**Project Title**  
Environmental Protection in and around Refugee Camps

**Project Summary**  
The project intends to put in place mechanisms and measures to protect the environment in and around the refugee camps in the country. It aims to contribute to the overall national goal of protecting the environment and the conservation and management of natural resources. The project aims to protect the lands in and around the refugee camps from soil erosion and degradation. It also seeks to reduce pressure on the environment, specifically on the forests, in and around the camps by promoting the use of and making available improved cooking stoves which require low-firewood consumption for the 69,555 refugees. It is expected to decrease the volume and demand for use of firewood among households in the refugee camps. The project will also endeavour to achieve and sustain these outcomes by promoting awareness and education amongst refugees and host local population on environmental issues affecting them. The project will operate in the four Districts of Gicumbi, Karongi, Gatsibo, and Gisagara where the refugee camps are located. The project will have 4 outputs: Output 1: Lands in and around the refugee camps secured and protected against soil erosion and degradation; Output 2: Volume of and demand for use of firewood for cooking by refugees significantly reduced; Output 3: Increased environmental awareness and education among refugees and local population; and Output 4: Project management and monitoring ensured.

**Anticipated Start Date**  
1 January 2015

**Project Duration**  
24 months

**Funding Requested**  
Rwf 1,084,870,733

**Name of Lead Organisation**  
Ministry of Disaster Management and Refugee Affairs

**Type of Organisation, which best describes the Lead Organisation**  
- [x] Government Institution
- [ ] Non-Governmental Organisation (NGO)
- [ ] Private Sector Enterprise
- [ ] Academic Institution
- [ ] Other (please specify)

**Partner Institutions**  
RAB, REMA, UNHCR and other donors and partners supporting refugees in camps

**Full Office Address**  
Ministry of Disaster Management and Refugee Affairs
PO BOX: 4386 KIGALI

Website Address (if applicable)

http://midimar.gov.rw

Contact Person (the person who will have ultimate responsibility and be accountable for delivering this project)

Name: IZERIMANA Patrice
Position: MIDIMAR SPIU Coordinator
Email: veningabire@yahoo.fr
Tel: 0788500626/0788493049

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: ______
SECTION 1: INFORMATION ABOUT THE APPLICANT

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

The total number of full-time employees working for MIDIMAR including project staff: 99

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 project is building upon a solid and long-standing experience of MIDIMAR in implementing projects and activities in the area of disaster management and refugee issues. Specifically, MIDIMAR has successfully implemented similar projects on environmental protection in and around the Kigeme refugee camp. Kigeme Refugee Camp in Nyamagabe District is a pilot area where similar activities and project interventions on reforestation, construction of drainage system to prevent soil erosion, and provision of and promoting use of improved (low-fuel wood consumption) cooking stoves. The sustained environmental awareness campaigns in the camp have also been proven effective to complement the other environmental protection activities implemented in the camp. This initiative in Kigeme resulted to the following key achievements:

- 15,000 trees have been planted in and around Kigeme Refugee Camp which is expected to significantly help in reducing soil erosion in the area.

- Tree nursery has been established in the camp which supplied the tree seedlings used for planting

- About 8.6 kilometres of proper drainage system has been constructed around the camp which also contributed to the reduction of soil erosion and crop damage due to raging drainage waters or water run-off from the camp.

- A total of 5,860 households in the camp were provided with improved (low-fuel consumption) cooking stoves. This represents 100% coverage of households in the entire camp. This resulted to significant reduced pressure on the forest around the camp where refugees used to source their firewood used for day-to-day cooking.

Based on the project monitoring and verification feedback (evaluation) conducted by atmosfair on the Save80 project in Kigeme Refugee Camp, the findings revealed that the Save80 Cooking Stove distributed to households in Kigeme Refugee Camp is delivering the benefits to the users in terms of wood savings, time savings and less smoke. However, it was noted that an important lesson from this project is for the implementer (UNHCR) to develop a more robust distribution plan of the stoves to avert the high percentage of stove sales and non-use of the stoves by the intended beneficiaries (refugees). It can be
done by ensuring that users (refugees) are trained on proper use of the stove and increase sense of
ownership of the stoves. From these lessons learned of the Kigeme project, MIDIMAR will set up a
mechanism to ensure that the cooking stoves which will be distributed to the refugee households will be
maximized and used by the intended beneficiaries. One mechanism will be setting up a regular
monitoring system within the camps led by the Camp Managers. The local environmental clubs which
are organized in the camps will also be mobilized and tasked to conduct regular spot checks on each
refugee households to monitor whether the improved cooking stoves are still being used. Another
important lesson drawn from the Save80 project is the recognition that the Save80 cooking stove are
very expensive. A unit is costing above 40,000 Rwf and the units are imported. The high cost of the
Save80 cooking stove unit is very tempting for refugees to sell out the stoves provided to them. Hence,
for this project, the Karundura stove produced and designed locally and much cheaper but equally
effective (80% reduction in firewood consumption) will be distributed to the refugee households.

Building upon these successes and lessons learned in the Kigeme Refugee Camp, this project will
replicate and scale-up environmental protection interventions in the other four (4) refugee camps
namely: Gihembe Refugee Camp in Gicumbi District, Kiziba Refugee Camp in Karongi District, Nyabiheke
Refugee Camp in Gatsibo District, and Mugombwa Refugee Camp in Gisagara District.

MIDIMAR vouches on this solid experience in successfully implementing this pilot initiative in Kigeme as
an assurance and evidence of its capacities to implement this project successfully and even do better.
The Single Project Implementation Unit (SPIU) of MIDIMAR will be mainly responsible for the
implementation and overall management of the project. SPIU will be complemented by the Refugee
Affairs Unit of the Ministry who equally comprise of qualified technical and professional staff who have
years of experience working in these refugee camps across the country. The Project Management Unit,
based in SPIU, has extensive experience and expertise in management and implementation of
similar/related projects.

The SPIU Coordinator will provide overall oversight and coordination of the project. He will also be back-
stopped by the Program Manager on day-to-day project management functions. The SPIU Coordinator is a
holder of a Diploma in Law from the Kigali Independent University, Rwanda and a Bachelors Degree of
Arts from the National University of Rwanda. He currently is pursuing a Master in Business
Administration in Strategic Management (with track of Project Management) in Mount Kenya University.
He has solid 20 years of professional experience in various capacities. It includes his current position as
MIDIMAR SPIU Coordinator and other prior positions he held in the Ministry such as Disaster Project
Specialist, and Liaison Officer. Before he joined the MIDIMAR, he also served the National Intelligence
Security Service (SPIU) holding various positions. A good stint as well in the private sector serving as
Marketing Manager and Administrative Assistant. The SPIU Coordinator also has extensive training and
attended professional courses in both national intelligence security service and disaster management.

The Program Manager is a holder of a Master of Science in Applied Economics/Environment Economic
from the National University of Rwanda with Bachelor’s Degree in Economics/Development Studies in
the same University. She has extensive training and experience in the area of project management,
monitoring and evaluation, on environmental economics and sustainable development, and climate
change. She has a solid 9 years work experience in various capacities and positions including as Project
Specialist in MIDIMAR, Environmental Economist and Project Monitoring and Evaluation Specialist at
REMA, as statistical Focal Point in Charge of Infrastructure and environmental Statistics in the National Institute of Statistics, among others.

The **Environment Specialist** has extensive experience in environmental protection work and strong familiarity in working with refugees in the camps on environmental issues. She is a holder of Bachelor Degree in Life Sciences with specialization in Environment and Integrated Management of Biodiversity from the Faculty of Sciences, Mohamed V Agdal University in Rabat, Morocco. She has worked with MIDIMAR as Environment Specialist for two (2) years now and mainly responsible for inspecting, monitoring and supervision of all environmental protection activities in the 5 refugees’ camps and 2 transit centres and provide guidelines to camp based Implementing Partners in order to make sure that all activities carried out in the camps in assistance to refugees are in compliance with the National Environment Policy. She also conducts Environmental Impact Assessment and Environmental Audits in and around refugee camps and Transit Centers and follows up on the implementation of the Environmental Management Plans (EMPs).

The project **Finance Specialist** has solid and proven track record and experience in project financial management given her extensive experience in similar projects implemented by the SPIU and MIDIMAR. She is a holder of a Bachelor’s Degree in Business Administration under the Faculty of Management, in accounting option at the School of Finance and Banking (SFB-Mburabuturo). She has also recently started Certified Public Accountants Courses at Institute of Certified Public Accountants of Rwanda (iCPAR). She has 10 years of work experience in the area of finance management. She is now the Director of Administration and Finance of Single Projects Implementation Unit in MIDIMAR (DAF-MIDIMAR/SPIU) and other projects Financial Controller.

The project will benefit from the expertise and experience of the Planning, Monitoring and Evaluation Specialist of MIDIMAR. **The M&E Specialist** is a holder of a Bachelor degree in Development Studies (A0). He vouches on a 10-year work experience in various positions in different institutions. He is currently serving as MIDIMAR’s Planning, Monitoring and Evaluation Specialist. Prior work experience included as acting Director of the Strategic Planning Unit of MIDIMAR.

The Procurement Specialist of MIDIMAR will also be part of the in-house project staff. The Procurement Specialist is an equally qualified professional with about 5 years of experience. He finished A0 in Law (LLB).

