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Project title: Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda		
Country: Rwanda	**Implementing Partner (GEF Executing Entity): Rwanda Environment Management Authority (REMA)**	**Execution Modality**: *Full National Implementation Modality (Full NIM)*
Contributing Outcome (UNDAF/CPD, RPD, GPD): By 2023 Rwandan Institutions and communities are more equitably productively and sustainably managing natural resources and addressing climate change and natural disasters		
UNDP Social and Environmental Screening Category: *High*	**UNDP Gender Marker:** *2*	
Atlas Award ID 00097909	**Atlas Project/Output ID: 00101455**	
UNDP-GEF PIMS ID number: 6083	**GEF Project ID number: 10096**	
LPAC meeting date: *18th January 2022*		
Latest possible date to submit to GEF: *20th May 2020*		
Latest possible CEO endorsement date: *19th June 2020*		
Planned start date: 6 June, 2022	**Planned end date: 6 June, 2028**	
Expected date of Mid-Term Review: 6 June, 2025	**Expected date of Terminal evaluation: 6 March, 2028**	

Brief project description: Rwanda is among the most vulnerable countries to the effects of climate change in the world. Higher incidents of irregular rainy seasons, droughts, landslides and floods have exacerbated the impacts of historically degraded ecosystems to significantly increase vulnerability to climate risks for most rural households. COVID-19 has arisen as a challenge that amplifies the vulnerability of the country, which also poses a risk to efforts to addressing climate change impacts. These changes will affect agriculture, water resources, ecosystems, energy systems and human health, causing an estimated annual economic cost of about 1% of GDP by 2030[1]. Left unchecked, these impacts will particularly erode the benefits of the rural settlement programme (Imidugudu), adopted by government to catalyse urbanization and economic development in the rural areas. Such loses can be avoided by integrating climate risks and adaptation measures during the planning, design and implementation of the programme, to avoid maladaptation and 'lock-in'. Uptake of these measures are hampered by four barriers: i) Technical institutions and communities have limited technical capacity to generate current and diversified knowledge and climate information to integrate climate risks into the planning, design and implementation of the Imidugudu program. (ii) The resource poor beneficiaries of the rural settlement programme lack the means to invest in available climate smart technologies and solutions to integrate climate risk into the Imidugudu and diversify and sustain livelihoods in the face of climate change; iii) the country's policy space inadequately caters for the integration of climate risks into the Imidugudu programmes, exacerbated by weak capacity for cross sectoral coordination at District level; iv) Beneficiaries of the rural settlement programme and their supporting technical institutions have inadequate knowledge management and M&E.

[1] GoR, 2011: Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development

The goal of the project is to put Rwanda's Rural Settlement Programme (Imidugudu) on a climate-resilient pathway to secure the programme's development gains in the face of uncertainties emanating from climate change, and contribute to the country's recovery from the impacts of COVID-19. This project will demonstrate how a climate-resilient pathway can be achieved at the national level by implementing four outcomes that collectively tackle exposure and sensitivity to climate risks at the landscape. The project will provide technical skills, more accurate and relevant short to long-term climate information, tools, plans, methods and institutional and policy conditions to create and sustain climate resilient livelihoods for select communities, benefiting a total of 2,211,600 (50% women). The total cost of the six-year project is USD 31,215,638, financed through a LDCF grant of USD 8,355,638, USD 500,000 in cash co-financing to be administered by UNDP and USD 22,360,000 in other co-financing. It will be implemented by the Rwanda Environment Management Authority in partnerships with the Rwanda Housing Authority, Meteo Rwanda and the Local District Councils (Kirehe and Gakenke).

(1) FINANCING PLAN	
LDCF (GEF Trust Fund)	USD 8,355,638
UNDP TRAC resources	USD 500,000
Confirmed cash co-financing to be administered by UNDP	USD 500,000
(1) Total Budget administered by UNDP	**USD 8,855,638**
(2) CONFIRMED CO-FINANCING (*all other co-financing that is not cash co-financing administered by UNDP*)	
Rwanda Housing Authority	USD 10,000,000
Ministry of Agriculture and Animal Resources (MINAGRI)	USD 5,360,000
REMA	USD 3,000,000
Kirehe District	USD 2,000,000
Gakenke District	USD 2,000,000
(3) Total confirmed co-financing	**USD** 22,360,000
(4) Grand-Total Project Financing (1)+(3)	**USD** 31,215,638

SIGNATURES:		
Signature: Hon. Uzziel Ndagijimana, Minister of Finance	**Agreed by Government Development Coordination Authority**	**Date/Month/Year:** 30/05/2022
Signature: Juliet Kabera, Director General of Rwanda Environment Management Authority	**Agreed by Implementing Partner**	**Date/Month/Year:** 12/05/2022
Signature: Maxwell Gomera, Resident Representative of UNDP Rwanda	**Agreed by UNDP**	**Date/Month/Year:** 11/05/2022

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List of Acronyms

AF	Adaptation Fund
AfDB	Africa Development Bank
BK	Bank of Kigali
BPPS	Bureau for Policy and Programme Support
BPR	Banque Populaire du Rwanda
CAKE	Climate Adaptation Knowledge Exchange
CBA	Community-Based Approach
CBO	Community Based Organization
CSO	Civil Society Organisation
CCAFS	Climate Change, Agriculture and Food Security
CEB	Compressed Earth Blocks
CGIAR	Groupe consultatif pour la recherche agricole internationale
CIAT	International Center for Tropical Agriculture
CIP	Crop Intensification Programme
COGEBANQUE	Compagnie Generale de Banque
CoK	City of Kigali
CSA	Climate Smart Agriculture
COVID-19	Coronavirus disease 2019
CTA	Country Technical Advisor
DDS	District Development Strategy
DIDIMAC	District Disaster Management Committees
DRAMS	National Disaster Risk Assessment and Monitoring System
EARP	Electricity Access Rollout Progamme
EBA	Ecosystem Based Approach
EDCL	Energy Development Cooperation Limited
EDPRS	Economic development and Poverty reduction Strategy
EIA	Environmental Impact Assessment
ELAN	Ecosystems and Livelihoods Adaptation Network
ENACTS	Enhancing National Access to Climate Services
ERC	Evaluation Resource Center
ERM	Enterprise Risk Management
ESMF	Environmental Social Management Framework
ESMP	Environmental and Social Management Plan
EWS	Early Warning System
FAO	Food and Agriculture Organisation of the United Nations
FFS	Farmer Field School
FLR	Forest Landscape Restoration
FONERWA	Rwanda Environment and Climate Change Fund
FSP	Full Sized Project
FtMA	Farm to Market Alliance
GAD	Gender Accountability Day
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GFCS	Global Framework for Climate Services
GIS	Geographic Information System
GMO	Gender Monitoring Office
GOE	General Operating Expense
GOR	Government of Rwanda
GPS	Global Positioning Satellite
HA	Hectares
HACT	Harmonized Approach to Cash Transfers
IDP	Integrated Development Programme
IER	Institute of Engineers of Rwanda
IFC	International Finance Corporation

IRIC	International Research Institute for Climate
IUCN	International Union for the Conservation of Nature
JADF	Joint Action Development Forum
KCB-R	Kenya Commercial Bank Rwanda
LAFREC	Landscape Approach to Forest Restoration and Conservation
LDCF	Least Developed Countries Fund
LUDP	Local Urban Development Plan
M&E	Monitoring & Evaluation
Meteo Rwanda	Rwanda Meteorology Agency (The short name of)
MFI	Microfinance Institution
MIGEPROF	Ministry of Gender and Family Promotion
MINAGRI	Ministry of Agriculture
MINALOC	Ministry of Local Government
MINEMA	Ministry in charge of Emergency Management
MINIFRA	Ministry of Infrastructure
MoE	Ministry of Environment
MOU	Memorandum of Understanding
MSP	Medium Sized Project
MTR	Mid-Term Evaluation
NADIMAC	National Platform for Disaster Risk Reduction
NAP	National Adaptation Plans
NAPA	National Adaptation Programme of Action
NDC	Nationally Determined Contribution
NGO	Nongovernmental Organization
NIM	National Implementation Modality
NPFE	National Portfolio Formulation Exercise
NST	National Strategy for Transformation
NWP	Nairobi Work Programme
OAI	Office of Audit and Investigations
OFSP	Orange Flesh Sweet Potato
PMU	Project Management Unit
PEI	Poverty Environment Initiative
PICSA	Participatory Integrated Climate Services for Agriculture
PIF	Project Identification Form
PIMS	Project Information Management System
PIR	Project Implementation Report
PMU	Project Management Unit
POPP	Programme and Operations Policies and Procedures
PPE	Personal Protection Equipment
PPG	Project Preparation Grant
PPP	Patient Procurement Platform
RAB	Rwanda Agriculture Board
RCSA	Rwanda Climate Services for Agriculture
RDB	Rwanda Development Board
RDO	Rwanda Development Organization
REMA	Rwanda Environment Management Authority
RHA	Rwanda Housing Authority
RIA	Rwanda Institute of Architects
RLMUA	Rwanda Land Management and Use Authority
RRF	Rwanda Reserve Force
RSB	Rwanda Standards Board
RTA	Regional Technical Advisor
RWARRI	Rwanda Rural Rehabilitation Initiative
RWEE	Rwanda Economic Empowerment of Rural Women
RWF	Rwandan Franc
RWFA	Rwanda Water and Forestry Authority

SACCO	Savings and Credit Cooperative
SBAA	Standard Basic Assistance Agreement
SCCF	Special Climate Change Fund
SDG	Sustainable Development Goal
SEA	Sexual Exploitation and Sexual Abuse
SEAP	Scaling-up Energy Access Project
SEDIMAC	Sector Disaster Management Committees
SES	Social and Environmental Standards
SESP	Safeguards Screening Procedure
SH	Sexual Harassment
SPCR	Strategic Programme for Climate Resilience
SPIU	Special Projects Implementation Unit
SSTRC	South-South and Triangular Cooperation
STAP	GEF Scientific Technical Advisory Panel
TE	Terminal Evaluation
UNDP	United Nations Development Fund
UNDP-GEF	UNDP Global Environmental Finance Unit
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSMS	United Nations Security Management System
USAID	United States Agency for International Development
VSLS	Village Savings and Loan Schemes
WAMPP	Wool and Mohair Promotion Project
WFP	World Food Programme
WRI	World Resources Institute

148. The LDCF Core indicators included as Annex 7 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground-truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

149. *Independent Mid-term Review (MTR):* The terms of reference, the review process and the final MTR report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Centre (ERC). The evaluation will be 'independent, impartial and rigorous'. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

150. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate. The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by December 2023. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

151. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Centre. The evaluation will be 'independent, impartial and rigorous'. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by *(add date included on cover page of this project document)*. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion. The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package.

152. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

153. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[84] and the GEF policy on public involvement[85].

Monitoring and Evaluation Plan and Budget:			
LDCF GEF M&E requirements	Responsible Parties	Indicative costs (US$)	Time frame
Inception Workshop	Implementing Partner PM/Coordinator	10,000 (under Budget Note 20, Yr1)	Within 60 days of CEO endorsement of this project.
Inception Report	PM/Coordinator	None	Within 90 days of CEO endorsement of this project.

[84] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[85] See https://www.thegef.org/gef/policies_guidelines

Monitoring and Evaluation Plan and Budget:			
LDCF GEF M&E requirements	Responsible Parties	Indicative costs (US$)	Time frame
Monitoring of indicators in project results framework	PM/M&E Officer	5,000 per year, total 30,000 – as part of the M&E Officers cost under Budget note 16	Annually prior to GEF PIR. This will include LDCF core indicators.
Monitoring of Gender Action Plan, stakeholder engagement plan and the ESMP	*Project Gender and Safeguards Specialists*	5,000 per year, total 30,000 as part cost of Safeguards and M&E specialists under Budget note 9	On-going.
GEF Project Implementation Report (PIR)	RTA UNDP Country Office[86] PM/Coordinator	None	Annually typically between June-August
Monitoring all risks (UNDP risk register)	UNDP Country Office PM/Coordinator	2,000 per year, total 12,000 – as part of the M&E Officers cost under Budget note 16	On-going.
Supervision missions	UNDP Country Office	None[87]	Annually
Oversight missions	RTA and BPPS/GEF	None**Error! Bookmark not defined.**	Troubleshooting as needed
Mid-term LDCF Core indicators in the CCA Tracking Tool	*REMA*	2,000 per year, total 12,000 – as part of the M&E Officers cost under Budget note 16	Before mid-term review mission takes place.
Independent Mid-term Review (MTR)	Independent evaluators	65,000 (UNDP Grant - under budget notes 27 for IC and 28 for LC)	July to December 2023
Terminal GEF *and LDCF* Core indicators	REMA	1,833.33 per year, total 11,000 – as part of the M&E Officers cost under Budget note 16	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE)	Independent evaluators	80,000 (UNDP Grant - under budget notes	June – September 2026

[86] Or equivalent for regional or global project

[87] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

2. CLIMATE CHALLENGE

1. Rwanda's topography, high population density, rainfall patterns, land cover and soil types combined with high dependence on subsistence agriculture for livelihoods, high dependency on biomass as the sources of energy and economic development make it highly sensitive and vulnerable to the impacts of climate change. By 2015, Rwanda was rated 13th most vulnerable country and the 90th least ready to combat climate change, with a vulnerability ranking of 131 of 178 countries[2]. The highly mountainous country covers a relatively small surface area (26,338 km^2) of land, largely 1,000 meters above sea level. With a total population of close to 12 million people and an average density of 497 persons per square kilometre[3] (the highest in Africa), human settlement has spread to land with over 50% slopes on hills and hilltops. Land holding in the rural areas averages at less than 0.2 hectares (ha) per household[4]. It is predicted that the population will be more than double, reaching 26 million by 2050, with a population density of 987 people per square kilometre[5], with even lower land holding per household. Like the rest of the country, livelihoods in Gakenke and Kirehe are based on an agricultural production system that is characterized by small family farms of less than 0.2 ha, with farmers practising mixed farming that combines rain fed grain crops, traditional livestock-rearing and some vegetable production[6]. Inhabitants of these two districts, especially the poor farmers, are amongst the most vulnerable people in Rwanda (ibid), and are amongst the target group of the government's rural settlement program (Imidugudu). Imidugudu aims to regroup vulnerable households in rural areas on serviced sites equipped with the basic infrastructure and community amenities, prioritizing households in categories one and two[7].

