

National Climate Change and Environment Fund (FONERWA) Full Project Document (PD)

GUIDANCE NOTE (24th November 2014 version)

WHAT IS A PD?

The **Project Document (PD)** is the final application to FONERWA for financial or technical assistance. The PD will provide the Fund Manager and the Technical and Managing Committees with a comprehensive understanding of your project, and how it fits into the broader context of Rwanda's environmental and climate change strategies.

HOW DO I COMPLETE THE FORM?

All submissions must meet the following basic requirements or they will be returned without consideration:

1. All submissions must be completed using Calibri font size 12.
2. All submissions must have a completed Cover Sheet (see below).
3. There is a 35 page limit for the PD form excluding Annexes.
4. Do not alter the formatting of this form.



Read Carefully!

All submissions must include the following documents:

1. CVs for all key project personnel.
2. A detailed work plan for the project together with a logframe matrix that links activities
3. A project Cost Benefit Analysis spreadsheet

In addition submissions must include the following where these are available:

4. A feasibility or pre-feasibility study
5. Any other supporting documents, such as verification of Rwandan Registration (for private companies and CSOs), letters confirming financing from other sources (if applicable), environmental impact assessments, etc.

Please follow the instructions on the following pages and complete all the requested information, even if the response is duplicated elsewhere.

HOW WILL THE PD BE ASSESSED?

The Fund Manager will assess each PD against **four technical appraisal criteria**:

1. **Value for Money:**
 - a. Does the project demonstrate value for money?
 - i. Economy: The right inputs have been identified to deliver the required outputs and will be procured cost effectively.
 - ii. Efficiency: Operational costs are appropriate given the benefits. The benefits exceed the costs; the project will deliver a positive Net Present Value (NPV) and Benefit Cost

- Ratio.
- iii. Effectiveness: The project contributes to one (or more) of FONERWA's core objectives.

2. Desirability:

- a. Does the project conform with:
- i. National, and
 - ii. Sectoral strategies related to environment, climate change, and economic development?
- b. Will the benefits of the project be sustained after the lifetime of the project activities?
- c. Does the project support strategic economic activities and/or poverty reduction?
- d. Will the project result in skills development and/or technology transfer?
- e. What is the degree of risk that the objectives of the project are not met?
- f. Does the project demonstrate additionality?

3. Viability:

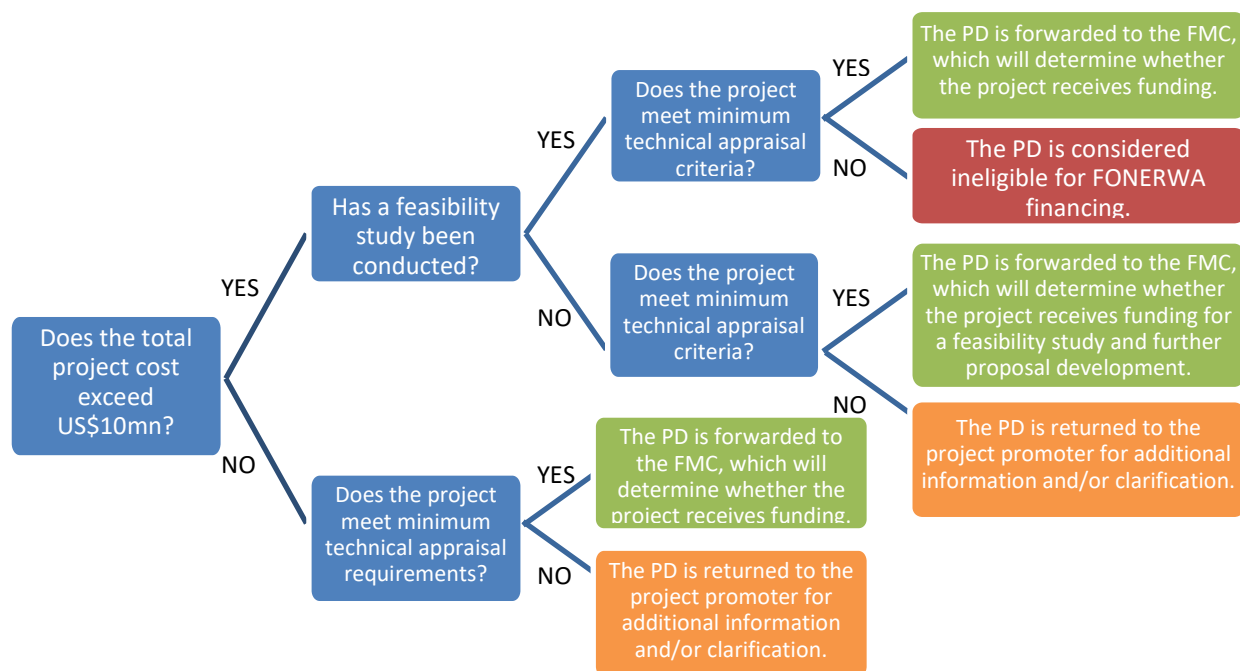
- a. Does the project implementer have sufficient experience to execute the project?
- b. Have the project management arrangements been confirmed?
- c. Is an appropriate Monitoring and Evaluation (M&E) framework in place?
- d. Have stakeholders been consulted and involved in the project formulation?

4. Capacity to Leverage Additional Resources:

- a. Does the project satisfy the criteria for international climate change or environment financing facilities, and is the project likely to attract additional international funding?
- b. Does the project proposal demonstrate the project has potential for income generation?
- c. Is the project likely to attract private sector investment?

WHAT HAPPENS AFTER I SUBMIT THE PD?

The Fund Manager will use the following decision tree to determine how to respond to PDs:



Each sub-criteria associated with Desirability, Viability and Capacity to Leverage Additional Resources will receive a score between zero and ten (0-10), and the criteria will be weighted as follows: Value for Money (40%), Desirability (20%), Viability (20%), Capacity to Leverage Additional Resources (20%). Value for Money is weighted more heavily than Desirability, Viability and Capacity to Leverage Additional Resources, to stress the importance of financing projects with tangible, identifiable results. The criteria related to Feasibility are simple yes/no answers that will determine whether the project is eligible for direct financing by FONERWA or whether the project will be competing for financing to conduct a feasibility study and further proposal development.

All PDs will be ranked by the Fund Manager according to their scores, shortlisted based on available financial resources and forwarded to the FONERWA Technical Committee for review. The Fund Manager will also provide an assessment of whether the minimum technical appraisal requirements have been met (at least 60/100). The Technical Committee will conduct a brief audit of the technical appraisal prepared by the Fund Manager, and then conduct a **Strategic Appraisal** of the shortlisted PDs. The Strategic Appraisal will be an in-depth review of the project's desirability and a prioritisation of the PDs based on the knowledge of the technical committee members. The Technical Committee will then determine the ranking for projects forwarded to the Fund Managing Committee (FMC).