Given its component on ‘improved cooking stoves, the project will also be assisted by the MIDIMAR **Firewood Manager**. As Firewood Manager, she ensures the smooth provision of firewood in the camps and ensure that refugees don’t venture out of the camps in search of domestic fuel. She also supervises the efficient implementation of firewood contracts and work closely with the respective districts and firewood contractors; and also participate in identification of competent suppliers for firewood where necessary. With this hands-on expertise and experience in managing the provisions of firewood in the camps, she will be an important resource to the project. Prior to her current job, she was the Human Resource Manager of MIDIMAR. She holds a Post Graduate Diploma in Strategic Human Resource Management at the MSM Executive Program in Management of RIAM/MAASTRICHT School of Management/Kigali and a Bachelor’s Degree in Administrative Sciences.
For its day-to-day operational and administrative support, the project will also benefit the services of an **Administrative Assistant**. He is a holder of a Bachelor's degree in Modern Languages with majors in Interpreting and Translation. He has been working in the field of administration support since 2008 as the secretary (New Generation Rwanda-Southern Province), Executive Secretary (New Generation Rwanda-National level), Secretary of the Strategic Planning Unit and Administrative Assistant of the Single Project Implementation Unit (Ministry of Disaster Management and Refugee Affairs).

The project will also benefit from the services of **Camp Managers** who are based in the Camps. The Camp Managers are equally qualified and competent professionals who have extensive experience in working with the refugees.

Furthermore, our local government partners at Districts where the refugee camps are located have extensive experience and capacities in implementing environmental programs. These local government experiences and capacities will be tapped to ensure success and sustainability in this project.

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 following MIDIMAR Staff will be involved in the entire management and implementation of the project (including planning, monitoring, evaluation and reporting). The CVs of these staff are attached as **Annex A** to this PD.

1. IZERIMANA Patrice, SPIU Coordinator
2. INGABIRE Veneranda, Project Manager
3. BORAMUNGU Apophia, Environmental Specialist
4. MINANI Jacques, Procurement Specialist
5. TEGANEZA Dorothée, Finance Specialist
6. URAMUTSE Gilbert, M&E Specialist
7. UMUTESI Clarisse, Firewood Manager
8. MUGUNGA Alain, Administrative Assistant

In addition, the following MIDIMAR Staff will provide oversight, technical and advisory support to the project:

1. RWAHAMA Jean Claude, Director for Refugee Affairs Unit

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.

The most recent audited annual accounts (income and expenditure statement & balance sheet in RWF, as well as the main sources of funding) are included as an attachment to this PD.
SECTION 2: INFORMATION ABOUT THE PROJECT

Q 2.1 Why the project is 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.)?

Rwanda is faced with wide-ranging challenges and problems of environmental degradation. Home to about 11 million people, Rwanda is amongst the most densely populated country in Africa. Influx of refugees adds to this population density burden and reinforces the already intense population pressure on the environment causing depletion of natural resources as well as exacerbating land scarcity problems.

The establishment of refugee camps (which started in 1997 in Gihembe) required the conversion of some unoccupied (forest) lands into refugee settlements. This often involved land clearing and cutting of trees in the area where the camps are established. As of date, there are already five (5) refugee camps which have been established and these cover a total 232.8 hectares of land in five Districts. Since the initial influx of refugees in 1997 (comprised of DRC population fleeing due to conflict), the number had been increasing and the trend is not seen to be changing anytime soon given the fragile political situation in the neighbouring country. In Gihembe Camp alone, the first and oldest refugee camp established in Rwanda, reports indicate that this has grown and expanded from a total occupied land area of about 10 hectares to approximately 25 hectares now sheltering a total of 14,707 refugees.

<table>
<thead>
<tr>
<th>Camp</th>
<th>Year Established</th>
<th>Area covered by the camp (as of date)</th>
<th>Total Number of Refugees (as of date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gihembe</td>
<td>1997</td>
<td>25 hectares</td>
<td>14,707</td>
</tr>
<tr>
<td>Kigeme</td>
<td>2012</td>
<td>34 hectares</td>
<td>18,115</td>
</tr>
<tr>
<td>Nyabiheke</td>
<td>2005</td>
<td>60.9 hectares</td>
<td>14,070</td>
</tr>
<tr>
<td>Kiziba</td>
<td>1997</td>
<td>28 hectares</td>
<td>16,363</td>
</tr>
<tr>
<td>Mugombwa</td>
<td>2014</td>
<td>85 hectares</td>
<td>6,300</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>232.8 hectares</td>
<td>69,555</td>
</tr>
</tbody>
</table>

Land Degradation and Soil Erosion Problem in and around the camps

As indicated above, the increasing numbers of refugees in the camps over the years have put intense pressure in the areas around the camps. This led to significant land degradation and soil erosion problems in and around the camps. Due to the dire living conditions of the refugees and very poor conditions of housing in the camps, the refugees do not have choice other than exploit and use any

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1 Total land area covered by Nyabiheke Camp is 45.9 and the other 15 hectare is forest area around the camp
available resources accessible to them. Many refugees engaged in soil (clay) excavation within and outside the camps for house building and wall creeping or brushing. The soil excavation and digging have resulted to erosion of soil and creation of gullies².

The settlements, specifically, the houses and buildings inside the camps had resulted to accumulation of rain water collected by the roofs. During rainy season, the camps’ poor drainage system causes water run-off and overflows inside the camps. The water thereafter flows and drains downstream affecting surrounding areas. Overtime, the integrity of the soil in and around the camps had been gradually affected further causing the flow, transport and accumulation of sediments downstream which in turn damaging agricultural lands and crops outside the camps. The water run-off and sedimentation of agricultural lands also caused soil infertility which impacts the productive potential and capacities of the agricultural lands cultivated by the host population. These likewise eventually led to the destruction of the natural biodiversity (flora and fauna) of the affected areas.

The above-described soil erosion patterns are likely to increase, continue and exacerbate causing severe threats to environmental sustainability in the affected areas if no measures are put in place. Appropriate measures for erosion control and rehabilitation of the gullies would create important impacts on the living conditions of the refugees and would benefit the local host population by reducing the impacts on their agricultural lands and crops.

The Environmental Impact Assessment of Gihembe Refugee Camp specifically cited the need to put in place mitigation measures and gully (ravine) rehabilitation in the camp in order to avert further land degradation and the risk of loss of life. The same study also highlighted the absence of alternative source of cooking energy and reliance on firewood leads to further deforestation. In order to address soil erosion problems in and around the refugee camps, the study also made specific recommendations to put in place mitigation measures such construction of drainage systems, rehabilitate degraded lands through vegetation cover. The study also recommended to increase awareness and sensitization of refugees on environmental protection, promotion of homestead tree maturing at household level (or forest/tree stewardship), including setting up of internal rules in the camps to ensure vegetation protection in and around the camps and establish fines that should apply for non-compliance. These study results and recommendations formed an important basis or reference in the design of this project.

Deforestation in and around the camps

Similar to the excavation and exploitation of the soil (clay) used for building houses, the increasing refugee population settled in the camps also exerts intense pressure on the forests and trees in and around the camps. These refugee camps are mainly reliant on firewood for day-to-day cooking, about 74% of the refugee population used firewood³. While firewood is being supplied to the refugees, these are not adequate to meet the daily requirement for cooking especially for big families. According to the EIA of Gihembe Camp commissioned by MIDIMAR, the firewood is supplied by MIDIMAR and distributed by ADRA at a ratio of 1 stere (500 kg or 1m³) for 22 people per month. This quantity satisfies the

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² EIA Report
³ EIA of Gihembe Camp, 2014
household needs for only 14 days. The remaining gap in supply of firewood is supplemented by refugees themselves. The refugees have to collect fresh or dead wood sticks from the meagre woodlands located at 2-4 Km around the camp or from private planted forests. As consequences, the woodlands around the camp have been almost cleared by refugees, leading to deforestation, land degradation and soil erosion. The refugees (first settlers of the camps in 1997) confirmed woodland existence and eventual clearing (for firewood use) around the camp sites.

This pattern of deforestation has to stop and areas in and around camps needs to be reforested. The clearing and cutting of trees also compound further the land degradation and soil erosion problems elaborated above. A total of 200 hectares of land in and around the four refugee camps need to be planted with trees through reforestation and/or agro-forestation.

While there are remedial measures being undertaken, these are inadequate to mitigate the adverse consequences brought about by increased demand for consumption and utilization of firewood. Conditions in and around the camps are getting worse causing unexpected and irreversible damages to the environment. In the long-term, it poses serious hindrance to the implementation of national environmental policies and to the sustainability of development efforts in the host districts. The project is very much needed urgently in order to avert any further damage or loss that may be caused to the environment and the well-being of both the refugees and the local population.

Furthermore, this project is very much needed and timely to be implemented by MIDIMAR as there are no other stakeholders who focus on addressing the problems of environmental degradation in and around refugee camps. While it could be vouched on how the humanitarian needs of the refugees are well responded by the Government of Rwanda with the assistance of and partnership with different humanitarian agencies including the UN Agencies, international and local NGOs who provide the basic humanitarian needs such as shelters, food and non-food aid, education services and health care, there are no external and sustained assistance available to fund initiatives and activities aimed at protecting the environment. The project will enable the MIDIMAR to initiate and implement measures for the protection of the environment in and around the camps before the situation gets worse and before other concomitant problems would arise.