2. Despite the rapidly growing population, Rwanda has adopted ambitious socio-economic goals expected to transition the country into middle-income status by 2024[8]. This was outlined in the Vision 2020 (now updated to 2050), which identifies the modernization of rural settlement sector as a strategic intervention for improving the quality of life via provision of decent and accessible housing, improved and affordable transport system, access to social amenities amongst other necessities. The sector aims to use "planned rural settlements" or *Imidugudu* to tackle vulnerability and improve public services, the quality of public infrastructure in rural areas and to contribute to socio-economic development and poverty reduction in the rural[9] areas. The Imidugudu program originates from the National Human Settlement Policy (2009)[10] . 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 [11] . 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) with improved sources of energy 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,

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[2] Rwanda Environment Management Authority, 2015: Baseline Climate Change Vulnerability Index for Rwanda

[3] National Institute of Statistics (NISR), 2015

[4] RURANGWA, E. 2013: Land Tenure Reform. The Case Study of Rwanda. Paper presented at the Conference on 'Land Divided: Land and South African Society in 2013, in Comparative Perspective', University of Cape Town, 24 – 27 March 2013.

[5] Government of Rwanda, 2011: The Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development; Kigali October 2011

[6] RURANGWA, E. 2013: Land Tenure Reform. The Case Study of Rwanda. Paper presented at the Conference on 'Land Divided: Land and South African Society in 2013, in Comparative Perspective', University of Cape Town, 24 – 27 March 2013.

[7] 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.

[8] Government of Rwanda, Macroeconomic Framework http://www.minecofin.gov.rw/fileadmin/National_Strategy_For_Trsansformation_-NST1.pdf

[9] The Law 20/2011 of 21/06/2011 Governing Human Habitation in Rwanda defines rural as "an area which is mainly characterized by agricultural and livestock activities. It is also characterized by a small number of medium-height buildings within a cluster of dwellings".

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

[11] 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.

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[12]. 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. However, the risks associated with climate change are not fully mitigated, which might compromise development gains delivered by this programme.

3. **The climate challenge:** The climate in Rwanda is complex with wide variations across the country and strong seasonality. The annual average temperature of Rwanda is 18°C and ranges from 13°C to 25°C. The annual mean temperature varies from 15°C to 21° from western highland to eastern plains and hills respectively. In the North-West, temperatures range from13°C to 20°C.There are two rainy seasons, March-May and mid-September to mid-December with an annual average rainfall of 1,295 mm. The highest monthly average rainfall, observed in April, is 157mm[13]. Although the country is not a major emitter of greenhouse gasses (GHGs), it has experienced temperature increase of 1.4°C since 1970, which is higher than the global average; projected to further increase by up to 2.5°C by the 2050s from 1970s[14]. The already highly variable average annual rainfall is projected to increase by up to 20% by the 2050s from 1970 (ibid) which is likely to cause floods and storms that can increase incidents of landslides, crop losses, health risks and damage to infrastructure, especially in the more mountainous and steep North and West of the country. Indeed, Meteo Rwanda reported regional increase in average temperature of 0.29°C per decade from 1985 to 2015, with increased inter-annual variability in recent decades (e.g., 0.79°C average increase from 2012 to 2014)[15]. Furthermore, projected changes by the 2050s include: increased average annual temperature of 1.4 – 2.3°C; likely increase in average rainfall (range of -3 to +9%); increased heavy rainfall event frequency (7–40%) and intensity (2–11%); and likely increase in the duration of dry spells with a range of 0 to +7 days[16]. These changes will affect agriculture, water resources, ecosystems, energy systems and human health[17].

4. The country's rural settlement programme, and the livelihood strategies being applied to support its implementation, have been affected by the impacts of climate change that have compounded the pressures of population growth, associated land fragmentation, and demands for resources for economic growth. Since 1995, seven major floods caused loss of life, crops, livestock and property, while the 2007 flood cost Nyabihu and Rubavu Districts some $22 million[18]. The Stockholm Environment Institute estimated that in the absence of adaptation, a 5-fold increase in costs of similar floods might occur by 2030[19]. A 2018 Risk Assessment[20] found that the country is highly prone to drought, landslides, floods, earthquakes and windstorms. In the northern and western Provinces, heavy rain events in combination with steep slopes and highly erodible soils accelerate soil erosion and causes landslides in susceptible areas (Map 1 in Annex 1), affecting dwellings and infrastructure. Furthermore, land scarcity has led to placement of Imidugudu in vulnerable areas in the landscapes while inappropriate land management practices have resulted in severe and widespread soil erosion[21].

5. The 2019 Annual Report on Disaster Effects[22] reported that nation-wide in 2019 alone, there were 80 deaths, 212 injuries, 8,425ha of crops damaged, and 4,796 houses damaged or destroyed by landslides, floods, fire, heavy rains, and

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

[13] GCAP, UK Met Office and Atkins, 2015: Future Climate for Africa: Rwanda Pilot Case; Final Report

[14] GCAP, UK Met Office and Atkins, 2015: Future Climate for Africa: Rwanda Pilot Case; Final Report

[15] USAID, 2019: Rwanda Climate Change Risk Profile Fact Sheet. https://www.climatelinks.org/sites/default/files/asset/document/2019_USAID-ATLAS-Rwanda-Climate-Risk-Profile.pdf

[16] USAID, 2019: Rwanda Climate Change Risk Profile Fact Sheet. https://www.climatelinks.org/sites/default/files/asset/document/2019_USAID-ATLAS-Rwanda-Climate-Risk-Profile.pdf

[17] USAID, 2019: Rwanda Climate Change Risk Profile Fact Sheet. https://www.climatelinks.org/sites/default/files/asset/document/2019_USAID-ATLAS-Rwanda-Climate-Risk-Profile.pdf

[18] USAID, 2016: https://www.land-links.org/wp-content/uploads/2016/09/USAID_Land_Tenure_Rwanda_LAND_IG_Climate_Change.pdf

[19] ECONOMICS OF CLIMATE CHANGE IN RWANDA, 2011: Stockholm Environment Institute. https://www.weadapt.org/sites/weadapt.org/files/

[20] Ministry of Disaster Management and Refugee Affairs, 2015. The National Risk Atlas of Rwanda

[21] FAO. 2015. Strengthening capacity for climate change adaptation in the agriculture sector in Rwanda. Environment and Natural Resources Management.

[22] Rwanda Environment Management Authority, 2015: Baseline Climate Change Vulnerability Index for Rwanda (updated in 2018)

winds, thunderstorms or lightning. In addition, 212 animals (livestock) died, 169 classrooms, 59 churches, 22 bridges and 58 power transmission lines were destroyed. In 2016 landslides in Gakenke, Muhanga and Ngororero Districts resulted in the death of 50 people, 27 injured and 2,317 houses damaged, rendering about 13,500 people homeless, including children[23]. About 3,447 hectares of land under crops were destroyed and 56 animals lost (ibid). Crop damage further led to food insecurity and lack of income in the following three months for about 4,000 families (or approximately 23,200 individuals) (ibid). In the same year, droughts in the Eastern Province caused severe food shortage, necessitating famine relief. Collectively, the current effects of climate change (including inter alia destruction of rural infrastructure and houses, reduced land and agricultural productivity) are estimated to result in annual economic costs of just under 1% GDP by 2030[24]. Assuming the current level of GDP (RwF 7,269 billion)[25] this economic cost translates to RwF 72.9 billion of the real GDP in 2018 or about 1.6 times the national budget allocated to water and sanitation sector (RwF 46.1 billion)[26] in 2019/2020 financial year.

6. **The project sites:** the project will be implemented in four mini-catchments: Bukinanyana and Gasharu in Kirehe District (Eastern lowland) and Muzo/Kagano and Muramba in Gakenke District (Northern highlands). (i) Bukinanyana catchment covers a surface area of about 5,282.5 ha with the Bukinanyana IDP model village covering about 10.9 ha (0.2% of the catchment). The Mahama refugee camp is included in the Bukinanyana catchment[27]. (ii) Gasharu covers about 6,165.1 ha, with the existing old and proposed extension site for the Gasharu IDP model village covering about 6.8 ha (0.1% of the catchment). (iii) Muramba covers about 3,033.2 ha, with the proposed IDP model village covering about 29.9 ha (1.0% of the catchment). (iv) Kagano covers 9,085.1 ha, with the proposed IDP model village covering about 46.7 ha (0.5% of the catchment). The total project pilot area is therefore 25,566 ha, with a total population of 107,651 in 191 villages. Both sites of Kirehe are located in lowlands with elevation varying between 1300 m and 1700m (Figure 2 and 3 in Annex 1), while Gakenke district's sites have topography with very high contrast, with elevation varying between 1400 m and 2400 m (see Figure 4 and 5 in Annex 1). These sites were selected in a participatory process based on the criteria outlined in Annex 12 (Baseline Assessment Report).

7. The four areas have high levels of vulnerability[28] due to high levels of exposure and sensitivity to climate events, coupled with low adaptive capacities (Figs 1 and 2) (brief explanation on the methodology used to assess the vulnerability in Box 1, full report in the baseline assessment report (Annex 12), including the coding of indicators for exposure, sensitivity and adaptive capacity used in the analysis).

Box 1: Summary of vulnerability assessment methodology applied to assess the four pilot sites

The assessment was based on responses to a questionnaire administered to 120 households (30 per site) drawn from Bukinanyana and Gasharu IDP sites in Kirehe District and from Muzo/Kagano and Muramba IDP sites in Gakenke District (Questionnaire in Annex 1 of the Baseline Assessment Report, Annex 12). The responses reflected the experience and perceptions of households in the following areas of vulnerability to climate change:

- **Exposure:** perceptions of change in temperature, rainfall amount and start date of the rainy season, drought episodes, flooding and windstorm events and thunderstorms with lightening;
- **Sensitivity:** perceptions on change in soil erosion and landslides, soil fertility, changes in the natural environment, household size, extent of irrigation used, water catchments, the extent of reliance on income from farming and non-farming sources, and income levels;

[23] Ministry in charge of Emergency Management (MINEMA), 2019: Annual Report on Disaster Effects Situation: 2018/2019. http://minema.gov.rw/index.php?id=107

[24] GoR, 2011: Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development

[25] National Institute of Statistics – Statistical Yearbook 2019

[26] Ministry of Finance and Economic Planning - Budget Framework Paper 2018/2019-2020/2021 page 33

[27] The refugee camp is spread across two villages namely: Karambi (where about 65% of the camp is situated) and Nyenyeri village (covered by about 35% of the refugee camp areas)

[28] The analysis used the vulnerability analysis methodology developed by REMA to determine vulnerabilities at National and District levels in 2018 (REMA and J. Mossel, 2018. Climate Vulnerability Assessment and Index, 2018. Kigali, Rwanda), which was modified for village level assessment. The methodology is built on the conceptual assumption that climate change vulnerability is a function of impact and adaptive capacity where impact is a combination of exposure and sensitivity.

- **Adaptive Capacity**: levels of awareness of climate variability and change, respondents' access to hazard alerts and weather information, respondents' change in surplus production, agricultural practices, and household practices following extreme weather events.

Vulnerability per village was calculated using the formula: Vulnerability = (Impact + Adaptive Capacity)/2.

8. **Exposure:** The findings showed that all the four villages had higher exposure (above 50%) compared to the District average. High exposure was due to the fact that in the last ten years, rainy seasons have become shorter and the onset and quantities of rainfall less reliable[29]. In addition, dry seasons have become longer and unpredictable and despite improvements in flood control, the number of landslides have increased, become more destructive and the number of victims increased (ibid).

9. **Sensitivity:** The high sensitivity was due to a combination of factors[30] namely: a) degradation of ecosystems services (soil, watershed, food), high dependence on rain-fed agriculture with only 43% of the households producing a surplus (hence low incomes of less than US$ 220 per year) and high rates of illiteracy with limited economic opportunities outside agriculture. The average land holding per household is 43.32 Ares (0.4 ha)[31]. The four sub-catchments face serious degradation arising from increasing soil erosion, deforestation, receding wetlands and deteriorating riverbanks (Table 2). Between 1990 and 2018, agriculture expanded by 8,439.70 ha at the expense of 5,140.20 ha of forest. Currently, 10,410 ha of land faces moderate to extremely high risk of soil erosion while 7,000 ha of forests are already degraded. In addition, 580 ha of marshland and 47 kilometres of riverbanks are being exploited [32] unsustainably. The respondents reported degraded ecosystems services such as loss of timber and non-timber products due to deforestation, declining land productivity due to soil loss and reduced soil fertility, reduced water for the irrigation scheme in Bukinayana due to degraded watershed.

