

Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

10096

Countries

Rwanda

Project Name

Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda

Agencies

UNDP

Date received by PM

9/2/2020

Review completed by PM

10/8/2021

Program Manager

Aloke Barnwal

Focal Area

Climate Change

Project Type

FSP

PIF ☐
CEO Endorsement ☐**Part I ? Project Information****Focal area elements**

1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?

Secretariat Comment at CEO Endorsement Request

Yes, the project remain aligned with the LDCF programming strategy.

Agency Response**Project description summary**

2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?

Secretariat Comment at CEO Endorsement Request

GEFSEC April 27, 2021

Comment 2.1 - cleared

Comment 2.2- Acknowledged that the project will support adaptation through resilient livelihoods. Regarding reforestation of 200 ha of land for increased income, please note that there is scientific evidence indicating that trees like Eucalyptus results in maladaptation with reduce water table and limited green cover. Therefore, it is recommended that the project adopts a scientific way of identifying options for tree plantation.

Comment 2.3 and its sub-comments- cleared

Comment 2.4 cleared

Comment 2.5 cleared

GEFSEC:

The overall design is fine. Please consider the following comments:

- Output 1.2 and 1.5 seems overlapping as both indicate use of climate information and assessments to inform decision making. These two outputs could be combined.

- Component 2 refers to Resilient lives and livelihoods in targeted landscapes. However, the outputs are primarily linked with livelihoods. Resilient lives indicate support to reducing life risk of people to climate extremes. Will the project support this aspect? If yes, please indicate relevant activity in the project outputs.

- Output 2.3 mentions Upgrading of housing and infrastructure. Please elaborate on "infrastructure" other than housing. What are these infrastructure and are these infrastructure part of the Rural Settlement Program which the LDCF project will climate proof? Please also make the link of the rural settlement program (Imidugudu) with resilient agriculture and ecosystem more clearer in the strategy section. Please also elaborate on "upgrading". Does this indicate climate resilient design of buildings and other infrastructure? No supportive activity indicates any support on resilient design standards development and adoption. It is mentioned in the innovation/sustainability section, but not explicitly as an activity or output in Table B.

The direct estimated impact of the project seems limited despite being so well targeted to support a national level program by expanding its resilience benefits in an integrated manner (i.e. going beyond housing to look at the entire landscape and livelihood resilience). For a \$10 million LDCF funded project 54,000 direct beneficiaries is quite low for Rwanda which has the highest population density in Africa. Please also note that beneficiaries benefiting directly from climate policies and plans can also be considered direct beneficiaries.

The project may consider a dedicated output or outcome that supports scaling up of the models implemented under this project to other Districts. This could also increase number of beneficiaries. This additional output/outcome could also explore knowledge and experience sharing with other programs (going beyond the settlement program) in the target regions if relevant.

AB GEFSEC:

Thanks for the response and revisions. Comment cleared.

Agency Response

The overall design is fine. Please consider the following comments:

Comment 2.1 - Output 1.2 and 1.5 seems overlapping as both indicate use of climate information and assessments to inform decision making. These two outputs could be combined.

Agency response: Output 1.2 increases the awareness and capacity of stakeholders to utilize existing climate-risk assessment tools and methods while output 1.5 equips Meteo-Rwanda to provide more relevant and higher quality weather forecasting. Output 1.5 has been revised to clarify the difference and complementarity between the two outputs. It now reads ? ?Meteo-Rwanda capacitated to provide high quality climate information to facilitate uptake of adaptation measures in the four project sites and nationally?.

Comment 2.2- Component 2 refers to Resilient lives and livelihoods in targeted landscapes. However, the outputs are primarily linked with livelihoods. Resilient lives indicate support to reducing life risk of people to climate extremes. Will the project support this aspect? If yes, please indicate relevant activity in the project outputs.

Response ? The project is focused on reducing risks to livelihoods rather than addressing risks to individual lives, by strengthening resilient livelihoods, via activities a, b and c of output 2.1; activities a, b and c of output 2.2. Activities a, b and c of output 2.3. The choice of these activities was based on the PPG finding that the main climate related hazards affecting the project area are floods, landslides and mudslides, droughts and famine. As explained in the Theory of Change and strategy section of the Prodoc, the low levels of economic and technological development in the rural areas, high population density, hilly topography with settlements on slopes, land scarcity and high dependence on agriculture means that reducing life risk of people to climate extremes should take a systemic, holistic approach integrating measures to improve ecosystems services as well as expanding options for more climate resilient livelihoods. Functional ecosystems are part of the adaptive base of communities and widen the livelihood options available to those affected by climate change. Indeed, all investments of Outcome 2 build resilience to climate extremes as follows: a) to improve ability of the landscape to provide ecosystems services that reduce risks of climate change to livelihoods, it will implement ecosystems-based adaptation plans formulated under outcome 1, which improves ecosystems services and hence the ability of the landscape to reduce the impacts of climate change on livelihoods, thus improving resilience (output 2.1). (b) It will also rehabilitate degradation hotspots to restore ecosystems services as the cornerstone of resilient livelihoods ? (output 2.2): The baseline assessment identified degradation hotspots across the landscape in the four pilot areas (Prodoc Table 2 and map 2 of Annex 1). The project will treat these hotspots to boost the sustained provision of ecosystem services under the EbA context. This includes restoring forests to provide nature-based flood and erosion control, land stabilization in catchment areas and rehabilitating riverbanks to protect the water catchment services, reduce incidents of landslides and protect rivers and wetlands from siltation. Indeed, the project will: a) stabilize 46km of degraded riverbanks via enforcement of rules and regulations prohibiting encroachment into the river channels combined with planting bamboo and other protective vegetation along the channels. These rivers include Rwagitugusa, Kibaya, Kagogo, Murutagara, Cyacika, Sumo, Mugambazi, Nyabarongo; b) engage communities in community-based protection of the 7,000 ha of forests found in the four project areas; c) implement reforestation programmes for at least 200 ha of

degraded forest using a mixture of fast growing economic trees (eucalyptus, *Grevelia robusta*, *Calliandra calothyrsus*, *Faidaherbia Albida*, African sandal wood) and indigenous species

Comment 2.3- Output 2.3 mentions Upgrading of housing and infrastructure.

Comment 2.3.1) Please elaborate on "infrastructure" other than housing. What are these infrastructure and are these infrastructure part of the Rural Settlement Program which the LDCF project will climate proof?

Response - The term infrastructure referred to communal facilities provided by the Rural Settlement Program (with government co-finance) which the LDCF project will climate proof. They include climate proofing feeder roads, installing waste management systems, electricity installation (including solar power), establishment of tree nurseries and reforestation of the new villages, community halls and early education support systems. The term infrastructure has been replaced with the more appropriate term communal facilities.

Comment 2.3.2) Please also make the link of the rural settlement program (Imidugudu) with resilient agriculture and ecosystem more clearer in the strategy section.

Response - the link of the rural settlement program (Imidugudu) with resilient agriculture and ecosystem has been made more clearer in the strategy section by adding the following text: As explained in section 2 (barrier analysis), given the low levels of economic and technological development in the rural areas, high population density, hilly topography with settlements on slopes, land scarcity and high dependence on agriculture, climate proofing should take a systemic, holistic approach to building resilience of the rural settlements in which: a) planning, design and building of the settlements and related infrastructure are based on non-proxy climate information to understand the real climate risks (short and long term timescale/projections from reliable source); b) a landscape-based approach to mainstreaming climate information/risk into the programs is used that connects socio-economic activities, infrastructure and ecosystem functions; c) stakeholders understand climate information and are engaged in improved management of ecosystems to reinvigorate ecosystems services, adopt climate-resilient production systems and diversified livelihood options, linked to viable high value markets; d) the country has a policy framework and knowledge sharing systems to ensure that all future settlement programmes in Rwanda are climate proofed; e) beneficiaries have access to affordable finance to support adoption of climate resilient technologies and production systems and alternative livelihoods

Comment 2.3.3) Please also elaborate on "upgrading". Does this indicate climate resilient design of buildings and other infrastructure?

Response - "Upgrading" means the use of climate resilient design for buildings and communal facilities such as roads, water systems, and buildings. The following sentence has been added in Prodoc para 45 to communicate the facts more clearly. "LDCF

funding will build on the Government co-financing of USD 10 million to support climate-proofing activities such as providing climate resilient designs for dwellings and communal facilities, implementation of ecosystem based and diversified livelihood activities for the beneficiary communities?

Comment 2.3.4) No supportive activity indicates any support on resilient design standards development and adoption. It is mentioned in the innovation/sustainability section, but not explicitly as an activity or output in Table B.

Response - Resilient design standards are supported by activity 2a under output 2.3 (Provide technical input into the selection of sites, design and building of the new IDPs and climate resilient access roads, ensuring that each step incorporate measures to climate proof the process and the settlement programme. We have now clearly articulated the development of the model more clearly under output 1.3 (Prodoc para 64, activity (e)). Model development (under outcome 1) will be supported by a broad knowledge-based consultation. The project will then collate inputs from the broad range of stakeholder consultations into several climate proofing options. It will assess the feasibility of the various options via cost benefit analysis including considerations of social, economic and environmental feasibility using multi-criteria approaches. It will select one or several models and develop guidelines for their application. It will also develop training materials that are deemed necessary to support the uptake of the model (to be incorporated in the training conducted under output 1.4 and for uptake by other relevant government programmes).

Comment 2.4 - The direct estimated impact of the project seems limited despite being so well targeted to support a national level program by expanding its resilience benefits in an integrated manner (i.e. going beyond housing to look at the entire landscape and livelihood resilience). For a \$10 million LDCF funded project 54,000 direct beneficiaries is quite low for Rwanda which has the highest population density in Africa. Please also note that beneficiaries benefiting directly from climate policies and plans can also be considered direct beneficiaries.

Response - The number of beneficiaries has been changed to reflect the widespread benefits reaching people at the local and national levels. The number of beneficiaries is now 2,211,600 (50% women). This includes 108,000 people in 191 villages benefitting from more resilient physical and natural assets (improved dwellings, better managed landscapes with improved ecosystems that mitigate negative impacts of CC), 43,600 people with diversified and strengthened livelihoods and sources of incomes (as a result of climate smart agriculture and improved access to value chains), 2,000,000 people benefitting from new and improved climate information systems, 60,000 people trained. These changes have been incorporated in all relevant places in the prodoc and CEOR.

Comment 2.5 - The project may consider a dedicated output or outcome that supports scaling up of the models implemented under this project to other Districts. This could also increase number of beneficiaries. This additional output/outcome could also explore knowledge and experience sharing with other programs (going beyond the settlement program) in the target regions if relevant.

Agency Response ? Scaling up and replication are very important for this project and have been key considerations in its design. Replicating the models developed and piloted by the project has been factored in the project design and mainstreamed through outcomes 1, 3 and 4 in the steps described below. It is considered that integrating replication comprehensively gives provides a robust basis for actual scaling up/replication.

