



Reducing vulnerability and increasing resilience to climate change through promoting innovation, transfer and large-scale deployment of adaptation-oriented technologies in priority agriculture value-chains and creating jobs

Basic Information

GEF ID

10377

Countries

Congo DR

Project Title

Reducing vulnerability and increasing resilience to climate change through promoting innovation, transfer and large-scale deployment of adaptation-oriented technologies in priority agriculture value-chains and creating jobs

GEF Agency(ies)

UNIDO

Agency ID

UNIDO: 190251

GEF Focal Area(s)

Climate Change

Program Manager

Jason Spensley

PIF

Part I – Project Informatics

Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, the program is aligned with the Adaptation Programming Strategy of the GEF for LDCF for the GEF-7 period.

However, the adaptation rationale needs to be strengthened, including by more clearly articulating the climate problem the project aims to address (e.g. climate hazards and the impacts of those hazards), and why the proposed interventions are the most cost-effective way of doing so.

GEFSEC 1Nov2019:

Numerous different climate hazards and impacts are listed in the agency response, but it is still not clear which the project is intending to address through the outcomes and outputs outlined in the PIF. Please provide a clearer narrative on the climate hazards, impacts and risks it will address, and therefore the most cost-effective solutions to address those specified climate 'problems' (climate hazards and their impacts and risks). We also suggest greater focus in outlining this narrative on the most critical hazards and impacts that this project can realistically address. If, as the agency response seems to suggest, climate resilient energy provision is intended to be the primary focus of this project, please clarify the main climate hazards (e.g. increasingly irregular rainfall, intense precipitation in short periods of time, longer periods of rainfall, droughts, etc, or a combination), and how they are negatively impacting energy provision, and focus the project outcome and outputs accordingly. Alternatively, if the main climate impacts the project aims to address are some combination of the other climate impacts listed (e.g. "disease and insect attack on crops", transportation and distribution of products, heat in homes effecting well being on human health, etc.) please clarify that. Please incorporate any relevant modifications along these lines into the PIF (and kindly indicate where the changes have been made in the comment box and/or by attaching a tracked changes version to the documents upload section).

GEFSEC4Nov:

Thank you for the additional explanations and text, which has strengthened the climate rationale and logic of the proposal. While we appreciate the inter-related nature of energy, water and food security in the context of adapting to climate change, the project as it is currently focused and structured is extremely broad and complex and risks spreading too thin. Please provide greater focus and cohesion in the PIF by either (a) reducing the sectoral scope; (b) focusing on a central cross-cutting theme that will provide focus and cohesion to the set of different outputs and activities (e.g. technology innovation, innovative finance, etc); or (c) another central focus you identify.

Thank you in particular for the additional explanation of climate hazards and their impacts on energy, water and agriculture. It appears that "Increased land and ecosystem pressures" are referring to non-climate changed induced pressures on land and ecosystems. If this is the case, please do not indicate as climate change hazards.

GEFSEC6Nov:

Cleared

Agency Response

Regarding adaptation rational, and climate problems the project seeks to address please see updates in section 1.A.1 and Alternative Scenario Section 1.A.3

Lack of access to clean, reliable and affordable energy affects the vulnerable populations in many different ways and increases their vulnerability:

- Lack of access to energy reduces the productivity of the agricultural sector and hence reduces the income of farmers and people working in this sector. Examples include:
 - o Irregular rainfall, extended dry periods and droughts severely affect agricultural output (access to energy for water pumping and irrigation (eg solar water pumps and irrigation systems) would mitigate these effects)
 - o More extreme and longer rainfalls increase humidity and lead to diseases and insect attacks on the crops
 - o Higher humidity due to extreme rainfalls affects the processing and preservation of certain crops, eg cocoa beans, and hence reduces their quality and quantity (access to energy for drying systems would mitigate this effect)
 - o Due to higher temperatures and extreme heat agricultural products (fruit, vegetables, but also dairy products, meat, fish etc) perish quicker and lead to substantial losses (access to energy for refrigeration, cold storage and cold chains would reduce these losses in revenues)

- Torrential rains lead to destruction of infrastructure (roads, bridges etc) and hence affects transport and distribution of the products, etc
- Lack of access to energy negatively affects any other income-generating activities in rural and urban areas and hence reduces economic opportunities and income that would otherwise strengthen the resilience of vulnerable groups to climate change
- Lack of access to energy for ventilators and refrigerators reduces the ability to adapt to higher temperatures and extreme heat in people's homes, thus affecting their wellbeing and health; etc.

Climate change also adversely affects existing energy generation and distribution infrastructure (eg through torrential rains, floodings, hurricanes) and thus leads to severe electricity outages that also adversely affect any business and income-generating activities. Decentralised energy systems based on renewable energy sources, such as solar lanterns, solar home systems or solar mini-grids, would mitigate these effects and help the vulnerable populations to better adapt to climate change.

Digitally-enabled information and education tools, eg for climate data; information on suppliers of adaptation products and services; information on financial products and services for adaptation products; climate insurance products etc, are further examples of adaptation solutions.

There's a wide range of innovative climate adaptation products and services that can potentially address different climate problems in the different priority areas defined in the NAPA. For example, agricultural activity, along the entire value chain, is specifically affected by the adverse effects of climate change and there exist a large variety of adaptation solutions for different problems. For example, solar-powered water pumping or irrigation systems address the effects of irregular rainfall patterns and extended dry periods and droughts; refrigeration and cold storage solutions address extreme heat and reduce the loss of agricultural produce and improve its quality.