If the project is considered to have met the minimum technical appraisal requirements, then the Technical Committee will forward the PD to the FMC for final decision. For projects with a total cost exceeding US\$10mn, the FMC will only be able to provide project financing if the project applicant has conducted a feasibility study. If a feasibility study has not yet been conducted, then the FMC will determine whether to grant the project applicant financing to conduct a feasibility study and grant further proposal development support. If the total project cost does not exceed US\$10mn, then the FMC will determine whether to provide financing for the project regardless of whether a feasibility study has been conducted.

If the Technical Committee does not feel that the project meets the minimum technical appraisal requirements, then the project will be returned to the promoter for more information and/or clarification. If a project has already had a feasibility study conducted, and the technical committee still does not feel that the project meets the minimum technical appraisal criteria, then the project is NOT eligible for resubmission.

WHEN WILL I FIND OUT THE RESULT OF THE ASSESSMENT?

Prior to PD submission to the FONERWA Managing Committee, assessment of the PD will require a maximum of 1 month (21 working days) following receipt. The Managing Committee will then have the final decision on all PDs. The results of the FMC meeting will be available within 10 working days of each quarterly meeting. The Secretariat will provide you with dates of quarterly meetings.

HOW CAN I GET HELP WITH MY FULL PROPOSAL?

Do not hesitate to contact the Fund Manager's office if you have any questions. Providing advice and support for proposal development is one of the primary responsibilities of the Fund Manager.

Tel: +250 252 580 769

Email: info@fonerwa.org

WHO CAN I CONTACT IF I AM DISSATISFIED WITH THE PROCESS?

If you have suggestions to improve the PD appraisal process, or if you would like to challenge the results of the assessment, email the FONERWA Managing Committee:

Email: info@fonerwa.org

Email title: FOR THE ATTENTION OF THE FONERWA Managing Committee (FMC)

National Climate Change and Environment Fund (FONERWA)

Full Project Document (PD)

COVER SHEET

(Attach this sheet to the front of your submission. *Please do not exceed one A4 side of paper.*)

Project Title	Using Water_Energy_Food Security Nexus to Promote Climate Resilient Decisions and Model Actions in Selected Landscapes along Akagera Basin
Project Summary (In 75 words or less please summarise what your project intends to achieve and how)	The goal of this project is to provide evidence-based policy guidance and promote local actions that enhance climate resilience and participatory sustainable development along the Akagera Basin. The project will assess the impact of different development trajectories in the Akagera Basin on food, energy and water security and the environment; key elements within EDPRS 2. It will build grass-root community enterprises, as models for integrating key elements of the water, energy and food security nexus.
Anticipated Start Date (DD/MM/YYYY)	01/10/2015
Project Duration (in months)	36
Funding Requested (RWF)	628,916,640
Name of Lead Organisation	Albertine Rift Conservation Society (ARCOS Network)
Type of Organisation, which best describes the Lead Organisation (please select only one box)	<input type="checkbox"/> Government Institution <input checked="" type="checkbox"/> Non-Governmental Organisation (NGO) <input type="checkbox"/> Private Sector Enterprise <input type="checkbox"/> Academic Institution <input type="checkbox"/> Other (please specify)
Partner Institutions	Stockholm Environment Institute (SEI) Nile Equatorial Lakes Subsidiary Action Program (NELSAP)
Full Office Address	Promise House, Kimironko; P. O. Box 1735 Kigali, Rwanda
Website Address (if applicable)	www.arcosnetwork.org http://www.sei-international.org
Contact Person (the person who will have ultimate responsibility and be accountable for delivering this project)	1) Name: Dr Sam Kanyamibwa Position: ARCOS Executive Director Email: skanyamibwa@arcosnetwork.org Tel: 0785 751 900 2) Name: Dr. Louise Karlberg Position: Unit Head: Resources and Development, SEI Email: louise.karlberg@sei-international.org Tel: +46 73 707 85 43
Is this a resubmission of an earlier submitted PD (if so please provide details)	No

For Internal Purposes Only: To be Completed by the Fund Manager

Date Received: _____ PD Code: _____
 Date Comments Sent: _____
 Feasibility Study? (Y/N) _____ PPD Code: _____
 Thematic Financing Window: _____
 FONERWA Entry Point: _____
 Technical Appraisal Score: _____ Rank: _____

National Climate Change and Environment Fund (FONERWA)

Full Project Document (PD)

(Please provide a complete answer to each question, even if the answer is duplicated elsewhere. This PD should not exceed 35 sides of A4 size paper.)

SECTION 1: INFORMATION ABOUT THE APPLICANT

Q 1.1	What is the Lead organisation's total number of full-time employees?
18 staff	
Q 1.2	What is your organisation's experience of managing similar projects or activities <i>(please explain why you think your organisation and partners are capable of managing the project)?</i>

The project will be coordinated by the Albertine Rift Conservation Society (ARCOS) with primary technical collaboration from the Stockholm Environment Institute. ARCOS will also benefit from collaboration with the Nile Equatorial Lakes Subsidiary Action Program (NELSAP), for synergy and experience sharing from NELSAP's on-going activities in the Kagera Basin.

ARCOS is a regional organization which has been operating in the Albertine Rift region since 1995 and has offices in Rwanda, Burundi and Uganda. ARCOS is the winner of the MacArthur Foundation for Creative and Effective Institutions and is in the process of using this award money to build a Regional Information and Training Centre in Kigali where the project management unit will be located. ARCOS has implemented various projects with government institutions and civil society organisations at local level, the Albertine Rift regional level, the Great Lakes regional level and Africa-wide on African Mountains. ARCOS has built expertise in integrated landscape assessment and monitoring, ecosystem services assessment and valuation, information management and sharing, GIS, facilitating policy dialogue and community work.

This initiative builds particularly on the following regional projects implemented by ARCOS in the Albertine Rift region, the Great Lakes region and African Mountains:

- ARCOS is implementing a regional project aimed at fostering capacity and stakeholders dialogue on how to manage the drivers affecting freshwater ecosystem services in the Great Lakes region (USD 500,000).
- ARCOS just completed a project on enhancing ecosystem services resilience and establishing a sustainable community benefits system in three landscapes: Echuya Forest in Uganda, Mukura Forest in Rwanda and Kibira-Rusizi in Burundi where integrated landscape monitoring and piloting payment for ecosystem services were implemented involving various stakeholders (USD 400,000).
- ARCOS is facilitating a regional project at the Africa level on Sustainable Mountain Development (USD 1,250,000)
- ARCOS is managing a project on enhancing civil society leadership in environmental impact assessment (EIA) in the Central Albertine Rift, covering Rwanda, Democratic Republic of Congo and Burundi (USD 200,000).

The main partner, Stockholm Environment Institute, is an independent international research institute specialised in environment and development issues at local, national, regional and global policy levels for more than 20 years. SEI brings rigorous and objective scientific analysis in the field of environment and development, particularly on water-energy and food security nexus.