Under output 1.1, the project will provide gender responsive training to government technical staff and communities in climate risk management focused on EbA, especially as part of post-COVID recovery strategy climate proofing of physical assets for further scaling up and sustainability. As described in Prodoc para 58, -- to ensure the sustainability of the training and skills development, the programme will be embedded into the extension services (Twigire Muhinzi) and delivered via training of trainers modality. Prodoc Para 58 provides the long list of the courses to be offered by the project, all of which support the upscaling of the concept beyond the project sites.

Output 1.3 (Climate-proofed Imidugudu models developed in a science-led, gender and COVID responsive highly participatory process and piloted in four landscapes) -- provides further avenues for upscaling the concept. The model will be developed with participation of the entire country (national level) with the implementation tested at the local level in the project sites as described under output 2.3. To ensure replication/upscaling, model development will be led by the Rwanda Housing Authority (who has national mandate for the implementation of Imidugudu country-wide), with the support of a Project Technical Committee. RHA will therefore lead a national discourse on climate proofing the Imidugudu aimed at creating understanding and buy-in of: a) definition of the concept; b) its importance in the efficiency and sustainability of resources invested in the Imidugudu programme; c) the requirements (costs, policies, rules, regulations and institutional arrangements) for its effective and widespread adoption including the trade-offs at different levels. This will lead to a stakeholder-driven and expert-informed model and guide for climate proofing Imidugudu settlements in Rwanda, addressing the entire process from planning the rural settlement programme to its operation. This model and guide will be designed with options that are applicable to different settings of Rwanda. These measures will ensure replication and upscaling.

Under Output 1.5 (Meteo-Rwanda capacitated to provide high quality climate information to support uptake of adaptation measures in the four project sites and nationally) ? the project will increase the capacity of Meteo Rwanda to generate required climate information to inform decision-making at central and project levels. As described in Prodoc para 68, Meteo Rwanda will be supported to actively contribute to downscaled weather and climate information which will be disseminated through regular channels nation-wide with a web portal created for online visualisation. The dissemination of the information will be accompanied by an awareness raising strategy to educate the public about the availability of the higher quality, more relevant

interpreted climate information and the existence of the portal for the use/application of weather and climate information for day to day decision-making. These measures will promote replication nation-wide.

In addition, the purpose of outcome 3 is to embed the consideration of climate risk into policies to promote replication. Under this outcome, the project will provide a policy enabling environment and improve cross sectoral coordination to create pathways for replication and scale up of the climate proofing concept. *The project will ensure that the concept of climate proofing the Imidugudu is captured in the national and district planning, budgeting and public investment systems, to provide a basis for budgetary provisions for its roll out.* Output 3.1 will facilitate a strategic review of policies, national and district strategies, programmes and planning tools to ensure they capture climate proofing of Imidugudu in the investment decision-making processes. Output 3.2 will provide training for technical and community institutions to improve their effectiveness in the cross sectoral coordination units and networks recently created by the Government of Rwanda.

Furthermore, outcome 4 will provide monitoring and evaluation systems, codify knowledge and promote its dissemination to further support replication and upscaling. The project will design, in a gender and COVID-19 responsive process, a participatory M&E plan and integrate it into the M&E systems of the extension service (Twigire Muhinzi), District and/or relevant Sectors. It will also develop a comprehensive Communications and Knowledge Management Framework to coordinate communications and knowledge management (in a similarly gender and COVID-19 responsive manner). Knowledge products will be produced and disseminated targeting different audiences at all levels - local, national, international, including decision-makers, project partners, aligned programmes, community stakeholders.

Collectively, these measures will have created the conditions for replication in a more sustainable manner. In addition, sharing lessons and learning from other projects has been explained under the partnerships section (paras 91 to 100). This includes projects and programmes in Rwanda and Africa.

In view of the integrated nature of scaling up and learning, it is decided not to create a new Output/Outcome at this stage, as this will require changing several Outputs and potentially the Theory of Change.

10 May 2021; Agency Response to Comment 2.2: Point well noted. Paragraph 77 has been revised to make specific reference to Rwanda's Forest Landscape Restoration Guidelines, following scientific methodologies introduced by WRI and IUCN thereby avoiding maladaptation. As described under Prodoc Para 78, the reforestation will be guided by the Forest Landscape Restoration Guidelines (a scientific method of determining suitability of proposed reforestation programmes). Para 78 states this in the following text --- The project will specifically promote research on indigenous trees and grass species which balance quick growth rates, economic potential and protection of the environment. To ensure effective reforestation that balances trade-offs (economic, livelihoods needs and ecosystems restoration), reforestation will be guided by the

Forest Landscape Restoration (FLR) Concept[1]¹, where the villages will produce FLR plans following the methodology introduced by the World Resources Institute (WRI) and IUCN, as recently modified and applied for the Gatisbo FLR baseline conditions assessment[2]². Under these guidelines, no known invasive species will be introduced. Species whose potential for invasiveness are unknown will be carefully assessed to avoid accidental introduction of invasive species.

[1] Ministry of Natural Resources ? Rwanda (2014). Forest Landscape Restoration Opportunity Assessment for Rwanda. MINIRENA (Rwanda), IUCN, WRI. viii + 51pp.

[2] World Resources Institute, Ornanong Maneerattana, Fred Stolle, Tesfay Woldemariam; 2017: Baseline Conditions of Forests and Landscapes in Gatsibo District. Methodologies for Understanding Restoration Progress through Biophysical, Socioeconomic and Governance Indicators: Gatsibo District, September 2017.

3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Co-financing

4. Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat Comment at CEO Endorsement Request Yes. No additional comments.

Agency Response

GEF Resource Availability

5. Is the financing presented in Table D adequate and does the project demonstrate a cost-effective approach to meet the project objectives?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response

Project Preparation Grant

6. Is the status and utilization of the PPG reported in Annex C in the document?

Secretariat Comment at CEO Endorsement Request Yes

Agency Response

Core indicators

**7. Are there changes/adjustments made in the core indicator targets indicated in Table E?
Do they remain realistic?**

Secretariat Comment at CEO Endorsement Request

The estimated core indicator 1 seems low for the project design and scope.

GEFSEC 27 April: The revised indicators and targets are fine. Comment cleared.

Agency Response

In view of this and earlier comments on beneficiaries, the number of beneficiaries is 2,211,600 (50% women), out of which 108,000 people in 191 villages will benefit from more resilient physical and natural assets (improved dwellings, better managed landscapes with improved ecosystems that mitigate negative impacts of CC), 43,600 people with diversified and strengthened livelihoods and sources of incomes (as a result of climate smart agriculture and improved access to value chains), 2,000,000 people will benefit from new and improved climate information systems, 60,000 people trained. These changes have been incorporated in all relevant places in the prodoc and CEOR.

Part II ? Project Justification

1. Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?

Secretariat Comment at CEO Endorsement Request

Yes, there is good elaboration of the climate vulnerability challenges and is consistent with the description of the PIF.

Agency Response

2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?

Secretariat Comment at CEO Endorsement Request

The baseline scenario is explained well. The Agency is requested to consider the recently GEF CEO Endorsed project of sustainable cities in Rwanda which focuses on Kigali and six secondary cities to support integrated urban planning and urban infrastructure upgrading and restoring of wetlands and natural resources.

GEFSEC 27 April: Thanks. Comment cleared.

Agency Response

This suggestion has been adopted ? the following text has been added to the section on partnerships (Prodoc para 94). Sustainable Cities Impact Program ? 2020 ? 2027, World Bank-GEF with funding from multiple bilateral donors. The project objective is to support cities pursue integrated urban planning and implementation that delivers impactful development outcomes with global environmental benefits (GEBs). In Rwanda, the project will support the development of an integrated wetland master plan to safeguard carbon stocks and increase carbon sequestration, , which will bolster biodiversity. Moreover, it will address climate change resilience through flood risk management infrastructure investments incorporating green and grey infrastructure. This component will support a detailed city-wide topographic survey (using LiDAR technology), which will be an invaluable dataset for urban redevelopment, wetland protection, and flood management. An integrated solid waste management strategy will be developed, based on a detailed analysis of technical, environmental, legal and financial concerns. The project also addresses inclusive and resilient infrastructure delivery through physical investments. These are focused on (1) urban upgrading in priority unplanned settlements, with a focus on access streets, footpaths, drains, and improved sanitation and low-carbon approaches will be adopted, including energy-efficient lighting, and low-carbon materials (e.g. low impact development for urban drainage); (2) the rehabilitation and restoration of a priority wetland, and the creation of green space and recreational facilities, and (3) wetland health monitoring, which will address biodiversity and water quality. Urban upgrading will emphasize the use of low-carbon and nature-based solutions, such as the planting of trees, and Sustainable Drainage systems such as swales, filter strips and ponds (the latter two are GEF financed). Investments in the wetland will support biodiversity through the creation of parks and the re-introduction of vegetation and sustainable management of the wetland through erosion control, bank protection and creation of buffer zones will reduce land degradation. Relationship to this project: The Sustainable Cities Impact Program is implemented by MINAFRI, which is also a board member of the proposed LDCF project. The climate proofing of Imidugudu project will therefore coordinate very closely with the

Sustainable Cities Impact Program, ensuring sharing of building codes, learning experiences and lessons.

3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?

Secretariat Comment at PIF/Work Program Inclusion
GEFSEC 27 April:

Comment 3.1- cleared.

Comment 3.2- thanks. cleared.

Comment 3.3.- thanks for the details. Comment cleared.

Comment 3.4- cleared. thanks for the details.

Comment 3.5- cleared.

Comment 3.6- cleared.

Comment 3.7- thanks for clarifying. Comment cleared.

Comment 3.8- Please comments below

- Thanks for confirming that support for road construction will be primarily to make it climate resilient. This is fine.

- The argument that reduce fuel wood consumption and use of solar energy will reduce land slides is not strong. Solar energy could improve energy access and thereby support livelihood and adaptive capacity, is a reasonable argument. But reducing land slides is a far stretched logic.

- Thanks for clarifying that the project's focus goes beyond housing and that's why the comment was made. At the preamble and the description of the settlement program indicated support for housing infrastructure, and therefore it was not clear why the project is spending on services like transport, waste and energy. So, it is understood that the project will strengthen resilience of housing and road infrastructure, and improve adaptive capacity of communities through improved energy access and waste management. These support are then complemented further by interventions in the target region by adopting an ecosystem based adaptation approach.

Comment 3.9- well noted the point on improved energy access and its link with economic and social resilience. However, it is recommended that the project does a proper feasibility assessment of different energy access options before deciding on investments.

Comment 3.10- Cow shed as a resilient livelihood option is fine. Hope the project will inform the communities in identifying appropriate breeds which can support sustained benefits. For bio-gas, as suggested above, it will be good that feasibility of all clean energy options be carried out before deciding on the technology. For plastic water storage tanks aren't very innovative option for rainwater harvesting and its use by communities happens in business as usual scenario also. The project may like to consider other options to support adaptive capacity which are incremental in nature. This applies to comment 3.11 also.

Comment 3.12- Thanks. The justification is fine. It is recommended that the project adopts a participatory planning with communities to identify alternate livelihood options which improves income and adaptive capacity. Also, a careful assessment of potential maladaptation impacts of the options should also be considered while finalizing the options.