Regarding cost-effectiveness please see section 1.A.5 Incremental cost reasoning

The proposed project has been designed with a view to maximise the positive impact on the most vulnerable population groups, i.e. to substantially reduce vulnerability and strengthen resilience and climate change adaptation. The proposed project seeks to achieve maximum impact by adopting a strong private sector-driven market approach and by addressing both the supply side of climate adaptation-oriented technologies and services (through innovating MSMEs) as well as the demand side (by enabling the target groups (vulnerable people) to acquire and use climate adaptation-oriented technologies and services). The proposed interventions focus on developing a conducive market for climate adaptation-oriented solutions in DRC by providing support to the suppliers and customers of climate adaptation-oriented technologies and services and by improving the policy and regulatory framework as well as the capacity of government and other public institutions.

Supporting private-sector MSMEs with their climate adaptation innovations has strong catalytic and multiplier effects: assisting MSMEs with transforming their early-stage ideas into viable businesses, and subsequently supporting commercialisation and large-scale deployment of their climate adaptation solutions has substantial potential for scaling-up and hence maximising impact. Furthermore, successful market-driven business models have potential for replication and hence further increase the cost-effectiveness of the initial interventions. In addition to the expected improvement to climate change adaptation, supporting the development of the MSME sector in DRC will also contribute to employment creation, empowerment of women and the youth, and to social and economic development in general, which, in turn, will also strengthen the resilience of the population.

The proposed project will also have a strong focus on catalysing additional public and private financing for the development and distribution of climate adaptation-oriented technologies and services, both by crowding in (long-term) private sector finance for innovative MSMEs for business expansion and growth as well as by developing adequate financial products and services for the target populations that will enable them to adopt climate adaptation products and services.

Agency Response 4Nov2019:

Please note that changes have been made in Section 1.A.1. under highlighted section "Climate change impacts and proposed adaptation measures for priority sectors" (pages 8-9 in attached PIF). Please note that as per country request the project intends a multi-sectoral approach addressing increased climate vulnerability in the energy, water and agricultural sectors.

A table has been added regarding the identified climate hazards and the proposed adaptation measures for priority sectors (pg. 9).

Please further note that in section 1.A.3 an overview of the project intervention strategy based on identified climate hazards/vulnerability areas is provided. The example given, which is for the agricultural sector, elaborates how the project seeks to ensure the delivery of appropriate adaptation-oriented technology and business model solutions (through acceleration, innovative financing solutions and market creation) (please also see pages 18-19 of attached PIF).

New sections have been highlighted in yellow, as well as full PIF document with highlighted sections has been uploaded to the Roadmap.

Agency Response 5Nov2019:

Thank you, the proposed project is formulated around b) central cross-cutting theme to drive climate adaptation across these priority sectors as defined in the NAPA, as well as requested by national stakeholders.

Updates have been marked in green in section 1.A.1, pages 7 and 9 in attached/updated PIF (updated PIF with marked changes has been also uploaded to the Roadmap section).

Please note that a number of suitable adaptation solutions deliver multiple benefits across sectors (e.g. solar-water pumping systems). Consequently, an integrated multiple-sectoral approach can deliver clear cost benefits as following:

- Enabling a global shift in investment and in operational decision making across sectors, therefore targeted policies considering the integrated water-energy-food perspective have to be deployed
- Transition to achievable resource consumption intensities across sectors can largely offset trade-offs between water efficiency and climate proofing and decentralization of energy infrastructure

- Investing in an integrated approach, is the most cost-effective way in the long term due to synergies in the energy, water and food sectors
- These synergies (in water, energy and food) are paramount for minimizing joint implementation costs.

Regarding table on climate hazards: Increased land and ecosystem pressure has been removed from the table.

Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, the project components are relevant and appropriate distribution of resources are proposed to achieve program objectives. However, the following elements which require further consideration, at the PIF and PPG stages:

General:

- Why limit the focus to SMEs? Why not also include micro-scale enterprises?
- Please ensure explicit criteria and selection process for all training and financial investments in micro and SMEs (MSMEs) to ensure direct impacts for adaptation and resilience, in components 1 and 2.

Component 1:

- Project output 1.1.1: Suggest focus on “delivering” rather than “piloting, commercialization” rather than “promoting” innovative technologies.
- Project outputs 1.2.1 and 1.2.2: Please consider how to increase these figures of [S]MSEs supported or reduce the scale of budget requested.

Component 2: This component has potential to catalyze investment and action for adaptation and resilience. However, the description and activities require strengthening, particularly when developing the full proposal with the PPG support. Please consider the following:

- This component would be strengthened by ensuring adequate focus on access to capital and other forms of finance for MSMEs to increasing resilience of their production, as well as provision of new adaptation goods and services.