Figure 1: Exposure and Sensitivity per village relative to District averages

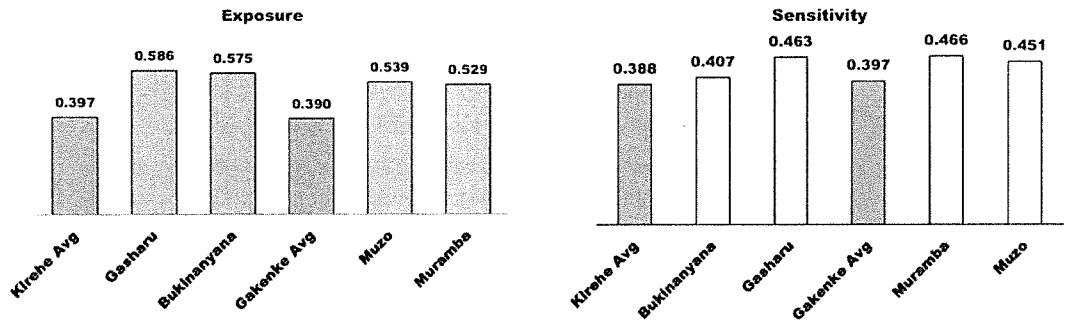


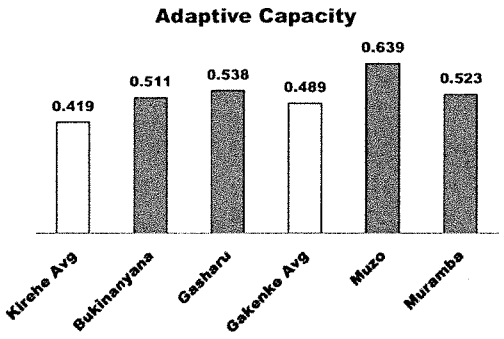
Figure 2: Adaptive capacity and vulnerability per village relative to District averages

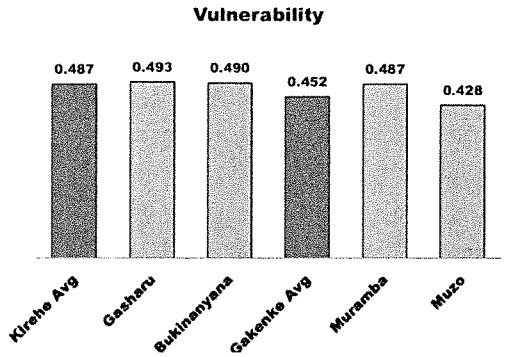
[29] Findings from the baseline assessment reported in Annex 12 of the Prodoc available separately.

[30] Findings from the baseline assessment reported in Annex 12 of the Prodoc available separately

[31] Average holdings are smallest in Muzo village in Gakenke and largest in Gasharu village in Kirehe. Land is jointly owned by men and women, by law, except in cases of widowed or unmarried people.

[32] Source - (Prime Minister's order No006/03 of 30/01/2017 "Drawing a list of Swamp Lands, their characteristics and boundaries and determining modalities of their use, development and management





10. **Adaptive capacity:** The villages lacked basic amenities that are available in a modern IDP village, which reduced their resilience and ability to recover after disasters such as droughts and floods. Table 1 below ranks the village amenities in the project based on government criteria for model Imidugudu on a scale of 0 to 1[33]. It is clear that all the four villages have serious lack of amenities although Bukinanyana is relatively better off. In addition, over 75% of the households that received early warning did not use the information for decision-making. This shows that they have capacity gaps in their preparedness to adapt to climate events.

Table 1: Ranking of Village Social Amenities in the Proposed Project Area

Amenities	Village			
	Muzo/Kagano	Muramba	Gasharu	Bukinanyana
Planned/consolidated dwellings	0	0.3	0.3	0.8
Quality of building materials (from temporary to permanent)	0.3	0.3	0.2	0.8
Access to electricity	0.2	0.2	0.1	1
Ownership of Water tanks	0	0.5	0.2	1
Girinka (access to one cow per family)	1	1	1	1
Access to biogas	0	0	0	0.5
Community centre	0	0	0.8	0
Dispensary	0	0	0	0
Early Childhood Centre	0	0	0	0
Technical training centre	0	0	0	0
Crop Intensification Programme	1	1	1	1
Access roads (tar, murram, none)	0.4	0.5	0.4	0.4
Access to insurance (crop, livestock)	0	0	0	0
Average scores	**0.22**	**0.29**	**0.31**	**0.50**
Rank	**4**	**3**	**2**	**1**

11. Furthermore, inequitable gender relations put women and the youth at higher vulnerability due to inequitable access to natural resources, to education and limited presence in decision-making forums. The livelihoods of the communities in the pilot areas are highly dependent on natural resources (firewood, land, water etc.). Access to natural resources are affected by gender because, in general, the socially constructed roles and relationships determine gendered division of labour and time use, access and control of important resources, power and decision making, and knowledge and

[33] An expanded list of facilities to be considered in the refinement of the baseline and indicators will be used – in Annex 12. This will be done in the first six months of project implementation.

capacities (power-relations). The Government of Rwanda has made strong political commitment to gender equity and equality at all levels[34], placing the country first on the global ranking of countries with the most women in legislature and fourth on the World Economic Forum's Global Gender Gap Report of 2017[35]. Indeed, the country has legislation to reduce the scope for application of customary law in the areas of land tenure and inheritance, has adopted a uniform and government-administered tenure regime and a new law on matrimonial regimes and inheritance, all of which incorporate progressive ideals of gender equality.

12. Nevertheless, these measures have not significantly changed the social inequality mind-set: whilst women may not face much resistance in accessing politics and decision-making positions, this has not liberated them from gender subordination; political participation has increased their workload and generally adapted patriarchal norms instead of eliminating them[36]. This is because the rise in women's participation was not reciprocated by a cultural change, thus, gender power relations, gender hierarchies and gender-based inequality and injustices practiced through gender biases and stereotypes still prevail (ibid). Indeed, application of the progressive new law in rural areas is hindered by a combination of factors, including weak enforcement in the reality of weak regulatory influence on village life; low levels of awareness and understanding of the new law, both amongst men and women; limited access to State Courts. Furthermore, the rights under the Law on Matrimonial Regimes and Inheritance (1999) accrue only to legally recognized marriages. The Law therefore does not protect the many women in customary marriages, second wives and concubines. The prevailing gender biases and stereotypes have led to the gender gaps reported throughout the various sections of this prodoc.

13. In addition to the challenge, the recent outbreak of the COVID-19 pandemic has posed serious challenges to the economy and, no doubt, has also affected the project sites through health impacts, disruption of value chains and erosion of community and individual household adaptive capacities. Most of these impacts and other related complications will continue to be felt for long periods of time thereby undermining efforts to address climate change and worsening its impacts. In the short term, COVID-19 restrictions and response measures as well as the fact that society has to change the way it goes about its day-to-day business under a new normal will have operational implications on project implementation.

14. The long-term preferred solution is to climate proof Rwanda's rural settlement program by integrating climate risks and adaptation measures during the planning, design and implementation, to avoid maladaptation and 'lock-in', and to sustain the benefits of the programme despite the escalating uncertainties related to climate change. Given the low levels of economic and technological sophistication 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) an ecosystems-based[37] 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 increase 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. The preferred long term solution will also enable the project beneficiaries to build forward better and greener following the impacts of COVID-19, thereby making a sustainable recovery from the pandemic.

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[34] This principle is enshrined in the National Constitution of June 2003 (as amended in 2019) and is reflected in all government policies. One of the Constitution's most effective scheme is the "one-third gender rule", the affirmative action that dictates that all public offices be held by a minimum of one third of the minority gender. This has led to more women in public offices, especially in political positions, governance, decision making, and legal matters. With women making up 53.2% parliamentarians (a slight drop from the 64% in the 2013 general elections)

[35] The Global Gender Gap Report 2017. World Economic Forum. http://www3.weforum.org/docs/WEF_GGGR_2017.pdf

[36] Georgia Orenstein, 2018: Blogger - https://borgenproject.org/gender-equality-in-rwanda/

[37] Ecosystem-based Adaptation is the use of biodiversity and ecosystem services, as part of an overall adaptation strategy, to help people to adapt to the adverse effects of climate change...it aims to maintain and increase the resilience and reduce the vulnerability of ecosystems and people in the face of adverse effects of climate change." CBD 2009

15. Achieving this ideal solution is hampered by five interrelated barriers: 1) Technical institutions and communities have limited technical capacity to generate comprehensive and diversified knowledge and climate information to integrate climate risks into the planning, design and implementation of the Imidugudu program; 2a) The resource poor beneficiaries of the rural settlement programme lack the means to invest in available climate smart technologies and solutions to integrate climate risk into the Imidugudu and diversify and sustain livelihoods in the face of climate change; 2b): Low levels of financial literacy and weak local institutions limit ability of households to access existing value chains, value addition and marketing – limiting opportunities for household incomes; 3) the country's policy space inadequately caters for the integration of climate risks into the Imidugudu programmes, exacerbated by weak capacity for cross sectoral coordination at District level; 4) Beneficiaries of the rural settlement programme and their supporting technical institutions have inadequate monitoring, evaluation, and knowledge management systems. Figure 1 shows the Theory of Change Diagram while the barriers are discussed in detail below.

Barrier # 1: Inadequate technical capacity to generate relevant climate information and integrate climate risks into the planning, design and implementation of the Imidugudu program

16. To effectively climate proof the rural settlement programme will require that local communities fully understand the risks to the programme emanating from climate change. It also requires that they understand the benefits and opportunities presented by climate change and have the skills to adopt climate smart solutions and adaptation practices. In addition, they need to understand and to have access to up-to-date, downscaled climate information and the appropriate tools and advisory services at their disposal.

17. Although the quality of climate information has increased in the recent past[38], there are misalignments and capacity gaps in the climate information products and services 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 into the rural settlement programme and adaptation decisions and actions. Consequently, majority of the population tend to mistrust the available climate information and weather forecasts. About 75% of the respondents to the baseline assessment undertaken during the formulation of this project reported that they did not use climate information in decision-making. Meteo Rwanda has limited capacity (up-to-date skills and state-of-the art equipment) to generate, analyse and provide usable weather and climate information. Insufficient training of staff of relevant departments within the Ministries of Infrastructure, Agriculture and Animal Resources and Environment, and Community Groups facilitating development at local levels such as the Joint Action Development Forum (JADF), cooperatives (SACCOs), Twigire Muhinzi and the associated Farmer Field Schools exacerbates the challenge of using climate information in the planning and implementation of the Imidugudu programme. These institutions have limited capacity to offer needed advisories and effective extension support to the communities which would enable them to adopt more resilient and productive practices within the rural settlement programme. Consequently, communities have limited awareness of the risks that climate change poses to the Imidugudu and their livelihoods and are not familiar with climate smart solutions to build their resilience and adaptive capacity.

18. Climate proofing the Imidugudu programme is further hampered by a lack of a clear, locally applied/tested model to guide climate-proofing the Imidugudu programmes. Thus, a working definition for the climate proofing is yet to be developed; the requirements for the widespread application of such a model(s) are not yet known including the policy framework, institutional coordination, budgetary provisions or the skills and capacities required for its successful uptake. As a result, there are no prototype climate-resilient settlement designs; and the facilitators of the Imidugudu programme – such as the private sector engaged in building the model villages (architects, contractors) - have little awareness of the necessity of climate proofing the process, and have no tools or skills for climate proofing.

19. While it is widely accepted that healthy ecosystems provide a cost effective means of reducing vulnerability of livelihoods to climate risks, the technical staff and the communities do not have the skills or the capacity to generate this knowledge and utilize it in facilitating a landscape approach or community based adaptation plans, that would guide the climate proofing of the Imidugudu program. The four sub-catchments targeted by this project are host to important river systems, wetlands and forests, which would provide cost-effective adaptation measures to secure the Imidugudu

[38] For example, Meteorological Services of Rwanda (Meteo-Rwanda) has recently reconstructed rainfall and temperature data to compensate for the significant decline in meteorological station data coverage from the mid-1990s to around 2010. In addition, Meteo Rwanda generates weather information at 4x4 kilometre grid and communicates it using the administrative boundaries as reference.

programme. These natural resources are highly degraded (Table 2), which sets off a vicious cycle where degradation of natural resources further increases poverty, often leading to negative capacity and coping strategies. Despite the high levels of vulnerability reported during the baseline assessment, none of the communities had any comprehensive plan(s) to tackle climate risks systematically.

20. Outcome 1 will provide skills, information and tools to reduce and/or manage climate risks and secure the benefits of the Imidugudu programme.

Barrier # 2A: Imidugudu beneficiaries lack the financial resources to invest in available climate smart technologies and solutions to integrate climate risk into the Imidugudu and diversify and sustain climate-resilient livelihoods.