In terms of staff capacity, ARCOS has a team of professional staff in environmental and economic fields. The project will be supervised by Dr Sam Kanyamibwa, ARCOS Executive Director, who has over 25 years of work experience in conservation and natural resources management in Africa. He will be closely assisted in the supervision of the Project by Dr Louise Karlberg, who leads the Resources and Development Unit at SEI. A full time Senior Officer will be assigned to coordinate the Project Management Unit, comprised of part time staff including the Finance and Administration Manager, the Nature Based Community Enterprises Officer, the Communications and Information Officer who will also manages the Monitoring and Evaluation component, and full-time field-based team of Community Support Officers, who will be based at District level. A Technical Advisor from SEI will provide technical support to the project.

At local level, the project will be implemented jointly with Districts. This has been discussed with the districts and formal arrangements have been agreed (MOU with Kirehe District, Support Letters from Bugesera and Rutsiro Districts).

The Table below summarises the roles and responsibilities of diff partners		
Partner	Main Role	Other responsibilities
ARCOS	Project coordination and overall management	Secretary/Reporting to Steering Committee
SEI	Coordination of Nexus analysis and technical training	Member, Steering Committee
Districts	Mobilisation of stakeholders in the Districts,	Member, Steering Committee
NELSAP	Data sharing on Akagera Basin, Training of Community Catchment Committees	Member, Steering Committee
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)	
Position in the project	Name	Email
CORE PROJECT MANAGEMENT UNIT		
Project Manager	To be recruited (interim: Sam Kanyamibwa)	skanyamibwa@arcosnetwork.org
Finance and Administration Manager	Mrs Mukansoro Beatrice	bmukansoro@arcosnetwork.org
Nature Based Community Enterprises Officer	Michel Ndengera	mndengera@arcosnetwork.org
Community Support Officers (x3)	To be recruited (jointly with Districts)	TBD
Communications and Information Officer (incl. M&E)	Faustin Gashakamba	fgashakamba@arcosnetwork.org
SUPERVISION AND TECHNICAL SUPPORT		
Project Supervision	Dr Sam Kanyamibwa	skanyamibwa@arcosnetwork.org
Project Co-supervisor (SEI-Nexus- Water)	Dr Louise Karlberg	louise.karlberg@sei-international.org
Technical Advisor (SEI-Nexus- Energy)	Dr Oliver Johnson	oliver.johnson@sei-international.org

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.
Please find attached Annex 2	

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.*) ?

Meeting human aspirations in the face of a changing climate and an increasingly resource scarcity require that resources are used cautiously and equitably. Rwanda is witnessing rapid economic transformation, guided by the EDPRS II. This economic transformation combined with population growth, will lead to additional pressure on the environment and particularly the use of water, use of energy and agricultural production. Rwanda is one of the pioneer countries in having developed in 2011 its “Green Growth and Climate Resilience Strategy”. This strategy recommends the need to understand the linkages between different sectors in future scenarios. Agriculture, energy and water are closely interlinked: intensification of agriculture requires more water and energy per unit. Meanwhile, energy needs are commonly being met through the use of water for hydropower production and biomass for cooking. This inter-dependence needs analysis to guide natural resource management, investments and policy. Information to guide decisions as well as demonstration initiatives will help to support climate resilience activities and community livelihoods.

Sustainable energy transitions entail shifting away from traditional biomass use, while at the same time meeting climate change mitigation targets. Developing modern bioenergy and hydropower are potential options, requiring both water and land. Similarly, sustainable agricultural transformation will require higher energy and water inputs to improve productivity. Upstream water-withdrawals for irrigation may reduce water availability for hydropower generation and ecosystems. At the same time, the agricultural sector will need to adapt to a changing climate in particular focusing on water management to bridge more frequent droughts.

In Rwanda, Akagera Basin plays a significant role in biodiversity conservation and provide essential services for human well-being. However, there is an increasing competition for those services and as a result, they are being depleted as the country develops and the population increases. For instance, there is increasing competition for water, which is being exploited for hydropower, irrigation, and water supply to major towns and various industries. Moreover, biomass scarcity causes the country to import biomass from neighbouring countries as well as having to allocate croplands to wood plantations, such as eucalyptus.

Rwanda’s Green Growth and Climate Resilience Strategy centers around three cornerstones: 1) Achieving energy security and low carbon energy supply, while avoiding deforestation, 2) Ensuring sustainable land-use and natural resources management resulting in food security and the preservation of biodiversity and ecosystem services, and 3) Societal protection, including reduced vulnerability to climate change. Rwanda has committed itself to becoming a middle-income country by 2020, basically transforming the whole energy and agricultural sectors, and doing this sustainably. However, this transformation has to take place in a place in the context of scarce water and biomass (land) resources on a per capita basis. For instance, in 2009, 21% of the biomass consumption was ascribed to unsustainable use of biomass. Furthermore, agriculture, energy and water sectors are closely interlinked. An intensified agriculture system will require more energy and water per unit land, whilst a modernized energy sector will be less based on traditional biomass and thereby less land intensive.

These resource constraints and inter-sector dependencies require that the whole so called water-energy-food nexus is critically analyzed on the ground as well as in terms of institutions and policies, in order to avoid undesirable outcomes in terms on natural resources management, investments and policy inconsistencies.

Such analysis needs to address resources demand and cross-sector linkages within the energy and agriculture sector, taking into account the current policy and institutional frameworks and evaluating the outcomes according to policy goals and socioeconomic development targets. Furthermore, there is a need to assess the impacts of optional development trajectories in terms of new policies and technical innovations. The “SEI Nexus toolkit” is a set of water-energy-food planning tools that enables such as analysis. The Water Evaluation and Planning (WEAP) tool (<http://sei-us.org/software/weap>) and the Long-range Energy Alternatives Planning (LEAP) (<http://sei-us.org/software/leap>) are two of the most common water and energy planning tools used globally today, particularly in data scarce environments. In dialogue with stakeholders, the tool can be applied to test classical “what if” questions (e.g. what if we increase the energy tariff, subsidize fertilizer, build more irrigation dams etc.).

The stakeholders themselves populate the model with their own data, develop the assumptions, and jointly with the project team, critique the results of the tool in an iterative way until the model is deemed credible. Moreover, stakeholders analyze the socioeconomic and environmental impacts of the results and compare them with the goals in national strategies and policies. Lastly, stakeholders participate in the formulation of new policies and technical innovations to be tested in the toolkit, thereby supporting the development of new interventions.

In this participatory process the Nexus tool-kit can be used for several purposes:

1. To support the implementation of current policy frameworks such as the EDPRS II and sector specific policy frameworks, to test policy coherence and analyze options for implementation strategies such as for instance various policy mechanisms (e.g. energy and water tariffs, water rights etc.);
2. To guide new policy development and make policy recommendations, and;
3. To guide investments in new technical innovations.