- Please explore opportunities to work with first and second tier National Financial Institutions and commercial banks, including Equity Bank and microfinance institutions active in the country, to develop lending products and establish line(s) of credit for financing adaptation a resilience enterprises by [M]SMEs.
- Project output 2.1.1: To ensure increased access to finance, as well as market creation for adaptation goods and services, please include a focus of the trainings on financial institutions (including microfinance credit officers operating in the field) on the viability, financial impact, and adaptation impact of a set of climate adaptation solutions to specified climate hazards (e.g. efficient irrigation as a solution to the hazard and impacts of drought; changing crop varieties as a solution to the hazard and impacts of increased variability of precipitation; etc.). Please ensure the “trainer-to-trainer approach” also includes focus on FPS and staff including credit officers.
- Project output 2.3.1: This is an important output with potential for catalytic impact, but that will require deepening. When developing the full funding proposal with PPG support, please expand on how “innovative financial products and services will be adapted to the needs of the most vulnerable populations”, and how these will be designed to ensure adaptation and resilience impact. 20,000 beneficiaries seems low. Please identify ways to increase this ambition and raise this figure in the PIF. To achieve scale-up and sustainability, it will be crucial to incorporate adaptation impact considerations national and commercial banks and microfinance institutions into lending decision making, reinforced by line(s) of credit for a set of adaptation and resilience actions.
- Project output 2.3.2: This is another important output with high potential for catalytic impact, but that requires expanding on as a significant focus of this component. For example, what types of “risk mitigation instruments” will be put in place; will this involve incorporating climate information into FSP investment decision making processes; if so, can the risk mitigation instruments also incorporate how [M]SMEs are undertaking climate risk mitigation/reduction efforts?

Component 3: Please ensure complementarity and avoid duplication of the National Adaptation Planning support provided by the GCF to DRC approved in January 2018 and currently being implemented by UNDP (https://www.greenclimate.fund/documents/20182/466992/Readiness_proposals_-_Democratic_Republic_of_Congo__UNDP__Adaptation_Planning.pdf/9a6380dd-c545-4b9f-a474-3a6897162970). In particular, Project Outputs 3.1.2, 3.1.3, and 3.3.1 have high potential for duplication. We encourage revising this component to strengthen DRC’s ongoing adaptation process in building on the activities in the above referenced project supported by GCF, by focusing more specifically on integrating sustainable mechanisms for entrepreneurship incubation and acceleration (linked with Component 1) and financial instruments for adaptation with the finance sector (linked with Component 2), and building these into DRC’s broader adaptation planning process.

Component 4:

Project output 4.1.2: Ensure focus of knowledge materials on FSP tools and methods for investing in adaptation and resilience by [M]SMEs

GEFSEC 1Nov2019:

Please provide response to the specific comments above regarding components 2 and 3, and indicate changes made in the PIF. It would be helpful to attach a version to the roadmap section of the portal that indicates the changes in a highlighted colour or tracked changes.

GEFSEC 4Nov2019:

Cleared. Thank you for increased clarity and ambition, particularly with regards to incubation and financing options for MSMEs. Please note that at the PPG stage, it will be especially important to analyse best specific options and methods for "establishing innovative financing mechanisms established to help MSMEs to leverage financing to de-risk and scale-up operations" (output 1.2.3); Innovative financial products and services adapted to the needs of the most vulnerable population (output 2.3.1); and other outputs related to innovating finance for MSMEs.

Agency Response

For General:

Scope is now reflecting MSMEs

Selection criteria will be determined during PPG, but will be defined around key measures including: innovative climate adaptation solutions with strong catalytic and multiplier effects; substantial potential for scaling-up and hence maximising impact for resilience building, business models with potential for replication and hence further increase the cost-effectiveness of the initial interventions. Further applications will be screened regarding also contribute to employment creation, empowerment of women and the youth, and to social and economic development in general, which, in turn, will also strengthen the resilience of the population.

For Components, For detailed updated on Outputs, please see updated in Table B, as well as Alternative Scenario Section 1.A.3

Agency Response 4Nov2019:

Component 2, suggestions have been added and the appropriate design will be further explored during the PPG phase (see pages 2-3 of the attached PIF).

output 2.1.1 - please note a new output 2.1.2 has been added to ensure capacity building of FSPs

output 2.3.1 number of beneficiaries has been increased to 100,000 in total; further the component description includes the suggestions on working with NFIs for the development of appropriate lending products. A thorough assessment of current gaps will be done as part of the project which will then form the base to design the appropriate instruments.

output 2.3.2 this now includes climate smart investment planning tools for FSPs to incorporate risk assessment of climate hazard in business environment of MSMEs

Component 3, has been dramatically changed to fit the requested changes and alignment with on-going adaptation planning processes in DRC (please see pages 3-4 of the attached PIF).

In addition, the following revisions have been made:

Component 1: SME has been changed to MSMEs

output 1.1.1 changes to delivery

output 1.2.1 and 1.2.2 figures have been increased

Component 4: knowledge products for FSPs added to the scope.

Agency Response 5 Nov2019: well noted; at the PPG stage these options will be explored and well elaborated in the CEO Endorsement document.

Co-financing

3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

There is brief description on how the different co-financing was identified. More information is particularly required on the estimated \$15M from private finance partners, the Challenge Fund, and the Secretariat General for Agriculture. Please explore opportunities for a line(s) of credit to be provided by National Finance Institutions or others.

GEFSEC 1Nov2019:

Grant co-financing from UNIDO has been marked as "recurrent expenditures". However, where co-financing truly meets the definition of "grant", it should typically be classified as "investment mobilized" rather than "recurrent expenditures". For further details, please refer to the Co-Financing Guidelines (http://www.thegef.org/sites/default/files/documents/Cofinancing_Guidelines.pdf).

AfDB should be classified as a GEF Agency.

GEFSEC 4Nov2019:

Cleared

Agency Response

Please see in Section 1.A.5 on cost-reasoning and co-finance. Additional annex reflecting contribution through AfDB DRC office has been attached.

Agency Response 4Nov2019:

UNIDO grant contribution renamed as 'investment mobilized'.