**Lack of Awareness on Environmental Issues**

The above issues and challenges are obviously exacerbated by the lack of awareness of environment issues among the refugees. The refugees are somehow contained in the camps. They are dependent on interventions and assistance from humanitarian agencies to meet their day-to-day needs. They are living in poor social and economic conditions; hence, concern for the environment is not their immediate priority. This lack of awareness contributed very highly on the environmental issues and problems in and around the refugee camps. The project will do a lot in terms of improving environmental awareness and education of the refugees.

**Alignment of the Project to National Priorities, Policies and Strategies**

The project is also aligned to national priorities, policies and strategies such as the Vision 2020, EDPRS 2, and the Five Year Strategic Plan for the Environment and Natural Resources Sector (2014-2018).
The project will contribute to the implementation of these policies and strategies and achievements of these relevant national priorities.

The project contributes achievement of the key pillars of the Vision 2020 and specifically to one of its cross-cutting issues on the protection of environment and sustainable natural resource management. The project will contribute by addressing degradation, deforestation, erosion, and the depletion of natural resources such as trees and forests.

It will also contribute to the achievements of the EDPRS 2 goals and objectives. Specifically, the project will directly add value to the EDPRS 2 cross-cutting issue of Environment and Climate Change. The component on reforestation (tree planting in and around camps) and the massive use of improved cooking stoves by all the households in refugee camps will have significant implication to emission reduction, prevention of land degradation and soil erosion.

The project will also contribute to the objectives and outcomes set out in the Five Year Strategic Plan for the Environment and Natural Resources Sector (2014-2018). Specifically, the project’s contribution will be part of the building blocks towards achievement of the sector’s mission ‘to ensure the protection and conservation of the environment and optimal and rational utilization of natural resources for sustainable national development and overall plan objectives ‘to ensure that environment and natural resources are utilized and managed productively in support of equitable and sustained national development and poverty reduction’. Moreover, specifically the project will contribute to attain one of the specific objectives “to increase and sustainably manage ecosystems and forest resources to optimize their economic as well as ecological functions’ and one of the key outcomes ‘Ecosystem and forestry resources increased and sustainably managed to optimize their economic as well as ecological functions and improved Environment management and vulnerability to climate change impact reduced’.

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 main objective of the project is to put in place mechanisms and measures to protect the environment in and around the refugee camps in the country. It aims to contribute to the overall national goal of protecting the environment and the conservation and management of natural resources. The expected outcome of the project is environment in areas in and around refugee camps protected through reforestation, use of clean energy and environmental awareness by the active engagement and involvement of the refugees and local host population. The project aims to protect the lands in and around the refugee camps from soil erosion and degradation. It also seeks to reduce pressure on the environment, specifically on the forests, in and around the camps by promoting the use of and making available improved cooking stoves which require low-firewood consumption for the 69,555 refugees. It is expected to decrease the volume and demand for use of firewood among households in the refugee camps. The project will also endeavour to achieve and sustain these outcomes by promoting awareness and education amongst refugees and host local population on environmental issues affecting them. The
The project will operate in the four Districts of Gicumbi, Karongi, Gatsibo, and Gisagara where the refugee camps are located.

The project will have **4 outputs**:

Output 1: Lands in and around the refugee camps secured and protected against soil erosion and degradation

Output 2: Clean energy is widely used among households in the refugee camps resulting to reduction of use of firewood for cooking by refugees

Output 3: Increased environmental awareness and education among refugees and local population

Output 4: Project management and monitoring ensured.

Under output 1, the project will rehabilitate and reforest **80 hectares** of deforested lands surrounding the refugee camps. Another **120 hectares** will be planted with agro-forestry. It will also construct **4 kilometers** of drainage system in the Gihembe refugee camp which will protect the lands (farm and agricultural areas) around the camps, prevent accumulation of sediments downstream which causes soil infertility and protect the hilly areas from land degradation like ravines. The **project** will also rehabilitate a ravine in Gihembe refugee camp. The ravine rehabilitation will protect the area from further land degradation and prevent accidents and dangers to lives of people around the area.

Under output 2, the project will provide a total of **14,000 units** of improved cooking stoves for the refugee households in 4 refugee camps namely Gihembe, Kiziba, Nyabiheke, and Mugombwa. This will result to significant reduction in the volume and demand for use of firewood for cooking which in effect will result to the gradual and eventual halting of tree-cutting by the refugees for domestic cooking use. In the long term, this will also significantly reduced the government expenditures for firewood supply to refugee camps.

Under output 3, the project will support the organization of environment protection clubs in the refugee camps and will conduct **12 training and environmental awareness campaigns** to improve public awareness on environmental issues. The increased awareness and education among the refugees will ensure sustainability of the results achieved under output 1 and 2 of this project.

The project will also ensure economic benefits for the refugees and local population through jobs and will provide opportunities for income generation in the implementation of the project including beyond the project life span. Specifically, a number of refugees and local population could gain employment in the establishment and maintenance of the tree nurseries which will be put up in each of the four (4) refugee camps. The organized cooperatives comprised of both refugees and local population will also benefit from the local production of cooking stoves. A significant number will also benefit from the training and technical assistance on maintaining tree nurseries as well as gain knowledge and skills in the production and maintenance of improved cooking stoves. The technology for producing the improved cooking stoves will be transferred to the refugees and local population through technical skills training to be provided through the project. A number of refugees and local population will benefit from the ravine rehabilitation
through jobs in the construction.

A project log frame is attached providing details of the project’s results framework specifically the impact, outcome, outputs and corresponding indicators.

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 objectives will be achieved through delivery and realization of the following key outputs as follows:

1. Lands in and around the refugee camps secured and protected against soil erosion and degradation

2. Clean energy is widely used among households in the refugee camps resulting to reduction of use of firewood for cooking by refugees

3. Increased environmental awareness and education among refugees and local population

4. Project management and monitoring ensured

Output 1 will aim to secure and protect lands in and around the refugee camps from soil erosion and degradation through reforestation. A total of 200 hectares of land around the four (4) refugee camps will be planted with both forest and agro-forest trees variety. Forest trees will be planted in public lands and agro-forestry will be undertaken in private-owned lands of the local population. The agro-forestation of private-owned lands will be done in consultation and with proper concurrence of the land owners with technical advice from the Sector Agronomist. The District authorities will be coordinated and involved in the identification of potential local residents who are willing to plant their lands with agro-forest trees.

The ownership for the trees planted in private-owned lands will rest on the owners of the land. Meanwhile, for the trees planted in public lands, the ownership will be retained to the government, however, homestead arrangements will be made with refugees to act as stewards of the forest/trees planted in and around the camps. Furthermore, to ensure that the trees planted are protected, an internal rule will be established in the camp which makes the refugees accountable for the protection of the trees. In addition, the assistance of the District Environmental Protection Officer will be coordinated and mobilized to ensure that illegal cutting of trees are prevented in the project areas.

Due to the risks posed by the ravine in Gihembe refugee camp, the project will support the rehabilitation of the ravine to prevent from further land degradation, soil erosion and even accidents causing loss of lives among refugees falling in the ravine. It will also support the construction of proper drainage system in Gihembe camp (upstream) to ensure protection of lands downstream from further degradation, destruction (like ravines) and prevent sedimentation which impacts on soil fertility. The project will specifically support the construction of a section of the drainage system, specifically the one which directly links to the ravine area downstream. The rest of the sections of the drainage system required for
Gihembe camp will be implemented through other sources of support. Mobilization of resources with UNHCR is currently on-going for this purpose.

The approach, process and sequence of activities which will be employed to realize this output will include foremost the identification and development of the reforestation plan and management which includes determining the areas to be planted with trees. Parallel to this is the establishment of the tree nurseries in each of the camps and its surrounding areas. The cooperatives composed of refugees and local population will be engaged as local partners to establish the tree nurseries including provision of extension services from experts (consultancy services from Agronomist or Forester) to maintain the nurseries for a period of 1 year.

The in-house expertise of RAB on establishment and maintenance of tree nurseries will also be tapped. MIDIMAR will enter into an MOU with RAB to provide services and expertise to set up the tree nurseries in 4 camps. The Cooperatives will be trained by the experts on the technology for operations and management of the tree nurseries. RAB and the Consultant Agronomist will ensure training and skills transfer to refugees and local population (cooperatives). Immediately after the technical assistance from the experts, the Cooperatives will then sustain the operations and maintenance of the tree nurseries. The seeds, equipment, materials, water supply, and basic infrastructure needed for the tree nurseries will be provided by the project which will be covered by the MOU with RAB. These will be procured accordingly by RAB through the government’s tender process.

The tree seedlings produced will be used for the tree planting and terracing to cover the area targeted and identified for reforestation. The tree planting and terracing will also involve sub-activities such as land preparation and clearing, planting, maintenance and monitoring. In all these sub-activities, the project will mobilize both refugees and local population to participate in the implementation of the actual activities. Subsequently, the tree nurseries could be sustained to continuously produce tree seedlings which could be sold for planting in other areas or Districts. The project will connect the cooperatives to potential markets for tree seedlings.