21. The communities in the four project areas are resource-poor and unable to invest in the available climate smart technologies, opportunities and solutions for integrating climate risks into the Imidugudu and to diversify related livelihood systems. There are many opportunities to implement resilience building measures to existing and new Imidugudu, which include: a) rehabilitation of degraded ecologically sensitive resources to improve ecosystems services and the effectiveness of nature based adaptation technologies; b) uptake of climate smart agriculture practices to rehabilitate degraded agricultural land and increase food production and adaptive capacity; c) improved and climate smart livestock management practices such as uptake of Girinka programme (zero grazing system for cows) and diversification of livestock systems; b) use of improved household energy systems such as biogas, electricity (including solar); d) constructing water harvesting reservoirs that help address the prevailing water scarcity; and, e) utilization of existing value chains to add value to produce, access organized markets and increase household incomes, boosting adaptive capacity. Communities in the project area have underutilized these opportunities as explained below, further undermining their collective adaptive capacities.

22. **Increasing resilience of settlements by implementing village greening measures (measures outlined in Table 1):** Muzo/Kagano and Muramba are not yet climate resilient settlements, Gasharu is an old Imidugudu site with only 120 families (with additional room for 400 more). Many of the homesteads are constructed with non-durable materials and are located in vulnerable sites, surrounded by degraded ecosystems, making them prone to climate risks (landslides and floods). Indeed, only one of the four pilot sites rated 50% along the criteria set by the government for a model village[39] (Table 1). The RHA, in collaboration with the Kirehe and Gakenke Local Authorities, have identified many vulnerable households (categories 1 and 2) in the two districts. They have plans and budgetary provisions for settling many households into less vulnerable sites. However, the resettlement process is progressing slowly due to shortage of resources to build climate resilient houses and implement the greening processes simultaneously. Residents of these areas do not benefit from planned/consolidated dwellings and the associated access roads. More than 80% of the households do not have electricity or biogas, have no water harvesting facilities, and lack social amenities (community, health or technical training centres). Consequently, the beneficiaries of the new settlements to be established by RHA and the Local Councils will fall short of implementing these additional climate resilient measures, thus fall short of securing the benefits of the settlement programme from further climate risks.

23. **Ecosystems management to improve ecosystems services necessary to increase resilience:** Ecosystem-based Adaptation is the use of biodiversity and ecosystem services, as part of an overall adaptation strategy, to help people to adapt to the adverse effects of climate change[40]. It aims to maintain and increase the resilience and reduce the vulnerability of ecosystems and people in the face of adverse effects of climate change. However, the levels of ecosystems services at the project sites was reported to have deteriorated significantly due to degradation of ecosystems over the last decade (Table 2). Between 1990 and 2018, agriculture expanded by 8,439.70 ha and 5,140.20 ha of forests was lost. Currently, 10,410 ha of land faces moderate to extremely high risks of soil erosion and about 7,000 ha of forests are degraded. In addition, there are 288 ha and 47 kilometres of degraded wetlands and riverbanks,

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[39] An improved Imidugudu is expected to have basics such as: planned/consolidated dwellings constructed with good quality permanent materials, have access to modern energy systems such as electricity, biogas, liquid petroleum gas, solar technologies, be equipped with water harvesting systems such as water tanks, have an established Girinka programme (access to one cow per family with a communal shed) and other economic activities linked to vibrant value chains, be served by public facilities such as a community hall, health facility, Early Childhood Centre and a technical training centre, members have access to land under the land consolidation program (with its improved extension services, commercialization and access to value chains), have well developed access roads (tar, murram) and that members have insurance, preferably for crop and/or livestock.

[40] Secretariat of the Convention on Biological Diversity (2009). Connecting Biodiversity and Climate Change Mitigation and Adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change. Montreal, Technical Series No. 41, 126 pages.

respectively[41]. Despite these facts, there is limited protection and/or rehabilitation of these ecologically sensitive segments of the landscape, reducing the effectiveness of the natural capital in providing cost-effective adaptation infrastructure to the settlements and livelihoods.

24. **Limited uptake of climate smart livelihood support practices** such as climate smart agriculture and diversification livestock systems, that would increase land productivity and diversify sources of household incomes, thus increasing resilience. Although the Crop Intensification Programme (CIP) was available in all four pilot areas, more than half[42] of the households did not access the programme due to their inability to consolidate land with neighbours, a requirement for joining the CIP[43]. In addition, many of the households cannot afford the 50% payment for irrigation equipment and technology (government subsidy covers the other 50%)[44]. Furthermore, although the Girinka Programme (one cow per family) is available in the four pilot areas, many respondents to the baseline assessment, especially women found it a challenge to keep cows. This is due to insufficient forage, lack of alternative choice (no small stock is offered to families who struggle to maintain the hybrid cows), limited consideration of gender aspect at project design level, limited land for eligible beneficiaries (families with less than 0.2 ha do not receive a cow while many teenage mothers fall in this category) and limited skills in the care and management of the given cows[45]. None of the households had crop or livestock insurance, leaving them exposed to loss of capital due to unusual climate events.

Barrier # 2B: Low levels of community and local institutions' capacity to add value to products and to effectively participate in existing value chains thereby limiting their access to high value markets

25. Despite the presence of considerable number of value chains operating in the two districts (detailed in the baseline assessment report, example of coffee value chains in Box 2), households in the pilot sites found it challenging to utilize them to benefit from value addition and existing markets. This reduces their opportunities to diversify household incomes, thereby increasing vulnerabilities. The inability to link with value chains is attributed to weak cooperatives and absence of a culture of savings, exacerbated by high levels of financial illiteracy. Although savings would contribute to cushioning livelihoods against shocks from climate change, most people have very low levels of financial literacy which restricts their ability to save and access loans from formal financial services for improving agriculture and/or other income generating activities. Consequently, the number of people accessing these facilities is limited.

26. There are many banks and financial institutions offering loans and investment packages (outlined in the baseline assessment report, example in Box 3). However, many people in the project areas are either unaware of these services, do not qualify for the services and/or belief the packages are too complex. Despite the many opportunities therefore, households in the target sites remain poor and outside this financial system. In Muramba, Muzo/Kagano and Gasharu, poor prices for milk sets a vicious cycle of weakening the milk savings and credit cooperative (SACCO) and irregular milk collection, high cost of transportation (3 hours to the processing unit). Furthermore, the local organizations had very limited capacities to undertake their stated objectives (particularly linking members to inputs, credits and markets), with a combined score of below 40% (using the modified UNDP Capacity Assessment System – Annex 12).

27. Outcome 2 will support the practical implementation of measures to increase adaptive capacity, reduce exposure and sensitivity, thereby increase resilience.

Box 2: Coffee Processers in Rwanda

Coffee processors operating in Rwanda include Sucafina (a multinational Swiss coffee merchant) and its affiliated non-profit Kahawatu Foundation and Impexol. These groups have technical assistance programs to help local coffee farmers meet the

[41] Source - (Prime Minister's order No006/03 of 30/01/2017 "Drawing a list of Swamp Lands, their characteristics and boundaries and determining modalities of their use, development and management

[42] 48.8% of the men reported accessing land under the programme compared to 32.3 of the men and 14% of the youth

[43] Implemented since 2008, the Ministry of Agriculture and Animal Resources (MINAGRI) has used the CIP to promote commercialization of agriculture products and boost economic development of famers, supported by input schemes and value chains.

[44] The baseline assessments undertaken during the project formulation revealed that: (i) over 85% of farmers in the pilot areas do not use irrigation currently; (ii) irrigation produces a significant increase in yields both in Kirehe (where the climate is dry) and Gakenke (less dry, but high rain variability); (iii) a typical 0.25 ha farm could spend in the range of RWF 930,000 (~USD 1,000) to purchase a pump, sprinklers, pipes and accessories; (iv) half of the investment is covered by the subsidy the government; the remaining half needs to be finance by the farmer (or cooperative) directly, through loans or, if available, contributions from donors and NGOs.

[45] Government of Rwanda, 2018. GENDER MONITORING OFFICE ANNUAL REPORT 2017-2018. http://www.gmo.gov.rw/fileadmin/user_upload/reports/GMO_Annual_Report_2017-2018.pdf

quantity and quality criteria for the international export market. For instance, Impexcol has 18 agronomists on board and has worked with 18,142 farmers cultivating 5,182 ha in total. It (i) produces and distributes seeds to small farmers for free, (ii) runs 3-year technical assistance programs to bring farmers up to speed (also for free), (iii) works downstream with international companies and organizations focused on sustainable coffee (including Starbucks). Kahawatu is funded by donors including Sucafina, Nestle' and other major brands and donors. Kahawatu services include: (i) extension services to coffee growers, (ii) sustainable agricultural land management, (iii) access to the value chain, (iv) certification of participating farmers so that they can sell to international merchants, (v) support of in-house agronomists. With an annual budget of USD 1.2 million and 24 full-time agronomists, Kahawatu so far has supported 22,000 farmers. Coffee from Gakenke is now produced and marketed as a brand, whereby cooperatives such as the Abakunda Kawa collect the coffee at farm level, process it and package it as a final product for the market. Likewise, banana crop is transformed into wine, maize into flour and animal feed, pineapple into juice, milk into yoghurt and cheese.

Table 2: Land use, land use changes and resources degradation profile of pilot sites

Site/ issue	Risks of soil erosion			Forest types			Land use changes (1990 -2018)			Degraded wetlands and Rivers		
	Moderate	High	Total	Moderate	Sparse	Total	Agric Expansion	Forest lost	% wetlands lost[46]	Wetlands (ha)	Rivers	Kms of riverbanks
Gasharu	1,639	471	2,110	240	88	327	3,717.40	3,523.2 (92%)	48% (209ha)	209.2	Rwagitugusa	0.43
											Kibaya	8.07
											Kagogo	7.16
											Murutagara	5.41
Murambа	844	623	1,467	687	548	1,234	584.6	612.7 (33%)	100% (78ha)	0	Cyacika	1.45
Bukinanyana	2,269	714	2,983	61	1	62	2,846.80	2,213.3 (97%)	34% (14ha)	14.0	-	-
Muzo/ Kagano	1,287	2,563	3,850	3,492	2,300	5,792	1,290.90	1,004.3 (15%)	Tbd	78.8	Sumo	2.17
											Mugambazi	10.34
											Nyabarongo	11.69
Total	**6,039**	**4,371**	**10,410**	**4,480**	**2,936**	**7,416**	**8,439.70**	**5,140.20**		**288**		**46.72**

Box 3: Examples of financial services currently on offer in Rwanda

Examples are Kenya Commercial Bank Rwanda (KCB), Bank of Kigali (BK), Equity Bank, Urwego Opportunity Bank, Banque Populaire du Rwanda (BPR) and Compagnie Generale de Banque (COGEBANQUE). These financial institutions offer financial products covering pre- and post-harvest needs for commodities such as maize, potatoes, rice and coffee – including funding of seeds, fertilizers and equipment. For instance, KCB is partnering with the International Finance Corporation (IFC) to scale up its financing to the agriculture sector. IFC has provided KCB with a USD 4.5 million facility that can be used to provide financing to cooperatives procuring maize for the World Food Programme's (WFP) procurement platform (Farm to Market Alliance) and for working capital; in 2017, the IFC also provided a USD 2.2 million risk sharing facility to partially cover KCBR's credit risk. Urwego specifically target the agricultural sector, but on a small scale; primarily rice farmers and cooperatives, with a limited staff of 14 and 700 clients (primarily outside of Kirehe and Gakenke).

[46] Nationally, the country lost 100,151 ha of wetland ecosystems, which is equal to about 36% in just 28 years (1990-2018)

MFIs and Umurenge SACCOs serve a large number of farmers, but do not have specialized agriculture lending programs – they offer primarily very small personal loans to individuals. A few exceptions include the MFIs Duterimbere, RIM (RéseauInterdiocésain de Micro Finance), and Ejo Heza, which focus on the commodities grown in their respective districts (e.g., potatoes in the north and coffee in the east) with specific loan products. As part of the Vision Umurenge Program (VUP), the government is providing additional funding lines at very low interest rates to Umurenge SACCOs, for on lending to individuals or groups under various loan programs[47]. One such facility, worth RWF 25 billion (~USD 27 million), focuses on loans for productive activities and could become an additional source of finance for farmers. The government owned Rwandan Development Bank (BRD) primarily lends to agri-businesses. Like other savings and credit cooperatives that provide finance to smallholder farmers in the country, Nyamugali SACCO has capital of Rwf 36,750,000[48] (with the capacity of disbursing loans of up to Rwf 594, 672,144[49].

Barrier # 3: Climate proofing Imidugudu is not recognized within the Rwanda Planning, Budgeting and Public Investment Systems

28. The Government of Rwanda has taken keen interest in promoting strong adoption of adaptation and low carbon, climate resilience development strategies. Despite these advances, climate change is still seen as part of the environment agenda, rather than as part of the development or planning agenda. Furthermore, climate proofing the Imidugudu programme is not yet recognized within the country's planning, budgeting and public investment system, limiting its national uptake. National priorities in Rwanda are implemented in accordance with planning frameworks that ensure coordination across all public institutions and adherence to national strategic objectives. This planning happens at three levels, namely: i) long-term planning at the national level; ii) medium-term planning at the national, sectoral and institutional level; and iii) annual planning at the institutional level. An issue that is not mainstreamed into these planning frameworks will not feature in the decision-making on national public investment, hence cannot be budgeted for, nor up scaled or replicated. The important planning frameworks 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).