Comment 3.13-, 3.14 and 3.15 are all cleared. Thanks for considering the suggestions.

GEFSEC:

Please refer to comments in Part 1 question 2. Please see additional comments below:

This section in the CEO ER is very difficult to comprehend as it doesn't elaborate each component building on the PIF and findings from the PPG phase. The reviewer referred to results and partnership section under the ProDoc in this regard. It would be good if the Agency can provide a bit more details of each component in the portal entry also. Currently, it provides information about the changes from the PIF version. Please address the following additional comments:

- Please elaborate on the GCF complementarity proposed at the PIF stage.
- Please elaborate how exactly the climate services will be provided to communities and other decision makers. The CEO ER submission says the following which is strategic but lacks specificity. "entire climate information value chain, from the collection, analysis and packaging of such information to meet the needs of communities, to the application of this information at local level to support the integration of climate risks" Under output 1.1. and 1.2 it's alluded a bit but the focus seems to be primarily on training relevant people on use of the climate information. Please describe how the climate information will sustainably flow to communities. Output 1.5 does indicate the infrastructure support to Rwanda Meteo for climate information services, though it's not clear how the information will be disseminated to communities.

- Output 1.3 suggests development of Climate-proofed Imidugudu models. However, the detailed activities under this output isn't clear if the project will support in actually developing these models directly or will it just provide training and share information. (para 63 in prodoc doesn't indicate that such plans will be developed)

- Output 1.4 Please describe the link between these EbA and the Climate Proof Imidugudu models.

- Output 2.3: The output seems to focus on housing and other settlement infrastructure e.g. roads, green spaces, etc to make it climate resilient. However, it isn't very clear what approaches will be taken to make them climate resilient. Will it support climate resilient design standards for all the infrastructure? If yes, what climate risks will it tackle e.g. flooding, increased temperature, etc. Also, does the project envisage additional cost to making infrastructure resilient and if yes would there be government budgets available for additional cost? The budget item 11 proposes to upgrade 30 km of roads with an investment of nearly one million dollars. Please clarify, if this is the additional cost to make the roads climate resilient or is it for entire reconstruction of the road network. It is expected that the scarce LDCF resources are used in more catalytic activities instead of those which could be funded from existing government budget. In this context, it is also not clear how it is justified for an adaptation finance to provide grant funding to set up solar power units in the housing units which provides more of mitigation benefits. This entire budget item "**Upgrading houses to more climate secure versions for 500 households with climate smart facilities**" with budget of 1.55 million doesn't seem to be aligned with project's focus. The support for roads (not sure how it links with house upgradation), waste and energy doesn't look very intuitive. Instead, the project may focus more on upgrading the houses with resilient materials, resilient design and other supporting infrastructure e.g. drainage networks that could make housing infrastructure resilient.

Under this output, the project aims to support Bio-gas also. Given that bio-gas hasn't been a successful model, please elaborate why this is being pursued in the project. Also, it's not clear how it will address climate vulnerability. If it's not viable, the project may like to use LDCF resources to support on climate proofing other infrastructure which could deliver more resilience benefits. In this context, item 10 under the budget proposes to use nearly a million dollar for bio-gas, cow-sheds and plastic water tanks which doesn't demonstrate good value for money.

Output 2.4: Under this, the focus is on water harvesting for domestic and irrigation purposes. The output however specifies plastic tanks for rainwater harvesting. It is recommended that best available practices for rainwater harvesting is pursued and also to include rainwater harvesting measures on field for irrigation purposes also.

Output 2.5: The focus on alternative livelihoods is welcome. However, the Box 6 provides very old data (more than 10 years old) to provide a basis to support alternate livelihoods. Also, the project proposes a wide range of options and it is not clear

whether the project can support so many economic activities whose direct link with climate risks is not very direct. In this context allocation of nearly \$1.8 million seems too high for activities which are not directly linked with delivering adaptation benefits to specific climate risks. The project may explore co-financing for these activities and direct LDCF resources more towards resilient infrastructure planning and development which is core to the program.

Output 3.1: While it is understood that the project's focus is on Imidigudu programme, it is recommended that the project also engages with other infrastructure policies and programs also at the national level which can benefit from the project's experience.

Output 4.2: The project can innovate on knowledge management aspects with greater adoption of digital technology including mobile based applications and use of social media to disseminate information to communities.

In addition to the above, a similar program on climate resilient infrastructure in India introduced measures such as geo-tagging of all infrastructure, water bodies and other resources under a government program which enabled villagers and other decision makers in tracking progress and better planning of resilient infrastructure. The Imidigudu program also provides a good opportunity to pilot such initiatives (may be in a small scale) which could then be scaled up for the entire program. The Agency is requested to consider this opportunity, if viable.

AB GEFSEC: All comments cleared. Thanks for revisions and responses.

Agency Response

Comment t 3.1: Please refer to comments in Part 1 question 2.

Agency response ? Part 1 question 2 comments have been addressed in the preceding sections.

Please see additional comments below:

Comment 3.2: This section in the CEO ER is very difficult to comprehend as it doesn't elaborate each component building on the PIF and findings from the PPG phase. The reviewer referred to results and partnership section under the ProDoc in this regard. It would be good if the Agency can provide a bit more details of each component in the portal entry also. Currently, it provides information about the changes from the PIF version.

Response ? The initial intention was to not duplicate details from the Prodoc in the CEOER. In view of this comment, the content of the CEOR has been aligned with the information in the Prodoc providing detailed information on project results (CEOR paras 42 to 76).

Comment 3.3: Please elaborate how exactly the climate services will be provided to communities and other decision makers. The CEO ER submission says the following

which is strategic but lacks specificity."entire climate information value chain, from the collection, analysis and packaging of such information to meet the needs of communities, to the application of this information at local level to support the integration of climate risks" Under output 1.1. and 1.2 it's alluded a bit but the focus seems to be primarily on training relevant people on use of the climate information. Please describe how the climate information will sustainably flow to communities. Output 1.5 does indicate the infrastructure support to Rwanda Meteo for climate information services, though it's not clear how the information will be disseminated to communities.

Response ? The project aims at ensuring that communities receive timely and accurate climate information to be able to make decisions and adapt to climate change. As explained in the Prodoc, the main climate related disasters affecting the project area are floods, landslides and mudslides, droughts and famine. The climate services to be provided to communities and other decision makers to tackle these challenges are a) higher quality downscaled weather and climate information provided by Meteo-Rwanda (with the project supported technical skills and equipment to generate numerical weather prediction and climate modeling products) ? under output 1.5. This information will be availed to the whole country through regular communication channels currently being used by METEO-Rwanda to disseminate weather and climate information (radio, television, cell phones, publications); b) Participatory Integrated Climate Services for Agriculture (PICSA). - PICSA will be used to reach out and empower farmers to interpret location specific weather and climate information in the project sites giving them options to prevailing and expected weather patterns amongst other factors so as to decide on crop and livestock production. PICSA has been successfully used to ensure that there is a connection between the production of climate information, its transmission and application at community level (please correct this statement for accuracy); c) awareness and skills to access and utilize all the new and improved climate information.

As explained in the Prodoc paras 68 and 69, Meteo Rwanda will be supported to actively contribute to downscaled weather and climate information which will be disseminated through regular channels nation-wide with a web portal created for online visualisation. The dissemination of the information will be accompanied by an awareness raising strategy to educate the public about the availability of the higher quality, more relevant interpreted climate information and the existence of the portal for the use/application of weather and climate information for day to day decision-making.

Furthermore, Meteo Rwanda will partner with the Rwanda Agricultural Board and Twigire Muhinzi (extension service) to further disseminate advisory services at the local level via the Participatory Integrated Climate Services for Agriculture (PICSA). PICSA will be used to reach out and empower farmers to interpret location specific weather and climate information in the project sites giving them options to cope with prevailing weather patterns amongst other factors so as to consider their implications on crop and

livestock production. The CEOR text has been modified to elaborate exactly what climate services will be provided to communities and other decision makers.

Comments 3.4-3.8

General context to our response to comments 3.4 ? 3.8 below: ? in order to provide a context for the responses in the next 4 questions/comments, it is important to summarize the intent of the project here. *The Imidugudu program originates from the National Human Settlement Policy (2009)[3] . One of the objectives of the Rural component of this policy is the rationalization of land use achieved via regrouping of human settlements in rural areas on serviced sites equipped with the basic infrastructure and community amenities[4]. Under the imidugudu program, several vulnerable households (up to 100 per imidugudu/village) are settled in a consolidated piece of land, where they are provided with dwellings (houses) and social amenities (school, health centre, roads, reticulated water and drainage services). The significant advantages derived from this mode of settlement are that optimal arable land is allocated to agriculture, while houses and support amenities are built on sites which have been selected and decided by the community. There is easy access to services, and distances to and costs of support amenities and basic infrastructure is reduced, and security is improved. Access to information and training is made easier, opportunities for mechanized agriculture and use of agricultural inputs is improved, opportunities in developing secondary and tertiary sector activities are improved. Innovativeness is stimulated through competitiveness between villages and between imidugudu within the village[5]. Implementation of the imidugudu is done through the preparation of model human settlement plans on the basis of the topographical conditions and the development potential of the regions. These model plans are built in each district, and district authorities are encouraged to upscale them. The project will not actually finance the settlement programme itself, as this is done and financed by the Government of Rwanda using its own resources. The project will support the climate resilience of the programme.*

Comment 3.4: Output 1.3 suggests development of Climate-proofed Imidugudu models. However, the detailed activities under this output isn't clear if the project will support in actually developing these models - directly or will it just provide training and share information. Para 63 in prodoc doesn't indicate that such plans will be developed.

Response - The project will indeed develop and deliver climate-proofed Imidugudu models. Activities under output 2.3 have been elaborated further to clearly indicate this point. Model development will be achieved via the following activities: a) Establish the Climate Proofing Technical Committee with clear Terms of Reference for its operations; (b) Undertake stakeholder mapping and identify relevant stakeholders to be consulted; (c) Design a stakeholder consultation strategy, identifying any specific capacity support required for effective participation of specialized groups such as Meteo-Rwanda, technical experts (climate scientists, infrastructure development experts, rural development experts), academia and students; (d) Undertake the consultative process in

line with the stakeholder consultation strategy (at all levels); (e) Collate the inputs from the stakeholder consultations into several climate proofing models; assess the feasibility of the various models via cost benefit analysis including considerations of social, economic and environmental feasibility using multi-criteria approaches. Select one or several models and develop guidelines for their application; (f) Develop training materials that are deemed necessary to support the uptake of the model (to be incorporated in the training conducted under output 1.4 and for uptake by other relevant government programmes); (g) Develop and disseminate awareness raising material to popularize the model such as policy briefs (with recommendations for policy and regulatory changes that might be required ? in conjunction with Outcome 3).