Particularly in Gihembe Camp, where a ravine will be rehabilitated to prevent further soil erosion and land degradation and prevent accidents causing loss to lives, a tender process will be initiated to hire the firm to undertake the rehabilitation of the ravine and the construction of drainage systems upstream. Once services are procured, the actual rehabilitation of the ravine and the construction of the drainage system will take place immediately thereafter. Another tender process will be initiated to hire a consultancy firm to undertake the quality assurance, control and track progress of the ravine rehabilitation activity. Aside from structural intervention in the rehabilitation of the ravine, reforestation and terracing will also be done in the rehabilitated area to prevent recurrence of soil erosion. It is important to note here that in order to boost job creation from this project intervention, the labour component of the rehabilitation of the ravine and construction of drainage system in Gihembe will come from among refugees and local population. To ensure this strategy is followed and realized, the Terms of Reference and the Contract by and between MIDIMAR and the construction company awarded with the contract shall specify a provision that the contracting company is required, by virtue of the terms of

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4 Maintenance and monitoring will involve ensuring that the planted trees are growing and avoid tree seedling mortality through irrigation and weeding.
contract, to employ refugees and local population from the surrounding communities as workers or labourers in the project.

Output 2 aims to reduce the volume and demand for use of firewood for cooking in refugee camps through provision of improved cooking stoves to refugee households. A logical sequence of activities will be undertaken to achieve this output. It took off with the identification of households needing improved cooking stoves in the camps. The camp managers assisted in determining the households to be provided with cooking stoves. The list will be further validated by the project management team for quality assurance during the course of the implementation. Parallel to this is the organizing of cooperatives in the camps (comprised of both refugees and local population) that will be mobilized and engaged as local producers of the cooking stoves after appropriate training which will be provided by a private company or service provider procured for the purpose.

Technical training on production of cooking stoves will be provided to these cooperatives as part of capacity building. In addition, other cooperative capacity development including project and financial management training will also be provided to ensure that the cooperatives are able to manage the production of cooking stoves and be able to set-up savings from income generated in the production and sale of the cooking stoves. For the technical training and production of cooking stoves, services of high quality local providers will be sought through the government’s tender process. This tender process will be initiated accordingly. The project will support by financing the costs of raw materials, equipment, overhead and operations costs needed for production of the cooking stoves by the cooperatives in the camps. The cost will be inclusive in the services to be provided by the service providers hired for the purpose.

As part of the strategy for technology transfer and sustainability, the cooperatives (comprised of refugees and local population) will be engaged as partners by the hired service provider (or the cook stove organization) in the production of the cooking stoves. Provision of training on production of cooking stoves to the refugee cooperatives will be the responsibility of the hired service provider. The expertise of the service provider will be maximized and all the services and technical inputs to be provided by the service provider will be explicitly stated and integrated in the Terms of Reference and/or the Contract to be signed by and between MIDIMAR and the company. The labour required to produce the cooking stoves will come from the cooperatives. The latter will then generate income through the labour costs which will be shouldeard and paid for by the project topped-up in the per-unit cost of cooking stoves.

The cooperatives will also be ensured of the long-term benefits from the skills developed in producing improved cooking stoves. The production of the cooking stoves will ensue after the training and all materials required for production are made available by the hired service provider. The distribution of the cooking stoves to the refugee households will be done in batches i.e. for every 500 units finished product one distribution or hand-over.

Output 3 seeks to improve and increase awareness on environmental issues amongst the refugees including the local population. This output will be realized through the implementation of key activities. These activities will include the formation and organization of environmental clubs and committees in the refugee camps. The organized environmental clubs and committees will be trained and sensitized on a range of environmental issues and concerns and on how community (refugees) could be involved in
protection of the environment and conservation of natural resources e.g. forests, lands, etc. The Environment Specialist in MIDIMAR will be responsible for organizing and conducting these training and sensitization activities.

Once trained and sensitized, these organized clubs and committees will be transformed and mobilized as local environment advocates who will lead (with support from the project management team, the Environment Specialist and the Camp Managers) in sensitizing the refugees on environmental protection, conservation and other related environmental issues and concerns. With capacities strengthened and awareness of the environmental clubs and committees are developed, a series of sensitization activities and public awareness raising campaigns will be conducted in the refugee camps. To reiterate, the increased environmental awareness and education among refugees will help in the sustainability of the results achieved under output 1 and 2.

**Approach and Methodology**

A community-based approach will be employed in the implementation of all key activities of the project. By this approach, it means mobilizing refugees (beneficiaries) and host population to actively participate and be involved in delivery of services in order to promote economic activity among the refugees and host population, create employment or jobs and directly benefit from the project inputs and activities.

Specific measures will be undertaken to ensure that the project involves both refugees and local population. For instance, ‘Umuganda’ will be organized involving both refugees and local population in community works such as land clearing, terracing and tree planting. Another measure will be to organize cooperatives comprising of both refugees and local population. These cooperatives can venture into some local enterprises building on the skills and technology they have learned from the project including the savings they have established from the incomes generated as a result of their involvement in different project activities. As highlighted in another section of this proposal, these cooperatives will be strengthened through training. For project activities which will require paid-labour, the project will ensure that both refugees and local population shall be mobilized as workers and therefore will directly benefit from the jobs created by the project.

A project inception will be undertaken in all the four areas targeted by the project. The project inception will be done with the relevant District authorities, officials and staff including the JADF. The District will be coordinated to assist in convening the JADF to participate in the project inception. During the project inception, the roles and level of involvement of the District authorities and other stakeholders on the project will be detailed, defined and agreed.

The District and Sector authorities will also be involved in planning and monitoring. This will be one of the key roles of the District which will be agreed at the inception of the project. Furthermore, District officials will be further involved in the project such as the following: (1) the Officer in Charge of Cooperatives at District levels will be coordinated closely by the project team in the area of organizing the cooperatives (refugees and local population) including some training, if and when possible; (2) The District Environmental Protection Officer will also be coordinated and involved on ensuring that trees planted under this project are not cut or trimmed by either refugees or local people.
The acquisition of goods and services will be done through the government tender or procurement process and procedure as hereunder elaborated:

a. A procurement plan is prepared  
b. The invitation to tender or bid is published for 30 days  
c. The tenders are opened in a meeting with all the applicants and the Tender Committee  
d. The provisional result communicated to all the applicants  
e. The applicants have 7 days to appeal the decision and then a final notification is sent to all applicants  
f. If a guarantee is required, the successful bidder has 15 days to secure it  
g. Contract negotiation and signing

**Signing of MOUs with Cooperatives and Partners**

In the engagement and mobilization of cooperatives as partners in the establishment and operation of tree nurseries and the production of improved cooking stoves, Memorandum of Understanding (MOUs) will be signed by and between the MIDIMAR and the Cooperative(s) to agree on responsibilities and activities of each party. In addition, MOUs will also be signed with RAB to cover agreements, responsibilities and key deliverables with regards the establishment of tree nurseries. On one hand, contracts will be signed with service providers and consultancy firms procured for the following activities: (1) production of cooking stoves, (2) Construction of drainage system, (3) rehabilitation of the ravine, and (4) quality assurance for the structural works.

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

The project is designed ensuring that activities and interventions adhere to gender and age sensitivities, responsiveness and principles. It considers the specific needs of women, men and youth and the gender-based differentials which may prevent equitable participation or benefits from the project’s interventions. The project will ensure the inclusion of women and youth in different project interventions including but not limited to targeting women and youth to take part and lead the processes.

All the project’s activities and intervention will set gender and age sensitive targets and indicators (i.e. at least 30% women) to ensure equitable participation and promote inclusiveness of women, men and youth. Specifically, the cooperatives to be mobilized and engaged as partners should be comprised of or represent women and youth.

Furthermore, a proportion of women, men and youth should comprise those who will benefit from the jobs or employment opportunities created by the project. Specifically, youth and women will be identified and targeted as direct beneficiaries of training and jobs created in the cooking stove production, establishment of tree nurseries, labour for tree planting and terracing, and labour for the ravine rehabilitation and drainage construction.

### 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?
Stakeholders affected by the Problem:

Refugees (beneficiaries)

The target beneficiaries of this project, specifically the total of 69,555 refugees living in the four (4) refugee camps namely: Gihembe Refugee Camp in Gicumbi District, Kiziba Refugee Camp in Karongi District, Nyabiheke Refugee Camp in Gatsibo District, and Mugombwa Refugee Camp in Gisagara District are the main stakeholders who are affected by this problem. The refugees are foremost and the first to be directly impacted by the problems of land degradation, soil erosion, and lack of drainage system causing water runoff. The refugees are the ones directly affected often by the lack of firewood supply in the camps pushing them to go out in the forests around the camps and cut trees for firewood. The refugees are also confronted with the lack of income, poverty and dire living conditions in the camp.

The Local Host Population

Aside from the refugees, the local host population of the concerned Districts where the refugee camps are located are likewise affected by these problems. The depletion and cutting of trees in and within the immediate surroundings of the refugee camps including the lack of proper drainage system also pose problems even to the local host population. The local host population often bears the brunt of the effects of rain water runoff from the camps which flows to their agricultural farms downstream and destroying crops. The prevalent cutting of trees in and around the camps also caused soil erosion which also affects the farm lands of local host population.

District and Sector Authorities

The District and Sector Authorities are also another set of stakeholders who are affected by the problem. Often, the local authorities need to respond and address the problems of the resulting floods or landslides which occur due to the continuous land degradation and depletion of forests resources in and around the camps. As indicated above, often the lack of proper drainage system in the Refugee Camps which are located upstream on hills causing water runoff which drains to lands occupied by local residents either as residential areas or lands cultivated with crops which are the latter’s main source of livelihoods.

