<table>
<thead>
<tr>
<th><strong>Project Title</strong></th>
<th>NYANDUNGU URBAN WETLAND ECO-TOURISM PARK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Summary</strong></td>
<td>Rwanda Environment Management Authority (REMA) has started the process of designing Nyandungu wetland into an urban wetland recreation and eco-tourism park. The project will not only provide social and economic benefits to the communities but also support innovative approaches to restore and conserve wetland ecosystems on 130 Ha, promote the sustainable management of natural resources and support livelihood diversification to enhance incomes for local communities. This responds to the Green Economy in the EDPRS II.</td>
</tr>
<tr>
<td><strong>Anticipated Start Date (DD/MM/YYYY)</strong></td>
<td>05/01/2016</td>
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<tr>
<td><strong>Project Duration (in months)</strong></td>
<td>60 months</td>
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<tr>
<td><strong>Funding Requested (RWF)</strong></td>
<td>2.4bn RWF (2,413,699,149RWF)</td>
</tr>
<tr>
<td><strong>Name of Lead Organisation</strong></td>
<td>RWANDA ENVIRONMENT MANAGEMENT AUTHORITY (REMA)</td>
</tr>
<tr>
<td><strong>Type of Organisation, which best describes the Lead Organisation (please select only one box)</strong></td>
<td>Government Institution</td>
</tr>
<tr>
<td><strong>Partner Institutions</strong></td>
<td>District Authorities-Gasabo District (Ndera Sector) and Kicukiro District (Nyarugunga Sector), City of Kigali and RDB.</td>
</tr>
<tr>
<td><strong>Full Office Address</strong></td>
<td>RWANDA ENVIRONMENT MANAGEMENT AUTHORITY (REMA). PO BOX 7436</td>
</tr>
<tr>
<td><strong>Website Address (if applicable)</strong></td>
<td><a href="http://www.rema.gov.rw">www.rema.gov.rw</a></td>
</tr>
</tbody>
</table>
| **Contact Person (the person who will have ultimate responsibility and be accountable for delivering this project)** | Name: NTABANA Alphonsine  
Position: SPIU COORDINATOR  
Email: sherialponsine@gmail.com  
Tel: 0788304206 |
| **Is this a resubmission of an earlier submitted PD (if so please provide details)** | No |
SECTION 1: INFORMATION ABOUT THE APPLICANT

Q 1.1 What is the Lead organisation's total number of full-time employees?

Total number of full-time employees working for REMA including project staff: 60

Q 1.2 What is your organisation's experience of managing similar projects or activities (please explain why you think your organisation and partners are capable of managing the project)?

The Rwanda Environmental Management Authority (REMA) is the body in Rwanda responsible for Environmental Regulation and management; it has the mandate to promote environmental protection and to restore habitats. One department of REMA is the Single Project Implementation Unit (SPIU). This is a team of staff employed by REMA who have the specific task of managing major projects (examples below). REMA and the SPIU have extensive experience and expertise and have demonstrated their capacity, efficiency and effectiveness through projects already implemented and under implementation. This includes project management skills, accounting, resource mobilisation and procurement. Further to the SPIU team, REMA has in-house technical advice available including civil engineers, and various environmental regulators and experts. There are several current projects that can demonstrate REMA’s capacity including:

The Vulnerable Ecosystem Rehabilitation Project (VERP) has been implemented since 2013.

Reducing Vulnerability to Climate Change by Establishing Early Warning and Disaster Preparedness Systems / Support for Integrated Watershed Management in Flood Prone Areas. The main objectives are to reduce the vulnerability of the Gishwati ecosystem and its associated Nile-Congo crest watersheds and to reduce the vulnerability of the people that derive their livelihoods from that area.

The Poverty and Environment Initiative (PEI) Project has the objective of enhancing the contribution of sound environmental management for poverty reduction, sustainable economic growth and achievement of Millennium Development Goals in Rwanda.

The Lake Victoria Environmental Management Project (LVEMP II) aims to improve the collaborative management of the trans-boundary natural resources of the Lake Victoria Basin for the shared benefits of the Partner States. This is achieved through reduced environmental stress in targeted pollution hotspots and selected degraded sub-catchments to improve the livelihoods of communities, who depend on the natural resources of Lake Victoria Basin.

As part of the Decentralised Environmental Management Project (DEMP), REMA developed and implemented a similar eco-tourism and habitat rehabilitation project in collaboration with Rubavu district.
This involved rehabilitating and restoring Rubavu mountain; which is one of the Lake Kivu watersheds. The area faced environmental and biodiversity problems which led to loss of human lives several times through flooding. Following the implementation of the project, the biodiversity has improved as well as facilitating income generation from other benefits such as eco-tourism, sport and culture. REMA learned several lessons from this project, importantly; that support from the RDB and their collaboration is required from the design stage of the project through to promotion. Scale of the intervention is important with a bigger project having more impact and greater revenue potential. Suitable tree species choice to increase biodiversity is important. The private sector is willing to engage, but they sometimes lack the capacity or levels of investment required to take on full time management at the present time.

Q 1.3 **List** the name, position, and email of key personnel involved in the project, such as the project executive, project manager, and core technical staff. (Provide a CV for each of the key personnel as an attachment to this PD)

The names, positions, and emails of key personnel involved in the project, are listed below and CV’s for each of the key personnel are attached to this PD.

REMA is the implementation organisation for the project and will be responsible for coordination of activities and project facilitation. Within REMA the SPIU are the staff members directly responsible for day to day project management and monitoring and evaluation. Since the project will require extensive construction and landscaping activities REMA recognises that more specialist staff are needed to manage the project. Hence a specific project manager with experience in construction / landscaping / conservation will be employed to oversee the construction phase of the project. This individual will be recruited by REMA in due course. REMA will also employ a construction contractor to undertake the construction phase. To support the project REMA will draw on the experience of various technical experts (National Technical Advisory Committee, Project Steering Committee) and stakeholders who will guide more technical aspects of the project.

Organisational Structure for project management:
Below are details of the SPIU members and other REMA Staff that will have responsibilities for the project:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Tel</th>
<th>Email</th>
<th>Project responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTABANA ALPHONSINE</td>
<td>SPIU Coordinator</td>
<td>0788304206</td>
<td><a href="mailto:sherialphonsine@gmail.com">sherialphonsine@gmail.com</a></td>
<td>With support of DG REMA, the SPIU Coordinator will provide advisory and management support to the implementation of the projects. The SPIU Coordinator will coordinate all project activities. Maintain links with</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Contact Information</td>
<td>Responsibilities</td>
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</tr>
<tr>
<td>MUGABO Joseph</td>
<td>SPIU Director of Administration and Finance (DAF)</td>
<td>0788530189 <a href="mailto:mugabojoseph@yahoo.fr">mugabojoseph@yahoo.fr</a></td>
<td>Ensure efficient management of finance processes for the project focusing on financial analysis, reporting and oversight for all resources managed by the project. Provision of high-quality professional advice to the SPIU management. Proper planning, expenditure tracking and audit of financial resources in accordance with GoR and Development Partners rules and regulations; Organization and oversight of projects cash management processes, including liquidity management, recommendation of interest level, risk assessment, bank relationship management, timely accounting and reconciliation of all transactions, security for cash assets on site.</td>
<td></td>
</tr>
<tr>
<td>HABIMANA Thierry</td>
<td>Accountant Specialist</td>
<td>0788847033 <a href="mailto:habithi@yahoo.fr">habithi@yahoo.fr</a></td>
<td>The Accountant is responsible for all accounting aspects of the project: Regularly kept and updated accounts as well as fully maintained registers, i.e., check register, invoices register, petty cash book, etc; Monthly bank reconciliation statements - prepared in a timely manner, i.e., by the 10th day of each month; Monthly and Quarterly financial statements as required by Ministry of Finance and Economic Planning in Rwanda (MINECOFIN), Quarterly IFRs for the World Bank, and financial statements to fulfil reporting needs of other Development Partners and key stakeholders; Annual financial statements ready for audit;</td>
<td></td>
</tr>
<tr>
<td>NSABIMANA Patrick</td>
<td>Monitoring and Evaluation</td>
<td>0788414323 <a href="mailto:NsabimanaPatrick@gmail.com">NsabimanaPatrick@gmail.com</a></td>
<td>Develop the overall framework for the implementation of an M&amp;E system of the project activities in accordance with the project M&amp;E manual.</td>
<td></td>
</tr>
<tr>
<td>Role</td>
<td>Position</td>
<td>Contact Information</td>
<td>Responsibilities</td>
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</tr>
<tr>
<td>REMY DUHUZE</td>
<td>Civil Engineer and project technical adviser</td>
<td>0788612725 <a href="mailto:dunoremy@yahoo.com">dunoremy@yahoo.com</a></td>
<td>Support implementation of the project by overseeing civil works.</td>
<td></td>
</tr>
<tr>
<td>Project Manager (construction and post construction)</td>
<td>Project Manager</td>
<td>To be recruited</td>
<td>The Project Manager will provide management support to the implementation of the Nyandungu project with a particular focus on day-to-day management, particularly with regard to above project objectives linked to the construction phase, post-construction, data collection and biodiversity recovery. Provide technical advice and guidance to the implementation of above mentioned objectives related to biodiversity and other relevant policies, strategies and development plans, focusing particularly on the central administration level as well as at decentralised level.</td>
<td></td>
</tr>
<tr>
<td>Project Accountant</td>
<td>Project Accountant</td>
<td>To be recruited</td>
<td>To address a staff time shortage in the SPIU a dedicated project accountant will be recruited. Suitable candidates should be qualified and have suitable experience.</td>
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</tbody>
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Q 1.4 **Lead Organisational Finances. Provide a copy of these** from the most recent audited annual accounts (income and expenditure statement & balance sheet in RWF, as well as the main sources of funding) as an attachment to this PD.

Annual financial audits have been provided for projects implemented by REMA, see KPMG and RUMA audit reports attached.

**SECTION 2: INFORMATION ABOUT THE PROJECT**

Q 2.1 **Why** is the project needed *(clearly state the problem this project will address and the evidence base for its justification. Where possible, refer to international, national and/or sectoral strategies.)*?

The City of Kigali is one of the fastest growing cities in the region with an increasing population. According to the Fourth Population and Housing Census, Rwanda, 2012 - Thematic Report Population size, structure and distribution *(National institute of Statistics of Rwanda, January 2014)* the population in Kigali was 1.1M inhabitants. The Kigali City Master Plan Report - Detailed physical plan for Gasabo and Kicukiro Districts *(City of Kigali, 2013)* makes projections for the city’s future population. Taking the medium case scenario the
population is expected to grow at 5% between 2012 and 2025, when the population is expected to reach 2.5M inhabitants, from 2025 to 2040 the projected growth rate is 2.5% with an expected population of 4.3M in 2040. The rapid growth of Kigali and the associated human activities are putting significant pressure on the city’s existing green spaces, for example a 9.6ha site in the area around the lake in Nyarutarama is being developed for luxury housing and hotels. This area was one of the best sites in Kigali to observe birds, due to good levels of native tree species and even several migrant species had been observed. The development of the site has resulted in informal agriculture, deforestation and a marked decrease in the diversity of bird species (evidenced through observations by members of the Rwanda Birding Club).