Comment 3.5: Output 1.4 Please describe the link between these EbA and the Climate Proof Imidugudu

Response ? The environmental, social and economic impacts of climate change coupled with the unsustainable management of ecosystems, increase the vulnerabilities of people and nature. In the context of Rwanda, especially given the identified climate hazards and the country's topography, EbA is an effective way of reducing the vulnerability of Imidugudu to the impacts of climate change. The following text has been added to description of output 1.4 (Prodoc para 65) to clearly show the link. ?As explained in the strategy section, households are highly dependent on low technology, low input agriculture and other natural resources for their economic development and livelihoods. Mainstreaming climate risks into the Imidugudu programme requires improving the natural resources and healthy ecosystems. Healthy functional ecosystems are therefore the bedrock of resilience of the communities in the rural areas, as they buffer away from climate hazards as well as widen the livelihood options in the face of climate change. Adaptation plans will therefore be developed to provide a systematic approach to address the vulnerabilities at the landscape level and promote healthy natural resources and ecosystems.?

Comment 3.6: Output 2.3: The output seems to focus on housing and other settlement infrastructure e.g. roads, green spaces, etc. to make it climate resilient. However, it isn't very clear what **approaches will be taken to make them climate resilient**. Will it support climate resilient design standards for all the infrastructure? If yes, what climate risks will it tackle e.g. flooding, increased temperature, etc.

Response - Output 2.3 will test the implementation of the Imidugudu climate proofing model developed under output 1.3. The models will address the main climate related disasters affecting the project areas, which are floods, landslides and mudslides, droughts and famine. Infrastructure such as roads will be made more resilient through a number of options to be considered under Output 1, including engineering and structural measures (such as Slope stabilization structures such as dry stone wall, gabion wall and jute bag wall; paving of roads with durable materials; improved drainage systems to

avoid erosion of materials as applicable to specific sites; planning and design with proper cross section and dimensions) and bioengineering measures (such as use of vegetation, either alone or in conjunction with civil engineering structures such as small dams, wall and drains to manage water and debris thereby reducing instability and erosion on slopes). A footnote has been added to the Prodoc under the Output to bring this out clearly. The project will support the RHA and the Districts to refine the selection of the sites for new villages, ensuring that medium to long-term climate information and the status of the ecosystems inform the choice of climate-proofing measures. It will work on the designs of the new homes, ensuring that climate risks relevant to the specific village are factored into the building plans, thereby testing, and contributing to the development and refinement of building codes for climate proofed Imidugudu to be developed under outcome 1. It will ensure that all the stakeholders engaged in the building process, including the private sector contractors, have been trained on climate proofing (training provided under output 1.4).

Comment 3.7: Also, does the project envisage additional cost to making infrastructure resilient and if yes would there be government budgets available for additional cost?

It is envisaged that climate-proofing infrastructure, starting from planning, designing and implementation will entail additional costs. Output 1 will involve the costing of climate-resilient imidugudu, including, but not limited to infrastructure.

Response ? the structure/logic of the project is as follows:

1. During the project implementation phase, the GoR provides co-finance for the infrastructure;
2. The project financing supports activities to integrate resilience building in the infrastructure financed by the GoR. Thus, the additional cost is already embedded in the financing provided by GoR;
3. Post project, following the adoption of policies, models and codes for climate proofing, GoR will implement its Settlement Programme with resilience built in, including the additional cost.
4. The design of the model will also consider costs and benefits.

The project is therefore building on a considerable government co-finance (US\$ 10 million) set aside to construct new Imidugudu (villages) and provide communal facilities as outlined in Table 1 of the Prodoc. Rwanda Housing Authority has the mandate for rolling out the Imidugudu programme. It requested the project to develop the climate proofing model, in a highly participatory process, that involves assessing the feasibility of the various models via cost benefit analysis -- including considerations of social, economic and environmental feasibility using multi-criteria approaches. The relevant model(s) will be selected on the basis of this analysis. RHA is committed to

climate proofing the Imidugudu programme and its leadership of the development of the model, supported by the mainstreaming of the models into the budgetary processes (under outcome 3) will ensure financing (and upscaling) of the model. Under output 3.1, the project will support the Rwanda Housing Authority to develop a strategy for implementing the revised Human Settlement Policy, including aligning its budgets to the new policy provisions, to replicate and upscale the climate proofing concept (Prodoc para 85).

Comment 3.8: The budget item 11 proposes to upgrade 30 km of roads with an investment of nearly one million dollars. Please clarify, if this is the additional cost to make the roads climate resilient or is it for entire reconstruction of the road network. It is expected that the scarce LDCF resources are used in more catalytic activities instead of those which could be funded from existing government budget. In this context, it is also not clear how it is justified for an adaptation finance to provide grant funding to set up solar power units in the housing units which provides more of mitigation benefits. This entire budget item "**Upgrading houses to more climate secure versions for 500 households with climate smart facilities**" with budget of 1.55 million doesn't seem to be aligned with project's focus. The support for roads (not sure how it links with house upgradation), waste and energy doesn't look very intuitive. Instead, the project may focus more on upgrading the houses with resilient materials, resilient design and other supporting infrastructure e.g. drainage networks that could make housing infrastructure resilient

Response ? It is indeed acknowledged that LDCF focuses on adaptation, and the project is intended to generate those adaptation benefits, without avoiding approaches and technologies that have some mitigation benefits. If beneficiaries do not use sources of energy such as solar, biogas etc., they will depend on fuelwood, which exposes the landscapes to landslides and other climate hazards. The Imidugudu (village settlement) programme includes provision of access roads to the villages (new and established). The project funds will provide the additional budget to enable use of climate resilient materials ? such as tar and/or murram, in line with the determination to be made by the PMU. As explained in the preamble, the Imidugudu program is a tool for rationalizing land use via regrouping of human settlements in rural areas on serviced sites equipped with the basic infrastructure and community amenities. Under the program, several vulnerable households (up to 100 per imidugudu/village) are settled in a consolidated piece of land, where they are provided with dwellings (houses) and social amenities (school, health centre, roads, reticulated water and drainage services). The significant advantages derived from this mode of settlement are that maximum arable land is allocated to agriculture, houses and support amenities are built on sites which have been selected and decided by the community, there is easy access to services, distances and costs of support amenities and basic infrastructure is reduced, security is improved, access to information and training is made easier, opportunities for mechanized agriculture and use of agricultural inputs is improved, opportunities in developing secondary and tertiary sector activities are improved and innovative spirit is developed

through competitiveness between villages and between imidugudu within the village[6]. Provision of houses, roads, social amenities, improved sources of household energy (electricity, solar and cookstoves) and water (reticulated and for irrigation) are core components of the Imidugudu, in recognition of the fact they build social capital and provide livelihood options less prone to damage from climate driven challenges. The project therefore supports actions to improve resilience of the entire Imidugudu programme ? including upgrading the houses with resilient materials, resilient design of communal facilities such as drainage networks, provision of improved energy sources to replace use of firewood and reduce pressure on ecosystems services. While these measures are likely to yield welcome mitigation co-benefits, the goal of the is adaptation. In response to specific comment: ?This entire budget item " Upgrading houses to more climate secure versions for 500 households with climate smart facilities" with budget of 1.55 million (about \$3,100 per household) doesn't seem to be aligned with project's focus? the project has considered the fact that baseline investment to establish the houses has been met by GoR, with the project?s additional investment focusing to ensure climate-resilience rather than building the entire housing units, which would cost more than \$3,100 per household.

Comment 3.9: Under this output, the project aims to support Bio-gas also. Given that biogas hasn't been a successful model, please elaborate why this is being pursued in the project. Also, it's not clear how it will address climate vulnerability. If it's not viable, the project may like to use LDCF resources to support on climate proofing other infrastructure which could deliver more resilience benefits.

Response ? Providing alternative energy is a core part of addressing climate vulnerability in the project area, for two interrelated reasons: a) it reduces pressure on the natural forests, hence avoids the degradation of the ecosystems and ecosystems services; b) a more secure source of energy contributes to social capital and resilience; As explained earlier, functional ecosystems are the bedrock of rural Rwanda, due to the nature of livelihoods, deeply intertwined with natural resources for all aspects of livelihoods.

As explained in para 81, project design recognizes that many households in the IDP villages have experienced challenges with the type of biogas system commonly used in Rwanda ? the fixed dome bio-digester, which tends to be expensive[7] (affordability by poor households), complex to build and operate, and has a high rate of failure within the Imidugudu setting, especially in very cold places (such as Muzo/Kagano). The project therefore proposes a mixture of household energy solutions which will include: a) explore cheaper, more efficient and less complex biogas systems such as the flexi-polyethylene tube digesters[8] which utilize a broader range of materials ? including waste from pigs, goats, sheep, rabbits, poultry, kitchen waste, market waste, grass, water hyacinth, farm weed and garden clippings. The project will review the outcome of several piloting initiatives undertaken in the country and if these are reliable and economically viable will actively support their uptake. (b) Biogas systems will be issued

only to households who express the willingness and demonstrate abilities to maintain them. (c) Other households will be given the option of improved energy cookstoves. (d) Solar technologies will be promoted for both lighting and cooking. (e) At least 10 technicians will be trained on the biogas installation and maintenance as well as basic plumbing skills (for the maintenance of the water systems). The project will assist the communities to develop long term financing and business models for maintenance and replication of the technologies under Output 2.4,

Comment 3.10: In this context, item 10 under the budget proposes to use nearly a million dollar for bio-gas, cow-sheds and plastic water tanks which doesn't demonstrate good value for money.

Response ? Value for money is an important consideration in the design of the project, and in selection of the basic elements of a climate-resilient Imidugudu. This is key for uptake and scaling up beyond the project. In this regard, the eventual model that will be developed by this project involves costing a model climate-proofed Imidugudu (Outcome 1). Bio-gas, cow-sheds and water storage tanks are good value for money in addressing climate risks common in the project areas as follows:

a) Biogas replaces use of firewood which reduces pressure on the forests and woodlands, allowing the recovery of the landscape ? and securing better ecosystems services, furthering the use of nature-based solutions to reduce flooding. The project will therefore provide households with improved easier to use and maintain biogas systems as an incentive for the uptake of the cleaner, more efficient energy systems. They will also reduce the amount of time that especially women and girls spend in collecting fuelwood. As argued throughout the theory of change, healthy functional ecosystems form a solid bedrock for adaptation in rural communities. Furthermore, cleaner household energy has co-benefits in health as it reduces household pollution (smoke from biomass fuel). There is strong evidence that acute respiratory infections in children and chronic obstructive pulmonary disease in women are associated with indoor biomass smoke [9].

b) Cow-sheds are provided to increase resilience of, and the effectiveness of the one-cow per family (Girinka) programme under the Imidugudu program. Water tanks will enable households to harvest water from the upgraded houses. Ownership of cows and clean water increases social capital and diversifies and deepens livelihood options, thus reduces vulnerability to negative impacts of climate change. As the IPCC 4th Assessment Report concluded [10] many aspects of economic development also facilitate adaptation to a changing climate, such as better education and health, and there are adaptation strategies that can yield welfare benefits even in the event of a constant climate, such as more efficient use of water and more robust crop varieties. Indeed, adaptation to climate change needs to be seen as an integral part of a country's development planning, rather than as a separate issue, and adaptation measures that lead to better overall development outcomes are preferable to ones that focus exclusively on adapting to climate change impacts while ignoring other stresses [11].