AfDB changed to GEF Agency

GEF Resource Availability

4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes the proposed GEF financing is in line with GEF policies and guidelines. LDCF allocation is sought to be used. \$10 million is currently available for DRC from the LDCF in GEF-7.

Agency Response**The STAR allocation?**

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

No

Agency Response

The focal area allocation?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

No

Agency Response

The LDCF under the principle of equitable access

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes

Agency Response

The SCCF (Adaptation or Technology Transfer)?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

No

Agency Response

Focal area set-aside?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

No

Agency Response

Impact Program Incentive?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

No

Agency Response

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, the PPG requested (\$219,000 inclusive of fees) is within the allowable cap for a Full-Size project.

Agency Response

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Not clear. Please upload the LDCF Core Indicators and Metadata worksheet onto the roadmap section of the portal.

GEFSEC 1Nov2019:

Please more completely fill out the core indicators table provided as an annexed document in the roadmap section. The core indicator figures in this document are low. Please identify opportunities for increasing impact ambition of this project as reflected in the core indicators, particularly in terms of number of beneficiaries and hectares under climate resilient management.

GEFSEC 4Nov2019:

The increases to the number of beneficiaries and hectares are well noted. If possible, the project would be strengthened by considering opportunities to increasing the number of project/plans above 1, and the number of people training.

GEFSEC 6Nov2019:

Well noted. Please strive for greater gender balance for number of number of people trained and number of beneficiaries. The proposal would be strengthened if this gender balance can be improved.

GEFSEC 7Nov2019:

Cleared

Agency Response

Core indicators have been uploaded on portal as well as LDCF/SCCF Worksheet uploaded in Roadmap section.

Agency Response 4Nov2019:

Core indicators table (attached as Annex B) has been revised in line with guidance provided.

Values for beneficiaries and hectares of land have been increased to increase project impact ambition

Agency Response 5Nov2019:

Number of project/plans has been increased to 3: 1. On MSME development (coming out of output 3.2.1); 2. On innovative finance (coming out of output 3.1.2); and 3. On improved adaptation planning to ensure cross-sectoral linkages (coming out of output 3.1.3.).

LDCF Core Indicators table (Annex B) has been also revised.

Agency Response 6Nov2019

Thank you, and well noted. LDCF Core indicators table (Annex B) has been updated accordingly and attached to Roadmap section.

Although, still not complete gender balance, the project will seek to target at least 45000 women. Additionally the project will seek to reach out and engage as many women (and youth) as possible and conduct gender dis-aggregated impact tracking.

Project/Program taxonomy

7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Mostly yes, but please consider the following:

1. Whether Level 2 indicator of "Innovative Financing Instruments" may be more relevant related to Influencing Models.
2. Please also check level 4 indicator of "Climate Finance", related to level 3 indicator "Climate Finance".

GEFSEC 1NOV2018:

Cleared

Agency Response Please see updates in Annex C for Taxonomy.

art II – Project Justification

1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, but this can be strengthened, including as follows:

1. With regards to the first barrier type indicated (Barriers impeding SMEs...) and its barrier (a) 'SMEs lack of awareness of the risks and opportunities...', this broad statement would benefit from disseminating types of SMEs with types of awareness. Please strengthen considerations of whether access to climate information is a barrier, and if so what the causes of this barrier are.

2. Please clarify what types of "adaptation products and services" are being referred to and for which access to finance is a barrier or root cause for different types of adaptation products and services. This will be useful to consider need/gaps in focusing finance for different adaptation products and services.

GEFSEC 1Nov2019:

As requested above, please provide a set of brief examples of what is being referred to as "adaptation goods and services".

GEFSEC 4Nov2019:

Noted. Please sharpen the initial criteria description in the PIF to include greater focus on direct climate adaptation and resilience impact in short, medium and long terms.

GEFSEC 5Nov2019:

Well noted. Please ensure this is indicated in the PIF and indicate in the comment exactly where it can be found in the PIF document.

GEFSEC 6Nov2019:

Cleared

Agency Response

Barrier section has been updated to reflect suggested changes.

For 1. Please see under section 1.A.1 barriers incorporate limited access to reliable climate data.

For 2. Please note under barrier e) access to finance as a key barrier for MSMEs that develop, manufacture and/or distribute climate adaptation products and services does not necessarily depend on the type of product or service as such, but more on the entrepreneurial capacities, the business plan (operations, commercialisation, distribution systems, market potential etc) and the business model. However, during the PPG phase, a more detailed risk assessment of different climate adaptation products and services and related business models will be conducted and their market potential, financial viability and climate adaptation impact will be evaluated.

Access to finance for target customers of climate adaptation solutions through adapted financial products and services may depend on the type of adaptation product as products and services for income-generating activities that will increase revenues of the target customers that can then be used for loan repayment and hence reduce payment risk will be easier to develop and adopt by FSPs.

Agency Response 4Nov2019:

Please note that changes have been made in Section 1.A.1. under highlighted section "Climate change impacts and proposed adaptation measures for priority sectors" (pages 8-9 in attached PIF). A table has been added regarding the identified climate hazards and the proposed adaptation measures for priority sectors (pg. 9).

Please further note that section 1.A.3 provides a overview of how these adaptation goods and services will be identified and selected according to sector specific indicators (please also see pages 18-19 of attached PIF).

Agency Response 5Nov2019:

This is well noted, during PPG a thorough impact assessment will be conducted to clearly define climate adaptation and resilience impact in short-term, medium-term and long-term. Criteria table will be updated accordingly and submitted in the CEO Endorsement document.