The Kigali State of the Environment and Outlook Report (REMA, 2013) makes note of the City of Kigali Development plan (CoK, 2012) report that states that “deforestation, cultivation and urbanisation in and around Kigali have led to the serious destruction of wildlife biodiversity and the city no longer enjoys the same magnitude of biodiversity and that the city is striving to protect it more in the future” The report; Rwanda State of Environment and Outlook – summary for decision makers (REMA, 2009) states that the introduction of alien (non-native invasive) species is damaging the environment. This report also notes that even though the revenues from tourism based on biodiversity have increased, the conversion of biodiversity rich into alternative uses continues. Areas are being cleared for agriculture in wetlands, decreasing the pollution and flood abatement capacity of wetlands. The Kabuye Sugar Works project plans to develop 2,000ha of wetland for sugar cane production, see link below. Such wetland clearances have significant impacts on habitat loss.


The Eastern Gallery Forests Conservation Project Biodiversity Survey (Association pour la Conservation de la Nature au Rwanda, 2010) notes that there was just over 200ha of riverine gallery forests remaining in Rwanda by 2010. The report states that these areas are under considerable pressure from deforestation, however they are incredibly important in maintaining Rwandan biodiversity and support a diversity of native species. Birds in Rwanda an Atlas and Handbook (Rwanda Development Board, 2011) suggests that some bird species have been lost from Rwanda due to the deforestation of these gallery forests i.e. the Shining-blue Kingfisher, Little Greenbul, Red-tailed Leaflove and the Brown-chested Alethe. This evidence shows the importance of native tree species in preserving biodiversity. Native habitats are also important for supporting endangered species, during the feasibility study for the project consultees reported that the Grey Crowned Crane used to frequent the area, but has not been seen for some time. The project will create suitable habitat for this species as well as other endangered species such as the Malagasy Pond Heron.

The current pace of development and poor management of wetlands in combination with the effects of climate change are leading to increased flood risks that have an economic impact on the city and reduce the resilience of the population. Human activities and the increasing destruction of wetlands also lead to biodiversity loss. Part of the reason wetlands are being badly managed is that there is a lack of knowledge in Rwanda on how wetlands can be used to manage pollution and flood risks and their value to biodiversity. Furthermore, there is a lack of knowledge on the importance of native tree species and how to propagate them. Therefore there is a definite need to demonstrate a model that shows the potential of wetlands to abate pollution and flood risk and that this can be achieved by creating a wetland site rich in native flora that will act to increase biodiversity and generate revenue.

The tourism industry in Rwanda is largely dependent on biodiversity and to maintain growth in this sector it is important to protect the country’s wildlife and habitats. However, whilst there are national parks, these are located (more or less) at the extremities of Rwanda. The Rwanda Tourism Policy (Ministry of Trade and Industry, 2009) designates several regions as “Destination Management Areas”, in this document Kigali is identified as being the tourism hub. In addition the main entry point of tourists into Rwanda is the airport in Kanombe, and even when the proposed airport is developed in Bugesera the majority of tourists will pass
through Kigali. Furthermore, the majority of the countries tour operators operate out of Kigali i.e. Primate Safaris, Volcano Tours, Songa Tours, Bizidanny Tours. It is acknowledged that there are plans to develop the Kivu Belt for tourism, however Kigali will remain the hub. The Rwanda Tourism Policy (Ministry of Trade and Industry, 2009) also notes that there is a definite need to increase the number and diversity of tourism products on offer, this was verbally confirmed by RDB during the preparation of the PD. There is therefore definite potential to capture some of the tourist revenues passing through the city. At present the city currently lacks a tourism product that both protects and showcase the country’s biodiversity and generates revenue. There is also a lack of a centrally located facility that demonstrates the importance and potential of wetland areas to Rwandans and to educate the next generation on the importance of biodiversity conservation and environmental management. Furthermore, informal discussions with Ex-pat residents during the preparation of the Project Document identified that they would visit the park as did conversations with Rwandan citizens. 

The Nyandungu wetland complex (on the outskirts of Kigali) was once a military zone, then agricultural land and most recently it was restored by REMA returning it to savannah scrub / marshland. However, there are pastoralists illegally grazing cattle and goats on the site and the underutilization / minimal management of the site has led to flooding of the downstream area. The site also receives polluted water including sewage outflow from Kimironko Prison. The site is worth preserving and REMA notes that the site has potential to generate revenue as well as be improved to conserve biodiversity provided the right measures are put in place. The site borders the Special Economic Zone (SEZ) and rehabilitating the project site will act to offset the environmental impact of the SEZ and mitigate to some extent the aesthetic impact that the industrial zone has had on the landscape.

The project will help contribute to the achievement of several national strategies: EDPRS 2 recognises that the Government of Rwanda aspires to incorporate a green economy approach into its economic transformation through exploiting new green economic opportunities; this project will contribute towards the realization of EDPRS 2 priority area 2: that “For Rwanda to achieve the goal of 28% annual real exports growth, EDPRS 2 proposes to prioritise interventions that will Invest in soft and hard sector-specific infrastructure to accelerate growth in the commodity and tourism sectors”. This project will contribute to investment in this priority area. EDPRS 2’s Outcome 5.1: that “Increased level of “green” investment and environmentally sustainable urban development that exploits ‘green’ economic opportunities” are needed. The project aligns directly with this outcome since the project itself is a green and sustainable urban development designed to generate revenue and green jobs.

The project will address identified weaknesses (i.e. lack of ownership, informal grazing, encroachment, lack of revenue generation) in wetland management and will contribute to research and technology transfer within Rwanda by demonstrating how wetlands can be managed well for many benefits. The park will serve as a good example for the “green economy” as outlined in the Green Growth Climate Resilience Strategy (GGCRS). It will demonstrate how green technology and proper planning and management can be used to attenuate floodwater and how green technologies i.e. “living machine” - Reed Beds, can be used to manage pollution. These demonstrations will serve as an example for other areas within the City of Kigali and Rwanda. REMA has just completed a high quality feasibility study including a long-term horizon conceptual plan, which highlights main components such as culture and biodiversity, and green spaces for public recreation for conservation of the environment. This project will demonstrate the viability of the concept that can be replicated in Rwanda’s secondary cities.

The park will contribute to the need for recreational space as outlined in the City of Kigali Master Plan and will show that wetland conservation can have economic, social and environmental benefits to the inhabitants of Kigali, Rwanda and visiting tourists. The park will demonstrate that native and indigenous trees and vegetation support a greater biodiversity than exotic species and that this biodiversity can generate revenues as is
observed in Rwanda’s national parks. The park itself will require a workforce (of more than 30 people) permanently engaged in “green jobs” and projections indicate that the park should generate over 1bn RWF profit in the first 12 years of operation. There are also many wider benefits. The development of the park will have a dramatic effect on the immediately surrounding area, with quality of life improving due to the increase in green space and associated health benefits. The creation of the park will benefit the Rwandan tourism industry through increased revenues for tour operators. The creation of parks also increases the land values in the immediately surrounding area. The urban park is needed to preserve biodiversity in Kigali and will offset the loss of other green spaces. It will provide much needed recreation space, improve the health and wellbeing of the population, educate the population and it will provide an asset to future generations of Rwandans.

**Q 2.2** What change is this project intended to achieve (state specific objectives, expected results/impact and long-term legacy? To address the core environment and climate change objectives of the project, it would be helpful to refer to national and sectoral climate change and environment objectives. Provide measurable indicators, within a log-frame matrix. In addition, make a note of the expected impacts on employment and poverty reduction, as well knowledge and technological transfer.)?

The overall outcome of the project is “Nature reserve and urban park created to increase biodiversity, reduce flood risk, manage pollution, raise awareness of wetland conservation and create green jobs”

The project will restore a (approximate) 130ha of wetland located in Nyandungu, City of Kigali, at the same time as restoration a multi-use urban environmental park will be created. The proposed design of the park has been elaborated in two documents:

Firstly REMA commissioned in 2012 the “Study for Establishing Urban Wetland Recreation and Eco-tourism Park in Nyandungu Valley, Kigali City (Rwanda)”. This document explored the potential for the development of the site into an urban park and provided options for management. It provided some ambitious and costly design ideas for a park drawing on some similar projects elsewhere in the world.

REMA then commissioned in 2015 a detailed design document. This document provides a much more realistic vision for the park. However, it includes features that are not essentially compatible with the goals of FONERWA. It also omits a visitor centre and therefore a facility from where to manage the park in the long-term and to facilitate revenue collection. Furthermore, it was felt during the development of the PD that the proposed design can be improved to maximise the biodiversity potential of the park. In particular the design proposes the use of exotic tree and plant species these would not contribute as much to biodiversity conservation as the use of native Rwandan species. The choice of tree and plant species is however a relatively small matter and easily remedied through minor design revisions. This document does however provide details of all the soft and hard-landscaping required for the park, including paths, roads, and toilets and so on. One material change from the design will be the removal of the fishing area. Following advice from the FONERWA reviewer this was considered to be incompatible with biodiversity management and would require constant upkeep for limited financial return. The budget initially allotted for fishing has been redistributed to provide a further bird watching hides.

These documents also propose some potential roles for stakeholders and partners, however when the PD was developed issues were discussed that meant that these responsibilities have changed relative to the documents, especially in regard to the long-term management of the park. Though it should be noted that REMA has made these changes to strengthen the long-term sustainability of the park rather than to disregard what are merely options proposed in these documents.

Taking the above into account the park will provide a 130ha area of restored habitat, including 50ha of forest using native species, over 70ha of restored wetland, the widening of a river channel and creation of ponds to demonstrate the flood alleviation potential of wetlands and the use of reed-bed (living machines) to demonstrate the pollution abatement potential of wetlands. The park will have a network of paths, roads,
toilets, nature viewing areas, bird hides and picnic areas to provide the facilities required by tourists. There will be an area that is designed for wedding photographs, a concession for a café / restaurant will be offered on-site to the private sector. Furthermore, there will be a visitor centre that will explain the role of wetlands in conservation and the ecosystem services they provide that help support the Rwandan economy. The park will create temporary jobs during construction and permanent jobs during operation. It will provide a tourist attraction that will help tourism operators in generating revenue.

The park will have a differential pricing structure, with tourists paying higher fees than Rwandan Citizens (further details can be found in the Project Management Template “Costs vs Revenues” sheet). It is envisaged that the park will offer free entry to school groups and that on quiet days (i.e. mid-week) the park will offer free entry to local community members from the lower Ubudehe Categories, (the exact mechanisms for this to be determined during the project).

The creation and restoration of habitats will result in the increase in bird, insect, reptile, amphibian and mammal species present on site. The wildlife will self-populate the area. Such a model has worked well elsewhere in the world, for example Barnes Wetland Centre in London, UK is an artificial wetland site in an urban setting, it now hosts a diverse array of bird species (including rare and endangered birds) and has become important for migratory species. It uses native vegetation species and an array of habitats to increase biodiversity. Barnes Wetland Centre also has a strong educational aspect in regard to wetland conservation with signage aimed at people of all ages. [http://www.wwt.org.uk/wetland-centres/london/](http://www.wwt.org.uk/wetland-centres/london/)

The project has four Outputs as identified in the log-frame, work plan and budget. Targets under each of these outputs have been set. For full details refer to the log-frame. The main outputs are as follows:

**Output 1. Biodiversity conservation through introduction of native tree species and terrestrial habitat restoration.**

Under this Output are all activities related to the terrestrial environment. The aim is to conserve an area of land planted with native tree species and to introduce measures to facilitate revenue generation.

- Over 50ha of terrestrial habitat will be restored through landscaping and tree planting. The area of trees planted as well as the number of native tree species used will be monitored.
- 26ha of land will be cleared of non-native invasive species (Lantana camara, Tithonia diversifolia)
- Infrastructure including roads and paths will be installed. This infrastructure is required to facilitate visitor access to the different parts of the site and is a prerequisite to charging entry fees.