Government Agencies

The government agencies are affected, too, because they have to address and respond to needs to rehabilitation, reforestation, and prevention of soil erosion or even service provisions. Specifically, MIDIMAR is affected by continuous provision of firewood supply to the camps to meet the requirement. MINERANA has to respond and address the issue of land degradation. MINAGRI has to deal with the problems of soil erosion and loss of crops of the farmers. More government resources, therefore, are required to be allocated to address these concerns.

Stakeholders influential in solving the problem:

Refugees (beneficiaries)

The active participation, support and cooperation of the refugees themselves are very critical in the successful implementation of the project. They are foremost the main stakeholder who could do a lot to
improve the environmental conditions in and around the camps and address the different environmental problems affecting the camps and its immediate surroundings.

**Refugee Cooperatives in the Camps**
The Refugee Cooperatives in the camps is another important stakeholder who can influence to help solve the problem. Through the diligence and commitment of the refugee cooperatives to make all the activities assigned to them successful such as the management, operations and maintenance of the tree nurseries, the production of cooking stoves as well as being able to set up savings schemes as designed and intended by the project, the environmental problems including the problem of lack of livelihoods source and income in the camps could be addressed.

**The Environment Clubs and Committees in the Camps**
The leadership, participation and cooperation of the different environment clubs and committees in the camps also play an important role in addressing the problems. The extent of environmental awareness and education among refugees largely depend on how the clubs and committees are able to help and assist in sensitizing the refugees on a range of environmental issues.

**District and Sector Authorities**
The cooperation and collaboration including involvement of the local government authorities are also influential and reinforcing factors to sustainably address the environmental problems in and around the refugee camps. The role of the local government authorities could not be undermined in this project.

**Local host population**
In as much as the local host population are affected by the environmental problems besetting the refugee camps, the cooperation, involvement and participation of the local host population on various project activities and interventions will make a long way to help address the problem. Specifically, the participation of local host population in environmental ‘umuganda’ for tree planting or terracing could contribute a lot not only on actual conduct of Umuganda but also in terms of building social relations between the host population and the refugees.

**UNHCR and other donors and partners supporting the refugees**
The UNHCR and other donors and partners are key stakeholders who could help sustain the interventions initiated by the project. They could help through direct assistance, resource mobilization and technical assistance.

**Rwanda Environment Management Authority (REMA)**
REMA is responsible for the implementation of environment policies and legislative frameworks. It has the institutional capacity and mandate in implementing similar interventions and projects in Rwandan communities. The expertise and experience of REMA will be tapped to provide technical guidance and advice on how this project in the refugee camps could be effectively implemented.

**Rwanda Agricultural Board (RAB)**
The Rwanda Agricultural Board (RAB) has the in-house and institutional capacity and experience in establishment, operation and maintenance of tree nurseries. This expertise of RAB will be influential and
contributory to the effective implementation of Output 1, specifically on tree nurseries and tree planting activities.

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

MIDIMAR has the institutional mandate to coordinate refugee affairs in the country. It has the capacity and experience to coordinate and manage refugee camps. Its interventions to these refugee camps will be sustained until these camps continue to exist in the country. The benefits, processes and approaches of the project will definitely be sustained by MIDIMAR and even replicated or scaled-up should new refugee camps be established in the future.

By engaging the refugee camps, the local host population and the District and Sector authorities in the design, planning, implementation and monitoring and evaluation of this project, a strong sense of ownership and commitment to the processes, activities and approaches will be developed and internalized. Important lessons learned, the experience and the knowledge and skills transferred to the refugees and local population will ensure sustainability of the activities initiated through the project.

By engaging other stakeholders in the project, such as UNHCR, ADRA, ARC, the projects’ successful approaches and interventions could inform these stakeholders’ own programme strategies and will become an important value addition to their current interventions and activities. It also sees the potential for replication and scale-up supported by these partners.

The environmental awareness and education instilled among the refugees will also serve as important foundation for transforming refugees into good stewards of the environment in and around the camps. Through this behaviour change, it is expected that the activities and interventions of the project will be sustained by the refugees themselves.

The project approach to develop capacities of cooperatives on project and financial management including setting up saving schemes will also ensure sustainability of income-generation and economic activities amongst the refugees and even the local population. It is envisioned that the tree nurseries will be sustained by the Cooperatives and will continuously produce tree seedlings which would be sold to other areas needing seedlings for forestation and afforestation activities. The possibility of supplying tree seedlings to RAB and other organizations undertaking reforestation projects will also be explored and assess the viability. Corresponding marketing strategy could be developed to assist the Cooperatives to sell or market their produce and generate income even beyond project life span. Moreover, the skills in production of tree seedlings and the technology on improved cooking stoves could be used as credentials for refugees and local population to get jobs or employment. The savings generated by the Cooperatives and its members could be used to invest in other small scale enterprises which could give them income and jobs. The Cooperatives will be supported to establish local enterprises. More particularly, the savings which will be established in these cooperatives will be utilized as a start-up capital on community based enterprises such as continuing operations of the nurseries and production of cooking stoves. The agro-forest trees will also ensure sustainable income and source of food (from fruits) produced. The income to be generated from these could come from marketing or selling of the fruit products. The fruit trees are
expected to be yielding after 5 years. The potentials of the fruit production (e.g. mangoes) could be further assessed to see the viability of supplying in volume to local companies producing fruit by-products such as fruit juices.

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

The project will ensure economic benefits for the refugees through jobs and will provide opportunities for income generation in the implementation of the project. Specifically, a number of refugees and local population could gain employment in the establishment and maintenance of the tree nurseries which will be put up in each of the four (4) refugee camps.

The organized cooperatives in the camps will also benefit from the local production of cooking stoves through paid labor. A significant number will also benefit from the training and technical assistance on maintaining tree nurseries as well as gain knowledge and skills in the production and maintenance of improved cooking stoves. The technology for producing the improved cooking stoves will be transferred to the refugees and local population through technical skills training to be provided through the project.

The project will create jobs for a total of 1,040 persons/refugees (women, men and youth) for 118 working days in a spread of three to six months of implementation of the tree planting activities. The project input will consist of the labor costs for clearing and land preparation, terracing, planting, weeding and maintenance. This will be equivalent to *Seventeen Million Nine Hundred Twenty Thousand Rwandan Francs (Rwf 17,920,000)* direct benefits which goes to refugees in the form of wages.

In addition, another 1,400 persons/refugees (women, men and youth) will also benefit from jobs created for the production of cooking stoves. The equivalent labor cost is *Forty Two Million Rwandan Francs (Rwf 42,000,000)* which will comprise as direct benefits in the form of wages for refugees.

Furthermore, the project will also create a 1-year employment for an Agronomist who will be contracted to provide technical supervision of the tree nurseries and tree planting activities.

There will also be additional jobs created for construction workers, artisans and skilled labor from among the refugees or local population who will be employed in the construction of drainage system and the ravine rehabilitation.

Beyond the project duration, opportunities for income generation will be sustained through the cooperatives. The savings scheme introduced and established by the cooperatives could be sustained and used to invest in income-generating activities in the camps. The skills, technical and vocational knowledge gained in the production of stoves and operations of tree nurseries could also be sustained by the Cooperatives. Refugees and local population who were skilled/trained on production of cooking stoves could venture on production and marketing or find employment in private enterprises or producers of improved cooking stoves.

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This amount is 20% of the total cost of 14,000 units of cooking stoves at Rwf15,000/stove prevailing market price.
Q 2.8 **Preparation:** Has a feasibility or pre-feasibility study been conducted *(if yes, then please attach a copy to this PD)*?

There is no feasibility study conducted for this project. However, the design and development of this project was based on robust assessment of needs and environmental issues besetting the refugee camps and its surrounding areas. The feasibility study for the ravine rehabilitation and the drainage system in Gihembe camp was used to inform the design and strategy for this specific activity under Output 1. Moreover, the EIA of Gihembe camp also formed as basis for needs analysis which informed the design of this project. The experience, successful implementation and sustainability of similar activities in Kigeme Refugee Camp was also used as case study reference which informed the formulation, design, components and strategies of this proposed project.

The copy of the feasibility study of the Ravine Rehabilitation in Gihembe Camp is herein attached as Annex C.

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 regulatory or legal requirements needed prior to project implementation. Consent from private land owners for the areas targeted for agro-forestry will be voluntary on the part of the land owners. The land owners themselves will be directly provided with agro-forest tree seedlings for planting in their own land.

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

There is no EIA conducted for this project. However, the EIA of Gihembe refugee Camp has extensively informed the development and design of this project.

A copy of the EIA of Gihembe Camp is herein attached as Annex D.

Q 2.11 **How will the performance of the project be monitored and evaluated (both during and after the project)?**

A monitoring and evaluation system will be directly linked to the project’s logical framework, annual work plans and budget. The Monitoring and Evaluation Plan has been prepared and attached in this PD as supporting document. Different monitoring and data collection tools will be used such as surveys, interviews with beneficiaries and stakeholders, field visits, observations, including participatory appraisal and case studies, when deemed fit and appropriate. Media coverage, documentation (photos) could also substantiate reports on project accomplishments.