Value for money: The project employs a combination of nature-based solutions, which are recognized as more cost effective than infrastructural solutions to adaptation, with significant gains in efficiencies and effectiveness from both to build resilience. The interventions selected (cow-sheds, biogas, water storage tanks) employ locally accessible available technologies in Rwanda. The set-up costs may seem high, but the long-term costs are low as the operation and maintenance can be locally performed. These are also widely used in Rwanda, which makes them preferable to the beneficiaries. Alternatives (such as underground dugout tanks) are not preferred locally due to the difficulties associated with their use and the problems of landslides and mudslides. While it is acknowledged that the total cost is high, this is the true cost of adaptation in this context. These technologies will not be applied uniformly across all settlements, but will differ from site to site.

Beneficiaries of the Imidugudu programme are the poorest in the Rwandan society ? those under category 1 (households who do not own homes) and 2 (have very basic homes but find it difficult to access basic needs) of the Umubede classification [2]. For these poor households poverty compounds the impacts of climate change to increase their vulnerabilities. Diversified livelihood options build the adaptive capacity of such households as they enable them to meet their basic needs in the face of climate change, are able to withstand the shock of variable rainfall patterns. At a landscape level, alternative livelihood options reduce demand on natural ecosystems to get energy (fuelwood), grazing among other demands. This maintains the quality of ecosystems, enabling them to play their adaptive roles such as stabilizing landscapes (reduce hazards such as landslides) and providing ecosystem goods such as water. Imidugudu designed taking these into consideration are more climate-resilient at household and landscape levels. The project is designed to build adaptive capacity and resilience from the basic needs of imidugudu beneficiaries. Provision of one cow per family and clean potable water is a core component of the Imidugudu programme. Providing cowsheds and higher-grade cattle with a durable water harvesting and storage systems (tanks) will increase social capital, reduce poverty and vulnerability. Households that meet basic needs (food, shelter, water) are more resilient and better placed to cope with impacts of climate change. Increasing the resilience at the households level is therefore an effective way of building adaptive capacity

Comment 3.11: Output 2.4: Under this, the focus is on water harvesting for domestic and irrigation purposes. The output however specifies plastic tanks for rainwater harvesting. It is recommended that best available practices for rainwater harvesting is pursued and also to include rainwater harvesting measures on field for irrigation purposes also

Response - As stated in Prodoc para 80, the project will support the beneficiaries of the resettlement programme to acquire water harvesting structures to increase water available to households for domestic use and/or irrigation to counter the effects of irregular rainfall patterns. Although households can use the water harvested from

rooftops using plastic tanks for irrigating vegetable gardens around the homes, field level water harvesting for irrigation as well as solar pumps are supported under output 2.1 (as part of climate-smart farming methods). The project will support the acquisition of water storage facilities, based on best practices available. PPG assessments concluded that currently, plastic tanks for rooftop water harvesting are the local best practice and preferences expressed by the communities.

Comment 3.12: Output 2.5: The focus on alternative livelihoods is welcome. However, the Box 6 provides very old data (more than 10 years old) to provide a basis to support alternate livelihoods. Also, the project proposes a wide range of options and it is not clear whether the project can support so many economic activities whose direct link with climate risks is not very direct. In this context allocation of nearly \$1.8 million seems too high for activities which are not directly linked with delivering adaptation benefits to specific climate risks. The project may explore co-financing for these activities and direct LDCF resources more towards resilient infrastructure planning and development which is core to the program

Response - The beneficiaries of the Imidugudu are the poorest in the country where poverty is significant barrier to the uptake of adaptation measures. Several studies have found strong links between increasing household incomes to adaptation under conditions similar to the project area. In Ethiopia, Berhe et al [13] found that people severely affected by climate change and living in a situation demanding urgent solutions can actively apply various adaptation strategies if the strategies are linked to the creation of sustainable income benefits. They concluded that integrated approaches comprising adaptation methods and expected benefits are an important way to induce farming communities to address challenges related to climatic change. In Brazil, Donald Nelson [14] found limits of poverty reduction in support of climate change adaptation, where poverty declined significantly without all the expected reduction in vulnerability; but he partly attributed this to households not investing increased wealth in risk management strategies. The proposed project addresses both livelihoods diversification and improvement and investment in risk management. Allocating the budget to both soft and hard adaptation measures will enable LDCF funds to yield comprehensive adaptation results rather than partial results focusing on infrastructure alone. The budget allocation to this output is based on the fact that: effective adaptation requires balanced investment in infrastructure, livelihoods and ecosystems; a lower allocation for livelihoods would reduce the number of beneficiaries, especially given the high cost of infrastructure investments per beneficiary; cash co-financing is already high (1:1 ratio).

As stated in Prodoc para 83, the project will support households to effectively utilize the many existing value chains, in a gender and COVID-19 responsive process, to add value to produce and access markets, to increase household incomes and hence adaptive capacity, guided closely by the ESMP, the Gender Action Plan and the Stakeholder Engagement Plan. The value chains include milk, fruit processing, coffee, poultry,

maize, beans and cassava sales. The project will identify marketing cooperatives and increase their capacities to facilitate producers to cooperate, bulk and sell together, buy inputs together and add value through transforming together. To avoid confusion, Box 6 has been removed. However, the range of options will be made available for beneficiaries to choose from, and this will differ from site to site. Annex 12 contains a list of other potential products and opportunities for bulking commodities with currently active value chains. Cooperatives will be provided with technical expertise (via training and coaching) to increase operational capacities and improve financial services to their members (improve financial literacy and savings).

Comment 3.13: Output 3.1: While it is understood that the project's focus is on Imidigudu programme, it is recommended that the project also engages with other infrastructure policies and programs also at the national level which can benefit from the project's experience

Response - This is noted and done. Output 3.1 has been amended to: Strategic review of policies, national and district strategies, programmes and planning tools to ensure they capture climate proofing of Imidugudu and other infrastructure programmes in the investment decision-making processes. It is noted that the project will facilitate stakeholders to review the following strategic planning frameworks and to generate recommendations which will be provided to influence future planning cycles. These include the National Strategy for Transformation (NTS 1) 2017-2024, Rwanda's National Investment Policy (NIP, 2017), the National Decentralisation Policy (2012), District Development Strategies (2018-2024), the Rural Settlement Strategic Sector Plan (2018-2024) and the Organic Law on State Finance and Property (No. 12/2013 of 12/09/2013).

Comment 3.14: Output 4.2: The project can innovate on knowledge management aspects with greater adoption of digital technology including mobile based applications and use of social media to disseminate information to communities.

Response ? Thank you for the suggestion. This has been adopted as highlighted in green text in para 90 of the Prodoc.

Comment 3.15: In addition to the above, a similar program on climate resilient infrastructure in India introduced measures such as geo-tagging of all infrastructure, water bodies and other resources under a government program which enabled villagers and other decision makers in tracking progress and better planning of resilient infrastructure. The Imidigudu program also provides a good opportunity to pilot such initiatives (may be in a small scale) which could then be scaled up for the entire program. The Agency is requested to consider this opportunity, if viable.

Response - This is noted and will be explored during the inception as well as the implementation of the project ? via adaptive management. the following text has been included under output 2.3 -- The project will explore geo-tagging of all climate proofed

infrastructure, water bodies and other resources under the programme to enable interested stakeholders (communities and other decision makers) to track progress and better planning of resilient infrastructure. This item was not included in the project budget and its implementation will therefore be financed under co-finance.

[1] PICSA was developed by a broad partnership including the University of Reading and the CGIAR systems and was successfully piloted in four districts ? Burera, Ngororero, Nyanza and Kayonza.

[2] PICSA was developed by a broad partnership including the University of Reading and the CGIAR systems and was successfully piloted in four districts ? Burera, Ngororero, Nyanza and Kayonza.

[3] Drafting the updated Policy started in 2013. The document is still in stakeholder consultation and approval process.

[4] The Human Settlement Policy (2009) states that specific objectives include the establishment of new homes, improvement of the quality of homes, the rational management of land, the improvement of the agricultural production, the creation of other income generating activities, the establishment of basic facilities closer to the population, the strengthening of the role of local communities in the management of human settlement and the organization of the human settlement financing system.

[5] RWANDA GOVERNMENT, 2013: Urbanization and Rural Settlement Sector Strategic Plan ? 2012/13-17/18

[6] RWANDA GOVERNMENT, 2013: Urbanization and Rural Settlement Sector Strategic Plan ? 2012/13-17/18

[7] Costing around Rwf 800,000 and Rwf 900,000 respectively (US\$ 1260 and US\$ 1410) for a 6m³ and 8m³ tanks, respectively

[8] The two digester sizes available, 6 and 16 m³, cost about \$500 and \$800 respectively (includes the stove, gas pipes, installation)

[9]
https://www.researchgate.net/publication/5226126_Biomass_Fuels_and_Respiratory_Diseases_A_Review_of_the_Evidence

[10] Chambwera, M., G. Heal, C. Dubeux, S. Hallegatte, L. Leclerc, A. Markandya, B.A. McCarl, R. Mechler, and J.E. Neumann, 2014: Economics of adaptation. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken,

K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 945-977

[11] Chambwera and Stage, 2010. Climate change adaptation in developing countries: issues and perspectives for economic analysis. IIED.
<https://pubs.iied.org/sites/default/files/pdfs/migrate/15517IIED.pdf>

[12] These categories were created in 2014 by the Local Administrative Entities Development Agency, in a participatory process, and are reviewed every three years. Under the programme, households are put in categories based on their social-economic status, and their property ? in terms of land and other belongings ? and what the families? breadwinners do to earn a living. The categories are: Category 1: Families who do not own a house and can hardly afford basic needs. Category 2: Those who have a dwelling of their own or are able to rent one but rarely get full time jobs. Category 3: Those who have a job and farmers who go beyond subsistence farming to produce a surplus which can be sold. The latter also includes those with small and medium enterprises who can provide employment to dozens of people. Category 4: Those who own large-scale business, individuals working with international organisations and industries as well as public servants.

[13] Berhe et al. Pastoralism: Research, Policy and Practice (2017) 7:12 DOI 10.1186/s13570-017-0084-2
(file:///D:/2020%20Bids%20and%20carry%20over/Rwanda%20LDCF%203/EBA%20valuation%20literature/The_effects_of_adaptation_to_climate_change_on_inc.pdf)

[14] Donald R Nelson et al 2016 Environ. Res. Lett. 11 094011;
<https://iopscience.iop.org/article/10.1088/1748-9326/11/9/094011/ampdf>

10 May 2021

- The argument that reduce fuel wood consumption and use of solar energy will reduce landslides is not strong. Solar energy could improve energy access and thereby support livelihood and adaptive capacity, is a reasonable argument. But reducing landslides is a far stretched logic.