**Output 2. Biodiversity conservation through aquatic habitat creation and restoration.**

Under this Output are all activities related to the aquatic environment. The aim is to use habitat restoration and creation to demonstrate that wetlands can abate flooding and pollution, at the same time facilities required for revenue generation will be introduced.

- Clearing and widening of the existing river channel, to maintain and regulate water flow through the project area.
- Areas of open water of different depths will be created, these will act to attenuate peak flow during flood events. These areas will attract resident water birds and migratory species. In addition reducing downstream flood events will increase resilience and improve livelihoods of communities living downstream.
- Noting that the site receives polluted water from run-off and Kimironko Prison sewage outflow the park has been designed to reduce pollution in the wetland by treating the water entering the site, using “living machines” (reed bed water treatment). This is of benefit to the park itself and to downstream water users.
• Infrastructure including boardwalks and bridges in marshy areas will be installed as well as a birdhide. As above, this infrastructure is required to facilitate visitor access to the different parts of the site and is a prerequisite to charging entry fees.
• Development of a long-term management strategy for park maintenance.

Output 3. Project lessons disseminated.
Under this output are all activities related to sharing knowledge and experience of the project. The aim of this Output is to make sure that the valuable information gathered during the project gets a wider audience. The hope being that when the park demonstrates a viable model for conservation; that others will replicate the project thereby increasing its legacy. Activities under this output include:
• Developing a communications strategy for the project.
• Publicising the project and produce periodic publications on experience.
• Facilitating study tours and visits for stakeholders, private sector.

Output 4. Employment created as a result of the project.
Under this Output are activities related to ensuring that the aim of creating permanent green jobs is met. In total 70 green jobs will be created by the project. The construction of the park will create jobs, the exact number will depend on the modalities used by the principal contractor, though this is expected to be at least 40 individuals at certain points of the project with a focus on ensuring gender and youth equality. It is expected that approximately 20 permanent staff will be required to manage the park when complete. In addition the park will create 10 further jobs by training freelance guides. Activities include:
  • Capacity building for park management and maintenance staff
  • Capacity building for freelance nature guides

The park will have numerous wider benefits. One notable benefit will be the increase in land values in residential areas immediately surrounding the site, this effect is noted elsewhere in the world (see - https://www.planning.org/cityparks/briefingpapers/economicdevelopment.htm accessed August 2015). The creation of the park will also help support the tourism industry (as another product will be made available to tourists) thus increasing the potential revenues for tourism operators. The park also has potential to stimulate interest in Rwanda’s National Parks and to increase their visitor numbers and revenues. The project will highlight management techniques and green technologies that can be used in Rwanda’s secondary cities, therefore demonstrating its scalability as a model for other wetlands and increasing its potential legacy.

The park can be considered as a legacy project for Rwanda. It will create an asset that is currently missing from Rwanda. The best option for long-term management needs to be explored and REMA will ensure that the regulatory framework is in place to ensure the projects legacy, much in the same way that national parks are maintained for the benefit of the nation.

With reference to national strategies:
• The project will contribute to one of the outcomes set out in the Environment and Natural Resources Sector Strategic Plan (2014 - 2018): “To increase and sustainably manage ecosystems and forest resources to optimise their economic and ecological functions as well as urban eco-tourism”.
• The project will also contribute to the implementation of Rwanda’s Green Growth and Climate Resilience Strategy. The project help implement one of its three strategic objectives “sustainable land use and water resource management to achieve appropriate urban development and preservation of biodiversity and ecosystem services”. The project will serve as a demonstration to secondary cities on how to develop sustainable urban parks.
| Q 2.3 | **How** will the project objectives be achieved (include a detailed Work Plan as an appendix highlighting key deliverables and activities and responsibilities. Clearly describe the approach and methodology to be followed and the sequence of activities planned.)? |

**Approach**

The project has been designed using a participatory approach, with stakeholders including the RDB, REMA, CoK, Gasabo and Kicukiro districts and local communities being involved in the initial design of the project. RDB was also consulted during the preparation of the PD on the potential for revenue generation, preliminary pricing structure, and the predicted visitor numbers. During the project implementation there will be further stakeholder meetings and dialogue to ensure that the project is implemented in a way that benefits these parties.

REMA is the principal implementing organisation for the project. The REMA SPIU department with support from other REMA staff (i.e. Director General, Civil Engineer and others) will be responsible for procurement, budget management and contract management. See the diagram in box Q1.3 for details of the management structure for project implementation. Members of the SPIU will be based in REMA headquarters, but will make site visits more than once a week to undertake oversight, consult the on-site project manager, construction contractor and other contractors (as appropriate). This will ensure that the SPIU have control over the project activities. The REMA SPIU will follow the procedures outlined ministerial order N 001/08/10 MIN of 16/01/2008 establishing regulations on public procurement.

To address the need for a dedicated project manager (to be based on-site) in the first quarter of the project REMA will recruit a suitably qualified and experienced project manager to oversee the implementation of the project and a suitably qualified and experienced project accountant to oversee the budget and financial reporting requirements. It would be advantageous to the project if the Project Manager has experience in environmental projects. REMA will oversee the adjustments of the design to maximise biodiversity and facilitate revenue collection.

REMA will also tender for a suitably qualified and experienced construction contractor. This company will undertake the physical construction works required for the project. The on-site project manager will report to the SPIU on progress and contribute to the M&E system. Staff from the SPIU shall visit the site regularly to collect data for the M&E system, to track progress and to identify when interventions are required.

To achieve the majority of activities under Outputs 1 Biodiversity conservation through introduction of native tree species and terrestrial habitat restoration and 2 Biodiversity conservation through aquatic habitat creation and restoration. REMA will tender for and recruit (following GoR procedures) a suitable and reputable contractor that will undertake the physical implementation of the project i.e. groundwork, construction, hard and soft landscaping. The contractor will report to the REMA SPIU and REMA technical staff. The majority of the groundwork (digging ponds, ditches) and infrastructure (paths and roads) installation can be accomplished by a reputable contractor (i.e. Horizon), though technical assistance may be required for some elements i.e. the “living machine” – reed beds, this will be sought as appropriate. Further, technical support on planting will be sought as appropriate from REMA, RNRA and others. A specification for the tender was outlined during the design phase of the project, this will be reviewed prior to procurement.

REMA is responsible for the majority of activities under Output 3: Project lessons disseminated; and Output 4 Employment created as a result of the project. These will be achieved in a variety of methods using in-house staff and contractors / consultants where necessary. At various stages in achieving these outputs there will be stakeholder consultations to ensure maximum impact and effective outcomes.

Plant and tree propagation and planting can be undertaken by local cooperatives who will receive payment based on the quantities of trees and plants supplied. Since native trees will be used there is a need to collect
seeds, seedlings and cuttings from outlying sites of natural forest. The supply of seeds, seedlings and cuttings will be facilitated by REMA and stakeholders (RDB, RNRA), these stakeholders will also provide technical advice on how to propagate certain tree species. Lessons from this activity will be documented and disseminated.

REMA is aware that a lot of investment will be put into the site and that due care and attention is required to make sure that this investment is not lost. Therefore, a long-term management plan is required, various options have been explored and these can be found below. Once the park has been installed REMA will oversee the site for two years to ensure that the investment to date is cared for correctly (especially with regard to trees planted that need projection for the first few years) and demonstrate its profitability and visitor numbers. This period will also allow REMA to establish a robust long-term management organisation for the park. Therefore these two years are important to ensure the long-term achievement of benefits and sustainability of the project.

REMA considers that the establishment of a Charitable trust (drawing on various experienced persons from the public, private and NGO sectors) to be the preferred option for the long-term management of the park. This model will allow for the State (also the investor) to have an on-going role in management of the park, yet day to day responsibility will be devolved to a separate body run along the lines of a business, yet with charitable status and any profits to be reinvested in further conservation projects. This model will require REMA to ensure that the body can be created effectively: this will require the development of management plans created, terms and conditions for the board of trustees and to ensure that the regulatory and legal framework is in place to facilitate its operation.

However, REMA recognises that conditions may change and during Y4 and Y5 REMA reserve the right to explore further options (taking into account stakeholder opinions) for the long-term management and business sustainability of the park. To determine what long-term management strategy is best for the park REMA will undertake a participatory study with stakeholders. In all likelihood this will require high-level support to ensure that the regulatory framework is in place to facilitate the chosen option. DG REMA, the Minister of State for Natural Resources, DG RDB and so on may serve important roles at this stage.

The management of the site after completion of the construction will require direct involvement from REMA to ensure that all infrastructure installed is functional and that the biodiversity is maximised. Green jobs will be created and guides, maintenance workers will be selected from local communities where feasible. These staff will be trained as required, with specific efforts required to train guides. There is long-term potential to manage the site in conjunction with local pastoralists for mutual benefit. This will be elaborated further during the latter stages of project implementation and development of the long-term management plan.

Guides trained as part of the project (from local communities where applicable) are expected to operate on a freelance basis. Training will be provided, but their salaries will depend on the numbers of days worked and their performance, the fee they charge will be in line with the freelance guiding system in operation at Akagera National Park. This system has been introduced in Akagera NP and is working successfully. Using freelance guides reduces the operating budget because no permanent salaries are required.

A site within the park will be offered as a concession for a restaurant through competitive tender, thus providing source of revenue to the park through ground rent.

**Methodology**

Output 1: Biodiversity conservation through introduction of native tree species and terrestrial habitat restoration;
and Output 2: Biodiversity conservation through aquatic habitat creation and restoration.
Phase 1: Refine and finalise the design
REMA will oversee the enhancement of the current design to make several improvements based on expert opinion. There is potential to improve on the planting design to increase the proportion of native Rwandan tree species, to improve the mixture of species in one area and to try and recreate Riverine Gallery Forest that is disappearing at a fast rate. The current design uses paths to create some distance between visitors and parts of the park (stream and wetlands) in the hope that the lack of human presence will help species to enter the park. However, since one of the main potential revenue streams for the site is eco-tourism and nature observation there is a need to improve accessibility to the varied habitats on offer to improve the potential for nature observation. This is entirely feasible if paths are planned well and natural screens of trees, shrubs and rushes are used to allow selective views of interesting habitats.

Potential native tree species to be chosen in collaboration with stakeholders include species that are important for supporting Rwandan biodiversity, have relevance to Rwandan culture and are threatened in their natural habitats. Species that can be used will be taken from a list including: *Acacia hockii*, *Acacia kirkii*, *Acacia sieberiana*, *Acacia polycantha*, *Acacia tortilis*, *Albizia gummifera*, *Anthocleista grandiflora*, *Bersama abyssinica*, *Borassus aethiopium*, *Blighia unijugata*, *Bradelia micanthra*, *Celtis Africana*, *Chaetacme aristata*, *Clausena anisata*, *Cordia africana*, *Combretum Sp*, *Commiphora Sp*, *Croton macrostachyus*, *Dracaena steudneri*, *Dracaena Sp*, *Ekebergia capensis*, *Euphorbia candelabrum*, *Erythrina abyssinica*, *Euphorbia tirucalli*, *Ficus lutea*, *Ficus natalensis*, *Ficus sycomorus*, *Ficus thoningii*, *Ficus vallis-choudae*, *Grewia Sp*, *Kigelia africana*, *Maesa lanceolata*, *Prunus africana*, *Pterygota mildbraediei*, *Phoenix reclinata*, *Spathoda campanulata*, *Sapium ellipticum*, *Teclea nobilis*, *Trimeria grandiflora*, *Vangueria Sp*.