Agency Response 6Nov2019

Thank you, the comment has been addressed (please refer to page 9 in attached PIF).

A preliminary definition of direct adaptation impact in short-term, medium-term and long-term has been also proposed. Please note that these will be refined during PPG. Kindly refer to section 1.A.3 Alternative Scenario, under Component 1, page 21-22.

"Component 1 aims to foster innovations in climate adaptation technologies by supporting entrepreneurs, start-ups and MSMEs with delivery of innovative products and services delivering climate change adaptation benefits. Based on the specific needs and vulnerability assessment of priority sectors, technology innovations with high-impact potential in the area of climate change adaptation will be admitted into competition based accelerator programme.

During PPG, selection criteria will be further elaborated and direct climate adaptation impacts in short-term, medium and long-term will be determined based on a thorough environmental and social impact assessment. The selection criteria will be based around key measures including: innovative climate adaptation solutions with strong catalytic and multiplier effects; substantial potential for scaling-up and hence maximising impact for resilience building, business models with potential for replication and hence further increase the cost-effectiveness of the project interventions. In addition, applications will be screened considering their contribution to employment creation, empowerment of women and the youth, and to social and economic development in general, which, in turn, will also strengthen the resilience of the population. Sector specific selection criteria will be defined, according to sectoral adaptation needs and technology requirements. It should be noted that some of these interventions are cross-sectoral since they provide multiple adaptation benefits. Please see table below for draft selection criteria, to be expanded and validated during PPG".

	Sector specific identified adaptation-oriented technologies and service innovations	Adaptation impact/selection criteria		
		Short	Medium	Long
	<ul style="list-style-type: none"> Energy storage systems interconnected RE systems / solar wind 	- improved energy access in rural and	- enabling income diversification for	-Climate resilient energy

Energy	<ul style="list-style-type: none"> • decentralized and systems (solar, wind, hydro-) • backup power supply for individual rescue/service centers and homes, also enabling transportation of basic supply and first aid when event of climate hazards 	<p>decentralized areas,</p> <ul style="list-style-type: none"> - shortened and independent recovery of vulnerable communities thus enabling provision of other basic services 	<p>improved resilience building,</p> <ul style="list-style-type: none"> - Reduces pressure on natural resources based energy sources such as charcoal and firewood 	<p>infrastructure enabling more climate adaptive economic development</p>
Water	<ul style="list-style-type: none"> • Rainwater harvesting, efficient water management strategies across all sectors and solar water pumping systems • Improved water management technologies. • Flood water management systems • Climate proofing of water infrastructure, flood water management systems • Water harvesting technologies and efficient water utilization 	<ul style="list-style-type: none"> - Reduced cost related to (waste-) water management and energy - Increases access to water during drought periods - Reduces energy requirements for treatment, thus minimizing carbon footprint and costs - Reduces maintenance requirements and promotes state of art production facilities through installation of new, water efficient technology 	<ul style="list-style-type: none"> - efficient utilization of water across various economic sectors - Reduced pressure on freshwater ecosystems, - Reduction in polluted wastewater discharge into local freshwater ecosystems, e.g. by on-site water recycling and reduced water use 	<ul style="list-style-type: none"> - climate proofing of water infrastructure for improved health and sanitation especially in events of climate hazards - flood prevention
Agriculture	<ul style="list-style-type: none"> • improved and efficient irrigation systems • climate data services for agriculture planning, production and processing • early-warning systems • climate insurance • crop drying, agro-processing and storage technologies • models that seek to scale new, in-demand publicly-bred varieties of climate-smart and traditional food crops • Focus on drought resistant crops. • Smart agricultural, drip irrigation and hydroponic soil moisture monitoring 	<ul style="list-style-type: none"> - reduction in post-harvest losses - efficient utilization of agricultural inputs - improved planning and monitoring for agriculture production systems and along the agri-value chains - Reduced post-harvest losses - Reduced loss of livestock (through innovative climate 	<ul style="list-style-type: none"> - strong models promoting women and youth engagement in income diversification along the agriculture value-chain - sustainable land and resource management 	<ul style="list-style-type: none"> - sustainable food systems - diversification of agriculture production and valorization along the agriculture value-chain through improved agro-processing

Agriculture	<p>hydroponics, soil moisture monitoring, crop diversification and new varieties, biotechnology for crop adaptation</p> <ul style="list-style-type: none"> • Climate smart fertilizers and agricultural practices and inputs. Nutrient management systems. • Improved crop storage technologies/material that impede insect intrusion. Mechanized agro-processing facilities • Climate insurance products for livestock and crops • Digitally-enabled information and education tools, e.g. for climate data • Cold storage and cold chains facilities powered by solar 	insurance systems)		
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2. Is the baseline scenario or any associated baseline projects appropriately described?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Please clarify and explain the categorization of "investment mobilized" for the sources indicated.

Please expand on the extent to which other institutions are active in MSME development for climate adaptation and resilience, and the gaps are in service delivery. Please also clarify the extent to which the AECF, National Financial Institutions, commercial banks including microfinance institutions and others are already developed and are financing investment in adaptation activities.

GEFSEC 1Nov2019:

Please respond to the comment above, specifically: "Please expand on the extent to which other institutions are active in MSME development for climate adaptation and resilience, and the gaps are in service delivery. Please also clarify the extent to which the AECF, National Financial Institutions, commercial banks including microfinance institutions and others are already developed and are financing

investment in adaptation activities."