Overall, MIDIMAR as the Executing Agency of the project will be responsible for monitoring and evaluation. Project outcomes and outputs will be regularly monitored during the project. The M&E Officer will be primarily responsible for data collection, compilation and analysis and production of
corresponding periodic reports covering these. As indicated in the M&E Plan matrix, the MIDIMAR Staff
involved in the implementation of the project activities will each has monitoring functions imbedded in
their respective TORs relevant to the project. Specifically, the Project Manager, the Environmental
Specialist and the M&E Officer will have a bigger role to play in ensuring project monitoring and
evaluation activities are conducted timely and efficiently. To further ensure a quality M&E, the project
has specifically allocated adequate and substantial support for cost of field monitoring activities.

Regular progress reports will be prepared by the Project Manager and submitted to MIDIMAR on a
periodic basis which includes weekly, monthly and quarterly. MIDIMAR has adopted a regular weekly
flash reports for all staff and projects. This project will form part of the weekly flash reports. These
weekly flash reports could inform the project management team how the day-to-day implementation of
the activities is being undertaken and what progress has been achieved and what adjustments are
necessary to rectify, expedite or enhance the implementation to achieve desired results.

The monthly and quarterly progress reports will be generated and will record progress towards the
completion of key milestones and achievements of targets as indicated in the logframe. Specifically, the
quarterly progress reports will be submitted to the Project Steering Committee for review, approval and
recommendations. The quarterly report will describe and capture results or progress towards results, to
document lessons learned, identify challenges and constraints to the implementation and to plan for both
immediate and strategic corrective actions, adopt risk management measures including risk update and
management. The report will also include the expenditure report and an updated work plan and budget
for the ensuing period or quarter. Certified periodic (quarterly) financial statements will accompany the
progress reports.

The project will also conduct a mid and end of project assessment, planning and evaluation. The mid-
project evaluation will be held on December 2015 and the year-end project assessment and evaluation
will be on December 2016. This assessment outputs will be compiled into the Annual Project Report.
Both these assessment will involve a range of stakeholders including representatives of beneficiaries
(cooperatives or leaders), implementers, service providers, concerned government institutions,
FONERWA and members of the project steering committee. These will include an assessment of the
performance of the project and appraise the annual work plan and budget for the ensuing year. The
assessment will be coordinated by the Project Manager and with technical assistance and support of the
M&E Officer. Required data will be collected, compiled and analyzed to measure performance against
baselines and targets in the logical framework.

Since this is a two-year project, the ensuing annual assessment will also be the end-of-project (final)
evaluation. The final evaluation will focus on the extent of progress or achievements being made
towards outputs and alignment and consistency with corresponding outcomes. The report will
summarize the results achieved vis-a-vis the objectives, outputs and outcomes. It will also include reports on
lessons learned, risks management and update, challenges and actions taken on constraints. For the
end-of-project assessment, a project sustainability strategies and plan will be developed to agree and
ensure the sustainability of the project beyond project duration. Potentials for replication and scale-up
will also be explored and captured in the recommendations of the report.

Below is an M&E Matrix which contains a summary of M&E activities which will be conducted and the
corresponding timeframe and budget:

<table>
<thead>
<tr>
<th>M&amp;E Activity</th>
<th>Responsible person</th>
<th>Timeframe</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception workshop</td>
<td>Project Manager and the whole project team</td>
<td>Quarter 1, Year 1</td>
<td>2,820,000</td>
</tr>
<tr>
<td>Baseline survey</td>
<td>All members of the Project Team</td>
<td>Quarter 1, Year 1</td>
<td>12,680,000</td>
</tr>
<tr>
<td>Project Progress report</td>
<td>Project Manager and M&amp;E Officer</td>
<td>Monthly, Quarterly &amp; Annually</td>
<td>32,304,000</td>
</tr>
<tr>
<td>Project mid-term review and the final evaluation</td>
<td>Project Manager and M&amp;E Officer</td>
<td>Annually</td>
<td>27,200,000</td>
</tr>
</tbody>
</table>

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

In addition to the monitoring and evaluation system describe in Q2.11, the project beneficiaries and other stakeholders will also be involved in M&E activities of the project. The Cooperatives (under the terms and conditions of the MOU with MIDIMAR) will be required to submit periodic reports and updates on their respective activities implemented by highlighting progress made, milestones achieved and deliverables. The Cooperatives who will be directly involved in tree planting activity (Output 1, Activity 1.2, 1.3 and 1.4) will be required to report on the number of members or beneficiaries have been engaged as workers and/or paid of their labour costs for the range of sub-activities implemented. The reports compiled by beneficiaries will be sex and age-disaggregated.

Similarly, the Cooperatives who will be engaged as partners for the production of cooking stoves (Output 2, Activity 2.1, 2.2, 2.3 & 2.4), the same sex and age-disaggregated report will also be required. The Cooperatives will also specifically be mobilized in the validation of households to be provided with cooking stoves and the actual distribution of the stoves to beneficiary households.

The Environmental Clubs and Committees which will be organized and capacitated under this project (Output 3) will also be required to provide the project management unit with monthly reports on different environmental awareness campaigns and activities conducted in the camps including to report on how many women, men and youth have participated in these activities. The refugees will also be asked to provide feedback on the implementation of different project activities during field monitoring activities conducted by the project staff.

The Rwanda Agricultural Board (RAB) under the MOU to be signed with MIDIMAR will also be required to prepare and submit regular progress reports of the activities implemented under their watch.

Other stakeholders such as UNHCR, ADRA, ARC and other local and international NGOs operating, implementing and providing other interventions in the camps including the District and Sector authorities will also be involved in monitoring and evaluation. Regular feedback will be sought from them specifically during field monitoring visits conducted by the project staff. In addition, they will also be invited to participate in the annual project assessment exercise to provide external feedback and
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 specifically contribute to the following FONERWA’s overarching M&E framework:

1. Conservation and management of natural resources strengthened and sustained as a result of the Fund (mainly)
2. Renewable energy and other environment-ally sustainable, low carbon and climate resilient technologies adopted, developed and/or improved for use in Rwanda, as a result of the Fund

Q 2.14 **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*)

Capturing of lessons learned is a key component of the monitoring and evaluation system of the project. Aside from reporting on progress made towards outputs and regular monitoring of key indicators, key lessons learned in the whole process of project planning and implementation will be documented. Specific case studies or write-up on each output will be prepared highlighting on any specific innovations, good practices and approaches which stemmed from the project’s interventions. The lessons will be reflected in the periodic progress reports of the project.

Specific exercise to capture lessons learned will be conducted during the annual project assessments. In this exercise, an in-depth assessment and analysis of approaches and strategies that worked or did not work and why will be extensively explored and documented. It will also include identification and emphasis on new approaches used by the project. It could also highlight on what unintended impacts or results have been achieved during the course of the project implementation and identifying the factors which reinforce or constrained the achievement of milestones and progress. The lessons learned will also include detailed information on knowledge, skills, attitudes and behaviours which reinforced or constrained project implementation.

The lessons documented will be compiled, analyzed and package for wide dissemination and sharing. Dissemination and sharing of lessons learned will be done through a range of venues and fora. Foremost, for the benefit of the refugee population in the camps, camp-based or community-based fora, meetings and assemblies could be organized and showcase the lessons of the project to the beneficiaries themselves. The same forum or assemblies could be organized as well in the host Districts or Sectors to disseminate and share the project’s lessons to the local host population. Lessons learned report will be packaged, produced, published and circulated/shared to decision-makers, donors and partners. The mobilization and/or involvement of the mass media (TV, Radio, Newspapers, etc) to promote a wider public understanding and awareness of the lessons and achievements of the project will be another way to disseminate and share project information and lessons.

The MIDIMAR Communication team will produce video documentary on project’s achievements and recommendations.
lessons learned. The video documentary will be presented and shown during relevant public events, forum and conferences. MIDIMAR Management, Project Management Unit including beneficiaries will be featured in TV shows and radio guesting to share lessons and achievements in order to promote a wider understanding of the environmental issues and other challenges facing/affecting the refugee camps in Rwanda and how the project helped addressed the issues.

Annual Project Reports could be compiled and published to communicate lessons learned and achievements to stakeholders and donors. These video documentaries and Annual Project Reports will be uploaded in the MIDIMAR website for wider access and information by the public.

These lessons learned dissemination and knowledge-sharing strategies are intended to a wide range of relevant stakeholders such as the refugees, the local host population, the District and Sector Authorities, FONERWA, other relevant government institutions, other stakeholders and partners and the general public.

Q 2.15 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?

The main risks the project may face in the course of implementation which may hinder successful delivery of the project range from different types or categories i.e. cultural, environmental, external, economics, sustainability and operational in nature. The project made an exhaustive identification of risks per output and activity to ensure that they are managed well and appropriate measures are taken to address them. These risks include as follows:

<table>
<thead>
<tr>
<th>Risk</th>
<th>Probability</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low participation and involvement of Refugees in project activities; Refugees continuous depletion of natural resources e.g. cutting trees for firewood or digging clay pits without proper refilling</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential mortality of tree seedlings and trees</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Delays in implementation of specific project activities due to third-party circumstances</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Reduced involvement and participation from refugees and local population in project activities</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Lack of cooperation or motivation from local host population to take part in the agro-forestation activities; local host population may not welcome the planting of agro-forest trees in their private lands</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Resources may not be available soon enough to construct the complete drainage system</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Extraction of clay may end up with pits in and around camps. The extraction could pose harm to the environment through soil degradation. The pits could</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>
also accumulate and stagnate rain water and could be breeding ground for mosquitos which will pose further health problems to the refugees and the local population.