Other native plants suitable for increasing biodiversity include: *Aloe ferox*, *Asclepias fruticosa*, *Cardiospermum halicacabum*, *Carissa spinarum*, *Cyperus papyrus*, *Cyperus Sp*, *Leontis mollissoma*, *Leontis nepetifola*, *Paullinia pinnata*, *Liana Sp*, *Toddalia asiatica*.

Some trees of native species are already present on site, their growth will be encouraged through the removal of exotic and non-native species, with the exception of large established trees i.e. *Grevillia robusta*, *Senna Sp*, *Cassia Sp*, *Eucalyptus Sp*.

There is also a need to refine the design of the bird viewing hides and boardwalks. These will follow typical specifications as outlined in *A guide to producing universally accessible bird hides*, Ernst Retief 2013, Birdife South Africa and RMB Architects. (See attached document). There is potential to improve the availability of nesting sites for birds that nest in earth banks, notably martins, kingfishers and bee-eaters. Waste earth from excavations and locally produced clay pipes / brick and building blocks can be used to achieve this goal. See: [http://www.lbp.org.uk/downloads/Publications/Management/artificial_bank_creation.pdf](http://www.lbp.org.uk/downloads/Publications/Management/artificial_bank_creation.pdf)

The current design does not have a park office or entrance building where entry fees can be collected. This facility will be designed during the early stages of the project.

There is also a need to offer a site for a café / restaurant concession. This will be developed by the private sector that will pay an annual ground rent. The tender of the site and approval of the design will be overseen by REMA and stakeholders.

Phase 2: construction
There are several sub-stages to the construction phase. The sequencing is outlined in the work plan, the main construction activities will be carried out by a suitable contractor.

1. Installation of the hard infrastructure (block paved roads, site office, bridges, paths) that is required to
facilitate the progress of further stages.

2. Site cleaning and disposal of dumped rubbish
3. Removal of invasive species (Lantana camara, Tithonia diversifolia). Lantana, will be burned to destroy seeds, Tithonia can be composted for use as soil improver.
4. Undertake earthworks and significant landscaping works, watercourse widening, pond and lake creation.
5. Creation of tree / plant nurseries to facilitate planting in later stages. This will also involve seed collection and procurement of seedlings for some species.
6. Installation of living machine at the upstream end of the site.
7. Phased planting of trees and soft-landscaping starting at the upstream area of the site.
8. Construction of amenities, bird hide, toilets, cycle racks.
9. Tender for restaurant / café and other potential income generating facilities to be offered as a concession.

Phases 1 and 2 of implementation are expected to be completed within 3 years of inception.

**Phase 3. Management, operation and monitoring**
Following completion of the construction the third phase will ensure the establishment of the site and will monitor the success of the intervention. There are several stages needed to facilitate the long-term management of the project area. For two years after the construction has been completed i.e. in Y4 and Y5 of the project, the park will be managed by a team under the guidance of REMA. During this period the park will transition to a permanent management structure by parties (i.e. charitable trust) to be confirmed.

The type of skills and knowledge at this stage of the project are different to those required during construction. However, REMA envisages that some contracted staff (ideally from local communities) that will be trained earlier in the project will continue to be employed in the project.

The project will introduce innovative ideas into biodiversity and landscape management and there is a definite need for REMA control of the project in the short-term to ensure that the data required for long-term management is generated. There will be a period of research and development required to ensure that vegetation in the park develops as expected and that the lessons learned from the project’s implementation are fully documented. This period will help guide the development of the long-term environmental management and maintenance plan for the park to be implemented by the long-term management organisation (i.e. a charitable trust). This is especially important to ensure that the knowledge gained in propagating native tree species is retained and made available. This period will allow for the long-term management to be ensured in the most sustainable way with the opinions of visitors used to guide future investment in the park.

During Y4 and Y5 day-to-day oversight of the park will be undertaken by suitably qualified park management team to be contracted by REMA and the long-term management charitable trust (NGO). They will have experience and qualifications in business and conservation management. They will be responsible for a maintenance team and ancillary staff. Staff required as a minimum are; park manager, operations manager, accountant, gardeners, maintenance staff and security. Where required REMA will facilitate capacity building through hands-on training to ensure staff are of the required level. This two year period under REMA control will allow for refinements and corrective actions to be taken before handover to a permanent management option.

As the vegetation grows this will increase the biodiversity in the park and as a result so will its tourism potential, therefore a full detailed environmental management plan is necessary for long-term biodiversity management and to ensure revenue generation. This plan will be developed following a participatory approach with
stakeholders and will be designed to manage the park in a cost effective manner for the future. These plans will include details on the physical management of the park, improving revenue generation and promotion. During the preparation of the PD a basic costs and revenues plan was drafted and this has influenced the cost benefit analysis, a pricing study will form an activity in this phase.

As the park grows and biodiversity improves there is the opportunity to create green jobs through gardeners, maintenance staff and nature guides. These roles will ideally go to members of local communities dependant on their skills and experience. Nature Guides for example should be conversant in foreign languages. These guides can work with tourists, school groups and others. REMA in conjunction with RDB will develop the tourism potential and will provide guidance on training interpretive guides and syllabuses that complement the Rwandan Education Curriculum. Guides can also be used in monitoring and evaluation of the increasing biodiversity at the park by keeping records of observations of birds, mammals and so on.

As stated above there is a definite need for long-term management planning to ensure the sustainability of the project and to ensure that the investment made in the project is cared for and nurtured in the correct way. The project aims to restore a wetland area, to improve the biodiversity and to create tourism revenues. As such the long-term management of the site needs to balance all these factors in a way that both creates revenue, but that does not compromise the investment made in the site. Therefore there is a definite need to see that the park is well established and that a definitive environmental management plan is created to ensure that the park develops sustainably both in environmental and economic senses. The last two years of the project (Y4 and Y5) will be used by REMA to undertake activities to research and develop the management techniques required for the park. REMA will also undertake data collection during this period to assess the future investments required to develop biodiversity and tourism potential.

Therefore, in the short-term (Y4 and Y5) the oversight will be the responsibility of REMA and the charitable trust (NGO) created during the project. As stated above the preferred long-term management option is a charitable trust and full hand over is expected within two years after the completion of the physical works i.e at the end of Y5. In addition during Y4 and Y5 REMA will develop the regulatory requirements necessary for the long-term management structure

Regards long-term management, there are various long-term management options that have been explored to ensure that the park has sustainable benefits:

1. Public ownership and management
2. Creation of a charitable trust
3. Private public partnership
4. Community management
5. Private management

There are many issues to consider in regard to the long-term management of the park and each of the above options has positive and negative aspects. The development of a long-term management strategy is a very important stage of the project and will require stakeholder consultation and technical advice from various ministries. Some of the many considerations that need to be taken into account are:

1. Public investment should be retained for the public benefit.
2. REMA may want some long-term control over the project.
3. If managed as a charity / NGO the park would be tax exempt, meaning there is more money available for maintenance and operation.
4. Tourists may be more willing to pay for conservation when revenues go to further conservation rather than private hands.
5. Profits could be used to conserve further sites rather than to benefit private individuals.

In each case a reinvestment strategy in conservation or social projects would be advantageous. However, the enabling regulatory environment needs to be put in place to allow this. The future management group will have to adhere to the guidelines set by REMA. In addition the preferred option may change as the project is implemented and REMA considers it prudent to undertake a study to determine the best option for the long-term management structure and how it will operate. It is also noted that the long-term integrity of a state asset needs to be ensured. Some, albeit hands-off control of the park by the GoR is likely to be required in the long-run.

One potential option is public ownership with management by another body. This could be an NGO, a Public Private Partnership (PPP) or a private company. Akagera National Park is managed through a PPP between the RDB and African Parks. The board members are taken from Government, Private Sector and African Parks. The Akagera management model works well because the private partner is a non-profit organisation and all revenues generated are reinvested in the park or used to fund other conservation activities. They also have a strong community engagement program. The concern for this model is that a suitable partner with the same objectives and REMA may not be available. African Parks for example manages areas that are in excess of 10,000ha. There also, may not be a suitably qualified local private organisation that is experienced enough to take over the park. This option may also result in there being an onerous burden on REMA to continually oversee park management.

A second option is to use social enterprises in park management. A similar project is the Bigodi Wetland Sanctuary near Kibale Forest, Uganda. This site is community managed for the benefit of biodiversity and job creation, however there is permanent on-site technical support from a representative of the North Carolina Zoo. It is also located near several high quality lodges and one of the leading chimpanzee tracking areas that both act to draw in tourists and there are even several primate species in the sanctuary. The revenues generated are used for social projects rather than profit. There are some similarities and differences in both projects. Bigodi was started as a community enterprise with limited investment, as the habitat was largely intact, whereas this project aims to restore habitat and put in place infrastructure to facilitate tourism and demonstrate a reduction in flood risk and pollution. However, a community management model could be appropriate provided there remains high-level monitoring and ultimate control of the site and appropriate management guidelines would also have to be provided. [http://www.bigodi-tourism.org](http://www.bigodi-tourism.org)

A further option **(and the most preferred at this time)** is the creation of a charitable trust. The model of charitable trusts managing nature reserves is well established in the UK, to demonstrate the efficacy for this management option Two Wildlife Trusts based in the UK were consulted to determine how this model works for them; The Yorkshire Wildlife Trust and the Wildfowl and Wetlands Trust.

**Case Study 1:** The Yorkshire Wildlife Trust (YWT), (Yorkshire is region in the North East of England) manages 95 reserves totalling 2,500ha in a variety of locations, including mountainous regions, wetlands, rivers and the seashore. In addition to managing reserves it undertakes specialist projects and also undertakes community development, environmental education activities, publicity and promotion, campaigning and policy work. The “Yorkshire Wildlife Trust works for a Yorkshire rich in wildlife, valued and enjoyed by everyone”

The trust employs 100 full time staff and crucially is supported by 40,000 members. The trust is divided into four areas that report to a chief executive who is responsible for operation of the trust. The chief executive in turn reports to a board of trustees who govern the organisation. There are permanent trustees and further board members that are elected for a fixed term. The elected members come from various different backgrounds and do not necessarily need a background in conservation; they are selected primarily for them having the skills and knowledge needed to operate a charity. The YWT will identify gaps in the skills of trustees...
and try to recruit suitable members. For example the trust reported that this year they have been looking for trustees with experience in law (i.e. a solicitor), human resources and an environmental scientist that has worked at a national level. As general guidance the trustees have often worked in a senior management role in the public, private or NGO sectors. The trustees must be able to think and act strategically, understand finance, financial management and budget planning, have excellent communication skills and can act as ambassadors for the Trust. The trustees meet at least five times a year and there is a separate financial risk committee (composed of five trustees) that meets four times a year. The trustees select the chief executive who then manages the trust. The trust is part of a wider organisation; the Royal Society of Wildlife Trusts that provides advocacy and representation at a national level.

The funding for the trust comes from various sources: voluntary income (donations), funding from the Postcode Lottery (where people buy a ticket hoping to win, part of the profit is passed on to good causes), fundraising events and investment income.

Further details can be found in the Yorkshire Wildlife Trust Annual Report and Accounts 2015 and Articles of Association.  
This model is working for the Yorkshire Wildlife Trust, however they rely on membership fees and charitable donations. Whereas the park will be mostly reliant on entrance fees.

**Case Study 2:** The Wildfowl and Wetland Trust (WWT) is a conservation charity with the goal to preserve wetlands. The charity recognises that human interaction with wildlife and wetlands to build understanding is essential for wetland conservation. It believes that a connection to nature is important and this can be as simple as feeding the birds. It is very active in preserving critically endangered species and manages breeding programs for some of the world’s most endangered water birds to rescue them from extinction. The charity has all its reserves and headquarters in the UK, however it works internationally with governments, communities, businesses and other NGOs on advocacy and conservation programs.