Agency Response 10th May 2021: The point is well noted. The conclusion that reduced firewood use can contribute to reducing landslides was based on the findings of a 2019

study on Landslide susceptibility and influencing factors analysis in Rwanda[1]- which concluded that the western, northern and some parts of southern provinces of the country were the most susceptible areas owing to the slope, land use/land cover (LCLU) characteristics, rainfall and elevation as the main influencing factors. This complemented earlier findings provided by an assessment of deforestation effects on soil erosion in the Lake Kivu Basin of DR Congo[2] (area similar to Rwanda), which stated that: The highest soil erosion rate of $41 \text{ t/ha}^1\text{?year}^1$ estimated in a settled area of the Lake Kivu basin falls within the erosion rates that occur in construction sites, which can vary from 20 to $500 \text{ t/ha}^1\text{?year}^1$ *due to land surface disturbance without biomass coverage*. It further reported that a minimum of 60% forest cover is necessary to prevent serious soil erosion and landslides. Thus, especially in areas with high population density, provision of alternative sources of energy will contribute to addressing the drivers of land use and land cover change, which is connected to landslides. It is understood that use of solar energy on its own will not be effective, but will need to be combined with other changes in the way that the landscapes are managed. However, as now indicated in paragraph 82 of the Prodoc, during implementation, the project will

further assess the links between landslides and deforestation and use the findings to

adjust the project actions.

Thanks for clarifying that the project's focus goes beyond housing and that's why the comment was made. At the preamble and the description of the settlement program indicated support for housing infrastructure, and therefore it was not clear why the project is spending on services like transport, waste and energy. So, it is understood that the project will strengthen resilience of housing and road infrastructure, and improve adaptive capacity of communities through improved energy access and waste management. These support are then complemented further by interventions in the target region by adopting an ecosystem based adaptation approach.

Agency response 10th May 2021: Noted, in agreement with the statement/conclusion

Comment 3.9- well noted the point on improved energy access and its link with economic and social resilience. However, it is recommended that the project does a proper feasibility assessment of different energy access options before deciding on investments.

Agency response 10th May 2021: Noted: activity (a) of output 2.4 (prodoc para 82) has been modified to reflect this advice and now reads -- Undertake an assessment of the different energy access options, including various biogas systems in use in the country and beyond and identify the appropriate system(s) for the households in the project areas;

Comment 3.10- Cow shed as a resilient livelihood option is fine. Hope the project will inform the communities in identifying appropriate breeds which can support sustained benefits.

Agency response 10th May 2021: Noted. Indeed project implementation will be based on highly consultative process in identifying and selecting technologies (including livestock breeds) and adaptive measures. This is emphasized in Prodoc para 80.

For bio-gas, as suggested above, it will be good that feasibility of all clean energy options be carried out before deciding on the technology.

Agency response 10th May 2021: Noted. As explained above, activity (a) of output 2.4 (prodoc para 82) has been modified to reflect this advice and now reads -- Undertake an assessment of the different energy access options, including various biogas systems in use in the country and beyond and identify the appropriate system(s) for the households in the project areas;

For plastic water storage tanks aren't very innovative option for rainwater harvesting and its use by communities happens in business as usual scenario also. The project may like to consider other options to support adaptive capacity which are incremental in nature. This applies to comment 3.11 also.

Agency response 10th May 2021: Noted. As now noted in Prodoc para 80, the project will undertake an assessment of water storage options to support adaptive capacity which are incremental in nature and use the findings to guide selection of systems to be disseminated.

Comment 3.12- Thanks. The justification is fine. It is recommended that the project adopts a participatory planning with communities to identify alternate livelihood options which improves income and adaptive capacity. Also, a careful assessment of potential maladaptation impacts of the options should also be considered while finalizing the options.

Agency response 10th May 2021: Noted. Para 80 reinforces the participatory manner in which this output will be implemented. The project will support households to effectively utilize the many existing value chains, in a gender and COVID-19 responsive process, to add value to produce and access markets, to increase household incomes and hence adaptive capacity, *guided closely by the ESMP, the Gender Action Plan and the Stakeholder Engagement Plan.*

[1] <https://link.springer.com/article/10.1007/s10668-019-00557-4> (accessed on 10th May 2021).

[2] *Forests* **2016**, 7(11), 281; <https://doi.org/10.3390/f7110281>

4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?

Secretariat Comment at CEO Endorsement Request

Table 3 in the Prodoc and the entry in the portal is well noted. However, please provide a qualitative description of the alignment instead of just mapping the outcomes of the project. One or two paragraphs to summarize the Table will be sufficient if articulated well.

GEFSEC 27 April:

Thanks. Comment cleared.

Agency Response

This has been noted and done. The following text has been added to Prodoc para 38. The proposed project contributes to objectives one and two of the Adaptation Focal Area (CCA) under the Least Developed Countries Fund (2018-2022), as outlined in Table 3. Under objective 1 (Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation), the project will contribute technologies and innovative solutions to reduce climate related risks and/or enhance resilience, thus contribute to the implementation of the LDCF outcome 1.1. here, it will provide climate information based decision-making tools to support uptake of adaptation measures in the four project sites; advance climate smart agricultural practices to increase and sustain food production under uncertain climate scenarios; rehabilitate degradation hotspots (forests, hilltops and wetlands systems) to restore ecosystems services as the cornerstone of resilient livelihoods; upgrade housing and infrastructure

around imidugudu to more climate smart versions in four villages benefitting about 500 households, including revision of climate smart water harvesting and household energy systems. The project will also strengthen cross-sectoral mechanisms to mainstream climate adaptation and resilience, thereby contribute to mainstreaming climate change adaptation and resilience for systemic impact (LDCF Objective 2). Here it will develop models for climate proofing the Imidugudu programme; update key national and district level planning and budgeting instruments to provide policy and budgetary provisions for mainstreaming climate risks into Imidugudu and other infrastructure development; provide skills, tools, information and share experiences and lessons for mainstreaming climate risks into development?

5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

6. Is there further and better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?

Secretariat Comment at CEO Endorsement Request

Innovation in terms of interventions such as integrating climate resilience in settlement planning and design, application of Nature Based Solutions and design of building standards is unique for the settlement program. Please describe any process related innovation that the project may adopt such as greater engagement of communities and private sector, application of new technologies for infrastructure and knowledge management, business/implementation models, etc. that may have more catalytic impact beyond the project region.

GEFSEC 27 April: Thank you. Comment cleared.

Agency Response

This has been noted and done. The following text has been added to Prodoc para 138.
?Other innovations include the use of highly participatory science-led processes of developing the climate proofing model, tackling poverty to create adaptive capacities at the household level as a cost effective adaptation measure and the application of new technologies for infrastructure and knowledge management. Rwanda Housing Authority will be assisted by a technical committee to engage in a national level dialogue on the model, a process that will simultaneously build the model while raising awareness of its existence and importance. The project will use value chains approach to increase incomes at household level to reduce poverty among the poorest and most vulnerable households in the rural areas where poverty is a significant barrier to adaptation. The value chain approach also involves working with small scale business enterprises and financing institutions, especially the microfinance institutions. Finally, the project will adopt digital technology in communications including mobile based applications and use of social media to disseminate information to communities. In addition to these, the project will contribute to the development of building codes for climate proofed Imidugudu to be developed under outcome 1. It will ensure that all the stakeholders engaged in the building process, including the private sector contractors, have been trained on climate proofing (training provided under output 1.4). This is especially catalytic in that it embeds climate proofing design and construction into the construction industry at large, with benefits going beyond the project region and project life.?

Project Map and Coordinates

Is there an accurate and confirmed geo-referenced information where the project intervention will take place?

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

Child Project

If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?

Secretariat Comment at CEO Endorsement Request

NA

Agency Response

Stakeholders

**Does the project include detailed report on stakeholders engaged during the design phase?
Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?**

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

Gender Equality and Women's Empowerment

Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?

Secretariat Comment at CEO Endorsement Request

Yes.

Agency Response

Private Sector Engagement

If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?

Secretariat Comment at CEO Endorsement Request

The section is not elaborated well despite significant potential of the project to engage with the private sector. Please provide a more detailed engagement plan based on the various elements proposed across various sections in the prodoc.

Consultation and engagement as service providers is fine. However, the project may also explore opportunities to create business models that provide resilience benefits to communities. A number of such initiatives are proposed related to agriculture, climate services, etc. under which private sector could play a role beyond just being service providers.

GEFSEC 27 April, 2021: Thank you. The mapping of private sector stakeholders to be engage in the program is useful. For ease of further review, kindly include the below analysis under the private sector engagement section.

GEFSEC AB: Thanks. Comment cleared.

Agency Response

The private sector baseline assessment undertaken during project formulation found that there are many vibrant value chains operating in the project areas. It also found that the beneficiaries of the Imidugudu programme are the poorest people and have considerable challenges in utilizing these value chains; the primary challenge being financial illiteracy and weak institutions (SACCOs that fail to adequately equip them to utilize the value chains). The private sector reported that due to the small quantities of sellable produce produced by individual households, engaging the households constitutes high transaction costs ? hence inefficient use of scarce capital. The project will therefore work with marketing cooperatives and increase their capacities to facilitate producers to cooperate, bulk and sell together, buy inputs together and add value through transforming together. This will be based on a further refinement of the private sector engagement plan on these value chains, to be conducted during the inception phase of the project. however, other private sector players will participate and/or engage with the project as described in the table below.

Agency response 10th May 2021: Noted. The Table has been added to Prodoc after para 83.

Private sector	Areas of contribution, participation and/or engagement with the project	Where in the Prodoc
Contractors and builders within the Imidugudu programme	They will contribute to the formulation of an climate resilient Imidugudu model and will receive training on implementation of the model (thus mainstreaming climate risks into the design and building of the imudugudu). the actual building/upgrading of houses (co-finance) and infrastructure is ordinarily done by the private sector (builders, contractors, suppliers of materials)	Outcome statement on prodoc para 58; output 1.1 statement in prodoc para 59; output 1.3 (model development) statement in prodoc para 63; description of the building (co-finance) of climate smart houses, upgrading communal infrastructure in output 2.3, prodoc para 79.

Communications companies (Television stations, radio stations, cell phone companies (Artec, Liquid Telecom and MTN Rwandacell), Newspapers	The project will disseminate the communications and awareness raising strategy through these companies, including disseminating improved climate data.	Dissemination of higher quality climate information under output 1.5 ? Prodoc para 69.
Livestock insurance companies	The GoR has entered into collaboration agreements with three insurance companies (Radiant, SONARWA and Prime Insurance) to roll out subsidized insurance schemes country-wide. Radiant Insurance Company is designated (by GoR) to operate the programme in Kirehe and Gakenke. The project will encourage households to engage with the insurance providers to benefit from the subsidized scheme.	Prodoc para 76
Ordinary farmers interested in income generating activities in support of the forest restoration exercise.	The project will establish tree nurseries (preferably via business arrangements, encouraging farmers who lose use of their lands for about a year (while establishing terraces) to take up such income generating activities.	Prodoc para 78
Suppliers/vendors of rainwater harvesting, improved household energy systems (such as high efficient cookstoves, LPG, biogas equipment	Under output 2.4: the project will assist the households to acquire, rainwater harvesting, improved household energy systems (such as high efficient cookstoves, LPG, biogas equipment	
Local technicians with capacity to build and maintain cow sheds and improved biogas units	 These equipment and systems will require building and maintenance, which will be provided by local technicians.	Prodoc paras 80 ? 83.