The refugees hesitate to adopt new technology/improved stoves

<table>
<thead>
<tr>
<th>Risk Description</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved cooking stoves could be sold by beneficiaries. The intended benefits of the project from this intervention may not be fully achieved.</td>
<td>Medium</td>
</tr>
<tr>
<td>Low attendance and participation in environmental awareness education and campaigns</td>
<td>Low</td>
</tr>
<tr>
<td>The delay in the procurement will affect the progress in the implementation of planned activities</td>
<td>Medium</td>
</tr>
<tr>
<td>The delay in implementation will undermine the confidence in project implementation and effect the project delivery</td>
<td>Low</td>
</tr>
<tr>
<td>Budget to implement activities may not be released on time</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Overall, the probability of the risks occurring is ranging from low to medium. In case the risk occurs at any point of the project implementation, the potential impact ranges from medium to high. In consideration of this risk analysis, the project has put in place measures and controls in order for these risks to be managed accordingly.

Risk log is attached as Annex E.

Q 2.16 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?

The project does not pose risks to the environment, people and institutions affected by the project. The project is aimed at protecting the environment and interventions are geared towards instilling the values and importance of conservation of natural resources, therefore, the project will not in any way pose any impact or risks to environment. It will also create opportunities for income generation for poor refugees in the camps.

On a smaller scale though, the activity on production of cooking stoves using raw materials such as clay might have potential minor impact on the environment if left unaddressed at the onset of the project. Hence, this will be accordingly mitigated by ensuring mechanisms for regulated digging for clay and/or promote and use the technology which does not or minimally use clay as raw material.

Moreover, the Project Management Unit, with the leadership of the Project Manager and the Environment Specialist will include this concern in the public awareness and sensitization campaign to ensure that no rampant diggings of clay pit will be done. The Environmental Clubs and Committees in the refugee camps will also be mobilized to help monitor activities on digging of clay pits in and around the
refugee camps.

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 cost of this project is \(2,264,775.25\) \(\text{USD}\) equivalent to \(1,562,694,920\) Rwandan Francs,

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>Recurrent</td>
</tr>
<tr>
<td>711,948,000</td>
<td>347,273,516</td>
</tr>
<tr>
<td>1,059,221,516</td>
<td>447,186,401</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 requested amount is \(1,084,870,733\) Rwandan Francs,

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>753,252,924</td>
<td>331,617,809</td>
</tr>
</tbody>
</table>

The remaining cost will come from the Government through regular and/or supplemental allocations by MINECOFIN. The cost from MINECOFIN will cover the cost of project management and offices space.

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)**

The Government of Rwanda, through the Ministry of Disaster Management and Refugee Affairs will contribute to \(421,537,184\) Rwandan Francs for Project MANAGEMENT Cost and offices space and logistics.

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

The issues and problems on environmental protection in and around refugee camps have not generated any resources and support. While there are many stakeholders and partners assisting and intervening in the camps, these are all to address humanitarian needs. Some of the most prominent stakeholders, donors and organizations include UNHCR, ADRA, World Vision and ARC. They focused mainly on provisions of services on health, food distribution, and education. None of these organizations provides support for environmental protection. The environmental problems and issues confronting the camps are tremendous. In order to avert any further damage and degradation of the environment in and around the camps, it is important and primodial to address these concerns now.

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\(6\) US$ Exchange rate used is Rwf 690
FONERWA as fund for environment and climate change is the best partner and source of support for this environmental protection project to address environmental issues in and around refugee camps. Without FONERWA funding, this project is not likely be supported by any other funding institution as evidenced by the lack of projects of the same nature. Based on extensive analysis and mapping of relevant projects or initiatives, there are at most five (5) projects, as elaborated in the table below, which focused on environmental protection of refugee camps. These projects are small-scale and are often integrated only as a sub-component of projects addressing specific humanitarian needs or concerns. Therefore, these projects only merit very meagre resources or funding and the geographical coverage is also very limited. All these projects have already been completed the latest of which was completed in 2013.

<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>Greening and beautification for environment protection in refugee camps</td>
<td>The project was implemented in 3 refugee camps namely Kiziba, Gihembe and Nyabiheke. It was intended to minimize the impact of rain waters on unprotected lands in the camps through greening and other beautification activities. The lack of vegetation cover and proper drainage systems in these 3 refugee camps resulted to uncontrolled soil erosion and related land degradation problems in the communities surrounding the camps.</td>
<td>The project was launched in 2012 and ended in 2013. It was supposed to continue in 2014 but the lack of funds stopped it prematurely. During the project more than 20000 trees were planted on a total surface of 7ha as follows: 11000 tree seedlings in Kiziba RC Rwankuba Sector Karongi District on a surface of 3 ha. 5600 tree seedlings in Gihembe RC Kageyo Sector Gicumbi District on 2ha 8000 trees seedlings in Nyabiheke RC Gatsibo Sector in Gatsibo District on a surface of 2ha.</td>
<td>The project concentrated mainly on tree planting in the camps including a small portion of surrounding lands. The FONERWA project will complement it by increasing the surface area covered. The total surface of rehabilitated forests is much bigger (200ha) including 80ha in the camps and 120ha around the camps.</td>
</tr>
<tr>
<td>Environmental protection through livelihood activities</td>
<td>The project was implemented in Gihembe and Kigeme Refugee Camps. The main focus of the project is improved livelihoods through planting of cassava. A total of 6000 of cassava trees were planted in these 2 camps with a survival rate of 41%. The low survival rate was caused by the proximity of the cassava farm to the shelters which is due to unavailable land in the camps. The environmental protection was implemented in 2012 and covered 3ha of lands as follows: - 2ha in Gihembe RC Kageyo Sector Gicumbi District - 1ha in Kigeme RC Gasaka Sector Nyamagabe District.</td>
<td>No potential for duplication. The project will instead benefit from the experience by integrating livelihood development in tree planting or terracing activities.</td>
<td></td>
</tr>
<tr>
<td>Status: Completed</td>
<td>component of the project is limited to awareness building and use of terracing technology in cassava planting.</td>
<td>The project was carried out by MIDIMAR in partnership with CoopRwanda a national NGO involved in environment protection activities country wide. During this project more than 15000 were planted mainly around the Kigeme refugee camp.</td>
<td>The successful results will be replicated in 4 others camps with an expected improvement on survival rate due to a better maintenance mechanism as a result of knowledge transfer through capacity building among refugees and local communities who will be trained together in cooperatives.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Tree planting project in Kigeme Refugee Camp.</strong></td>
<td>Implemented by: MIDIMAR in partnership with CoopRwanda</td>
<td>The project was implemented in 2012-2013. Covered a total of 5 ha of land in the direct surroundings of Kigeme Refugee Camp in Gasaka Sector Nyamagabe District.</td>
<td><strong>UNHCR Save80 project</strong></td>
</tr>
<tr>
<td><strong>Implemented by:</strong> MIDIMAR in partnership with CoopRwanda</td>
<td><strong>Duration:</strong> 2012</td>
<td><strong>Status:</strong> Completed</td>
<td><strong>Implemented by:</strong> UNHCR in partnership with atmosfair</td>
</tr>
<tr>
<td><strong>Status:</strong> Completed</td>
<td><strong>The project was carried out by MIDIMAR in partnership with CoopRwanda a national NGO involved in environment protection activities country wide. During this project more than 15000 were planted mainly around the Kigeme refugee camp.</strong></td>
<td><strong>The project focused on the distribution of Save80 stoves to all households in Kigeme Refugee Camp with the aim of reducing the consumption of firewood and at the same time minimize the impact on forests and land in Gasaka Sector and even beyond. The agreement between atmosfair who is the manufacturer of the stoves and the UNHCR is a potential carbon credit following the results in use of the stoves. The atmosfair will award a proportional carbon credit accordingly to the use of the stoves and the results in fuel consumption reduction which is directly linked to reduced carbon emissions.</strong></td>
<td><strong>Implemented in 2012-2013. The stoves were distributed to a total number of 5860 households in Kigeme Refugee Camp.</strong></td>
</tr>
<tr>
<td><strong>UNHCR Save80 project</strong></td>
<td><strong>Duration:</strong> 2012-2013</td>
<td><strong>Status:</strong> Completed</td>
<td><strong>The Kigeme experience informs substantially the strategies of this project. Note that the Kigeme Camp is not included in this project’s coverage. Instead the experience and lessons learned from the project implemented in Kigeme will be an important reference for this project in terms of what work and what didn’t work and how to improve from there.</strong></td>
</tr>
<tr>
<td><strong>Implemented by:</strong> MIDIMAR in partnership with CoopRwanda</td>
<td><strong>Status:</strong> Completed</td>
<td><strong>The project was initiated in 2005 in Kiziba and Gihembe RC. These 2 camps were the only camps in Rwanda at that time.</strong></td>
<td><strong>ARC improved Cookstoves promotion for environment protection in Refugee Camps.</strong></td>
</tr>
<tr>
<td><strong>Implemented by:</strong> American Refugee Committee (ARC)</td>
<td><strong>Duration:</strong> 2005-2006</td>
<td><strong>Status:</strong> Completed</td>
<td><strong>The project focused on the promotion of use of improved Cookstoves among refugees. ARC assisted in training of trainers of how to make and maintain efficient mud stoves. However, due to the lack of follow-up and a proper monitoring mechanism so as to improve the quality of the stoves and continue the promotion campaign, the project did not yield substantial satisfactory results. It stopped prematurely in 2006. A recent survey jointly carried out by MIDIMAR and UNHCR concluded that as for now, these mud stoves</strong></td>
</tr>
<tr>
<td><strong>ARC improved Cookstoves promotion for environment protection in Refugee Camps.</strong></td>
<td><strong>Implemented by:</strong> American Refugee Committee (ARC)</td>
<td><strong>Duration:</strong> 2005-2006</td>
<td><strong>Status:</strong> Completed</td>
</tr>
</tbody>
</table>
are still used widely by refugees but with a minimum impact on fuelwood consumption reduction.