The charity was established in by Peter Scott (son of Captain Scott the Antarctic Explorer) in 1946. Since then it has grown considerably. It now manages 10 sites in the UK covering 3,000ha and they are designed to allow visitors to get as close as possible to nature. These sites receive 1 Million visitors per year including 50,000 School children. The trust employs 350 full time staff and receives support from 700 volunteers and 200,000 members. Some of the sites are owned by the trust however; others are leased on long-term arrangements. The sites are often leased from private owners, yet because of the importance of the biodiversity these sites are often already protected by national legislation. The appropriate government regulator must approve the management plan for each site and sometimes the landlord may have other specific requirements.

The trustees for the charity come from a wide range of backgrounds and include: academics, business people, naturalists and even retired diplomats. The WWT reported that it is important to have a good mix of skills and knowledge amongst the trustees. The trustees are elected to the board at annual meetings, they are often selected or recommended by existing board members, in other cases the trust will approach an individual who has the right skills. The board is responsible for financial and strategic planning and are the ultimate custodians of the charity and ensuring it meets the legal obligations of being a charity. Below the trustees there is a CEO and a management board, department heads and operational staff. All staff used by the trust are in-house and are responsible for all maintenance and upkeep.

Regards funding; visitor entry fees support the operation of the 10 visitor centres and sites, which includes incomes from shops and restaurants. Membership fees, endowments and donations are used to support the
wider international conservation activities and breeding programs. Any surplus is invested back into the organisation through improving the sites or extending the conservation work.

The WWT also has a consultancy division that works globally to restore wetlands and to develop sustainable eco-tourism sites. The Associate Director of consulting (Dr Matthew Simpson) reported that in the numerous wetland parks they have been involved in there are several different management approaches available. One popular model is the state ownership of the site with the creation of an NGO (Charitable Trust) to manage the site and creating franchises for restaurants and shops. It was reported that this option has worked well in various countries including Least Developed Countries. Another option they have used is that the there is no franchising involved in management, but there is a levy against private sector companies who then fund the site.

The information from the YWT and the WWT suggests that state ownership, NGO (charitable trust) management and commercial franchises may be the preferred option in this instance.

**Proposed structure for Long-term management:** The board of the charitable trust will comprise an elected board of trustees from government institutions, NGOs, the private sector and local communities. Skills required for trustees are: conservation and ecology, finance, tourism, human resources, law and public engagement. The constitution and responsibilities of the board will be developed by REMA during the project in consultation with relevant stakeholders and legal advisors. The board of trustees will be ultimately responsible for the park, they will have powers to guide the vision of the park, long-term investment in the park, and they will have the power to permit developments (i.e. franchises/concessions) on site to increase revenue provided the integrity of the park is not compromised. The Trustees will also set the vision and objectives of the charitable trust and the long-term planning for the organisation.

The Trustees will also have the main responsibility of managing the park’s finances and investments. The principal source of revenue for the park will come from entry and other fees, though site-rent for franchises and corporate sponsorship offer further revenue opportunities. The Trustees will have a responsibility to seek extra sources of funding to support the project in the long-term i.e. the Trustees will oversee the franchise process, seek corporate donations and direct the application for external funding where available. The Trustee Constitution will require there to be a financial reserve to cover unexpected eventualities. However, it is expected that the park will be profitable, and when sufficient profits are made the board will identify suitable financial investment mechanisms (with Rwandan Financial Institutions) and then invest in other sites where further parks can be created, for example the lakes around the Inyange Factory in Masaka are rich in birdlife. By creating a trust where revenues can be retained in wetland conservation this model would hopefully allow more areas to be protected and managed for long-term benefit. This option may also more easily facilitate engagement with international partners and access to funding only available to charities (NGOs).

The park manager will report to the Board of Trustees a minimum of four times per year and will be responsible for all day to day operations at the site. Should the trust grow to a level where it can extend its reach the Board of Trustees will be responsible for recruiting further staff as required and once it has reached a critical size with several sites a Chief Executive Officer will be appointed.

Therefore, as stated at this stage the preferred option is the creation of a charitable trust, the park can be run on commercial lines to generate tourism revenue, however the main objective of conservation will remain integral to the project. To create a trust will require a period of research to draft a constitution and to establish a board, these activities will take place in Y2, with the board members selected. REMA will start to develop the management structure as the project progresses through Y3 with all constitutions and MOUs in place before Y4. During Y4 and Y5 of the project whilst the vegetation and infrastructure becomes fully established REMA will co-manage the park with the NGO to ensure that the park is being managed correctly. The board will be
mostly made up of volunteers and will have little or no running costs, park revenues will be used for day to day management. This period of handover will allow REMA to address any teething troubles in management.

Regardless of the final option for long-term management structure there is potential to benefit communities through the park’s environmental management and maintenance plan. For example, depending on the growth rate of certain plant species and the need to stop some areas from becoming overgrown there is potential to use local community members (on an as required basis) to undertake large-scale maintenance i.e. grass cutting and invasive species control. Local community member will also benefit from the potential to be trained as nature guides (dependant on language skills) and some will be in full time employment as park staff (gardeners and wardens).

**Output 3: Project lessons disseminated**

This Output focuses on learning lessons and disseminating information from the project. REMA will use several methods to achieve the objectives and activities under this Output. A communications strategy will be developed to raise awareness about the project, its aims and its lessons. The hope is that the project will stimulate interest by other parties in creating similar parks.

The REMA website will be used to promote the project and REMA will develop an MOU with the RDB to further promote the project.

Specific activities under output three include: Six monthly e-newsletters will be produced and sent to interested parties and available via REMA website, Annual lessons learnt report summarising the annual review will be produced and disseminated. Study tours will be organised for various stakeholders, Government officials and communities to demonstrate what activities are being undertaken during construction and how these can be applied elsewhere, the “living-machine” reed-beds for pollution management could be used in many other locations. A document about the propagation of native tree species will be produced in English and Kinyarwanda. Radio and TV will be used to extend the reach of the awareness raising. The long-term management and business plan will be summarised and disseminated to interested parties to display the profitability of managing wetlands in this way.

**Output 4 Employment created as a result of the project.**

REMA will undertake several activities to ensure that the site creates green jobs. This will involve recruiting and training staff that will manage the site. Freelance nature guides will be provided with training so that they can earn an income by guiding visitors. Training programmes will be developed by REMA in conjunction with the RDB. They will be supported to form a cooperative and manage their own activities, REMA will oversee their performance. Once operational, the project will engage the private sector in several ways: through tourism operators using the site, through potential for cooperate sponsorship of key features, through potential to develop restaurant / café / shop, through educational and entertainment events for children and adults, and handcraft and gift sales.

**Q 2.4 How does the project address cross-cutting issues such as gender and youth?**

REMA as the overall project manager will ensure that contractors ensure a gender and youth balance in the workforce. Through the contracting procedure REMA will ensure that the contractor provides segregated sanitation facilities to ensure that a mixed gender workforce is viable and safe. REMA will ensure that the contractor provides a complaints procedure in regard to sexual harassment and grievances.

Tree production and planting will be undertaken by cooperatives and these will be encouraged to ensure gender and youth balance.
The tendering entity will request (within terms of reference or bid document) the potential supervisor of project activities to involve a balance of women and youth as paid workers.

During operation the management committee will have gender balance, as will other staff responsible for maintenance. There are opportunities to train youth in new skills, especially tourist guiding and propagating native tree species.

The park itself will be open to all people and is essentially a gender-neutral investment. Park wardens and staff will ensure the safety of park users.

Q 2.5 Who are the stakeholders affected by the problem, and who are the stakeholders influential in solving the problem? How have they been incorporated and involved in project design and delivery?

There are various stakeholders that have been or will be involved in the project. All stakeholders will have the opportunity to make inputs into the project, however in some instances it is not envisaged that all stakeholders will take a particularly active role throughout the whole project. Importantly, REMA needs to balance the needs and design of the project (as an environmental FONERWA project) against the wishes of stakeholders. For example, some stakeholders may see the site as a location for music concerts, however that might affect the integrity of the project. There is however potential in the long-term however to allow investments in the park (such as a play area) provided they are not in sensitive areas and do not affect the integrity of the investment. REMA therefore has a role to engage stakeholders early on in the project and explain why the design has been changed slightly to meet FONERWA requirements, maximise biodiversity and tourism potential. Stakeholder inputs will be used to plan long-term management and investment after the project has been completed.

One area where the communities can be consulted more closely is to document and promote the cultural significance of various trees, birds and other wildlife in Rwandan culture. This would allow the communities to contribute directly to the project and would add to the experience of visitors. Community members are also likely (dependant on skills) to be employed by the project in various roles, thus passing on financial benefits to locals.

REMA will ensure that all Stakeholder meetings are documented and that constructive discussion is encouraged. REMA will attempt to mediate disagreements and reach a consensus within the limits of the project’s overall goals.

**Stakeholders affected by the problem**

**The population**

The majority of the Rwandan population directly rely on ecosystem services for their livelihoods. The decline in the quality and quantity of ecosystem services resulting from over-exploitation of natural resources and environmental degradation results in the reduced resilience of the population to the predicted effects of climate change. The communities living downstream from the site are affected by periodic flooding and pollution, both these have deleterious effects on livelihoods. The citizens of Kigali are also stakeholders, there is currently a lack of recreational space within the city.

**Government agencies**

REMA is currently responsible for the management of the site and is the principal stakeholder involved and affected by the burden of managing the site. There are further various government agencies that are affected by the current issues (flooding and pollution). The flood events affect the City of Kigali, Gasabo and Kicukiro Districts, MIDIMAR and MININFRA. Floods can also affect the RAB (MINAGRI) station located downstream from the site.

**Stakeholders influential in solving the problem**
The proposed design of the site and feasibility study was undertaken using a participatory approach and stakeholder consultation. The various parties consulted included; local communities, local government, national government agencies.

Rwanda Environment Management Authority(REMA)
REMA is the principal stakeholder as well as project implementer. REMA has already undertaken some work to restore the site and has led the development of the project and its design. Further to the role REMA is already playing it can help the success of the project through enforcing environmental regulations in the area surrounding the site i.e. preventing pollution, littering and activities that will compromise water flow. REMA will be involved in the long-term management of the site.

Ministry of Natural Resources (MINIRENA)
REMA is an agency of MINIRENA. This ministry responsible for environmental policy formulation and monitoring. MINIRENA is the overall national authority with responsibility for protection and conservation of the environment. MINIRENA and its agencies will be responsible for supporting the project during implementation and operation. Staff from RNRA will provide technical assistance in propagation of trees and afforestation. MININRENA will be involved in the long-term management of the site.

Rwanda Development Board (RDB)
Further to the role of private sector development, the RDB is responsible for promoting tourism and the conservation of biodiversity in Protected Areas. They also have a mandate to develop, sustainable tourism in collaboration with stakeholders for the benefit of all the Rwandan People. The RDB has been involved through consultation in the design process. Since a large portion of revenue generation will come from tourism, they will be responsible for promoting the park and will provide advice on nature guides and other tourism products that can be offered. RDB will be involved in the long-term management of the site and its promotion.