With regards to the addition of CTCN, please clarify which specific projects implemented under this UNFCCC body are being referred to.

GEFSEC 4Nov2019:

Cleared

Agency Response

Please see updates under section 1.A.5 under co-finance.

Please note that CTCN programme has been added to baseline projects under section 1.A.2

As such the proposed project seeks to link to and build upon the services through the CTCN including technology needs assessment, identification of technologies, technology barriers, technology efficiency, as well as piloting and deployment of suitable technologies for climate adaptation.

Agency Response 4Nov2019:

Baseline projects and associated baseline investments have been added to section 1.A.2 (please see specifically pages 17-18 of attached PIF).

Description on how other national and regional institutions are active in MSME development especially for climate adaptation as well as existing gaps in service delivery has been further elaborated in section 1.A.2 (please also see pages 13-15 of the attached PIF).

CTCN baseline projects have been added in section 1.A.2 (please also see pages 15, 17 of the attached PIF).

3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Please note the comments above in response Part II, question 2 on strengthening components and outputs, including

1. Please ensure (M)SMEs supported with training, technical assistance and/or access to capital are screened, selected and strengthened visavis explicit criteria to define high potential for adaptation impact.

2. Please also consider how to increase availability and access to climate finance from NFIs and commercial lenders including through Micro Finance Institutions by creating new loan products for a set of adaptation and resilience actions. Please also consider viability of these partners to provide a line of credit and concessional rates, perhaps supported by a guarantee with use of funds through this project.

GEFSEC 1Nov2019:

The indicative selection criteria mentioned will have to be sharpened to focus more on direct adaptation impacts. Please provide a short description in the PIF. Please provide indication in the PIF document the extent to which the project will aim to address comment 2 above.

GEFSEC 4Nov2019:

As indicated above for section 2, question 1, please sharpen the initial criteria description in the PIF to include greater focus on direct climate adaptation and resilience impact in short, medium and long terms.

Agency Response

Please note that suggested changes have been incorporated under section 1.A.3 Alternative scenario and will be further defined during PPG.

Regarding selection criteria: these will be fully developed during PPG, but will be defined around key measures including: innovative climate adaptation solutions with strong catalytic and multiplier effects; substantial potential for scaling-up and hence maximising impact for resilience building, business models with potential for replication and hence further increase the cost-effectiveness of the initial interventions. Further applications will be screened regarding also contribute to employment creation, empowerment of women and the youth, and to social and economic development in general, which, in turn, will also strengthen the resilience of the population.

Regarding 2.) The proposed project will also have a strong focus on catalysing additional public and private financing for the development and distribution of climate adaptation-oriented technologies and services, by crowding in (long-term) private sector and public sector finance for innovative MSMEs for business expansion and growth.

During PPG, the project will assess potential mechanism with NFIs and commercial lenders by creating new loan products for a set of priority adaptation and resilience actions. Innovative financing mechanisms including guarantee funds and suitable line(s) of credit shall help MSMEs to leverage financing to de-risk and scale-up operations.

During the PPG phase, a detailed mapping of the existing local financial service providers (FSPs) – both private and public - and their products and services will be conducted. This will include microfinance institutions, commercial banks, incubators, VC/equity funds, national and international / bilateral and multilateral finance institutions and programmes etc. The objective will be to identify potential partners that will provide additional early-stage capital as well as long-term financing for high-potential MSMEs for business expansion and scaling up.

Agency Response 4Nov2019:

Indicative selection criteria have been refined and sector specific indicators proposed as included in section 1.A.3 Component 1, specifically Table 4. Please note that these criteria will be validated during the PPG phase. See also pages 20-21 of the attached PIF.

Regarding comment 2 (above) a paragraph has been added to Component 1 prior to the section on 'expected outputs' (please see page 22 of the attached PIF).

Agency Response 5Nov2019:

This is well noted, during PPG a thorough impact assessment will be conducted to clearly define climate adaptation and resilience impact in short-term, medium-term and long-term. Criteria table will be updated accordingly and submitted in the CEO Endorsement document.

4. Is the project/program aligned with focal area and/or Impact Program strategies?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, it is aligned with the LDCF Climate Change Adaptation Focal Area.

Agency Response

5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes. Please strengthen by incorporating description of the potentially transformative contribution of building climate risk and risk reduction considerations into lending practices, as well as the scale of impact by encouraging private investment in commercially viable adaptation and resilience actions by (M)SMEs.

GEFSEC 1Nov2019:

Cleared

Agency Response

Please see updated under section 1.A.5 for incremental cost reasoning

The proposed project will also have a strong focus on catalysing additional public and private financing for the development and distribution of climate adaptation-oriented technologies and services, both by crowding in (long-term) private sector finance for innovative MSMEs for business expansion and growth as well as by developing adequate financial products and services for the target populations that will enable them to adopt climate adaptation products and services.

With a view to catalyse additional financing and maximise additional private sector capital, the proposed interventions will include:

- targeted training and capacity building of FSPs, especially related to technologies and services that address the effects of climate change and offer solutions for climate adaptation; assessment of the climate adaptation potential of different technologies and solutions, including, for instance, (digitally-enabled) climate information tools; evaluation of MSMEs with climate adaptation innovations and new business models; risk assessment of innovative technologies and business models; adequate financial instruments etc. The training programmes will target management as well as loan officers and credit officers at HQ as well as regional level;
- the development of appropriate risk mitigation instruments to mobilise increased private sector financing, such as guarantee instruments, catalytic grants etc; the development of blended finance mechanisms with a potential of enhancing private sector engagement will be explored during PPG.