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

Some of the non-financial support which FONERWA could provide to the project include as follows:

1. Timely release of funds
2. Provide regular feedback on the performance of MIDIMAR in terms of implementing and managing the project
3. FONERWA should be present at all times in Project Steering Committee meeting including site visits
4. Advice and technical assistance on quality assurance of project reports and other related documents

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)

The required inputs for the project have been identified according to the outputs it intends to achieve within a period of 2 years. The experience and inputs considered/used in the similar intervention in Kigeme Camp mainly informed the design, strategy and approach of this project. Moreover, in consideration of expertise available in other Government agencies (e.g. RAB) and other service providers to deliver some of the project activities, MOUs modality will be used. To also ensure that the project benefits from high quality standards goods and services, a number of project inputs will be delivered and sought through a highly competitive process and the government procurement process will be exhaustively utilized in the project.

All procurement will be carried out according to Government of Rwanda Tender procedures:

1. A procurement plan is prepare and approved by the chief budget manager of the institution and sent to Rwandan Public Procurement Authority,
2. The invitation to tender is published for 30/45days depending on the scope of the tender, National/international,
3. The tenders are opened in a meeting with all the applicants and the tender committee by the Internal tender committee,
4. The provisional result is communicated to all the applicants,
5. The applicants have 7 days to appeal the decision, and then a final notification is sent to all the applicants,
6. If a guaranty is required, the successful bidder has 15 days to secure it,
7. Contract negotiation and signing
The following are some of the project outputs unit cost measures:

Output 1: Lands in and around the refugee camps secured and protected against soil erosion and degradation

*Forestation and Agro-Forestation:*

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Cost of Activity</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hectare</td>
<td>200 (80 Forestry and 120 Agro-Forestry)</td>
<td>Rwf 92,090,800</td>
<td>Rwf 767,423.33</td>
</tr>
</tbody>
</table>

*Construction of Drainage System:*

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Cost of Activity</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilometer</td>
<td>4</td>
<td>Rwf 153,348,000</td>
<td>Rwf 37,578,000</td>
</tr>
</tbody>
</table>

Output 2: Clean energy is widely used among households in the refugee camps resulting to reduction of use of firewood for cooking by refugees

*Improved Cooking Stoves:*

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Cost of Activity</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>14,000</td>
<td>Rwf 218,870,000</td>
<td>Rwf 15,633.57</td>
</tr>
</tbody>
</table>

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)?

For Output 1, the project identified three key and interrelated activities in order to produce the intended outputs. These are through (1) reforestation and agro-forestation in 4 refugee camps, (2) construction of the drainage system in Gihembe refugee camp and (3) rehabilitation of the Ravine in Gihembe. For reforestation and agro-forestation, the project inputs include technical expertise (RAB) to establish the tree nurseries, expertise of an Agronomist to supervise operations and maintenance of the nurseries including the actual tree planting activities. The expertise of the Environment Specialists and other project staff to ensure that refugees are involved and mobilized in all the project activities. Training on establishment, maintenance and operation of tree nurseries is also an important input. For the construction of the drainage system and rehabilitation of the ravine, the services of a contractor will be sought through competitive tender process. A consultancy for controls and quality assurance is also hired to ensure controls and standards are adhered to and complied.

For Output 2, the main input will be the provision of improved cooking stoves to the refugees. This will
be done by contracting a highly credible and competent service provider to train refugees and local population in the production of improved cooking stoves, supervision in the actual production thereafter. The input also includes the provision of the raw materials, supplies and equipment need for the production of stoves. In order to ensure that the outputs produced from this intervention is of high quality, the project made sure to avail of the best and high quality input as well. A major project input here is the improved cooking stoves (or energy-efficient or energy-saving cooking stove). To ascertain that only quality input will be provided under this project, a comparative analysis of locally available models of cooking stoves was undertaken. The project plans to provide the Karundura stove to the refugees. Specifically, a comparison was made between two models: the Karundura which costs 15,000 Rwf per unit and Canarumwe which costs 3,000 Rwf per unit. The comparison was done through actual demonstration of the use of the units and analysis of their respective technical specifications. Based on this analysis, while Karundura stoves appear to be more expensive than Canarumwe stove, Karundura stoves are much better in a range of ways. Primarily, Karundura stove is best suited for the camps as it does not require installation in a kitchen. The shelters in the refugee camps do not have space provision for kitchen. The Canarumwe stove only works well in a covered space such as a kitchen to be efficient. In terms of materials used, Karundura is made up of metal while Canarumwe stove is made of a combination of clay soil, sand and stones. The life span of Karundura stove is 4-5 years while Canarumwe only lasts between 8 months to 1 year. The technology of Karundura stove allows the regulation of the heat. There is a wind regulator which adjusts the heat and regulates the burning process of the firewood. Hence, the reduction in the firewood consumption. The heating (therefore cooking time) can last longer i.e. about more than 3 hours. In addition, the technology of the Karundura stoves allows for the production of charcoal at the end of the heating process. Based on the actual demonstration observed by MIDIMAR while using the Karundura stove to produce fire/heat, for every 2 kilograms of firewood burnt, about half a kilogram of charcoal is produced. The firewood used in a Karundura stove does not totally burnt into ashes. The charcoal could then be used further.

A detailed Cost-Benefit Analysis (CBA) has been calculated for the cooking stoves and reforestation activities. The CBA showed the value of benefits which could be gained from these specific project inputs or interventions (see the NPV and cost benefit ratio summarized below). On the other hand, due to unavailable local costs standards to use, CBA was not calculated for the ravine rehabilitation and the drainage system. Alternatively, a list of some social benefits resulting from these interventions are herein stated. The ravine rehabilitation will help ensure that no lives will ever get loss from any accidents. Accidents have already been happening in the said ravine. It has already curtailed 4 human lives so far. If the ravine is not backfilled, the danger pose to human lives due to the high potential of accidents (i.e. people falling down into the ravine) will remain. Once the ravine is rehabilitated, access, trading, and communication between two villages will be restored due to re-establishment of the road access. Based on the Environmental Impact Assessment of Gihembe Camp which included an assessment of the ravine, interventions to rehabilitate the ravine will contribute significantly to prevention of soil or rill erosion and protection of the land from further degradation. The proper drainage system will also prevent the transport and accumulation of sediments in downstream agricultural lands. It will also help prevent soil infertility.

The NPV and benefit cost ratio for this project is as follows:

<table>
<thead>
<tr>
<th>Planting trees/reforestation</th>
<th>DISCOUNT RATE</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV COST</td>
<td>17,012,073</td>
<td></td>
</tr>
<tr>
<td>PV BENEFIT</td>
<td>52,855,764.97</td>
<td></td>
</tr>
</tbody>
</table>
NPV | 35,843,692.25  
BCR | 3.10696

**Improved cooking stoves**

| DISCOUNT RATE | 10%  
| PV COST | 198,972,727  
| PV BENEFIT | 1,866,025,774  
| NPV | 1,667,053,046.33  
| BCR | 9.378299

The CBA matrix (in Excel Sheet) is attached as Annex F.

**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 following indicators will be used to demonstrate and gauge the effectiveness of the project:

1. Areas (in ha) protected from soil erosion and land degradation)
2. No. of HHs using clean energy
3. Percentage of refugees actively engaged in environmental protection activities disaggregated by gender and age: a. Women; b. Men; and c. Youth

The main objective of the project which is to put in place mechanism and measures to protect the environment and the expected outcome of ‘Environment in areas in and around refugee camps protected through reforestation, use of clean energy and environmental will be achieved through the achievement of the above indicated indicators. Outcome indicator 1 will demonstrate the effectiveness of the tree planting, the drainage system and the ravine rehabilitation in preventing soil erosion and degradation.

Indicator 2 will prove and validate the effectiveness of the massive use of improve cooking stoves in terms of reduced energy (firewood) consumptions. The decrease in firewood consumption is expected to reduce the cutting of trees by refugees in and around camps. In general, it will also demonstrate the reduction of pressure to forests and trees in particular as there will be decreased requirement for firewood provision by MIDIMAR in the refugee camps.

Indicator 3 will demonstrate how effective the environmental education and awareness campaigns conducted in the refugee camps are. It will further validate the effectiveness of these campaigns in terms of positively changing behaviour among refugees and reinforcing the achievements of the two other indicators.
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.

List of Annexes:

Annex A: CVs of Project Staff
Annex C: Feasibility Study
Annex D: EIA of Gihembe Refugee Camp
Annex E: Risk Matrix/Risk Log
Annex F: Cost Benefit Analysis Matrix
Annex G: Photos of Ravine in Gihembe Camp
Annex H: Monitoring and Verification Feedback Report on the UNHCR Save80 Project