In the latter case, there are several promising technical innovations that may have positive impacts for both transforming the agricultural and the energy sectors. Some of these include micro-hydro schemes, bio-digesters, improved cook-stoves, water harvesting dams, conservation agriculture etc. However, in many cases it is unclear what the impact from upscaling of these technologies would be on the specific sector, but also what the repercussions or benefits to other sectors and the environment might be. In these cases, the Nexus tool-kit can in these cases help to quantify the resources allocations to different sectors and potential environmental impacts, as well as the production of both food and energy for different development trajectories.

In addition to energy, water and agriculture modeling; capacity building and research is very crucial aspect without which the mentioned strategies and plan cannot be achieved. The EDPRS II encourages capacity building in strategic areas such as agriculture, small and medium enterprises, and also in planning at different levels so that decision-making is based upon research evidence generated from the participatory modeling activities. Such research-based decision-making (RBDM) offers an opportunity to reduce the generated uncertainty and to ensure efficacy and efficiency in sustainable development.

This project builds on one of the partner's (SEI) experience from a similar project conducted in Ethiopia. Just like Rwanda, Ethiopia has adopted a green growth development plan with similar socio-economic development goals. At the same time the country is facing similar development challenges in terms of water and biomass scarcities, land degradation, deforestation, habitat destruction, a rapidly growing population and a changing climate. Agricultural transformations and energy transitions are two key processes in the Ethiopian development strategy.

In Rwanda for example, the current national water resources management sub-sector strategic plan (2011 – 2015) recognizes the provisions under Rwanda's Vision 2020 and the EDPRS II to intensify agriculture and increase national energy output as one of the main drivers in the water sector (e.g. energy generation to grow up to 563MW by 2018 mainly through hydropower; agriculture to grow by 8.5% annually). Also, the District Development Plans of all the districts involved in this project have provisions to modernize agriculture, invest in more energy production, and intensify many water-demanding or dependent activities such as mining, industrial development, ecotourism, etc. At the same time, the districts are aiming for universal access to clean water, a goal which may be challenging to reach if water is diverted to other competing needs.

Also, Rwanda is one of the very few countries in the world that have a biomass strategy that specifically addresses the scarcity of biomass. The agriculture sector requires large amounts of biomass for fodder and for maintaining soil health, by returning some crop residues to the soils after harvest. At the same time, crop lands are being used for fuel wood plantations for the energy sector to meet fuel demands. And with increasing agricultural intensity, more energy per unit of land is required for pumping of irrigation water and for mechanization. While the agriculture sector depends on land and water for food production, the energy sector has alternative options to hydropower for electricity generation and biomass for cooking, such as solar, wind and biogas. Thus, while the agriculture sector is dependent on energy for its development, the future direction taken by the energy sector can also severely constrain national food production. In this context, the Nexus tool-kit can guide the cross-sector dialogue between stakeholders required for developing a common development trajectory, "the future we want", which is consistent across sectors and support the sustainable development of Rwanda.

In this regard, the districts have seen much value in this project since it will help them develop better plans for these different sectors based on the insights from the results of the Nexus toolkit. In their letters of support for the project, the districts showed interest in applying the toolkit to support their planning activities as well as a desire to draw on the project's recommendations to better mainstream climate change in their short-term to long-term plans. Furthermore, the districts also expressed their enthusiasm for the community activities built into the project since they see these as demonstration cases which could be replicated and thus serve as a model for green growth in the context of local development.

In Ethiopia's Lake Tana region, the SEI nexus tool-kit was applied jointly with stakeholder to compare three different development trajectories: business as usual, a full and successful implementation of the national strategies, and finally a strategy that aimed to address outstanding dilemmas under the current policy framework. The project brought together stakeholders from the food, water, energy and environment sectors to discuss the implications of different development trajectories and to jointly develop new strategies that would address outstanding dilemmas. The outcome of the project was the forming of a cross sector platform for dialogue, and an improved understanding of joint issues pertaining to resource scarcity (in this case specifically water and biomass) and the needs of other sectors. The project also revealed gaps in the current policy framework that would need to be addressed to ensure a desirable future for all.

The project will seek inputs and cooperation from MINIRENA, MININFRA and MINAGRI to ensure that each sector's priorities for development are taken into account and we have started dialogue with these ministries. In addition, the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) will be involved in the implementation of the program. By better understanding the interactions between energy, food and the water environment, Rwanda can develop more sustainably and maintain environmental integrity in the face of a changing climate. FONERWA has been identified as a funding source because the project aims to achieve several objectives important to FONERWA, including: data collection, habitat and water management and climate change resilience.

Q 2.2	What change is this project intended to achieve (<i>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.</i>)?
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The goal of this project is to provide evidence-based policy guidance and promote local actions that foster climate resilience and participatory sustainable development along the Akagera Basin.

The project will assess the risks and opportunities to the Akagera Basin under different development trajectories for different stakeholders, with focus on the food-energy-environment nexus. The project will result in an identification of sustainable and agreeable development pathways to guide future investments at national and local level. The four focal areas of the project – food, energy and water security and the environment – are all key elements within EDPRS II and the project will contribute to the implementation of the Green Growth and Climate Resilience Strategy. We expect the following outputs (more details in the logframe):

- ✓ High Level technical reports and policy briefs (25) illustrating future development pathways for food, water and energy production to guide planning and decision-making in focal districts of Rutsiro, Ngororero, Bugesera and Kirehe and other districts in Rwanda
- ✓ Over 2,000 stakeholders representing different development sectors operating in Rutsiro/Ngororero, Bugesera and Kirehe Districts understand and share vision about future development pathways
- ✓ Over 15 Nature Based Community Enterprises (NBCEs) empowered and supported through training, institutional development and link to markets (average of 5 per project landscape);
- ✓ Over 800 people supported in pursuing sustainable practices

A participatory process leading to these results will include the following:

- ✓ Annual participatory monitoring of biodiversity and ecosystem services provisioning in selected landscapes of Akagera Basin, with a focus on changes and opportunities for interventions (WP1).

- ✓ Using Water- Energy-Food Nexus toolkit to analyse current policies and plans and develop scenario narratives with stakeholders (WP2);
- ✓ Multi-stakeholder dialogues and increased public awareness of cross-sectorial interactions in the food-energy-water nexus and the sustainable use of ecosystem services. Policy recommendations for the water, food and energy sectors on how to achieve their goals sensitive to the needs of other sectors (WP3)
- ✓ Capacity building and support of local sustainable and climate resilient community initiatives. (WP4). Building on the collaboration with SEI and its international reputation, the project will contribute to knowledge sharing and technology transfer with stakeholders at local and national level on the nexus concept and key sustainability imperatives integrating water, energy and food security.

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.)?*

The project will work at 3 main levels: 1) evidence collection through research and monitoring, 2) multi-sector dialogue to facilitate the understanding and development of shared vision on future development in selected districts, and 3) local community enterprises to serve as demonstration models to link local action and planned dialogue.