Businesses that conduct trade in the common value chains - milk, fruit processing, coffee, poultry, maize, beans, avocado and cassava.	The PPG found that while there are very many private sector players established in the trading centers and operate businesses in the common value chains listed in the opposite cell, individual households struggle to engage with them profitably. The project will therefore identify marketing cooperatives and increase their capacities to facilitate producers to cooperate, bulk and sell together, buy inputs together and add value through transforming together. This will be based on a further refinement of the private sector engagement plan on these value chains, to be conducted during the inception phase of the project.	Description of output 2.5 in Prodoc para 83.
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Risks to Achieving Project Objectives

Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?

Secretariat Comment at CEO Endorsement Request

The ESS risk is elaborated well. However, please update the other risks associated with the project as provided in the PIF.

In particular, please highlight any risk associated with the Rural Settlement Program itself. Is there any political, financial or capacity risk which may affect LDCF funding. The project's reliance on a specific national program makes it risky and therefore the project design should clearly articulate and propose risk mitigation measures including options of linking the project with other similar programs which can benefit from the project during implementation process.

GEFSEC 27 April: Thank you. As per the GEF guidance, kindly provide a more detailed analysis of COVID-19 context, risks and opportunities relevant to this program. The guidance was shared by the GEF Secretariat to all the Agencies.

AB GEFSEC: Thanks. Comment cleared.

Agency Response

Agency Response ? the risks identified at PIF were captured in the Social and Environmental Safeguards Screening Procedure submitted with the Prodoc (Annex 4) and summarized in the Prodoc (paras 104 to 131).

A new risk was added to the text in para 117 -- There is a risk that the government budget for the for the baseline programme (building houses) may delay the project implementation. Although this risk is considered low (due to the high commitment of the RHA and the District Councils, a mitigation measure was included in para 118 - Any delays in the budgetary provisions for the baseline programme will be monitored by the Project Board and adaptive management used to redirect the funds to other already build up villages in the same districts that require upgrading to make them resilient.

Agency response 10th May 2021: Noted. The COVID-19 strategy is now provided as Prodoc Annex 11, with detailed analysis on risks and opportunities. This follows the guidance provided.

Coordination

Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?

Secretariat Comment at CEO Endorsement Request

Please elaborate how the project's institutional arrangement will ensure coordination of this project with other GEF-financed or bilateral/multilateral initiatives in the area. The institutional structure doesn't clearly provide a mechanism for such coordination.

GEFSEC: Thank you. Well noted.

Agency Response

Coordination of the project with other GEF-financed or bilateral/multilateral initiatives in the country and globally is ensured through the Special Project Implementing Unit (SPIU) in REMA, supported by a Technical Reference Group (TRG). REMA, the Implementing Partner for this project is also the implementing partner for many of the GEF projects in Rwanda. The Special Project Implementing Unit (SPIU) in REMA has the responsibility of coordinating all projects financed by GEF and other bilateral donors, on behalf of REMA. REMA will therefore use the SPIU to ensure that the current project is closely coordinated with all relevant projects including current and future GEF projects as well as projects. In addition, the project will have a technical reference group that includes experts and representatives from other projects and donor organizations. It is through this reference group that coordination and communication with other projects will happen. There will be a technical reference group at national level and in each pilot district. This text is found in Prodoc para 154.

Consistency with National Priorities

Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?

Secretariat Comment at CEO Endorsement Request

A list of national programs and strategies with which the program is aligned is provided (para 33). However, the Agency is requested to elaborate a bit more on how this project aligns with some of the key initiatives and policies e.g. NAP, the Green Growth and Climate Resilience Strategy and National Strategy on Climate Change and Low Carbon Development for Rwanda, Strategic Programme for Climate Resilience (SPCR); etc.

GEFSEC: Thank you. Comment is cleared.

Agency Response

The comment is noted and the following text has been added to Prodoc Para 33.

- a) the Green Growth and Climate Resilience Strategy and National Strategy on Climate Change and Low Carbon Development for Rwanda (GGCRS), which provides a pathway to address climate change and low carbon development, with an aim of making a significant impact on adaptation, mitigation and economic development. The strategy was developed in recognition of the fact that if the country is to tackle climate change, it needs to be mainstreamed into Vision 2050 and Sector strategies. The GGCRS aims to guide the process of mainstreaming climate resilience and low carbon development into key sectors of the economy. With a focus on agroforestry, climate knowledge, irrigation and roads infrastructure as its main tenants for adaptation, it provides a strategy focusing on green, low carbon development, but does not explicitly provide mechanisms to deal with vulnerabilities, associated with climate change. The project will contribute to tackling some of the barriers hampering its full implementation, including inadequate awareness, lack of practical tools for mainstreaming in many sectors (e.g. the rural section of the human settlement policy) and capacity inadequacies amongst stakeholders.
- b) the National Adaptation Plan of Action (NAPA): Objective four of the NAPA aims at providing assistance to districts of vulnerable regions to plan and implement conservation measures and water storage. Objective five aims to increase adaptive capacity of grouped settlement "Imidugudu" located in vulnerable regions by improving potable water, sanitation and alternative energy services, and the promotion of non-agricultural jobs. The project contributes to these objectives directly.
- c) Vision 2050 focuses on five broad priorities: High Quality and Standards of Life; Developing Modern Infrastructure and Livelihoods; Transformation for Prosperity; Values for Vision 2050; and, International cooperation and positioning. The project will contribute directly to the aims of vision 2050 - improved natural resources management, mainstreaming climate risk and gender, which are considered

important foundational issues for the achievement of the Vision. The implementation instrument for the remainder of Vision 2020 (from 2017 to 2020) and the first four years of Vision 2050 (2021 ? 2025) will be the National Strategy for Transformation (NST1). Priority Area number 7 of the NST1 recognizes sustainable management of the environment and natural resources as the pathway healthy lives and a Green Economy, focusing on Forestry, Land, Water, Environment and Climate Change. Under increased access to and use of sustainable and low carbon energy, the number of households depending on biomass as a source of energy for cooking is expected to reduce from 83.3% (2014) to 42% by 2024. This will be achieved by working with the private sector to increase the uptake of improved cooking stoves and to promote the use of alternative fuels such as cooking gas and biogas in both urban and rural areas

- d) National strategy for climate change and low carbon development (2020 to 2050). The strategy outlines actions that Rwanda can take in the short to medium term to ensure its future stability and prosperity in a changing climate and uncertain energy future. The strategy calls upon national planners to chart a new development pathway for integrated sector planning that balances cross-cutting issues of resource management. The project contributes to all the three core strategies of the National strategy for climate change and low carbon development: a) To guide national policy and planning in an integrated way; b) To mainstream climate change into all sectors of the economy, and (c) To position Rwanda to access international funding to achieve climate resilience and low carbon development.
- e) Strategic Programme for Climate Resilience (SPCR): The objective the SPCR is to enhance integrated, economy-wide, multi-sectoral climate resilience and to drive climate-responsive investment in Rwanda. Funded by the Climate Investment Funds (CIF), the SPCR aims at transformative impact through: a) Increased resilience of households, communities, businesses, sectors and society to climate variability and climate change; b) Strengthened climate responsive development planning. The proposed LDCF project contributes to these two overall goals, as well as directly to the four strategic programmes of the SPCR, namely: i) Agriculture Driven Prosperity under which it will provide climate-smart strategic support to Rwanda's agriculture and agroforestry sectors, while implementing participatory adaptation and climate resilient infrastructure in targeted areas. (ii) Water Security for All, under which it will enhance climate resilience of surface water and groundwater systems, promoting sustainable access to water, and reducing vulnerability in the face of increasing uncertainty in runoff. (iii) Climate Resilient Human Settlements under which it will build Rwanda's population resilience to shocks and stresses, by securing more reliable infrastructure and service delivery, and integrating climate change considerations into urban development. (iv) Stable and Sustainable Landscapes under which it will safeguard Rwanda's most fragile and disaster-prone landscapes, to reduce communities' vulnerability to floods and landslides and to enhance preparedness for a wide range of climate change impacts.

[1] Republic of Rwanda, 2017: National Strategy for Transformation 1: THE 7YEAR GOVERNMENT PROGRAM 2017-2024

Knowledge Management

Is the proposed ?Knowledge Management Approach? for the project adequately elaborated with a timeline and a set of deliverables?

Secretariat Comment at CEO Endorsement Request

The KM approach is comprehensive. However, given the scale of the project, the Agency is requested to adopt innovative approaches for information capture and dissemination.

GEFSEC: Thank you. Comment cleared.

Agency Response

The following text has been added to Prodoc para 90 -- All communications will adopt, to the greatest extent possible, digital technology including mobile based applications and use of social media to disseminate information to communities.

Environmental and Social Safeguard (ESS)

Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?

Secretariat Comment at CEO Endorsement Request

Detailed ESS is provided and categorized as high risk. Please confirm the assessment. Given that most of the risks are moderate and one is low, it is not clear why the project is categorized as high risk.

If the high risk assessment is confirmed, please elaborate if the project still will be able to deliver value for money. Is the risk assessment consulted with the executing agency and other relevant stakeholders and have they acknowledged this?

If all the above is yes, please note that this will be revisited when the project design is at final stage of clearance.

GEFSEC: Thank you for the clarification regarding the risk rating. Comment cleared.

Agency Response

UNDP takes environmental and social risks as a very important part of project design and ensures safeguards assessments are done by experts following its ESS policy and guidelines, without influencing the risk ratings with its own preferences or those of the implementing agency. The current categorization is based on an independent assessment informed by the evidence collected during the project formulation process. According to UNDP Safeguards Policy, the overall project risk is rated high when a large number of risks are rated moderate. On this basis, the risk rating assigned to the project will be maintained. We however confirm that the high-risk categorization does not render the project unimplementable. It only informs the implementing agency of the issues to monitor and address during implementation. The project has been designed to include an Environmental and Social Management Framework to manage the risk identified. Thus, it is expected to deliver good value for money, and has allocated sufficient budget to implement the ESS. UNDP will use its oversight role to ensure that the safeguards are addressed and monitored during implementation.

Monitoring and Evaluation

Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?

Secretariat Comment at CEO Endorsement Request

Yes. Detailed M&E budget is provided in prodoc.

GEFSEC 27 April:

As per recent GEF policy guidelines , please paste the detailed project budget in Annex E.

Agency Response

Agency response 10th May 2021: - The detailed M&E budget has now been pasted in annex on M&E Detailed plan.

Benefits

Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?

Secretariat Comment at CEO Endorsement Request

Yes. However, the number of beneficiaries is inconsistent. In Table B, it says 54000 direct beneficiaries. However, in the benefits section estimated beneficiaries are 107,000. As mentioned earlier in part 1, 54,000 is quite low number of beneficiaries for a project of this scale.

GEFSEC 27 April: Thanks. Comment cleared.