29. Furthermore, important stakeholders involved in the planning and budgeting processes within the public sector investments are unaware of the importance of climate proofing the Imidugudu programme. They include Parliament, District Councils, Public Investment Committee (PIC), Local Government Projects Advisory Committee (LGPAC), Clusters, Ministry of Finance and Economic Planning (MINECOFIN), National Development Planning and Research Department (NDPR), National Budget Department (NBD), Ministry of Local Government (MINALOC), Local Administrative Entities Development Agency (LODA), Rwanda Development Board (RDB), budget agencies, line ministries and agencies and districts.

30. Coordination of climate proofing development initiatives at the district level is further exacerbated by the out-dated tools for environmental planning and the limited capacity for coordination of the institutional framework for disaster management and response established by the GoR in 2018, which includes national, district and sector level coordination mechanisms (see details in Box 4). A National Platform for Disaster Risk Reduction (NADIMAC) has been established and it provides interagency and multi-sectoral technical support to the Ministry in charge of emergency management (MINEMA) on disaster management, disaster risk management and risk reduction issues and concerns. District Disaster Management Committees (DIDIMACs) have been established by law in the 28 Districts; and, Sector Disaster Management Committees (SEDIMACs) have been established in all sectors of Rwanda. These two institutions are in charge of coordinating and implementing disaster management activities at the District and Sector levels. Nevertheless, these institutions are nascent and still require additional capacity to sustain the coordination role. Similarly, the Joint Action Development Forums and Monthly Community Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange y'Abaturage), which provide important foci

[47] https://www.newtimes.co.rw/news/interest-free-loans-vulnerable-rwandans-be-rolled-out-july

[48] US$ 39,357.596

[49] US$ 638,857.30

for cross sector coordination in the implementation of the rural settlement programme have limited require additional training to be carry out these roles more effectively.

31. Outcome 3 will ensure that climate proofing of the Imidugudu programme is recognized within the country's planning, budgeting and public investment systems and that key stakeholders in the district and national budgeting processes are aware of the importance of its mainstreaming, creating a sustainable pathway for its national uptake. It will also provide training to the district-level coordination institutions (DIDMACs, SEDIMACs, JADF and community institutions) and provide updated tools for environmental management - that mainstream climate risks related to the Imidugudu.

Box 4: Institutional framework for disaster management and response

Currently, the Institutional framework for disaster management and response is clear. The country has recently boosted its capacity for coordinating disaster risk reduction as a result of (among others) the successful implementation of the "Joint Program on Support to Ministry of Disaster Management and Refugee (2013 – 2018), which was supported by One UN in Rwanda (US$ 4.7 million contributed by seven UN agencies – Food and Agriculture Organization, International Office of Migration, UNDP, United Nations Population Fund, United Nations Children's Fund, World food Programme and the World Health Organizations). The Terminal Evaluation[50] of the project reported that:

The government has established a robust institutional set up for National, District and Sector level cross coordination of disaster risk reduction across the sectors. A National Platform for Disaster Risk Reduction (NADIMAC) has been established to provide interagency and multi-sectorial technical support to Ministry in charge of emergency management (MINEMA) on disaster management, disaster risk management and risk reduction issues and concerns. At the lower levels, District Disaster Management Committees (DIDIMACs) have been established in all 28 Districts; and, Sector Disaster Management Committees (SEDIMACs) have been established in all sectors of Rwanda. These two institutions are in charge of coordinating and implementing disaster management activities at the District and Sector levels. The government provided capacity building support on disaster management and deployed District Disaster Management Officers (DDMOs) in 10 most disaster risk prone Districts, namely Gakenke, Rubavu, Nyabihu, Ngororero, Nyamagabe, Muhanga, Rwamagana, Nyagatare, Kayonza and Rutsiro. It has produced and made available Training Manual on Disaster Management for DIDIMACs and SEDIMACs and trained several officials, authorities, staff and professionals at national and District/Sector levels developed (35% women) and communities. The training is focused on post disaster needs assessment, better management of disaster at community level and use of early warning system. In addition, the government has undertaken the following:

- Mainstreamed DRR in Annual Action Plans (AAPs) and policies of sectorial Ministries (infrastructure, agriculture, environment, education, ICT, youth employment and productivity, housing and settlement, urbanization, transport, water and sanitation, health, education), and in 28 District Development Plans (DDPs);
- Provided a functioning National Disaster Risk Assessment and Monitoring System (DRAMS) – in the form of the National Risk Atlas of Rwanda, which is used policy planning, infrastructure development including urban planning for settlement, agriculture, etc. This is also informing investors especially those in the field of agriculture and other sectors;
- Set up and operationalized the end-to-end early warning systems in the form of the disaster communication system of MINEMA, which feeds into the national disaster database. Daily reports of disaster data are compiled and disseminated to decision makers and technical units appropriate and corresponding actions;
- It aired many public discussions on radio on disaster risk reduction and formed 209 schools clubs focused on awareness raising on the same.
- In addition to the above, the SERVIR[51]-Eastern and Southern Africa team members, with partners in Rwanda, have developed a system that serves as a data and information coordination platform for disaster management across government agencies. The web platform, managed and hosted by MINEMA, provides a place for interagency data sharing. Designed with a mixture of technical and non-technical users in mind, the system is

[50] MIDIMAR and MUJYANAMA PIO, 2017: Final evaluation of the "Joint Program on Support to Ministry of Disaster Management and Refugee

[51] SERVIR means to serve. SERVIR is a global network of regional partners dedicated to environmental management through the integration of Earth observations and geospatial technologies. It provides state-of-the-art, satellite-based Earth monitoring, imaging and mapping data, geospatial information, predictive models and science applications to help improve environmental decision-making among developing nations in eastern and southern Africa, the Hindu-Kush region of the Himalayas and the lower Mekong River Basin in Southeast Asia.

available to anyone with access to the internet who is in need of disaster data and information and can push disaster-relevant information from different agencies to the application. Selected focal points from specific agencies have the ability to upload and download data, and anyone with access to the internet can easily mash-up data layers from different agencies to create disaster maps and download data.

In addition, to the coordination committees, each district has a Joint Action Development Forum (JADF). Established by The Ministerial Instructions No. 04/07 of 15/07/2007 JADF is a multi-stakeholder platform put in place to facilitate and promote full participation of citizens in the decentralized and participatory governance and improve service provision processes with representatives from the public sector, private sector and civil society. JADF members come from institutions and organisations operating at District level including public, private, local and international NGOs, Faith-based organisations and other development partners. JADF meetings are a key platform facilitating the implementation of effective decentralization by providing a forum for service provision and development planning accountability. At the village level, coordination and linkages to the official committees is provided through the community level organisations, namely, Monthly Community Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange y'Abaturage). In addition, Rwanda has introduced performance contracts through 'Imihigo' which in turn serve for coordination and accountability mechanism at all instances of governance.

Barrier # 4: Inadequate knowledge management and M&E systems limit the use of experiences to improve rural settlement programme on a larger scale

32. Robust M&E, knowledge management systems are critical; they would enable the beneficiaries of the Imidugudu and the technical institutions that support them to learn from experience and lessons generated in Rwanda and abroad to collectively improve climate proofing and adaptation actions. However, these groups are not adequately or systematically monitoring the impacts of the programme on adaptive capacities of the beneficiaries. This is because they have no systems for monitoring and evaluation or knowledge management. The M&E and knowledge management systems of the institutions supporting the rural settlement programme and the associated livelihoods, such as the Twigire Muhinzi and the Local District Councils also have limited capacities for M&E and KM, because these functions are inadequately prioritized in budgeting processes. Outcome 4 will create participatory M&E and KM systems and build the capacity for the same for local communities and the support technical institutions.

Alignment of the proposed project to national and LDCF strategies

33. **Linkage of the proposed project to National Development Strategies and Priorities:** Climate proofing the rural settlement programme and enhancing resilience of the livelihoods of the beneficiaries of the programme will to Government Priorities set out in key national programmes and development strategies including:

    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)[52]. 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.

34. 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 rovision 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 Imidigudu 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

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

development; provide skills, tools, information and share experiences and lessons for mainstreaming climate risks into development.

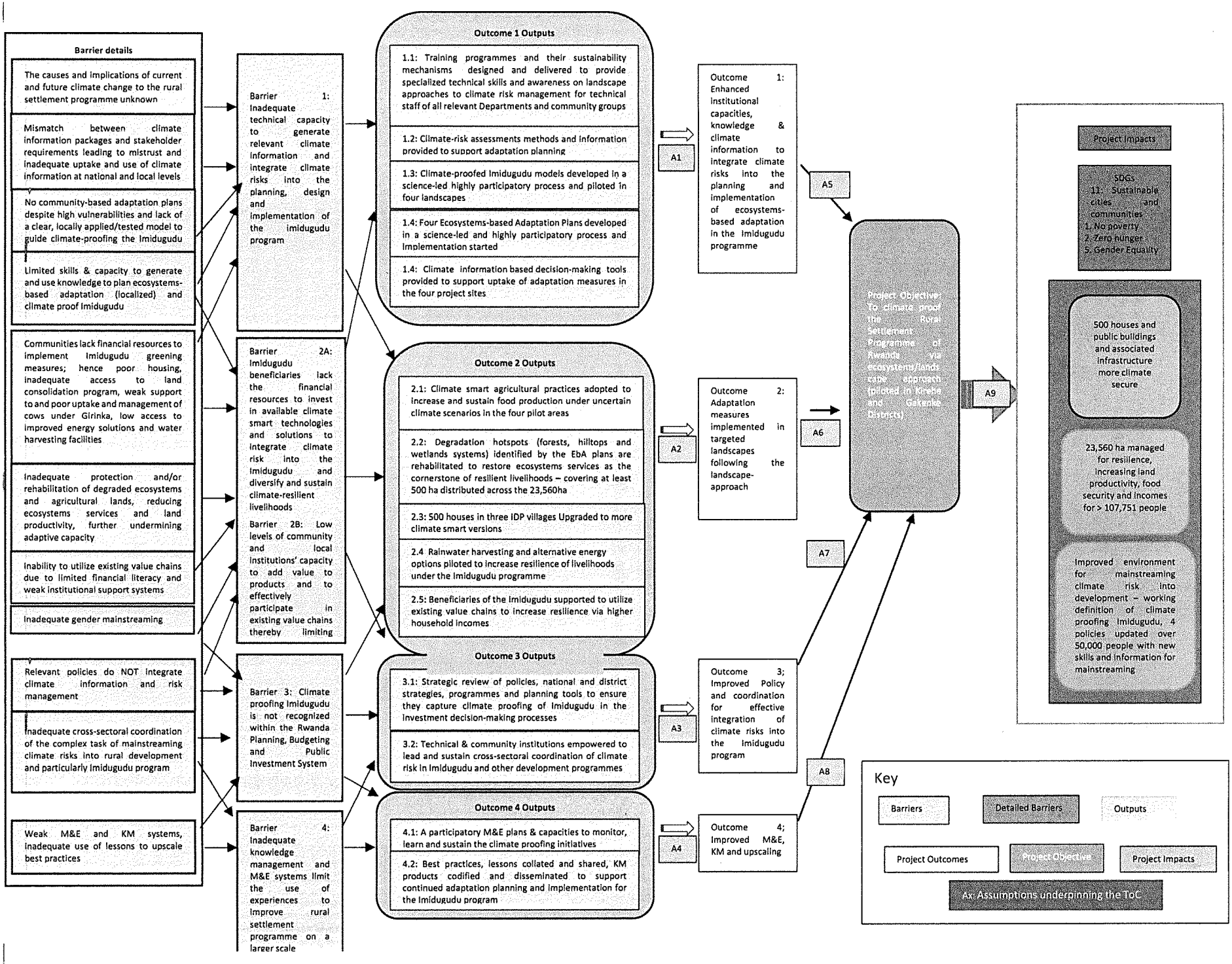
Table 3: Alignment of Project Objectives to Climate Change LDCF

LDCF Objective	LDCF Outcome	Project outputs contributing to objective
OBJECTIVE 1: Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	Outcome 1.1 Technologies and innovative solutions piloted or deployed to reduce climate related risks and/or enhance resilience	1.5: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites 2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha 2.3: Upgrading of housing and infrastructure around imidugudu to more climate smart versions in four villages benefitting about 500 households 2.4: Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme 2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes 4.1: Development of participatory M&E plans and enhancement of communities' capacities to monitor, learn and sustain the climate proofing initiative
OBJECTIVE 2: Mainstream climate change adaptation and resilience for systemic impact	Outcome 2.1 Strengthened cross-sectoral mechanisms to mainstream climate adaptation and resilience	3.1: 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. 3.2: Technical and community/village institutions provided with skills and organizational support to lead and sustain cross-sectoral coordination of climate risk in Imidugudu and other development programmes 4.2: Best practices, lessons collated and shared, KM products codified and disseminated 1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups 1.2: Climate-risk assessments methods and information provided to support adaptation planning as an on-going practice with a focus on the local level in the project areas 1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process and implementation started

35. **LDCF conformity:** The proposed project conforms to the LDCF's eligibility criteria, namely: i) undertaking a country-driven, participatory approach; ii) implementing the NAPA priorities; iii) supporting a learning-by-doing approach; iv) undertaking a multi-disciplinary approach; v) promoting gender equality; and vi) undertaking a complementary approach. **Participatory approach:** during the project formulation, consultations with national stakeholders – including government authorities from all relevant sectors, funding agencies, academia and researchers, NGOs and CBOs – were conducted. These stakeholders were engaged during the inception workshop, the validation workshop and individual consultations.