The project is structured around four work-packages. Key methodologies for each work-package are described below:

WP1. Integrated Landscape Assessment and Monitoring (ILAM) we will conduct annual Integrated Landscape Assessment and Monitoring in the 3 project landscapes. This will build on ARCOS experience in conducting this activity, focusing on biodiversity, ecosystem services and socio-economic status (see attached sheet). This activity will be implemented by ARCOS, working closely with NELSAP and with stakeholders in each landscape.

WP2. Quantify Water- Energy-Food Nexus. We will analyse current policies and plans, develop scenario narratives with stakeholders and parameterise the Nexus toolkit. SEI's WEAP and LEAP Nexus Toolkits are modelling tools that use a broad set of data collected in the field and from other sources. The toolkit can then analyse several development pathways, conduct stakeholder analysis of outputs and finally evaluate different development pathways. This activity will be implemented by SEI, with ARCOS support on the ground.

The Water Evaluation and Planning (WEAP) tool is an integrated water resource management (IWRM) tool that has been used in numerous river basins around the world. The model works as a scenario planning and decision support system, based on a fully integrated water system simulation model that includes a robust and flexible representation of all water supplies and water demands from all sectors, and allows for the description of operating rules for infrastructure elements such as reservoirs, diversions, environmental flows, canals, etc. The Long-range Energy Alternatives Planning (LEAP) tool is an integrated modeling tool that has been used in over 190 countries, tracking energy consumption and production in all sectors of an economy. The tool supports a number of different modeling methodologies, including both top-down macroeconomic projections of energy demand, bottom-up engineering-based demand analyses, and hybrid assessments that employ elements of each. Linked together, these tools form the basis of SEI's Nexus toolkit, which allows dynamic analysis of water, energy and land-use interactions

WP3. Evidence based platform and stakeholder dialogue for advocacy. We will involve key stakeholder groups in the Kagera Basin, including government, academia, communities, Community Catchment Committees, NGOs and the private sector. We will use the nexus toolkit to support discussions and influence decision-making leading to a basin-wide planning vision. We will produce awareness raising materials, technical and policy papers to guide public understanding and guide decisions. This activity will be implemented by ARCOS, supported by SEI.

WP 4. Building Sustainable Nature-Based Community Enterprises. This activity will be implemented in demonstration sites to enable joint learning with stakeholders, through local action planning and testing of

interventions designed to increase climate change resilience. With the districts, we have already identified all the community groups active in each district, including women and youth. During the project implementation, we will conduct further analysis of these groups, and a special attention will be paid towards women and youth groups.

The community group selection and engagement process:

Stage	Activity	Details	Who	By when
Selection stage	Reconnaissance visit	Already done during project design	ARCOS and Districts	June 2015
	Conduct feasibility study and value chain analysis	To identify potential community businesses, redefine application of toolkit for identified businesses	Consultant	Year 1 (Q1-Q2)
	Conduct due diligence to identify which community group to work with	To identify community groups (average of 5 per landscape) based on results above a	ARCOS and Districts	Year 1 (Q2-Q4)
	Define conditionalities and Terms of Agreement	Engage dialogue with selected community groups for partnership agreement		Year 1 (Q4)
	Signing of agreement and provision of funds	Official agreement signed between ARCOS, District and Community group	ARCOS and Districts	Year 1 (Q4)
Implementation Stage	Provide training to Selected community groups	Training in institutional, financial and business management	ARCOS, SEI, NELSAP	Year 1 (Q3-Q4) Year 2 (Q1-Q2)
	Conduct participatory business planning and Market linkage	Tailored planning and market relationship building for each community group	ARCOS	Year 2 (Q1-Q2)
	Conduct regular M&E and experience sharing	Conducted every 6 months to assess managerial and financial change	ARCOS and Districts	On-going

Beneficiary community groups will be selected based on the potential of their businesses for sustainability practices, financial viability and institutional capacity such as governance, size of members, and potential to serve as model in the society. Special attention will also be given to women, youth and vulnerable groups. Emphasise will be put on watershed riparian community groups.

The selection process will be transparent through a selection form based on all these criteria to be assessed by the project committee members who will select beneficiary community groups.

Initially, community activities will be performed with guidance from the general WEF nexus principles and the outcomes of the initial stakeholders meetings and field work. The nexus analysis itself will be a long study, which will run almost throughout the whole project life. Therefore, its results will only be incorporated into community interventions on a continuous basis.

We will then develop Resource User Agreements (i.e. resource management agreements for local communities reliant on ecosystem services) with selected community groups to better manage the environment for increased climate change resilience. The agreements will include community practices integrating the three pillars of the water-energy and food security Nexus at household level. These have to be identified with communities and can include:

- Agriculture and food security: agro-ecology techniques such as agroforestry, kitchen gardens, nutrient recycling, and water conservation to maximize sustainable food production,
- Renewable energy: solar technologies, and biogas digesters
- Water: rainwater harvesting, water conservation and water efficiency practices

In terms of training NBCEs, the selected community groups will be trained in business planning and development, quality management and marketing. We will set targets with each group, and we will regularly conduct a performance review of each community group, to monitor the changes towards the targets agreed.

The rationale will be to let these selected businesses to serve as models on how the Nexus analysis toolkit can be used to enhance and streamline nature-based community initiatives. The community initiatives will be integrated in the wider district development plan, by disseminating and supporting other community groups. We will conduct the publication of results and disseminate these to other communities and decision-makers, to share lessons and experiences and promote applicability to other parts of Rwanda. This activity will be implemented by ARCOS, working closely with Districts and NELSAP, particularly for the Community Catchment Committees, and with contribution of SEI in Nexus training.

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

At the grassroots level, the project will work with community groups (cooperatives and villages) to promote activities that integrate the nexus approach in the development and utilisation of water, land and energy resources. In collaboration with Districts in project area, ARCOS has already conducted a preliminary assessment of active cooperatives including women and youth. These will be involved in further analysis and due diligence to select community groups to work with. The project will put emphasis on ensuring gender balance is assured, youth empowerment and skill development schemes are privileged and transparency is encouraged across the whole spectrum of its on-ground activities.

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?

The project is seeking to promote actions that demonstrate the benefits of promoting synergies between the water, energy and agriculture sectors; a broad range of stakeholders has to be engaged and all of them are equally influential in ensuring actions that affect the water-energy-food nexus are integrated and harmonized.