6. Are the project's/program's indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

As indicated in Part I, question 6, please upload LDCF Core Indicators and Metadata worksheet onto the roadmap section of the portal, so that the indicative target contributions to global environmental benefits can be considered.

GEFSEC 1Nov2019:

As indicated in Part 1, question 6, please increase the ambition of this project, as reflected in the core indicators.

GEFSEC 4Nov2019:

Noted with thanks. Please see further comment above in part 1, question 6.

GEFSEC 6Nov2019:

Noted with thanks. Please see further comment above in part 1, question 6.

GEFSEC 7Nov2019:

Cleared

Agency Response

Indicator section has been updated accordingly and LDCF/SCCF Worksheet has been uploaded under the roadmap section.

Agency Response 4Nov2019:

Figures for target beneficiaries and hectares of land have been increased (please refer to Annex B in the Roadmap).

Agency Response 5Nov2019:

Annex B has been updated accordingly.

Agency Response 6Nov2019

Thank you, and well noted. LDCF Core indicators table (Annex B) has been updated accordingly and attached to Roadmap section.

Although, still not complete gender balance, the project will seek to target at least 45000 women. Additionally the project will seek to reach out and engage as many women (and youth) as possible and conduct gender dis-aggregated impact tracking.

7. Is there potential for innovation, sustainability and scaling up in this project?

Secretariat Comment at PIF/Work Program Inclusion

Yes, there is high potential for innovation, sustainability and scale up of this project, if the suggested modifications indicated in the responses above are able to be made, in particular with regards to increasing scale of impact ambition, prioritization of [M]SMEs with explicit consideration of adaptation impact potential; design of commercial lending products for adaptation and resilience activities by [M]SMEs; provision by project partners of financing at concessional rates through guarantees for lines of credits and other instruments; considerations of climate risk and risk reduction in lending practices; etc.

GEFSEC 1Nov2019:

Noted

GEFSEC 6Nov2019:

Cleared

Agency Response

Please see updates in section 1.A.7

The proposed project will focus on a set of interventions to ensure sustainability of the programme and the scaling up of the development and distribution of climate adaptation products and services by MSMEs, with a view to maximise the adaptation impact on the target groups.

With respect to **scaling up the project activities and impact**, a set of very specific and targeted interventions will be designed with a view to **mobilise additional public and private capital for climate adaptation innovation and large-scale deployment by MSMEs**. Such interventions will comprise intensive work with local and international financial service providers in the following areas:

- targeted training and capacity building for FSPs on financing climate adaptation innovation and deployment by MSMEs
- designing specific financial instruments adapted to the needs of MSMEs at different development stages of their businesses (early stage seed capital, working capital, long-term financing for business expansion and scaling up etc)
- development of risk mitigation instruments to mobilise increased private sector financing for MSMEs distributing climate adaptation products and services
- development of blended finance mechanisms that will provide risk sharing structures and hence catalyse increased private sector investment

- provide a wide range of networking, matchmaking and investment facilitation services to MSMEs

In addition to mobilising financing for innovating MSMEs, the proposed project will include specific activities to **increase access to finance for the target groups** (the vulnerable populations). This will include:

- training and capacity building for FSPs on designing and deploying financial products and services adapted to the needs of the vulnerable populations in order to be able to access climate adaptation products and services
- development of innovative financial products and services for target customers of climate adaptation products and services, including digitally-enabled solutions
- development of innovative financing structures, e.g. credit lines to aggregators etc

Project/Program Map and Coordinates

Is there a preliminary geo-reference to the project's/program's intended location?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes.

Agency Response

Stakeholders

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, information on Stakeholder engagement to date is included. With regards to future engagement, please clarify who will be responsible for SME training, and which stakeholders have potential to provide line(s) or credit and/or develop lending products for specific adaptation and resilience activities by [M]SMEs?

GEFSEC 1Nov2019:

While the PIF preparation has involved engagement with stakeholders and the PIF indicates this information, please clarify if the project will be dealing with indigenous peoples given the number of indigenous peoples and groups in DRC.

GEFSEC 4Nov2019:

Cleared

Agency Response

Please see update in Section 2. for stakeholders and Section 6. for coordination with indicated lead executing partner and identified potential executing partners to conduct specific activities. Precise modalities will be defined during PPG.

Agency Response 4Nov2019:

A section on how the project will engage with indigenous communities in case of multi-user issues and indigenous community land within the project intervention areas has been included (please also see pages 31-32 of the attached PIF). Nevertheless, the project seeks to refrain from potential conflict area over indigenous land, as resolution of conflict over land is not within the scope of this project.

Gender Equality and Women's Empowerment

Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

With regards to the reference to women having "more limited capacities to adapt", please expand on specific challenges related to women's and women owned [M]SMESs having access to training and finance for investing in adaptation actions. Understanding these specific challenges of [M]SME training and financial support for women can help ensure design of strategies to address them.

GEFSEC 1Nov2019:

Cleared

GEFSEC 4Nov2019:

Cleared.

Agency Response

Please see updated gender section with incorporated changes.

Agency Response 4Nov2019:

Changed section highlighted (please also see page 36 of the attached PIF).