Theory of change

36. The Theory of Change (ToC) diagram in Figure 3 summarizes the logic model for the following interrelated issues: a) provides the context within which the project interventions are expected to bring about change (barriers and their details), which are detailed in Chapter 1 of the Prodoc (Climate Challenge, ideal situation and barriers to achieving the ideal situation); b) identifies the sequence of required events (outputs) necessary to remove the barriers, which are described as outputs in Chapter IV of the Prodoc (Results and Partnerships); c) demonstrates the changes expected from implementation of the activities under the outputs as short-term changes (project outcomes), intermediate outcomes (project objective) and long-term outcomes (project impacts). These changes are described in detail in the Chapters III and IV of the Prodoc (Project Strategy, Results and Partnerships); d) Identifies underlying assumptions underpinning the logic, which are detailed in Table 4 of Chapter III of the Prodoc (Strategy). The indicators to monitor the changes along the ToC are presented in the Project results Framework (Chapter VI of the Prodoc), the GEF Core Indicators (Annex 10) and the M&E plan (Annex 3). The theory of change was generated in a highly participatory and gender inclusive consultation process, described in the Stakeholder Participation section and detailed in Annex 7.


Barrier details
The causes and implications of current and future climate change to the rural settlement programme unknown
Mismatch between climate information packages and stakeholder requirements leading to mistrust and inadequate uptake and use of climate information at national and local levels
No community-based adaptation plans despite high vulnerabilities and lack of a clear, locally applied/tested model to guide climate-proofing the Imidugudu
Limited skills & capacity to generate and use knowledge to plan ecosystems-based adaptation (localized) and climate proof Imidugudu
Communities lack financial resources to implement Imidugudu greening measures; hence poor housing, inadequate access to land consolidation program, weak support to and poor uptake and management of cows under Girinka, low access to improved energy solutions and water harvesting facilities
Inadequate protection and/or rehabilitation of degraded ecosystems and agricultural lands, reducing ecosystems services and land productivity, further undermining adaptive capacity
Inability to utilize existing value chains due to limited financial literacy and weak institutional support systems
Inadequate gender mainstreaming
Relevant policies do NOT integrate climate information and risk management
Inadequate cross-sectoral coordination of the complex task of mainstreaming climate risks into rural development and particularly Imidugudu program
Weak M&E and KM systems, inadequate use of lessons to upscale best practices
Barrier 1: Inadequate technical capacity to generate relevant climate information and integrate climate risks into the planning, design and implementation of the imidugudu program
Barrier 2A: Imidugudu beneficiaries lack the financial resources to invest in available climate smart technologies and solutions to integrate climate risk into the Imidugudu and diversify and sustain climate-resilient livelihoods
Barrier 2B: Low levels of community and local institutions' capacity to add value to products and to effectively participate in existing value chains thereby limiting
Barrier 3: Climate proofing Imidugudu is not recognized within the Rwanda Planning, Budgeting and Public Investment System
Barrier 4: Inadequate knowledge management and M&E systems limit the use of experiences to improve rural settlement programme on a larger scale
Outcome 1 Outputs
1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups
1.2: Climate-risk assessments methods and information provided to support adaptation planning
1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes
1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process and implementation started
1.4: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites
Outcome 2 Outputs
2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas
2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha
2.3: 500 houses in three IDP villages Upgraded to more climate smart versions
2.4 Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme
2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes
Outcome 3 Outputs
3.1: 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
3.2: Technical & community institutions empowered to lead and sustain cross-sectoral coordination of climate risk in Imidugudu and other development programmes
Outcome 4 Outputs
4.1: A participatory M&E plans & capacities to monitor, learn and sustain the climate proofing initiatives
4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the Imidugudu program
A1
A2
A3
A4
Outcome 1: Enhanced institutional capacities, knowledge & climate information to integrate climate risks into the planning and implementation of ecosystems-based adaptation in the Imidugudu programme
Outcome 2: Adaptation measures implemented in targeted landscapes following the landscape-approach
Outcome 3; Improved Policy and coordination for effective integration of climate risks into the Imidugudu program
Outcome 4; Improved M&E, KM and upscaling
A5
A6
A7
A8
Project Objective: To climate proof the Rural Settlements Programme of Rwanda via ecosystems/lands cape approach (piloted in Kirehe and Gakenke Districts)
A9
Project Impacts
SDGs
11. Sustainable cities and communities
1. No poverty
2. Zero hunger
5. Gender Equality
500 houses and public buildings and associated infrastructure more climate secure
23,560 ha managed for resilience, increasing land productivity, food security and incomes for > 107,751 people
Improved environment for mainstreaming climate risk into development – working definition of climate proofing Imidugudu, 4 policies updated over 50,000 people with new skills and information for mainstreaming
Key
Barriers
Detailed Barriers
Outputs
Project Outcomes
Project Objective
Project Impacts
Ax: Assumptions underpinning the ToC

3. STRATEGY

38. 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 increase 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.

39. The goal of the project is therefore to put Rwanda's Rural Settlement Programme (Imidugudu) on a climate-resilient pathway to secure the programme's development gains in the face of uncertainties emanating from climate change. The project adopts four integrated pathways that collectively tackle exposure and sensitivity to climate risks at the landscape level. It does so by providing technical skills, more accurate and relevant short to long-term climate information, tools, plans, methods to create and sustain climate resilient livelihoods for over 108,000 beneficiaries of the rural settlement programme in 191 villages covering over 25,000 ha of currently degraded landscapes in Kirehe and Gekenke districts. It also provides institutional and policy enablers to upscale the concept through the national and district budgetary systems. Implementation will be guided by a Gender Action Plan (Annex 9), a Stakeholder Engagement Plan (Annex 7) and an environmental and social impacts management plan (ESMP), supported by a grievances mechanism. The ESMP will be designed during the first year of the project, based on the environmental and social impacts management framework (ESMF - Annex 8).

40. Under the first pathway, the project will increase synergistic and effective service delivery along the 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 into the rural settlement programme and adaptation decisions and actions. The project will therefore ensure that local communities and the technical institutions that support them fully understand the risks to the rural settlement programme emanating from climate change, they appreciate the benefits and opportunities presented by climate change and have the skills to adopt climate smart solutions and adaptation practices to secure its benefits in the long-term. It will also ensure that communities have access to up-to-date, downscaled climate information and the appropriate tools and advisory services to support local adaptation planning and to integrate climate risks into the rural settlement programme. Given the reality of COVID-19 and its multi-faceted short and long term impacts, the project is designed to address the health and operational risks by being adaptive in its approach, and to also contribute to recovery and building back better and greener following the pandemic, while maintaining its main focus on building resilience and adapting to the impacts of climate change. As the pandemic is still unravelling at the time of project preparation, a risk management and adaptive approach is the best approach so as to harness the on-going efforts, lessons, new information on the pandemic that is emerging for an effective contribution.

41. This will be achieved by designing and implementing a programme to increase skills and knowledge on integrating climate risks into the rural settlement for the local communities and their supporting technical institutions (Rwanda Housing Authority, Ministries of Agriculture, Environment and Local Government and local institutions such as the Joint Action Development Forum, Twigire Muhinzi, Farmer Field Schools and Cooperatives). The training will include themes such as ecosystems-based adaptation and will be delivered using a training of trainers (TOT) approach, via the Farmer Field Schools. It will be delivered in partnership with other projects advancing ecosystems-based adaptation in the country.

42. The project will also facilitate formulation of community based adaptation plans, based on a thorough and holistic analysis of vulnerability, with a community based monitoring system to enable stakeholders to understand, monitor and control the changes to the important ecosystems and natural systems necessary for long-term resilience. The plans will provide a conceptual framework that will highlight layers and outcomes of resilience, and define a range of activities,

actors and processes that are important parts of a resilience building system. This should also inform plans at a higher level, e.g. at Sector and District level, including the District Development Strategies, that should also be further climate proofed.

43. The project will develop a cost-effective model for integrating both climate information and ecosystems-based adaptation in the rural settlement programme to avoid mal-adaptation and lock-in to vulnerable development. It will highlight the requirements for the widespread application of such a model(s) including the policy framework, institutional coordination, budgetary provisions and the skills and capacities required for its successful uptake.

44. While this Pathway will benefit from the practical experiences delivered through the other Pathways (2 to 4), it lays the foundation for the rest of the project. Pathways 2 to 4 will utilize the skills and tools provided by the Pathway.

45. Under the second Pathway, the project will increase adaptive capacity and reduce exposure to climate risks for the beneficiaries of the rural settlement programme in the four mini-catchments. This will be achieved by accelerating the uptake of measures for adaptive lives and livelihoods (increasing resilience) via the implementation of the community adaptation plans to transition the current unsustainable settlement patterns and exploitative farming practices to sustainable, diversified livelihoods, throughout the 23,560 ha landscapes with about 108,000 beneficiaries. The project will work alongside three villages that Government and the districts have already identified for resettlement into new more climate smart villages (Muramba, Gasharu and Muzo), and whose upgrade is already budgeted for by government (output 2.3). 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. It will also work with the inhabitants of the rest of the 191 villages in the four mini-catchments to rehabilitate at least 500ha of degraded hotspots (forests, hilltops, riverbanks, wetlands etc.) to restore ecosystems services across the 23,560ha; facilitate adoption of climate smart agricultural practices to increase land productivity and food security, pilot water harvesting and efficient household energy options to reduce pressure on the forests; and facilitate more effective utilization of existing value chains to increase household incomes. Collectively, these measures increase social capital, reduce pressure on natural resources and increase resilience of livelihoods and ecosystems. The results of this pilot will inform the design of the entire settlement programme of Rwanda to include climate change adaptation. Experiences from implementing this Pathway will be monitored via the fourth Pathway, and will inform the skills development and policy reform processes under Pathways one and three respectively.

46. The third Pathway will provide the policy enabling environment and improved cross sectoral coordination to create avenues for replication and scale up of the climate proofing concept. The project will ensure that climate proofing the Imidugudu programme is recognized within the country's planning, budgeting and public investment system, and that key stakeholders[53] who influence national and district budgeting processes understand the importance of climate proofing the programme. This will create a sustainable pathway for its national uptake. The project will therefore facilitate the review of the national, regional and district mid-term planning frameworks (policies, strategies and programmes) and provide recommendations to influence uptake of climate proofing concept in the next 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).

47. The project will update REMA's environmental planning tools to include principles of climate proofing. It will also increase the skills of institutions and platforms recently created by the GoR for cross sectoral coordination and disaster risk reduction. At the district level, the institutions include the District Disaster Management Committees (DIDIMACs) and Sector Disaster Management Committees (SEDIMACs). These are supported by the District Disaster Management Officers (DDMOs), the Joint Action Development Forum (JADF) and community level committees (Monthly Community Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange

[53] include Parliament, District Councils, Public Investment Committee (PIC), Local Government Projects Advisory Committee (LGPAC), Clusters, Ministry of Finance and Economic Planning (MINECOFIN), National Development Planning and Research Department (NDPR), National Budget Department (NBD), Ministry of Local Government (MINALOC), Local Administrative Entities Development Agency (LODA), Rwanda Development Board (RDB) Budget agencies, Line ministries and agencies and Districts.

y'Abaturage). The results of this Pathway will be monitored (through the fourth Pathway) and fed back into the skills development and practical implementation of adaptation measures under Pathways one and two, respectively.

48. A fourth pathway will provide monitoring and evaluation systems, codify knowledge and promote its dissemination to further support replication and upscaling. The project will design a participatory M&E plan and integrate it into the M&E systems of the Twigire Muhinzi, District and/or relevant Sectors. It will also develop a comprehensive Communications and Knowledge Management Framework to coordinate communications and knowledge management. Knowledge products will be produced and disseminated targeting different audiences at all levels - local, national, international, including decision-makers, project partners, aligned programmes and community stakeholders. At least two knowledge sharing events will be held at the district level. This Pathway is fundamental to monitoring the results of all the other Pathways, distilling and disseminating lessons; thus it integrates all the project outcomes into one logical strategy whose outcome is greater than the sum of its parts.

49. In view of COVID-19, the project adopts a strategy aimed at risk management in its operations as well as deliberate efforts to contribute to recovery and forward-looking building forward. Under the risk management focus, the project will be implemented to minimize exposure of project beneficiaries, staff and partners to COVID-19 through appropriate operational procedures, awareness and training of project staff, in line with country guidelines on COVID-19. Where needed, project meetings, training sessions and demonstrations will be done using COVID-compliant approaches and strategies developed at the inception of the project. Through its training programmes, the project will equip government extension staff to integrate COVID-19 strategies in their delivery of duties. Under the recovery and building forward focus approach, each project output will be implemented to ensure health-adaptation-environment linkages are built-in, while involving the health and economic recovery sectors in implementation processes. The immediate entry points for supporting recovery and building forward better are in the areas of: (a) Climate information dissemination that also integrates pandemic related information; (b) design and upgrading of Imidugudu to integrate design features and energy sources that do not compound COVID-related complications such as respiratory diseases, but rather healthy living; (c) supporting project-related value chain linkages disrupted by COVID-19 to improve access and incomes while promoting access to markets following COVID disruption, which include handling and packaging to minimize spread of diseases; (d) improving income and job opportunities in the MSME sector through business opportunities in solar products, improved cookstoves and biogas equipment that are part of the project interventions; (e) promoting greener recovery and building forward through renewable energy sources and ecosystem approaches to adaptation.