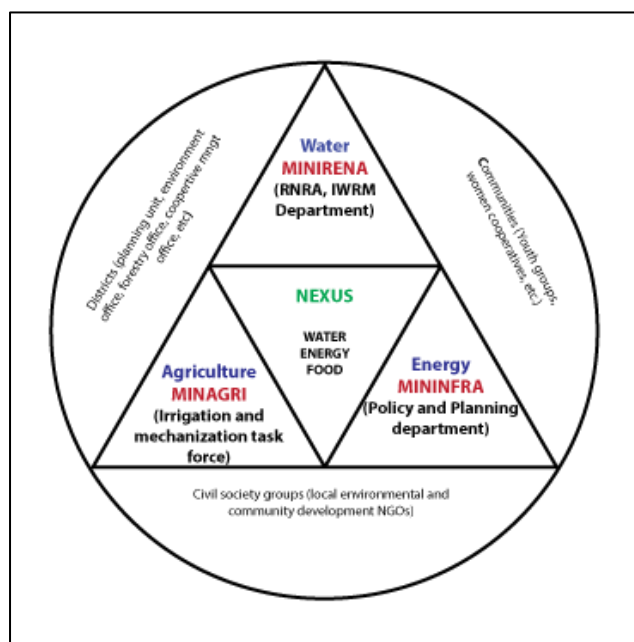


Figure 1: Project stakeholders' engagement diagramme

are: Mukura landscape (Rutsiro and Ngororero Districts), Kanyaru-Nyabarongo confluence (Bugesera District) and Rusumo (Kirehe District). To inform the project development process, all of these districts have been consulted and the priorities of the districts as outlined in their respective district development plans have been taken into account when defining the project intervention areas.

Since the project's scope is broad and given the three sectors involved, the implementation arrangement that will be put in place which adopts the collaborative action approach. A National Project Steering committee will be put established, with representatives from different stakeholders. Selected community groups will be supported through a small grants system that will be established within the projects and the grants will be overseen by the

Project Steering committee. At the District level, a Community Support Officer, jointly recruited with Districts, will support community groups and other project activities. Also, local civil society actors active in the areas of interest will be involved to ensure the project adds value to what they are doing already and avoids unnecessary duplication of effort.

Q 2.6	<u>How</u> will the benefits of the project be sustained after FONERWA funding comes to an end?
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Data collection at landscape level using the Integrated Landscape Assessment and Monitoring (ILAM) Framework is participatory with indicators selected by users of the Framework. In each district, we will build capacity of ILAM users who can continue to collect data after the life of the project, with minimum technical support that ARCOS will continue to provide.

The project will support community groups by providing them the skills, business planning, market linkages and financial support to build sustainable nature-based enterprises. The bottom line behind these initiatives is the sustainability at long-term. After initial support, our assumption is that they will not continue to depend on external funding.

This project is not an end itself. Different stakeholders involved, from local communities, district to different sectoral departments, will understand better different scenarios linked to development pathways. This will help to promote sustainable actions and climate resilience for some years after the end of the project. FONERWA itself will benefit. It will guide how FONERWA allocates funds in the future.

In terms of continuous monitoring of the impact of the project after its life has ended, the indicators of change will be selected in conformity with the indicators used to monitor implementation of various policies guiding Environmental and Natural Resources Sector as set out in the M&E framework of the Environment and Natural Resources Sector Strategic Plan.

Districts and other stakeholders such as NELSAP have been involved right from the design phase of the project. Moreover, special attention has been made to incorporate priorities included in the districts development plans. Finally, a monitoring programme will be conducted for the community projects whereby success stories, case studies will be shared regularly with stakeholders to demonstrate the effectiveness of the WEF nexus approach, which will encourage the wide adoption of this approach and the recommendations from the nexus analysis that will be conducted.

Q 2.7	<u>What</u> is the scope for income generation from the project?
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We are targeting to support 15 Nature Based Community Enterprises (5 per Landscape on average), to be supported in building sustainable economic initiatives. Communities, especially low-income groups i.e. minorities, women and youth, are the main users of the natural resources for their daily survivals as sources of energy, water and food. However, the mentioned groups are the most affected by the degradation of the natural ecosystems and linked effects i.e. climate change, shortage of services, etc.

The target community groups will be selected based on their potential for sustainability practices, financial viability and institutional capacity such as governance, size of members, potential to serve as model in the society. Special attention will be given to women, youth and vulnerable groups. The result from the market chain analysis and business planning will guide the technical and financial support process to the selected NBCEs. The results of the WEF analysis using the SEI's WEF analysis toolkit will direct the linkages with markets for established businesses and the support will serve as a beginning of the long-term mechanism to sustain the long-term alternative income generating activities.

As part of the project design, existing NBCEs in the project landscapes of focus have been inventoried and possible improvements identified pending the results of the market chain analysis and nexus analysis considerations. A list of these NBCEs can be found in Annex II attached to this PD.

Through the small grant and conservation agreement, the project will support the green income generating activities at the site level, with the high consideration of women, youth and vulnerable groups. Communities will be supported to improve their income generating activities and improve the quality of their production. In return, members of NBCEs will contribute to the protection of the natural resources including river banks, wetlands and natural forest.

ARCOS' Nature Based Community Enterprises Programme aims to promote the conservation and development that recognize the rights of local people to manage and benefit from the management and use of natural resources. This approach builds on the Conservation Agreement model developed by Conservation International and ARCOS works with CI in piloting this model in Rwanda. It is based on negotiations with communities and an agreement clarifying the roles and responsibilities and the benefits from the ecosystem services (see Annex ... for more details).

Q 2.8	Preparation: Has a feasibility or pre-feasibility study been conducted (<i>If yes, then please attach a copy to this PD</i>)?
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Usually, a feasibility study for this kind of project is not necessary. However, ARCOS has conducted an Integrated Landscape Assessment and Monitoring (ILAM) for Mukura Landscape (Copy attached). In cooperation with the Districts, we have conducted a preliminary assessment of active cooperatives, as basis for further selection and analysis. Finally, we have conducted analysis of District Development Plans (Kirehe, Bugesera and Rutsiro Districts) and national policies and strategies to guide project interventions.

Q 2.9	Preparation: Are there any outstanding regulatory or legal requirements that need to be met before the project can proceed (<i>access to land, planning consent, use of new technologies</i>)?
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There are no outstanding regulatory or legal requirements that need to be met. The project has been developed in consultation with the Districts (we have MOU and Letters of Support) and Ministries responsible for the sectors of the project (water, energy, food security).

Q 2.10	Preparation: Has an Environmental Impact Assessment been conducted for the project (<i>If yes, then please attach a copy to this PD</i>)?
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There are no project activities that require an Environmental Impact Assessment.

Q 2.11	How will the performance of the project be monitored and evaluated (<i>both during and after the project</i>)? 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).
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A monitoring and evaluation system will be linked to the logical framework, annual work plans and budgets. This monitoring and evaluation framework will aim at progressively informing project staff, Steering committee and all stakeholders in general on the roll out of the implementation and provide a mechanism to allow applying lessons learned from successes and failures.

The Five aspects of project monitoring will be considered:

- Project objectives - controlling the completion of the project activities as per the project logframe;
- Financial – whether the project meets budget targets set for it;
- Human – whether relationships with the project team and stakeholders continue to work effectively and whether there is internal harmony within the project team itself;
- Risk – whether the risk profile of the project is increasing or decreasing;
- Time – whether the project meets time-lines set for it and the appropriateness of the time-lines that have been established.