Kicukiro, Gasabo Districts and the City of Kigali
The site lies partly within both Kicukiro and Gasabo districts. The political and technical support of these districts is essential for the long-term success of the project. Districts can directly support the project through the management of Umuganda and VUP labour. Districts can act to inform communities bordering the site on the project’s importance, they can help regulate the activities of pastoralists currently using the site. The technical staff within districts will assist through technical advice and long-term monitoring around the site. Potentially one of the most important roles that will be played by districts and the City of Kigali is the regulation of developments in the water catchment around the site. These organisations will have a responsibility to ensure that water flow to the site is maintained and that unsuitable, unsightly or potentially polluting developments do not impact on the investment. This may mean enforcing a development buffer zone around the site. The already existing partnership between REMA and the Rwanda Development Board (RDB), City of Kigali (COK), Kicukiro and Gasabo districts. These partnerships will boost the implementation of this project.

Ministry of Trade and Industry (MINICOM)
Sets policy for trade, tourism and cooperatives. These policies will have an impact on the project’s success. REMA will consult MINICOM to ensure that the right regulatory and legal environment is available to support the park in the long-term.

Ministry of Finance and Economic Planning (MINECOFIN)
MINECOFIN contributes to Rwanda’s development through offering top range project and program support services to the government ministries, institutions, departments and project/program implementation units. The support services that MINECOFIN provides include project management, project implementation support,
project monitoring and evaluation, supervision, and advisory services, including capacity building in those competencies. MINECOFIN is also responsible for the financial implementation progress of the project.

Ministry of Local Government (MINALOC)
Responsible for decentralisation and can support the project through engagement with the districts.

The institutions mentioned above participated During the drafting of the project and the design. They also participated in the validation workshop to approve the design of the park. References are attached to this PD to justify this statement.

FONERWA
As the project funding agency FONERWA is a major stakeholder in the project. FONERWA is responsible for disbursing funds in line with the budget and ensuring that project monitoring and evaluation is of the required standard. FONERWA may also want to be involved in developing the long-term management plan for the park to ensure that the investment is ensured and not compromised.

**Q 2.6 How will the benefits of the project be sustained after FONERWA funding comes to an end?**

The park will have long-term benefits for the citizens of Kigali because it is a public asset designed to address the need for recreational space that is currently lacking. The park has an indefinite lifespan upon completion. As the trees grow and the park develops it will continue to improve for the benefit of biodiversity conservation. The park will also serve to promote biodiversity conservation through education for an indefinite period. By increasing the level of interest and appreciation of nature the project will have wider benefits for Rwanda.

REMA is conscious that planning the management early on will lead to a better outcome and REMA will plan the long-term sustainability and management of the park shortly after the project begins. REMA envisions creating a charitable trust (NGO) to manage the park, this will draw on the expertise of various individuals in Rwandan society selected for their skills. REMA will begin to approach suitable individuals within the second year of the project and will involve them through the 3rd, 4th and 5th years. Once the management structure and charitable trust is finalised REMA will develop an MOU with all the concerned parties and draw up a constitution for its operation. REMA will reserve the right to address any problems in management for the long-term benefit of the park.

REMA will develop a full business / management plan for the park in conjunction with stakeholders and technical experts. This will ensure that the park continues to serve its desired purposes of flood and pollution control and biodiversity conservation. REMA will develop a long-term management strategy for the park by exploring the various long-term management options as highlighted in section Q2.3 above. The long-term management strategy will be vitally important for the success of the project and REMA will draw on stakeholders and expert advice to develop this further.

Through developing various revenue streams (ground rents, entry fees, guiding fees and so on) the park will become financially self-sustaining. A suitable management structure will allow profits to be reinvested in the park or to extend conservation to other areas. There will be numerous jobs created during implementation and there is significant potential for job creation in the long-term management of the park. The profitability will help protect the park.

By working with Kicukiro and Gasabo Districts and the City of Kigali, REMA can ensure that developments surrounding the site do not affect the investment.

The project will display a sustainable model of wetland management using green-technologies and native trees. The knowledge gained during this process can be used to promote similar strategies elsewhere in Rwanda. There is currently a lack of knowledge on the propagation of native tree species, by using a significant
percentage of these species there is potential to increase our knowledge that can then be applied at other sites.

**Q 2.7 What** is the scope for income generation from the project?

The park offers several revenue streams:

- Entry fees (using differential pricing) - visitors will be charged for entry to the park.
- Guiding fees – Visitors can choose to employ a freelance guide. The guide will earn an income.
- Wedding photographs – An area in the park will be offered for wedding photos for a fee.
- Ground rent on restaurant / café – A site will be offered as a concession. The restaurant / café will then pay a ground rent to the park.
- Sale of native plant species – Gardeners working at the site will grow native species of trees and other plants that will be offered for sale to visitors and others.
- Entertainment and cultural events – The park may choose to rent out areas of the park for events, providing they fit the ethos of the park.

Projections indicate that the park should generate over 1bn RWF profit in the first 12 years of operation. Details of expected revenue generation can be found in the Excel annex sheet Costs Vs Revenues. The table below shows a summary of annual costs and revenue for the 12 years after completion of the construction phase.

<table>
<thead>
<tr>
<th>Year</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
<th>Y7</th>
<th>Y8</th>
<th>Y9</th>
<th>Y10</th>
<th>Y11</th>
<th>Y12</th>
<th>Y13</th>
<th>Y14</th>
<th>Y15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running costs</td>
<td>55,626,000</td>
<td>51,976,000</td>
<td>59,276,000</td>
<td>51,976,000</td>
<td>51,976,000</td>
<td>55,626,000</td>
<td>51,976,000</td>
<td>51,976,000</td>
<td>51,976,000</td>
<td>51,976,000</td>
<td>51,976,000</td>
<td>55,626,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>57,086,000</td>
<td>73,839,500</td>
<td>89,498,000</td>
<td>101,506,500</td>
<td>115,340,000</td>
<td>129,173,500</td>
<td>143,007,000</td>
<td>156,840,500</td>
<td>170,674,000</td>
<td>185,310,500</td>
<td>200,129,000</td>
<td>220,460,000</td>
</tr>
<tr>
<td>Profit</td>
<td>1,460,000</td>
<td>21,863,500</td>
<td>30,222,000</td>
<td>49,530,500</td>
<td>63,364,000</td>
<td>73,547,500</td>
<td>91,031,000</td>
<td>101,214,500</td>
<td>115,048,000</td>
<td>133,334,500</td>
<td>148,153,500</td>
<td>164,834,000</td>
</tr>
</tbody>
</table>

Profits within the first two years of establishment are low. However, it is considered essential that REMA has oversight during this period to gather the data required to ensure sustainability when REMA’s direct involvement ends. At the point of handover as visitor numbers to sustainable levels so does revenue. REMA is therefore going to oversee the site for the first two years of operation, to ensure that the site is profitable when handover takes place. During project implementation a full business plan will be developed.

The project will create both temporary and permanent jobs, where possible (dependant on skills and experience) members of local communities will be employed by the project to ensure that there is a benefit to local persons.

**Q 2.8 Preparation:** Has a feasibility or pre-feasibility study been conducted (If yes, then please attach a copy to this PD)?

A feasibility study has been conducted. The copy of it is attached to this PD.
Q 2.9 **Preparation:** Are there any outstanding regulatory or legal requirements that need to be met before the project can proceed (*access to land, planning consent, use of new technologies*)?

There are no outstanding regulatory or legal requirements that need to be met before the project can proceed.

Q 2.10 **Preparation:** Has an Environmental Impact Assessment been conducted for the project (*If yes, then please attach a copy to this PD*)?

With reference made to the Organic Law No 04/2005 of 08/04/2005 determining the modalities of protection, conservation and promotion of environment in Rwanda it is considered that an Environmental Impact Assessment (EIA) is needed for the project since the project involves developments within a wetland.

The EIA for the project has been reviewed and approved by the regulator, the Rwanda Development Board (RDB) on the 13.11.15; Reference number: RDB/3/EC/AS/129/11/15.

A copy of the approval letter has been submitted as part of the application documentation.

REMA will follow the Environmental Management Plan as outlined in the EIA and any other conditions as applied by the RDB.

Q 2.11 **How** will the performance of the project be monitored and evaluated (*both during and after the project*)? Explain the monitoring system below and then fill in the budgeted M&E Plan (*in the table below – example activities listed for information purposes only*).

REMA will hold overall responsibility for the monitoring and evaluation of the project. The M&E system will be linked to the logical framework, annual work plans and budgets provided alongside the PD and agreed upon by all the parties.

The baseline conditions of the site are already understood through the feasibility study and design documents.

During implementation the monitoring and evaluation of activities will include brief weekly and monthly project progress reports prepared by the main contractor and on-site Project Manager (who will specifically be recruited for this project). The REMA SPIU will manage this process and also undertake regular site inspections, the SPIU will have oversight of the M&E. REMA will be consulted should there be problems during implementation and a flexible, proactive approach will be taken to ensure project delivery. These short-term reports will allow REMA to ensure that progress is being made to meet quarterly milestones. The REMA’s internship program will strengthen the field based monitoring activities and management. Especially using the interns allocated to the City of Kigali and Gasabo District.

In depth progress reports will be submitted by the Project Manager to REMA on a quarterly basis, these reports will allow the REMA project management team to monitor progress on the completion of key milestones and achievement of targets. These quarterly reports will describe progress on implementation, lessons learnt, a risk update, budgeting, quality of management and an ongoing assessment of sustainability and acceptance of project interventions by the stakeholders. The report will also include the expenditure report, a work plan and budget for the upcoming reporting period. The quarterly reports of results from Monitoring and Evaluation activities will enable the team to take corrective or enhancing measures as necessary. The SPIU will be responsible for overseeing, validating and reviewing information provided by the site based staff. The SPIU will be responsible for reporting to FONERWA.

The project will commission an annual financial audit (to be conducted by an accredited auditor) of project accounts to ensure compliance with Government rules and procedures. The audit report will be submitted to REMA management team for review and approval. This will ensure continuous monitoring of project activities and allow for corrective measures in due time.
Annually, the project will prepare an Annual Assessment Report. The Report shall be prepared by the Project Manager and shared with REMA Management team. This will include an assessment of the performance of the project and appraise the Annual Work Plan for the following year. The project manager will collect and collate indicator data and measure performance against the baseline and targets in the Results Resource Framework and will ensure timely and effective communication of the results to all the key stakeholders.

The majority of indicators in the Log-frame can be easily measured and documented during the project, by reports from the contractor, project manager and REMA. However, Outcome Indicator 2.C) “Evidence that lessons from the project are used elsewhere” will be assessed during the annual review where the consultant employed will assess this through interviews with stakeholders and observations.

At the end of the project there will be a final project evaluation (conducted by an independent consultant) that will focus on the extent to which the project has achieved its desired outputs, and alignment with appropriate outcomes. The report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, and make recommendations on any actions needed to ensure sustainability, replicability and scaling up.

On completion of the project there will be opportunities to monitor the effectiveness of the intervention in the long-term. Responsibility for these activities will lie with the future management (to be agreed) and will not be limited to:

- Financial audits
- Monitoring downstream flooding
- Biodiversity surveys i.e. bird counts, aquatic survey, establishing transects and so on.