Key Assumptions

50. The Theory of Change (Figure 1) identifies several key assumptions underlying the transition of outputs into outcomes, outcomes into the overall objective, and the objective into longer-term impacts. These are summarized in Table 4.

Table 4: Assumptions underpinning the Theory of Change

Change/ Transition	Assumptions (indicated in indigo coloured boxes in the ToC Diagram (Figure 3).
Outputs to Outcomes	
Delivery of all outputs	a) <u>Strong and effective project coordination in the absence of UNDP support to implementation:</u> For the project to deliver outputs on time and within stipulated budgets, it is assumed that the strong Project Management Unit (PMU) established for the project's implementation will overcome the capacity deficits inherent in Government institutions, which tend to be understaffed. In the current context technical officers have too many responsibilities and often find it difficult to exclusively focus on one project, even when they possess technical skills adequate to implement the project activities. It is especially assumed that with strong project's coordination unit, procurement processes will be fast tracked to enhance speedy delivery without UNDP direct assistance to the National Implementation Modality (NIM). b) <u>Government will implement its settlement plans without delays:</u> The project supports the beneficiaries of the planned IDPs (to be built by government) to implement climate resilient measures. The government has already acquired land and identified families to benefit from the

	programme. It has plans and budgets to implement the programme (confirmed by the letter of Co-finance). It is assumed that the government will implement these plans as stipulated without delays.
A2: Component 2 Outputs to Outcome 2	a) Current high levels of demand for the technical assistance (tools, practices, systems) for climate proofing local development persists or increases. b) Status quo and systemic gender practices do not override implementation of operationalized gender strategy and action plan, hence derail equitable access to project benefits by men, women and the youth. c) Project resources are adequately supported by co-finance, and together they will be adequate to shift the barriers to the use of climate information and ecosystems-based adaptation measures to safeguard local development from climate risks. d) No unusual weather events (drought, flooding, cyclones) derails the rehabilitation of forests, rangelands and riverine areas, or undermines project climate proofing initiatives before they become robust enough to offer protection against the same climate risks.
A3: Component 3 Outputs to Outcome 3	a) Inter-sectorial, multi-stakeholder institutional framework for mainstreaming climate information w have appropriate staff and funding from the Government to ensure its effective functioning post t project, thus institutional failure will not threaten the sustainability of the project results. b) The current levels of support from authorities and other stakeholders for mainstreaming climate ris into the policy framework for protecting development gains is maintained or increased. c) Policy reviews and reforms are not subjected to undue bureaucratic delays common in policy reforms the country.
Outcomes to Objective and Impacts	
A5, A6, A7 and A8: Outcomes to Objective	a) Project's resources are adequately supported by co-finance, and together they will be adequate to sh the barriers to collaboration and inter-sectoral coordination to allow uptake of practices and policies mainstream climate risks into Imidugudu programmes; b) The current levels of support from authorities and other stakeholders for mainstreaming climate risks are maintained or increased. c) No unusual climate events (droughts or floods) occur in the project areas (or not in the initial years when the measures are being implemented by the project, which would mitigate the negative impacts of unusual climate events), have taken hold); d) No political unrest/instability in the country and in the project implementation areas.
A9 (objective to impacts)	a) It is assumed that the Imidugudu programme will remain a priority of Government, and will continue receiving budgetary support

51. The project design has been informed by lessons from similar projects as summarized below:

52. Lesson 1: While community participation in the design and implementation of projects is critical for local ownership, ensuring interventions are appropriate to local conditions and sustaining outcomes beyond project, many local organizations lack the necessary capacities to facilitate effective community participation. Capacity assessment for a sample of the cooperatives was undertaken during the project design (Annex 12); the findings will be used to inform a capacity building programme during the project implementation process. The project will therefore strengthen the capacity of local organizations such as savings and credit cooperatives (SACCOs), Twigire Muhinzi and Farmer Field Schools, which will support not only project implementation but upscaling and sustainability.

53. Lesson 2: While the need for urgent action to tackle climate change is generally accepted at the national level, there seemed less awareness of climate change issues among practitioners at the sector, cell and village levels, which are necessary for sustaining local level climate adaptation planning and associated interventions. The project will design and implement an awareness raising strategy to increase awareness for the importance of using climate information in the planning and implementation of the Imidugudu (aimed at all levels of decision-makers), the importance of designing participatory plans for systematically tackling climate risks at local levels and the importance of ecosystems-based

adaptation for sustaining the gains of both climate proofing and livelihood developments at the Imidugudu levels. The awareness raising messages will be disseminated via relevant stakeholder appropriate channels such as community radios, social media and REMA's national platforms (e.g. REMA's 15-minute weekly slots on radio and TV networks).

54. Lesson 3: While integrating project activities into the District development processes (plans, IMIHIGO contracts, budgets, and procurement plans) creates the necessary conditions to implement and sustain project initiatives, districts are understaffed. Technical staff are often involved in multiple projects and activities and cannot dedicate much time for implementation of specific projects. Hence delays in project implementation, compounded by delays in procurement, tend to derail project delivery within set time and budgets. This project will be led by a strong Project Management Unit (PMU) at REMA, consisting of a Project Coordinator on a full-time basis, Technical Officers designated as Project Focal Points at the Rwanda Housing Authority and project field officers at each District (Kirehe and Gakenke). The ToRs for project outputs will be incorporated in their performance contracts. The PMU will be supported by an M&E Specialist, a Gender Specialist, a Safeguards Specialist, a Communications and Knowledge Management specialist and a Procurement Officer. To the greatest extent possible, project implementation will be supported by civil society organizations, recruited rapidly and issued with contracts or memoranda of understanding (MoU), where appropriate.

55. Lesson 4: Despite the monitoring and evaluation provisions in the Project documents, actual use of M&E in adaptive management is generally weak due to limited capacity of the national and local M&E systems, capacity issues and a low level of importance assigned to monitoring and evaluation at the village level. The project proposes a dedicated member of staff responsible for monitoring and evaluation activities, ensuring adequate resources are available to develop a sufficiently robust monitoring and evaluation system to ensure timely and responsive management. The PMU will engage the Project Steering Committee to support the function of M&E and the utilization of M&E information for adaptive management. The Single Projects Implementation Unit (SPIU of REMA), which is the primary coordinating unit for all REMA projects, will link the project with other complimentary projects via the Thematic Working Groups and Joint Sector Reviews. This will improve coordination and sharing experiences on M&E, especially in climate proofing.

Alignment with the LDCF Strategies

56. The proposed project contributes to all the three objectives of the Updated Results Architecture for Adaptation to Climate Change under the Least Developed Countries Fund (2018-2022), as outlined in Table 5.

Table 5: Alignment of Project Objectives to Climate Change LDCF

LDCF Objective	LDCF Outcome	Project outputs contributing to objective
OBJECTIVE 1: Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	Outcome 1.1 Technologies and innovative solutions piloted or deployed to reduce climate related risks and/or enhance resilience	1.1: Information generated and used to develop cost-effective model(s) for climate-proofing Imidugudu, with clear working definition of the term and understanding of capacities, institutional arrangements and budgets necessary for its successful uptake. 2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha 2.3: Upgrading of housing and infrastructure around Imidugudu to more climate smart versions in four villages benefitting about 500 households 2.4: Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme 2.5 Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes
OBJECTIVE 2: Mainstream climate change adaptation and	Outcome 2.1 Strengthened cross-sectoral mechanisms to mainstream climate	3.1: 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

resilience for systemic impact	adaptation and resilience	3.2: Technical and community/village institutions provided with skills and organizational support to lead and sustain cross-sectoral coordination of climate risk in Imidugudu and other development programmes 4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the Imidugudu program
OBJECTIVE 3: Foster enabling conditions for effective and integrated climate change adaptation	Outcome 3.1 Climate-resilient planning enabled by stronger climate information decision support services, and other relevant analysis	1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes; 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process and implementation started; 1.5: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites
	Outcome 3.2 Institutional and human capacities strengthened to identify and implement adaptation measures	1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups 4.1: A participatory M&E plans and capacities to monitor, learn and sustain the climate proofing initiatives

4. RESULTS AND PARTNERSHIPS

57. The objective of the project is to develop/upgrade tools and institutional capacities to climate proof the Rural Settlement Programme, piloted in four mini-catchments in Kirehe and Gakenke Districts – Bukinanyana and Gasharu in Kirehe District and Muzo/Kagano and Muramba in Gakenke District. The project is built on the premise that current deficiencies in adaptive capacity are matched by a limited ability to manage and respond to existing climate variability, even before future climate change is considered. Improving the capacity of individuals, communities/villages, companies and government institutions to deal with current climate variability will build the foundation for tackling future climate change. The effective use of medium to long-term climate information in the planning and implementation of the Imidugudu programme will be particularly crucial and will ensure that development avoids maladaptation and lock-in. The project has four outcomes: 1: Institutional and community capacities for planning for landscape approach enhanced to climate-proof Imidugudu: 2: Adaptation measures implemented in targeted landscapes following the landscape-approach: 3: Policy frameworks and coordination strengthened to support climate-proofing of Imidugudu; 4: Knowledge management and M&E strengthened to support iterative adaptation planning. Gender will be mainstreamed throughout project planning, implementation, monitoring and evaluation.

Results

Outcome 1: Institutional and community capacities for planning for landscape approach enhanced to climate-proof Imidugudu.

58. This outcome will support climate informed planning as the basis for integrating climate risks into the rural settlement programmes and the associated livelihoods. It will provide communities in the four project areas, their supporting technical institutions and the private sector (builders, suppliers of building materials, contractors within the Imidugudu programme) with skills, awareness and decision-making tools to advance understanding of how vulnerability of livelihoods, local economies and the Imidugudu program are intertwined with the state of the natural systems. The stakeholders will use the information and knowledge to design alternative "climate proofed" Imidugudu plans; develop ecosystems-based adaptation plans as the basis for nature based solutions to flood and erosion control, including river bank and land stabilization in catchment areas; and design climate advisory services as decision-support tool to manage negative impacts of risks to livelihoods. The outcome will therefore lay the basis for the implementation of the other three outcomes (2 to 4), which will utilize the skills and tools throughout the project, thus contributing to, and integrating with all other outcomes. It will also lay the foundation for scaling up of the climate-proofing models

throughout the country (by training staff and the relevant private sector players at the national level). Outcome 1 is delivered through five outputs, described below.

59. Output 1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups: Enhancing capacities for planning, coordination and implementation in a sustained process at the local level is critical to guarantee effective climate adaptation. Under this output, the project will provide gender and COVID-19 responsive training to government technical staff, communities and the relevant private sector (serving the building sector) in climate risk management within the EbA and climate proofing Imidugudu contexts for implementation, further scaling up and sustainability. To ensure the sustainability of the training and skills development, the programme will be embedded into the Twigire Muhinzi extension services described under Box 3. The following themes will be covered, with each module integrating relevant gender aspects and any new measures necessitated by the COVID-19 pandemic and the response measures:

    i. Downscaling climate information for local level planning – National and district level training to support outputs 1.3, 1.4 and 2.3

    ii. Developing ecosystems-based adaptation plans – Community level training to support output 1.4, 2.1 and 2.2.

    iii. Climate-risk assessments methods – district and community level training to support outputs 1.3, 1.4 and 1.5.

    iv. Climate proofing Imidugudu models – definition of concept and requirements for its roll out – national level training to support output 1.1, 2.3 and outcomes 3 and 4.

    v. Participatory Integrated Climate Smart Agriculture (PICSA) as a tool for climate information and decision-making tools to support planning of Imidugudu and community-based adaptation measures applied in four communities – local level training to support output 1.5 and implementation of outcomes 2 and 4.

    vi. Climate smart technologies for rehabilitating degraded/ unproductive land via agro-ecological interventions to reverse the effects of unsustainable agricultural practices – local level training to support output 2.1.

    vii. Climate smart technologies to protect and rehabilitate ecologically sensitive segments of the landscape such as hills, river banks and lake shores, wetlands, watersheds, etc. – local level training to support output 2.2.

    viii. Practical measures to green the rural settlements in line with an updated Greening and Climate Proofing Toolkit – district and local level training to support outputs 2.3.

    ix. Diversifying livestock management systems – district and local level training to support output 2.1.

    x. Financial literacy - existing value chains and their requirements, existing financial institutions and their loan/subsidy packages and tips on how to practically join/engage with them – local level training to support implementation of output 2.5.

    xi. Radical and progressive terracing techniques, other soil and water conservation techniques, agroforestry, plant husbandry and watershed services – district and local level training to support outputs 2.1 and 2.2.

    xii. Gender mainstreaming in development programmes – importance, methods and benefits – local level training to support the whole project.

    xiii. Policies and local level implications on livelihood systems, why it is important that everyone pays attention to, and contributes to policy reforms e.g. awareness raising on the on-going land reforms - the new restructuring of land use planning and implementation from national to local levels, revised land policy and land law (2019), which have impacts on the implementation of the Imidugudu programme. Local level training to support the all the outputs.

60. Training on ecosystems based adaptation will be conducted in very close coordination with two on-going projects - Reducing Vulnerability to Climate Change in North West Rwanda through Community-based Adaptation and Building the capacity of Rwanda's government to advance the National Adaptation Planning process. It will utilize training materials developed under these two projects as well as under the LDCF 2 - Building resilience of communities living in degraded forests, savannahs and wetlands of Rwanda through an ecosystem management approach. Training on the reforms in land use will be conducted in close collaboration with the Rwanda Land Management and Use Authority (RLMUA).