The monitoring and evaluation activities will be guided by Project Progress Reports produced quarterly by the Project Management Unit. The reports will be submitted to the Project Steering Committee, and FONERWA to assess progress towards the completion of key milestones and achievement of targets. The project will also order annual audits of project accounts to ensure compliance with Government rules and procedures. The reports of

these audits will be evaluated by the Project Steering Committee. The steering committee will be composed by representatives of each district in the project area as well as representatives of ministries in charge of water, energy and agriculture, as well as community representatives, and possibly some development/investors.

The data collection will be performed using the classic questionnaires and interviews tools and techniques and these tools will be developed parallel to the development of the monitoring framework itself at the onset of the project. In the last year, a final evaluation review will be conducted which will focus on the extent to which progress is being made towards outputs, and alignment with appropriate outcomes. The report will summarise the results achieved (objectives, outcomes, outputs), lessons learned, and make recommendations on any actions needed to ensure sustainability, replicability and scaling up.

We understand that not all assumptions and predictions can be accurately made while designing the project and therefore we apply and adaptive management approach to the project we run. For this to work, an effective and timely monitoring and reporting system need to be established and in the purpose of the proposed project, quarterly planning will be supported by a quarterly reporting system where milestones will be assessed to check whether the project is on track and plan the next quarter accordingly.

Activity #	M&E Activity	Responsible person	Timeframe	Budget
Activity 1	Produce Project Progress and Final Reports	Project Manager and Project Management Unit	Quarterly, Annual and final reports	Salaries
Activity 2	Organise Project Steering Committee Meetings	Project Manager	2 meetings/year	10,275,300
Activity 3	Conduct Annual Audit	(FONERWA)	Annual	(FONERWA)
Activity 4	Conduct Mid-term Evaluation	Consultant	Quarter 3, Year 2	3,307,500
Activity 5	Conduct Final Evaluation	Consultant	Last quarter	6,615,000
Activity 6	Conduct regular M&E Reports for NBCEs	Project Manager and ARCOS Team	Every 6 months	4,365,900

Q 2.12 How will you involve the beneficiaries and other stakeholders in monitoring and evaluation?

The project committees at District levels and the Community Catchment Management Committees at the site levels will be established. Committees will be elected from the community based organisation and local leaders and they will work as advisers of the project. Meetings will be organised at least twice a year and they will be updated on the progress of the project both technically and financially. Committee members will also be involved in the final evaluation of the project and both inception and closing workshops will be organised. Community Catchment Management Committees will work closely with the project Manager and Project extension officers to oversee the activities at local levels and assist in the use of the small grants.

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 project will contribute to FONERWA's overarching M& E Framework through a number of activities undertaken, particularly through a number of technical reports and data generated by the research component of the project, the demonstration of how the Water – Energy and Food (agriculture) sectors can work together to drive sustainable development and through a number of nature-based community enterprises that will be developed and/or strengthened in the project's focal landscapes,

The project contributes to the FONERWA output: Environment and climate change issues mainstreamed into

policies, programmes, plans budgets and activities for public and non-public agencies:

- Indicator 3.1: National level MIS with sufficient environmental & climate change data to inform policy decisions
- Indicator 3.3): Total number of programmes of action in the Green Growth Strategy supported by approved PDs
- Indicator 3.5): Number of people involved in climate resilient income generation activities.

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.
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A number of projects and initiatives both by government and other stakeholders are taking place or are planned which potentially have overlapping elements with the proposed project. However, due to our project's strong emphasis on the use of this unique toolkit whose use will be unprecedented in Rwanda and drawing policy recommendations and planning support with reference to the results of the Water Energy Food Security Nexus analysis using the tool, the chance that this project overlaps with these other similar initiatives is minimal. In this regards, if such initiatives also emit recommendations but drawn from a different methodology; then this would be a good opportunity for more testing and cross-validation which would inevitably result in even stronger and more accurate policy orientations.

From consultations with districts and desktop research on on-going project/programme under different Ministries involved in the WEF sector or other stakeholders (NGO, CSO, Private Sector actors); we have inventoried the list of initiatives attached to this project document as ANNEX I and for each identified initiative, we have explained possible areas of duplication and possible coordination mechanisms to promote synergies. During the project implementation, we will maintain consultations with other initiatives to ensure synergies, exchange of experiences and avoid duplication.

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 (<i>e.g. Project stakeholders and others outside the project</i>)
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The lesson from this project will benefit not only beneficiaries and stakeholders of the project but also the whole community along the Akagera Basin. The awareness materials on agricultural best practices, environment and energy will be produced (and translated in local language) and shared with communities and neighbours through direct distribution and message transmitted in community meetings and workshops. They will also be distributed to the other organisation (NGOs), community groups and local leaders to reach more people in the project areas. Reports will be distributed to the Ministry of Agriculture, Natural Resources and Ministry of Energy, Districts and local administration entities and results will inform and guide decision-makers and will assist in developing more decisions which are applied to the whole the country.

The project positive outputs will also reach more people via the ARCOS' websites and biodiversity portal where the project materials, progress and final reports will be uploaded.

Q 2.16	Risk Management: 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?		
Risk description	Category	Risk level (low, medium high)	Mitigation
Poverty and high dependence on natural environment	Financial	Medium	Facilitate Business Planning and market chain analysis for community groups and implement the agreement in terms of technical and financial support The agricultural best practices will be supported and business plans developed.
Overlapping of policies: There are good policies on energy, water and food. However, some of the policies are conflicting which make difficult the implementation i.e policy to increase the crop (or energy) and environmental policy	Political	Medium	The WEF analysis toolkit will provide good planning support to avoid duplication of efforts and the potential overlapping that is perceived in the Environment and Natural Resources policies in Rwanda. Overall, this project is built on the premise that these policies are good and the main recommendations from the WEF analysis will be rather targeted at planning and implementation level.
National policy level: Recommendations may not be taken into	Political	Medium	The project focuses on supporting good implementation of existing policies. This does not cause any contradiction. On contrary, IT will provide the sustainability options for
Limited awareness on the climate change causes and effects	Environmental	Medium	Trainings and awareness raising activities
Limited and non-mainstreamed information on biodiversity, ecosystem services and socio-economy in Akagera Basin	Scientific	Low	Gathering the existing information and conduct the assessment with ILAM and publish them through workshops, reports and ARCOS' biodiversity portal.
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?		
	There is no direct risk to the environment that this project will pose, as the project will promote sustainable practices at local and district levels and will mainstream the effective oriented policies at ministerial level.		

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 RWF **689,000,490**

YEAR 1		YEAR 2		YEAR 3	
CAPITAL	RECURRENT	CAPITAL	RECURRENT	CAPITAL	RECURRENT
43,661,600	131,843,400	45,252,800	232,515,960	47,351,600	109,144,320
175,505,000		277,768,760		156,495,920	

Q 3.2 What is the total amount requested from FONERWA (RWF; provide financing needs for each year of the project)?