Private Sector Engagement

Is the case made for private sector engagement consistent with the proposed approach?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, the case made for private sector engagement is consistent with the proposed approach, and is a significant focus of this project, both in terms of [M]SME development and finance.

Agency Response

Risks

Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

There is considerable consideration of risks and their mitigation measures. Please also consider risk and ways to mitigate them related to ensuring commercial or other lenders' ability to loan adequate scale of capital for sufficient impact; Risk and mitigation measures for provision of high interest rates and inability of [M]SMEs to repay; [M]SMEs being successfully incubated and accelerated but not generating adequate adaptation and resilience impact.

GEFSEC 1Nov2019:

Please indicate where the changes/additions have been made to the PIF.

GEFSEC 4Nov2019:

Cleared

Agency Response

Additional risk regarding financial risks have been added and mitigation measures defined.

Agency Response 4Nov2019:

Changed section highlighted (please also see pages 38-39 of the attached PIF).

Coordination

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined?
Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?**

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

The institutional arrangements are outlined, and there is a description of possible coordination with most of the relevant GEF-financed projects/programs and other initiatives. Please note GEF project with ID #9392 (Climate Resilient Growth and Adaptation) with UNDP has been recently approved by GEF Council, and consider its relevance for this project.

As the agency knows, the implementation and execution roles on GEF projects are meant to be separate per policy and guideline. The GEFSEC will analyze any requests for dual role playing by an agency at the time of CEO endorsement and only approve those cases that it deems warranted on an "exceptional" basis. We strongly encourage the agency to look at third party options as a preferred way forward. We also strongly encourage the agency to discuss any and all options for execution that do not include the government with the GEFSEC early in the PPG phase. The technical clearance of this PIF in no way endorses any alternative execution arrangement

GEFSEC 1Nov2019:

Well noted.

GEFSEC 6Nov2019:

Cleared

Agency Response

Please see changes in coordination section. Lead executing agency has been defined, and further identified executing partners for conducting specific activities have been listed.

Reference to GEF project 9392 has been added.

Consistency with National Priorities

Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes. In addition to the information provided, please ensure coordination and consistency with the National Adaptation Planning process currently under implementation by UNDP, with GCF support, which is referred to above, in section II, question 2.

GEFSEC 1Nov2019:

Please indicate where the changes/additions have been made to the PIF.

GEFSEC 4Nov2019 (JS):

Cleared

Agency Response

Section has been updated accordingly.

Agency Response 4Nov2019:

Changed section highlighted (please also see page 42 of the attached PIF).

Knowledge Management

Is the proposed “knowledge management (KM) approach” in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project’s/program’s overall impact and sustainability?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, the proposed KM approach is in line with GEF requirements, and contributed to overall impact and sustainability. Please strengthen consideration and reference to learning from and with other initiatives providing MSME finance for adaptation in Africa and in other regions (e.g. <http://unepmeba.org/en/>).

GEFSEC 1Nov2019:

Please indicate where the changes/additions have been made to the PIF.

GEFSEC 4Nov2019 (JS):

Cleared

Agency Response

Reference to above mentioned initiatives has been incorporated.

Agency Response 4Nov2019:

Changed section highlighted (please also see page 43 of the attached PIF).

art III – Country Endorsements

Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?

Secretariat Comment at PIF/Work Program Inclusion

GEFSEC 22Oct2019:

Yes, a Letter of Endorsement has been submitted by the GEF OFP signed in June 2019, as indicated in the GEF data base.

GEFSEC 1Nov2019:

The GEF OFP's letter of Endorsement had wrongly added the amounts: in the letter the total amount is \$10,000,000 – however, the correct amount is \$10,000,009 (9 dollars more). This is the amount that was requested in Portal. It is not allowed to request an amount in Portal that is above the amount endorsed in the letter. Please amend, noting the current country cap for LDCF is \$10,000,000.

GEFSEC 4Nov2019:

Cleared

Agency Response

Agency Response 4Nov2019:

Please note that the endorsement letter has a typo for the Agency fee.

The correct Agency fee is USD867,580 (PPG fee USD19,000 + Project fee USD848,580) instead of USD876,580. The correct value(s) has been indicated in the portal under table D and E.

Termsheet, reflow table and agency capacity in NGI Projects

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat Comment at PIF/Work Program Inclusion

N/A

Agency Response

EFSEC DECISION

RECOMMENDATION

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

Secretariat Comment at PIF/Work Program Inclusion

GEFSec 22Oct2019:

Please address the points indicated above and resubmit the PIF. The comments and suggestions indicated above will need to be addressed before this PIF can be recommended for technical clearance.

GEFSEC 1Nov2019:

Please completely respond to each new comment and make corresponding changes/additions to the PIF. It would be helpful to annex a document with all changes/additions in tracked changes or highlighted text.

GEFSEC 4Nov2019:

Please address the further points in the PIF indicated in the comments above.

GEFSEC 6Nov2019:

Please address the further specific comments above and resubmit to enable technical clearance, related to (i) gender balance within indicators; and (ii) ensuring including text on adaptation impact criteria in the PIF.

GEFSEC 18Nov2019:

All the comments have been addressed. This project is recommended for technical clearance.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion

View Dates

	PIF Review	Agency Response
First Review	10/22/2019	
Additional Review (as necessary)	11/1/2019	
Additional Review (as necessary)	11/4/2019	
Additional Review (as necessary)	11/6/2019	
Additional Review (as necessary)	11/7/2019	

PIF Recommendation to CEO

Brief reasoning for recommendations to CEO for PIF Approval