<table>
<thead>
<tr>
<th>M&amp;E Activity</th>
<th>Responsible person</th>
<th>Timeframe</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline survey</td>
<td>Feasibility and design consultants</td>
<td>Complete</td>
<td>Complete. The design will be updated but this does not affect the baseline figures from the current feasibility and design documents.</td>
</tr>
<tr>
<td>Weekly Progress Reports</td>
<td>Contractor</td>
<td>Weekly</td>
<td>Included within contractor fees</td>
</tr>
<tr>
<td>Monthly Progress Reports</td>
<td>Project Manager</td>
<td>Monthly</td>
<td>Included within Project Managers Salary</td>
</tr>
<tr>
<td>Quarterly Progress reports</td>
<td>Project manager</td>
<td>Quarterly</td>
<td>Included within Project Managers Salary</td>
</tr>
<tr>
<td>Financial Audit</td>
<td>External Auditor</td>
<td>Annual</td>
<td>36,000,000 RWF</td>
</tr>
<tr>
<td>Annual Assessment Report</td>
<td>REMA SPIU project manager</td>
<td>Annual</td>
<td>In-kind contribution from REMA</td>
</tr>
<tr>
<td>Stakeholder Meetings</td>
<td>REMA SPIU project manager</td>
<td>Annual</td>
<td>14,400,000 RWF</td>
</tr>
<tr>
<td>Completion report / Project evaluation</td>
<td>External consultant</td>
<td>End of project</td>
<td>8,000,000 RWF</td>
</tr>
<tr>
<td>Long-term monitoring</td>
<td>Park management</td>
<td>Ongoing after project completion</td>
<td>Approximately 3,600,000RWF annually (to</td>
</tr>
</tbody>
</table>
Q 2.12 | **How** will you involve the beneficiaries and other stakeholders in monitoring and evaluation?

The project will establish a Participatory Monitoring and Evaluation system to enable stakeholders and beneficiaries to measure progress of project interventions. The project will employ a variety of tools for data collection and analysis including surveys, participatory appraisal (structured interviews, focus group discussions etc.) and case studies with project beneficiaries and other key stakeholders.

REMA will facilitate a grievance procedure for communities affected by the project, by communication through the district offices. Stakeholders affected by the project i.e. districts, CoK, MINIRENA, RDB, MINALOC, MINECOFIN and MINICOM and so on will have the option to consult the project manager during the preparation of quarterly reports with regard to this procedure.

There will be annual stakeholder consultations to validate progress monitoring and to plan the following years activities. The results of the monitoring will then be discussed by beneficiary groups with a view to gathering ideas for improving project interventions in the following year. In this way, the project will be responsive to feedback from beneficiaries tailoring its interventions in each of the outputs. This approach is aimed at creating a strong sense of ownership at the community level in order to sustain outcomes beyond project completion.

In the long-term beneficiaries and visitors to the park will contribute to biodiversity monitoring through casual observations and reporting.

Through the management mechanism to be established it is expected that stakeholders will be directly involved in the long-term management of the park.

| Q 2.13 | **Which** Output from the FONERWA’s overarching M&E framework will be contributed to in the project’s M&E Framework *(if possible choose an indicator from FONERWA’s M&E framework)*?

The main FONERWA output contributed to by the project is:

**Output 3: Conservation and management of natural resources strengthened and sustained as a result of the Fund**

This will be achieved through the creation of the park and its long-term management.

In addition the project will contribute to the following FONERWA Outputs:

**FONERWA Output Indicator 1.1: Ha of land secured against erosion**

Through increasing vegetative coverage over 130ha and by managing floodwater flows in the downstream area. Vegetation cover helps prevent erosion and the reduction in the peak flow of flood water will reduce its erosive capacity.

**FONERWA Output Indicator 1.2: Area (ha) forest cover (restored forest)**

Through planting approximately 50ha of forest using native species.

**FONERWA Output Indicator 1.3: No’ of ha of watersheds rehabilitated**

Through restoring the habitat and introducing pollution and flood control measures.

**Outcome 2: Renewable energy and other environmentally sustainable, low carbon and climate resilient technologies adopted, developed and/or improved for use in Rwanda, as a result of the Fund**

Through installing the “living-machine” reed beds for pollution control and through the concept of managing a green space for multiple environmental benefits including flood risk reduction.
**Q 2.14** **Duplication** of project with other funding sources - all relevant potentially overlapping projects need to be identified and the areas of overlap and complementarity identified, drawing lessons and establishing a framework for coordination during implementation. Please provide a summary of recently concluded, ongoing, and pipeline projects that are relevant to the proposed project in the table below.

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Timing and geographical coverage</th>
<th>Potential duplication and synergies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralised Environmental Management Project (DEMP) Rubavu Mountain.</td>
<td>As part of the REMA developed and implemented a similar habitat rehabilitation project in Rubavu. This involved rehabilitating and restoring Rubavu mountain; which is one of the Lake Kivu watersheds. The area faced environmental and biodiversity problems which led to loss of human lives several times through flooding. Following the project the district the biodiversity has improved as well as generation of other benefits such as eco-tourism and cultural.</td>
<td>The project ran from 2011 to 2014 and the site covered approximately 62 hectares.</td>
<td>REMA learned several lessons from this project, importantly; that support from the RDB and their collaboration is required from the design stage of the project through to promotion. Scale of the intervention is important with a bigger project having more impact and greater revenue potential. Suitable tree species choice to increase biodiversity is important. The private sector is willing to engage they sometimes lack the capacity or levels of investment required to take on full time management at the present time.</td>
</tr>
<tr>
<td>Nyandungu Tree Planting and guarding Project</td>
<td>REMA undertook some work to restore the Nyandungu wetland from its previous use as agricultural land to a wetland. This involved some tree planting and guarding the site.</td>
<td>2010 to present. The area is 130ha.</td>
<td>The proposed park project will build on previous efforts in the area. The proposed project will also help develop the currently underutilised site into a profitable condition.</td>
</tr>
</tbody>
</table>

**Q 2.15** **Lesson Learning**: Please explain how the learning from this project will be disseminated and shared during (and at the end) of the project, and to whom this information will target *(e.g. Project stakeholders and others outside the project)*

**Output 3. Project lessons disseminated**

This output focuses on ensuring that lessons learned are made available to anyone and are disseminated. The project will use green technologies and a park to help control pollution and manage flood risk. The project will also demonstrate that biodiversity conservation in an urban environment can be used to generate revenue and create jobs. The outputs of the project and the activities used to achieve them may themselves serve as lessons to others.

Lessons learned during implementation will be captured primarily through the **Monitoring and Evaluation system**, which will provide regular monitoring of project indicators, as well as progress against the key milestones.

The project will also develop a **knowledge management strategy** to ensure that the project learns from the experience gained during implementation and that the knowledge is shared with other stakeholders as
reference for future projects. The knowledge acquired under this project will enhance that of other projects or initiatives in the areas of sustainable natural resource management, environmental protection and climate change. Lessons learnt as well as knowledge acquired will inform project annual reports, completion reports and performance evaluation reports. The reports as well as recommendations will be incorporated into project activities to improve the performance of the project.

Lesson learning will be a key part of the knowledge management component of this project. The project itself will build awareness on the value of preserving ecosystem services, through increasing appreciation of biodiversity. It is expected that school/university groups will visit the site to learn about the environment.

The project management team and the REMA technical experts will be available to discuss with interested parties the project, challenges to implementation, the technologies used and so on. REMA will facilitate tours for interested parties to learn more about the project and technologies used. REMA will demonstrate that the park is profitable and will encourage others (Govt institutions, private sector) to implement similar schemes.

The project will also develop a communications strategy to ensure that the project learns from the experience gained during implementation and that the knowledge is shared with other stakeholders as reference for future projects. The knowledge acquired under this project will enhance that of other projects or initiatives in the areas of sustainable natural resource management, environmental protection and climate change. Lessons learnt as well as knowledge acquired will inform project annual reports, completion reports and performance evaluation reports. The reports as well as recommendations will be incorporated into project activities to improve the performance of the project.

The proposed project will share project results and lessons learned so that new approaches can be mainstreamed in local and national planning. Thus, the lessons will be disseminated using:

1. Progress reports to stakeholders and decision makers where challenges encountered will be raised and recommendations corresponding will be shared; thus all the stakeholders will be able to ask questions to understand better during monthly meetings.
2. Lesson learning meetings and workshops with all stakeholders will be organized;
3. Cross-visits for observation and experience sharing with beneficiaries in the District will be organized.
4. After this project, documents will be accessible on request.
5. Documentation on how to propagate native trees and plants.
6. The project final evaluation report will be summarized with emphasizes on best experience and lessons from this project and will be available online.

<table>
<thead>
<tr>
<th>Q 2.16</th>
<th><strong>Risk Management</strong>: Please outline the main risks to the successful delivery of this project indicating whether they are high, medium or low. If the risks are outside your direct control, how will the project be designed to address them?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk description</td>
<td>Category (political, operational, financial, environmental)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Monetary inflation</td>
<td>Financial</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Delay to tender process</td>
<td>Operational</td>
</tr>
<tr>
<td>Appropriate and qualified contractors are not available when needed.</td>
<td>Operational</td>
</tr>
<tr>
<td>Failure to create ownership and commitment for the project at the local level. Possible resistance to adopting proposed measures</td>
<td>Political / Operational</td>
</tr>
<tr>
<td>Delays in Disbursement of funds, procurement and institutional bureaucracy</td>
<td>Operational</td>
</tr>
<tr>
<td>Risk</td>
<td>Operational or Environmental</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Failure to attract sufficient revenue for ongoing operation.</td>
<td>Operational</td>
</tr>
<tr>
<td>Disruption of water supply entering the park and upstream pollution events</td>
<td>Environmental</td>
</tr>
<tr>
<td>Seasonal rainfall may cause delays to some excavations and landscaping.</td>
<td>Environmental</td>
</tr>
<tr>
<td>Long-term management structure and regulatory framework not conducive to long term sustainability.</td>
<td>Operational</td>
</tr>
</tbody>
</table>

**Q 2.17 Risk Management:** What specific risks, if any, does your project pose to the environment, people or institutions affected by the project and how will these be managed and mitigated?

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk level (low, medium, high)</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of water pumps</td>
<td>L</td>
<td>The design will be modified to ensure that the existing water pumps will remain available. They will be segregated from the park by fencing.</td>
</tr>
<tr>
<td>Soil / water contamination</td>
<td>L</td>
<td>The available data suggests that the site was used as a landing site for parachute landing training prior to 1994. There is therefore considered to be minimal risks of soil contamination from this activity as opposed to a live firing range or military disposal site. A further potential concern regarding contamination is the close proximity to the</td>
</tr>
</tbody>
</table>
Special Economic Zone, this area however has been developed in a way that requires industries to manage their environmental impact and to minimize the risks of pollution. The park itself has been created to attenuate pollution entering the site and though there may be a potential risk in the future from pollution events REMA will work with stakeholders (Gasabo, Kicukiro Districts and the City of Kigali) to ensure that future developments don’t compromise the park.

Economic impact on illegal livestock grazers

There are currently some livestock grazed on the site. It should be noted that the site is technically a state owned wetland and the activities on the site are technically illegal. However, to redress the potential loss of earnings employment opportunities will be created by the project and the individuals involved (provided they have the right skills) may find employment from the project.

SECTION 3: PROJECT BUDGET AND VALUE FOR MONEY

Q 3.1 What is the total cost of the project (RWF; provide total cost for each year of the project disaggregated by capital and recurrent expenditure)?