Agency Response

The number of direct and indirect beneficiaries has been changed from 54,000 to 2,211,600 (50% women) as explained in the proceeding section. As explained earlier, this includes 108,000 people in 191 villages benefitting from more resilient physical and natural assets (improved dwellings, better managed landscapes with improved ecosystems that mitigate negative impacts of CC), 43,600 people with diversified and strengthened livelihoods and sources of incomes (as a result of climate smart agriculture and improved access to value chains), 2,000,000 people benefitting from new and improved climate information systems, 60,000 people trained. An additional 3,000,000 people in the rest of Kirehe and Gakenke Districts as well as the rest of the country will benefit indirectly from the consultations on climate proofing model development, policy dialogues and the awareness raising programmes that support national uptake (upscaling/replication) of the model. These changes have been incorporated in all relevant places in the prodoc and CEOR.

Annexes

Are all the required annexes attached and adequately responded to?

Secretariat Comment at CEO Endorsement Request

Core indicator targets in LDCF template is not provided. Risk matrix is not provided.

GEFSEC: Thanks. All Annexes provided now.

Agency Response

This has now been done ?Indicator 2 (number of indirect beneficiaries) has been removed from the project results framework and retained under a footnote on core indicator 1 (direct beneficiaries ? which has been revised upwards). The project indicators have been aligned with the LDCF Tracking Tool.

Project Results Framework

Secretariat Comment at CEO Endorsement Request

The results framework indicate "Mandatory Indicator 2: # Indirect project beneficiaries disaggregated by gender (individual people)". Please note that this is not a mandatory indicator for LDCF. LDCF doesn't seek information about indirect beneficiaries, though GEF Agency may like to provide this information in the benefits discussion. Also, as discussed earlier, the direct number of beneficiaries is low for the project and the agency is requested to consider upward revision.

Overall, the Agency is requested to align the detailed results framework with LDCF-SCCF Tracking tool and its indicators.

GEFSEC: Please respond to this comment

AB GEFSEC: Thanks. Comment cleared now.

Agency Response

Agency response 10th May 2021: The indicator on indirect project beneficiaries disaggregated by gender has been removed from the Prodoc Results Framework and the LDCF-SCCF Tracking tool.

In addition, it is noted that the number of beneficiaries has been changed to reflect the wide range of benefits reaching people at the local and national levels. The number of direct beneficiaries is now 2,211,600 (50% women). This includes 108,000 people in 191 villages benefitting from more resilient physical and natural assets (improved dwellings, better managed landscapes with improved ecosystems that mitigate negative impacts of CC), 43,600 people with diversified and strengthened livelihoods and sources of incomes (as a result of climate smart agriculture and improved access to value chains), 2,000,000 people benefitting from new and improved climate information systems, 60,000 people trained. These changes have been incorporated in all relevant places in the LDCF Tracking Tool, UNDP Prodoc and CEOR.

GEF Secretariat comments

Secretariat Comment at CEO Endorsement Request

Please see above.

GEFSEC 28th July 2021

Please address PPO comments as following:

1. The Expected Implementation Start date has already passed, please revise the date.
2. Co-financing from UNDP of \$500,000 is entered as Grant and Recurrent expenditures. UNDP co-financing letter is not clear whether this is grant or in-kind. Please clarify.
3. Please submit the budget table under Annex E in the Portal entry.

GEFSEC 25 August, 2021

Comments 1 and 2 have been addressed. As requested, please paste the budget table in Annex E of the portal entry. Please also revise the Rio Marker for Climate Adaptation as

2 instead of 1. This project has "Principal" adaptation benefit which is scored 2 as per OECD guidelines.

GEFSEC 12th October

The budget was included in Annex E - while the last column of the budget table (Responsible Entity) is barely legible, the budget details are readable. See below additional comment from PPO:

1. In contractual services ? company: the following budget items ?Fees for implementing the activities (technical expertise, management of funds and operational costs) for 150 days spread over two years @ \$500/day = \$75,000.? (repeated twice for a total of \$150,000) as well as ?a) Technical expertise fees for reviewing policies relevant to the Imidugudu, in a participatory and gender responsive process, and generating recommendations for policy reforms ? 50 days @\$800/day = \$40,000? ? are not eligible - the GEF funds cannot cover overhead or administrative fees ? please ask the agency to amend.

Agency Response

Agency Response

1. **The expected Implementation Start Date** has been revised, together with the expected dates for Mid Term Review and Terminal Evaluation in both the Prodoc and the CEO Endorsement Request. The project is now expected to start on 1 November or earlier, depending on the actual date of CEO endorsement.
2. **UNDP co-financing:** We confirm that the co-financing from UNDP is a Grant. This has been reflected in the revised CEO Endorsement Request.
3. **Budget table:** The budget table has been submitted into the portal under Annex E.

JP, 13 SEPT 2021

The Project Table is now pasted onto Annex E on the portal and the Rio Marker changed to CCA2 as requested.

JP, 5 Oct 2021

Annex E is now completed per request.

Agency Response, 29 Oct 2021

Thank you for these comments, and below is a clarification of these issues as well as the revisions made:

Legibility of budget: We have checked this and can confirm that the last column of the budget table within Annex E (Responsible Entity) is well readable on UNDP side and REMA is the only listed Responsible Entity.

Contractual services: Revisions have been made to the budget notes to provide clarity that these costs are not administrative or overheads. They cover technical expertise to be provided to the project. These costs are included given the complexity of these specific Outputs, to ensure that the interventions are well designed and independently validated.

Council comments

Secretariat Comment at CEO Endorsement Request

Please provide a response to comments from Germany and Belgium on the project

GEFSEC: Comment cleared.

Agency Response

STAP comments

Secretariat Comment at CEO Endorsement Request

Please provide a response on how STAP's comments have been addressed in the project design. This can be Annexed in the ProDOC.

GFESec: Thanks. Comment cleared.

Agency Response

Annex B in the CEOR provides responses from STAP, Germany and Belgium.

Convention Secretariat comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Other Agencies comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

CSOs comments

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Status of PPG utilization

Secretariat Comment at CEO Endorsement Request Provided.

Agency Response

Project maps and coordinates

Secretariat Comment at CEO Endorsement Request Included.

Agency Response

Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

NA

Agency Response

Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)

Secretariat Comment at CEO Endorsement Request NA

Agency Response

Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

Agency Response

GEFSEC DECISION

RECOMMENDATION

Is CEO endorsement recommended? (applies only to projects and child projects)

Secretariat Comment at CEO Endorsement Request

The Agency is requested to address the comments and resubmit for further review.

GEFSEC 27 April 2021

Please address a few additional comments and resubmit the project.

AB GEFSEC

All comments have been addressed. The project is recommended for CEO Endorsement.

GEFSEC 28 July 2021

Please address the following additional comments and resubmit the project. These comments are also mentioned in the review sheet under GEF Secretariat Comments. Please provide response to the comments there.

1. The Expected Implementation Start date has already passed, please revise the date.
2. Co-financing from UNDP of \$500,000 is entered as Grant and Recurrent expenditures. UNDP co-financing letter is not clear whether this is grant or in-kind. Please clarify.
3. Please submit the budget table under Annex E in the Portal entry.

GEFSEC 25 August, 2021

Comments 1 and 2 has been addressed. As requested, please paste the budget table in Annex E of the portal entry. Please also revise the Rio Marker for Climate Adaptation as 2 instead of 1. This project has "Principal" adaptation benefit which is scored 2 as per OECD guidelines.

September 22, 2021

The comment on budget is not addressed yet. Now the budget is off the margins, without borders, making difficult to read and analyze it. Please note that often times this budget in Annex E in Portal is the only version that external audiences have access to (including Council Members), so the version in Portal has to be readable. Please upload a readable version (which has to be the same appended to the Document's section in excel format and in the ProDoc, if there is one), so this can be reviewed ? then we will be in a position to provide comments on the budget.

October 7. 2021

The budget table has been inserted in the portal entry now as requested. The project is recommended for CEO endorsement.

October 12, 2021

Agency is requested to address the additional comment from PPO on the budget. The comment is added under GEF Secretariat Comments section above.

November 1, 2021

The project has been resubmitted with comments from PPO addressed. Endorsement is recommended.

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	11/27/2020	
Additional Review (as necessary)	4/27/2021	
Additional Review (as necessary)	7/12/2021	
Additional Review (as necessary)	7/28/2021	
Additional Review (as necessary)	8/25/2021	

CEO Recommendation

Brief reasoning for CEO Recommendations

The LDCF project Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda (GEF ID: 10096) aims to climate proof rural settlements in Rwanda by adopting an integrated approach which aims to reduce climate risk exposure through improved settlement planning, lessen climate sensitivity with better access to climate information services and resilient infrastructure and strengthen community adaptive capacity by diversifying livelihoods. The project will support Rwanda's Imidugudu program which is the country's rural settlement program aimed at providing basic infrastructure and amenities for rural communities. The project will lead to climate proofing of the program in two strategic districts of Gakenke in Northern Province and Kirehe in Eastern Province for demonstration and future scaling up. It will directly improve climate resilience of 2.15 million people with 50% of them being women, build capacity of 60,000 people on climate adaptation planning and decision making and bring 25,765 hectares of land under climate resilient management.

The objective will be delivered through three interrelated core components, supported by a fourth on knowledge management. Component one will enhance institutional capacity to access climate information and to generate knowledge to support the

planning of a landscape approach complemented by community based adaptation planning to ensure the resilience of the Imidugudu program and livelihoods of the beneficiary communities. Component two will facilitate implementation of adaptation practices at Imidugudu level, including income generating activities to further boost resilience of livelihoods. Component three will provide the policy enabling environment to ensure that the pilot project creates pathways for replication and scale to ensure that future investments in the Imidugudu mainstream climate risk. Component four will codify knowledge and promote its dissemination to further support replication and upscaling. Gender will be mainstreamed throughout project planning, implementation, monitoring and evaluation.

The project adopts an innovative approach to demonstrate climate proofing of a public investment program, introduce new building codes for resilient housing and also introduce nature based solutions in the target districts to reduce ecosystem degradation and generating alternative livelihoods. The project will engage local communities including women and youth for decision making and promoting resilient livelihood opportunities. In addition to focus on community led approaches, the project will also strengthen systemic institutional capacity of key government departments including Meteo Rwanda for providing quality climate information services to communities and other planning departments.

The project will be implemented at an apt time when the country is responding to the COVID-19 pandemic which has caused significant economic loss. The project has duly factored in all the risks including those from the COVID-19 pandemic. By building adaptive capacity through new climate resilient livelihoods opportunities, it will directly contribute to climate resilient recovery at local level. In addition, while engaging with communities in climate resilient planning, the project will create awareness regarding COVID-19 response measures.

The project builds on a strong baseline of the existing Human Settlement Program which provides the necessary resources for building infrastructure and the long term vision of national government articulated under the Green Growth and Climate Resilience Strategy (GGCRS), 2011 ? 2050. The LDCF grant will be highly catalytic in influencing the baseline initiatives to deliver large scale climate adaptation benefits and systematically mainstreaming climate in public programs and budgeting.

Based on this, the project is recommended for CEO Endorsement.