The requested amount from FONERWA is RWF **573,289,490**

YEAR 1	YEAR 2	YEAR 3
159,981,730	253,200,346	142,653,987

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)

ARCOS currently runs two main projects that are going to contribute to the proposed initiative:

* “Stakeholders Engagement for Informed Decision-Making, Threats Mitigation and Sustainable Freshwater Services Management in the Great Lakes Region of East and Central Africa”, funded by the MacArthur Foundation.

“Sustainable Mountain Development for global Change, funded by the Swiss Agency for Development Cooperation (SDC). These projects will contribute co-funding in terms of Equipment, office costs and staff time as follows:

- Equipment: We have budgeted only additional equipment needed. Other equipment such computers for other project staff will be provided by ARCOS.
- Office Costs: We have budgeted for part of monthly rent, Internet connectivity and other office costs. The rest will be contributed by ARCOS
- Staff time: ARCOS contribution to staff time has been indicated in the budget.

In total, the co-funding has been evaluated to be RWF 62,087,400 (with ARCOS contributing 36,023,400 and SEI contributing 26,064,000 respectively).

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

The proposed initiative focuses on Integrated Basin management at national level while International funding privileges mainly transboundary basins. As an example, ARCOS is currently running a regional project with funding from the John D. and Catherine T. MacArthur Foundation covering the Great Lakes region, set out to engage stakeholders’ dialogue in the region to address threats affecting these ecosystems. This project focuses mainly on activities with regional scope. A forum has been established and an information system has been developed to facilitate data and information exchange as well as experience sharing to promote best practices and support the harmonization of management strategies for transboundary ecosystems. The proposed project will therefore build sustainability at local and national basin level, by supporting national activities in Rwanda and providing research-based evidence on how policies and strategies that regulate freshwater management along Kagera Basin can be strengthened to meet the challenges the country is facing, something not commonly funded by regional basin wide initiatives.

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

Non-financial support needed from FONERWA will include on-going advisory role on the best project management approach to adopt and in case where assumptions are not realized and therefore some adaptive management is needed, prompt follow up by the funds staff to review and endorse the revised plans will be much appreciated.

Moreover, the funds will contribute in terms of outreach by advertising the project outputs and best practices through its website and other channels.

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) The project builds on a long experience of ARCOS and its partners in implementing similar activities in other regions (SEI's work on Nexus and ARCOS' work on Landscape Ecosystem Services management and community work). These activities require stakeholder participation, capacity building and dialogue to build sustainability. In addition, ARCOS work on community development is based on the Model of Nature Based Community Enterprises and Conservation Agreements Model that require community empowerment, partnership and ownership of activities to build long-term change.

The project implementation will ensure that government procurement procedures are followed. ARCOS has its own operational procedures but these will be superseded by government procedures in case there are any inconsistencies. We will use government

- ii) The project will limit the use of consultancy to the minimum and will seek to leverage the internal capacity within ARCOS and SEI to conduct most of the research and stakeholders' engagement activities. For on-ground activities such data collection, this will be done in participatory manner involving community groups.

We identified all the major project's outputs and for each, we identified inputs and activities that are needed to realize it. From this, we calculated the unit cost for each output by dividing the total cost by the number of outputs to be generated. For example:

- We produced 13 Technical Reports and papers and 12 policy briefs and other outreach materials. These will need RWF 104,986,125 and RWF 34,995,375 respectively, which means that the unit costs is 8,075,856 and RWF 2,916,281 respectively.

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)?

Output 1:

To produce this output, we will conduct participatory annual landscape assessment focusing on biodiversity, ecosystem services and socio-economic conditions in the landscape. This assessment will also include data collection specific to the Water-Energy-Food Security nexus Model (list of Nexus indicators provided under Annex 7). Data collected will be analysed, including modelling and reports/papers produced.

Output 2:

To produce this output on stakeholders understanding and shared vision on future development pathways, we will organise several activities engaging stakeholders at local level, landscape level and national level, to promote better understanding of the nexus concept, opportunities and risks associated with different development scenarios in water, energy and agricultural sector. We will facilitate the development of shared vision and sustainability actions to be undertaken by different stakeholders. We will provide technical skills to selected officers as well as practical knowledge to Community Catchment Committee to build their capacity so they can continue to apply the nexus concept in the future. We will organise a national meeting as an opportunity to share the findings with all key stakeholders and validate the results and share the findings. This will also be supported by the production of various

outreach materials.

Output 3:

To produce this output, we will select a number of community groups to engage in sustainable nature based business initiatives through a rigorous process of due diligence analysis to determine potential for sustainability, identification of terms of engagement and Conservation Agreement bilateral, capacity building in business management, marketing and experience sharing, and providing seed money to develop their business and provide market linkages and networking with other groups beyond Rwanda. We will produce and share case studies and lessons learned with other stakeholders nationally and internationally.

The Net Present Value and benefit cost ratio are provided below:

Discount Rate	10%
PV Cost	326,973,936
PV Benefit	1,847,045,455
NPV	1,520,071,518
BCR	5.6

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 overall goal of this project is to provide evidence-based policy guidance and promote local actions that promote climate resilience and participatory sustainable development along the Akagera Basin. This will be achieved if the natural capital, risks and opportunities are assessed, if stakeholders in the landscapes and different development sectors understand and share the vision for the future, and if local NBCEs are demonstrated to be sustainable and undertake climate resilient actions when they apply the nexus approach.

The following outcome indicators will be used to measure the effectiveness of the proposed project:

1. Number of reports, technical papers, publications and other materials disseminated to key stakeholders ;
2. Number of community members engaged in promoting climate resilience initiatives and sustainability in project landscapes of Rutsiro, Ngororero, Bugesera and Kirehe Districts.

Indicator one will demonstrate the effectiveness of the project in terms of informing and supporting the planning process at local level while the indicator 2 will be used to measure the level of success of the project in promoting resilience of communities.

ATTACH ANNEXES HERE TO THE PD APPLICATION – *these can be accepted as separate files but clearly organise and identify the annexes so they are easy to refer to.*

The following Documents are attached:

1. CV of key Personnel
 - Sam Kanyamibwa
 - Louise Karlberg
 - Oliver Johnson
 - Claudien Nsabagasani
 - Faustin Gashakamba
 - Beatrice Mukansoro
 - Michel Ndengera
2. ARCOS Audited Accounts 2013 (Draft 2014 Audited Accounts)
3. MOU between ARCOS and NELSAP
4. MOU between ARCOS and Kirehe District
5. Letter of Support from Bugesera District
6. Letter of Support from Rutsiro District
7. Indicators Definition Table
8. Nexus: Indicators General introduction leaflet
9. Nexus: Ethiopia Case Study
10. ILAM Monitoring System
11. Nature Based Community Enterprises – Leaflet
12. Preliminary analysis of cooperatives in the Project Landscapes
13. Review of on-going initiatives with potential for synergy or duplication
14. Table of Revisions and Actions Taken on RCAs