The total cost of the project is 2.59bn RWF (2,587,967,074)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>Recurrent</td>
<td>Capital</td>
<td>Recurrent</td>
<td>Capital</td>
</tr>
<tr>
<td>350,634,500</td>
<td>93,033,690</td>
<td>1,442,361,625</td>
<td>79,833,690</td>
<td>121,192,500</td>
</tr>
<tr>
<td>443,668,190</td>
<td>1,522,195,315</td>
<td>237,826,190</td>
<td>266,263,690</td>
<td>118,013,690</td>
</tr>
</tbody>
</table>

Budget Summary over Project Phases

<table>
<thead>
<tr>
<th>Summary</th>
<th>Fonerwa Contribution</th>
<th>REMA Contribution</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 - Y1</td>
<td>403,834,605</td>
<td>39,653,585</td>
<td>443,488,190</td>
</tr>
<tr>
<td>Phase 1 - Y2</td>
<td>1,488,361,730</td>
<td>33,653,585</td>
<td>1,522,015,315</td>
</tr>
<tr>
<td>Phase 1 - Y3</td>
<td>204,442,605</td>
<td>33,653,585</td>
<td>238,096,190</td>
</tr>
<tr>
<td>Total Phase 1</td>
<td>2,096,638,939</td>
<td>106,960,755</td>
<td>2,203,599,694</td>
</tr>
<tr>
<td>Phase 2 - Y4</td>
<td>232,430,105</td>
<td>33,653,585</td>
<td>266,083,690</td>
</tr>
<tr>
<td>Phase 2 - Y5</td>
<td>84,630,105</td>
<td>33,653,585</td>
<td>118,283,690</td>
</tr>
<tr>
<td>Total Phase 2</td>
<td>317,060,209</td>
<td>67,307,170</td>
<td>384,367,379</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>2,413,699,149</td>
<td>174,267,925</td>
<td>2,587,967,074</td>
</tr>
</tbody>
</table>
Q 3.2 **What** is the total amount requested from FONERWA (RWF; provide financing needs for each year of the project)?

The total requested from FONERWA is 2.5bn RWF (2,490,318,149 RWF)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>386,811,805RWF</td>
<td>1,371,474,530RWF</td>
<td>496,792,605RWF</td>
<td>85,160,105RWF</td>
<td>91,460,105RWF</td>
</tr>
</tbody>
</table>

Q 3.3 **List** all other sources of funding. Note whether the status of other funding sources (i.e. Whether the money has been approved or is awaiting authorisation)

REMA is anticipating that all the required funds will come from FONERWA. No other financial support is available. REMA and other stakeholders will contribute to the park in the form of “In-kind contribution” in the form of man-hours, office space at REMA.

The total value of in-kind contribution is **174,267,925 RWF** over 5 years. Further details can be found in the budget sheet annex.

Q 3.4 **Additionality:** Explain why the project cannot be fully financed by other sources than FONERWA?

REMA recognises that the project aligns well with several of FONERWA’s objectives. REMA has already invested in the site and has invested funds to develop the feasibility study and design. The proposed project is additional to all previous investments in the site and builds on REMAs investments to date, totalling 119,465,298 RWF. Note: these costs have not been included in the project budget as they are in-kind contributions that pre-date the application.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Budget (RWF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree planting and site maintenance</td>
<td>63,448,500</td>
</tr>
<tr>
<td>Conceptual Plan (Alexis Gakuba, 2012)</td>
<td>17,187,500</td>
</tr>
<tr>
<td>Park Design (Dr Elias Twagira, 2015)</td>
<td>38,829,298</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119,465,298</strong></td>
</tr>
</tbody>
</table>

However, REMA lacks the funding required for the implementation of this project. There are at present no other sources of funding available that can allow REMA to fully implement the project.

Q 3.5 **What** non-financial support is needed to implement the project? What is the best way for FONERWA to deliver this support?

Technical support as well as strategic guidance will continually be sought from FONERWA in the process of implementation. FONERWA will also be consulted during M&E sessions as the main financial stakeholder in the project.
Q 3.6 Value for Money (Economy):

i) Briefly describe how the required inputs have been identified and how the GoR procurement procedures will be used to ensure they are obtained cost effectively

ii) Provide identified unit cost measures or selected project outputs? (Please see VfM guidelines on how to determine these. Further guidance from the FONERWA Secretariat is available)

i) Outputs 1 and 2: REMA identified that the project site is a suitable area for an urban park and nature reserve. REMA also identified that pollution management and flood control can be used for wider benefits. The approach and options chosen by REMA ensures that there are multiple benefits from the project. The choices made during the design process and project development have been made to facilitate this approach. The wetlands that will be created for example are restoring a natural and cost effective flood defense mechanism. The “living machine” reed beds for water treatment are a low impact, low energy and sustainable solution to managing pollution. Both these concepts relatively low cost and sustainable solutions to the problems identified. Biodiversity conservation is also a key aim of the project, creating and maintaining various habitats and using native flora as much as possible is the best way to increase biodiversity at a low cost.

The required inputs and bill of quantities have been identified during the participatory design process and REMA has an accurate assessment of the project budget and predicted contractor costs. The costs for all activities contributing to the overall project have been determined by consulting a contractor who has reviewed the design document and provided a detailed budget. During a competitive tender process it may be possible for REMA to improve on these figures. A draft tender document for the contractor has also been drafted. The principal contractor will be hired following a competitive tender process as outlined in the ministerial order N 001/08/10 MIN of 16/01/2008 establishing regulations on public procurement. The principal contractor under the supervision of the project manager will be responsible for procuring raw materials, goods and services which where necessary will be procured following these guidelines.

The principal contractor and project manager will liaise with Kicukiro and Gasabo district on accessing VUP and Umuganda Labour.

Under Outputs 3 and 4 REMA has identified the various options required to meet the desired objectives. Where required to achieve these activities GoR procurement procedures will be followed.

ii) The calculation of Unit Costs is explained in the Excel Annex: Unit costs are summarised below.

<table>
<thead>
<tr>
<th>Output Indicator</th>
<th>Unit cost (RWF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Area (ha) of native tree species planted. Note this is more important for overall biodiversity than planting any type of tree and thus it is subtly different to the Impact target of the project.</td>
<td>4,574,996.50 RWF</td>
</tr>
<tr>
<td>1.2 Number of different tree species / varieties planted.</td>
<td>Not calculated</td>
</tr>
<tr>
<td>1.3 Reduction in No of hectares of invasive non-native species</td>
<td>1,500,000 RWF</td>
</tr>
<tr>
<td>2.1 Area (ha) of marshland rehabilitated.</td>
<td>4,800,000 RWF</td>
</tr>
<tr>
<td>2.2 River channel widened and restored in Km</td>
<td>4,206,956.52 RWF</td>
</tr>
<tr>
<td>2.3 Long-term management guidelines put in place and updated annually.</td>
<td>20,000,000 RWF</td>
</tr>
<tr>
<td>3.1 Communications strategy implemented.</td>
<td>12,000,000 RWF</td>
</tr>
<tr>
<td>3.2 Stakeholder exchange platform / meetings.</td>
<td>2,000,000 RWF per meeting</td>
</tr>
</tbody>
</table>
3.3 No of persons attending study tours. 24,444.44 RWF per person
4.1 No of temporary staff employed in conservation. (i.e. during implementation phase) 64,699,177 RWF per temporary worker
4.2 No of permanent staff employed in conservation (i.e. staff employed during operation) 71,887,974 RWF per staff member
4.3 No of Freelance nature guides trained. 750,000 RWF per person

The unit costs for Outputs 1 and 2 could be considered high, however they present value for money because they include all elements that are necessary to increase biodiversity so that the park can generate the maximum revenue.

Similarly Output Indicators 4.1 and 4.2 are high, but they assume that the cost of job creation is the entire project budget divided by the number of jobs. There are probably ways to create green jobs in a cheaper way, but the assumption is that these particular jobs would not exist without the project.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Unit Cost (USD)</th>
<th>No of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Manager</td>
<td>$15000</td>
<td>1</td>
</tr>
<tr>
<td>Operations Manager</td>
<td>$8000</td>
<td>1</td>
</tr>
<tr>
<td>Environmental / horticulture manager</td>
<td>$8000</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance Staff</td>
<td>$2000</td>
<td>5</td>
</tr>
<tr>
<td>Gardeners and environmental Staff</td>
<td>$500</td>
<td>5</td>
</tr>
<tr>
<td>Wardens / Security</td>
<td>$500</td>
<td>10</td>
</tr>
<tr>
<td>Financial Manager</td>
<td>$10000</td>
<td>1</td>
</tr>
<tr>
<td>Receptionists</td>
<td>$2000</td>
<td>2</td>
</tr>
</tbody>
</table>

Note that the salaries of jobs under Output 4.1, i.e. temporary staff are the responsibility of the main construction contractor.

**Q 3.7 Value for Money (Efficiency):**

i) Briefly explain how the provision and operation of project inputs produce the expected outputs

ii) What is the Net Present Value (NPV) and benefit cost ratio for this project (Please see VfM guidelines on how to determine these measures. Further guidance from the FONERWA Secretariat is available)?

i) Outputs 1 and 2: The options chosen during the design of the project have been selected to efficiently achieve the three main project outputs. 1. Reduce flood risk, 2. Manage pollution, 3. Improve biodiversity. Wetlands in themselves offer natural flood defence, pollution management and biodiversity. The inputs of the project have been chosen to increase the natural capacity of the wetland in a sensitive and sustainable way that efficiently addresses the problems identified. The long-term success of the project will rely on minimal management costs and good levels of revenue generation. The design of the park reflects this by using native flora that will attract biodiversity; and as a result visitors.

Assuming modest visitor numbers and modest entry fees (developed following consultation with RDB), as a business the park will become profitable and self-sustaining in the short-term.

There are many benefits generated by the park that are not easily measurable using CBA though there are numerous studies that show the social and health benefits of green urban spaces. The main objectives of the project are to have environmental benefits. However, the social benefits increase the
positive value of the project, and although they are secondary to the main objectives they show that the project will have a wider impact than that captured by the CBA.

Outputs 3 and 4: The activities identified under these outputs are measures known to be effective for achieving the desired results. These activities have also been designed to ensure the long-term sustainability of the project. In regard to promoting the park to increase visitor numbers RDB will be involved to ensure that this is effective.

ii) Net Present Value = 5,095,059,325 RWF

iii) The Benefit Cost Ratio of the project has been calculated to be = 3

The benefits calculated with the available data show that the park is worthwhile. There are numerous studies in the literature that show that the development of urban parks (especially in depressed or industrial areas) have a benefit on land values and desirability in the surrounding area. It is noted that the site is near Kanombe Airport and the Free Trade Zone, therefore the park will go some way to address the negative effects of this infrastructure. Additionally, the close proximity to these locations may increase the visitor numbers at the site.

There are however many benefits of the project that cannot be easily captured with the available data and these have not been calculated. If it were possible to calculate further benefits REMA is confident that the BCR would increase considerably, i.e.:

- Non-Use Values (i.e. the value placed on the park by non-users) of the park and the bio-diversity conservation resulting from its creation could be calculated using a “Stated Preference” - Contingent Valuation Study. This has not been undertaken for the park project, yet similar exercises have been undertaken for other protected areas with positive results.
- The benefits to education, health and wellbeing have not been calculated, though such studies have been undertaken for parks elsewhere also with positive results.
- The park will have a value in promoting Rwanda’s commitment to biodiversity conservation; this has not been calculated.
- Using revenues, long-term the project should allow conservation of further wetlands. The benefit of this has not been calculated.
- The park will generate considerable taxable revenue for the state and this has not been included in the CBA.

Therefore, whilst there is a long-payback period for the intervention REMA is confident that these additional uncaptured benefits make the project worthwhile.

Q 3.8 **Value for Money (Effectiveness):** How does your project demonstrate effectiveness:
- How will it show the outputs meet the project objectives?
- Which indicators will you measure to demonstrate effectiveness?

The inputs chosen for the project follow a model that has been used elsewhere in the world. For example RSPB and WWT sites in the UK that protect areas for several benefits and revenue generation.

There are several indicators that will be used to measure the effectiveness of the project after the implementation has been completed. Broadly speaking these indicators are the same as those in the log-frame. For full details please refer to the project management excel document.

1. Monitoring biodiversity
2. Measurement of visitor numbers
3. Measurement of revenue generation
4. Measurement of green jobs created