61. Training will take the form of training the trainer (ToT) and will be channelled through the Twigire Muhinzi system. For the technical institutions, training will target key staff in the local authority at District, Sector and Cell levels including Agronomist Officers, Environment Officers and interns, Cooperative Officers, Infrastructure Officers, Land Officers, Forestry Officers and RAB CIP Officers, crop intensification programme contractors (contracted service providers who organise seed and fertiliser distribution and provide extension advice). At the sector level, the training will target the Agronomist Officer who cover many of the above functions dealing with aspects of rural infrastructure, lands adjudication/title registration, forestry and environmental management (responding to the respective four designated officers at District level) in addition to the 'primary' focus on agriculture, livestock and horticulture. Livestock Veterinary Assistants and Forestry Officers deployed at Sector level will also be included in this training. At the Cell level, the training will target the Social Development Officers (better known as the Integrated Development Programme Officers or 'IDPs') as this is the main salaried post concerned with agricultural and development issues. Activities will include: a) Identify all the relevant groups that need to be trained (including architects, engineers, planners, community groups, etc.) and refine the capacity assessment undertaken during the project formulation (Annex 12) with emphasis on training needs assessment and identify further training needs; (b) Review existing training manuals and determine suitability for training under this project and/or modify as necessary, develop training modules with a clear and costed work plan for implementation; (c) Conduct training in a gender responsive and participatory process; (d) Reflect on the development and delivery of the training programmes and document lessons learnt (in conjunction with output 4.2).

62. Output 1.2: Climate-risk assessments methods provided to support adaptation planning as an on-going practice with a focus on the local level in the project areas: The main climate related disasters affecting the project area are floods, landslides and mudslides, droughts and famine. The country has recently established a clear, well equipped and coordinated institutional framework for disaster management and response (Box 4). The programme has established climate risk assessment methods and set up systems for information collection and dissemination linking national to district and sector levels. Under this output, the project will raise the awareness of the Imidugudu beneficiaries and local populations at the project sites to the existence of tools and systems assessing and addressing floods, landslides and mudslides, droughts and famine. It will train, in a gender and COVID-19 responsive manner, relevant groups on the use of the existing networks and information so they can utilize the same more effectively. Activities under this output include: a) Disseminate information to local communities on the climate risk assessment tools and methods developed by the Joint Program on Support to Ministry of Disaster Management and Refugee; (b) Train relevant groups on the access and use of the existing information and networks (in conjunction with output 1.1); c) Reflect on the process and document lessons learnt (in conjunction with output 4.2).

63. Output 1.3: Climate-proofed Imidugudu models developed in a science-led, gender and COVID responsive highly participatory process and piloted in four landscapes: This model will be developed with participation of the entire country (national level); however, its implementation will be 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 (RHA) with participation from all relevant sectors, including the private sector (builders, contractors, suppliers of building materials within the Imudugudu programme). With the support of a Project Technical Committee, RHA will 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. To ensure that the development of the climate proofing model is informed by the best available technical expertise and science, a Project Technical Committee will be formed to lead the consultation,

comprising of nominated/delegated persons from relevant institutions (Ministries and Agencies), civil society, academia and community organizations, who are mandated to represent the interests of their respective stakeholder groupings (with attention given to adequate representation by women, young people and other vulnerable groups).

64. To ensure systematized consultation and input by all relevant groups, this committee will map stakeholders and develop a strategy for consultation and capacity support for stakeholders who might require it to participate fully. It will adopt innovative measures to engage the youth, for example by organizing competitions and debates between various institutions (schools, universities). Input from communities will be secured during the process of formulating adaptation plans (output 1.4). Inputs from the scientific community will be secured via technical conferences while inputs from policy makers will be secured through several iterative workshops and policy dialogues. Activities under the output will include: 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 and develop the 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); h) Reflect on the process of model development and piloting and document lessons learnt (in conjunction with output 4.2).

65. Output 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led, gender and COVID-19 responsive and highly participatory process: 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 climate resilience of the communities in the rural areas, as they buffer away climate hazards and 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. This will underpin good adaptation policy, planning and delivery by the communities that are directly dependent on natural resources for their livelihoods. Informed by various technical assessments, analyses, data and maps, and expert knowledge to be provided by the Project Technical Committee, the EbA planning process will bring together and enable an open dialogue to take place between the population exposed to climate change, decision makers, development planners and climate change experts to: define the geographic scope of the plan; describe the environmental, social, economic and institution characteristics of the mini watersheds; articulate a vision and strategic management objectives; identify and prioritize strategies and methods for addressing the issues; identify, prioritize and depict spatially suitable areas for cost-effective land rehabilitation, soil and water conservation, protection of wetlands, sustainable agriculture and other land uses; present a detailed implementation plan, including: (i) institutional arrangements for governance, collaboration and monitoring; (ii) a detailed monitoring and evaluation framework; (iii) a financing strategy and sustainability plan.

66. The project will update (ground-truthing) the vulnerability assessment[54] undertaken during the project formulation and use it as one input into the ecosystems-based adaptation (EbA) planning. EbA will be implemented using a community-based approach to adaptation (CbA) and will incorporate the concepts of Forest Landscape Restoration principles, to identify forested areas for protection and degraded forests for restoration. Adaptation planning will utilize suitable tools such as CRISTAL (https://www.iisd.org/cristaltool/), COBRA or any of the many other tools summarized here https://www.iied.org/tools-for-ecosystem-based-adaptation-new-navigator and here https://www.iied.org/sites/default/files/eba_tools_navigator_tutorial_sept_2019_en.pdf; file:///D:/2020%20Bids%20and%20carry%20over/Rwanda%20LDCF%203/Literature/Community%20Based%20Adaptation%20Practioner's_Guide.pdf.

[54] The data is available in a database – to avoid unnecessary data collection

67. To ensure effective uptake, the plans will be developed in a gender responsive and participatory approach, to engage a wide range of stakeholders in discussions about climate change in general and climate proofing the Imidugudu in particular. This is in line with the Land Use Planning Guidelines (2017)[55]. Particular consideration will be given to ensure meaningful participation of women, youth and other vulnerable or potentially marginalized groups. Activities under this output include: a) Mobilize communities and conduct training to ensure their effective participation in the design of the adaptation plans (in conjunction with output 1.4); (b) Review available EbA planning tools and select the most appropriate for application under the Rwanda pilot areas' conditions; (c) Conduct planning meetings - facilitate a discussion on the importance of the landscape for each of the stakeholders and sectors and how the actions of one stakeholder group or sector can influence the vulnerability and adaptation prospects of others, either positively or negatively; (d) Review and stock taking of socio-ecological information and information on the institutional and regulatory context; (e) Analyse climate change scenarios and assess current and future vulnerabilities (includes updating/ground trothing the vulnerability assessment report); (f) Identify, select and appraise adaptation options – including trade-offs; (g) Develop a clear, long-term implementation strategy, a financing and sustainability strategy; (h) Develop an M&E system to support adaptive management, learning and upscaling; (i) Develop and disseminate guidelines to integrate the EbA plan into day to day activities of the local communities and the existing development programmes, policies, frameworks and planning mechanisms at the local level; (j) Design a sustainability strategy to ensure continued implementation of the EbA plans and start its operationalization before the end of the proposed project; k) Reflect on the EbA planning process and document lessons learnt (in conjunction with output 4.2).

68. Output 1.5: Meteo-Rwanda capacitated to provide high quality climate information to support uptake of gender and COVID-19 responsive adaptation measures in the four project sites and nationally: This output will increase the capacity of Meteo Rwanda to generate required climate information to inform decision-making at central and project levels. Traditional methods of producing weather/climate forecasts using synoptic chart analysis are approaching a limit above which they cannot be improved further for greater benefit to users, who demand more accurate forecasts of the local weather/climate events. Enhancing climate related research, modelling and prediction of weather and climate through Numerical Weather Prediction (NWP) and climate modelling is the only way to ensure decisions are informed by non-proxy data in mitigating climate risks. Numerical Weather Prediction products will inform not only policy makers at central level but most importantly at community level during their day-to-day activities, while climate projection information will guide policy and decision makers and interveners in their long-term plans, hence minimising costs and risk in the long-term.

69. To support the generation of numerical weather prediction and climate modelling products, the project will set up a centre at Meteo Rwanda, equipped with high capacity computers (2 mini cluster computers) and 4 desktops with super capacity to run mathematical and climate models and other relevant accessories. This centre will provide climate risk analysis and conduct climate sensitivity analyses. This information will be used in the development of the cost effective climate proofing models, defining climate proof settlements infrastructure, climate smart agriculture and resilience and in the assessment of long-term climate risk. 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. This communication will be channelled through Communications companies (Television stations, radio stations, cell phone companies (Artec, Liquid Telecom and MTN Rwandacell), and newspapers.

70. Furthermore, Meteo Rwanda will partner with the Rwanda Agricultural Board and Twigire Muhinzi to further disseminate advisory services at the local level via the Participatory Integrated Climate Services for Agriculture (PICSA)[56]. 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. Lessons will be drawn from the four districts (Burera, Ngororero, Nyanza and Kayonza) who have benefitted from the Rwanda Climate Services for Agriculture (RCSA) project. Activities

[55] http://www.rlma.rw/uploads/media/LUP_Guidelines_Final_Published.pdf

[56] 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.

under the output include: i) set up and equip the numerical weather prediction and climate modelling centre; ii) conduct climate risk and sensitivity analyses and provide input into the development of the cost effective climate proofing model/defining and PICSA advisory services; iii) develop and disseminate awareness raising strategy on increased quantity, quality, relevance and access of climate data for decision-making; iv) partner with RAB and Twigire Muhinzi of Kirehe and Gakenke and roll out PICSA advisory services; v) Reflect on the process and document lessons learnt (in conjunction with output 4.2).

Outcome 2: Gender and COVID -19 responsive adaptation measures implemented in targeted landscapes following the landscape-approach

71. This outcome will pilot practical gender and COVID-19 responsive climate-proofing of Imidugudus in the four pilot areas benefitting both the old and new IDP settlements. It will work alongside three villages that Government and the districts have already identified for resettlement into new more climate smart villages (Muramba, Gasharu and Muzo), and whose upgrade is already budgeted for by government (output 2.3). LDCF funding will support climate-proofing initiatives through ecosystem based and diversified livelihood activities for the beneficiary communities, building on the Government co-financing of USD 10 million. It will also work with Bukinanyana village, which is already resettled in a more climate smart village as well as the inhabitants of the rest of the 191 villages in the four mini-catchments to support the implementation of the EbA plans. This will including the rehabilitation of the degraded hotspots to restore ecosystems services, upgrading of housing and infrastructure around Imidugudu to more climate smart versions, adoption of climate smart agricultural practices to increase land productivity and food security, promote the uptake of water harvesting and efficient household energy options to reduce pressure on the forests and more effective utilization of existing value chains to increase household incomes and resilience. Collectively, these measures will enable the beneficiaries of the rural settlement programme to create, improve and sustain livelihood options that collectively reduce their exposure and sensitivity to climate risks at the landscape level while simultaneously increasing their adaptive capacities. The results of this pilot will inform the design of the entire settlement programme of Rwanda to include climate change adaptation.

72. Outcome 2 will utilize the results of outcome 1 (skills and tools); it will provide feedback to the planning process of outcome 1 and the policy reform under outcome 3, informed by on-the ground practical implementation. It will contribute to the formulation of the participatory monitoring and evaluation plan and generate the knowledge to be collated and shared via outcome 4. It therefore forms the core of the project, and will be delivered through six outputs, described below.

73. Output 2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate and COVID-19 scenarios in the four pilot areas: Land productivity has declined significantly on isolated farms (outside the land consolidation system under the Crop Intensification Programme – CIP), with over 75% of the households reporting that they do not get surplus produce for sale, in an area where agriculture is the main source of livelihoods. The project will rehabilitate degraded and unproductive lands to increase land productivity and increase food production for consumption and sales, which increases adaptive capacity. The project will therefore support: a) households to consolidate farms and join the CIP; b) construction of radical and progressive terraces in degradation hotspots; c) diversify livestock farming systems; and, d) popularize crop and livestock insurance as measures to support climate responsive practices.

74. Under land consolidation, the project will assist households to consolidate their lands in order to start farming under the Crop Intensification Programme and take on other climate smart agricultural practices. It will therefore raise the awareness of the communities about the gender and COVID-19 responsive climate smart options available for adoption (for cropping, agroforestry and livestock systems) they can adopt. Individual households will be encouraged and supported to adopt the practices appropriate to their circumstances. Support for this output will be channelled through the Twigire Muhinzi structures whose functions are described in Box 5.

75. The project will also assist willing households to diversify livestock using the Girinka model. The Girinka provides one cow per household in a merry-go-round system. The project will work through producer cooperatives to facilitate households to engage in these alternative livestock production systems. The project will also train the households on practices to integrate pasture production and food production systems to increase availability of livestock feed.

76. The project will support households to adopt crop and livestock insurance schemes, offered by the private sector. The GoR has recently (2019) initiated a subsidized insurance scheme for selected crops (maize and rice) and cows under the Girinka, where it provides 60% of the premium. GoR has entered into collaboration agreements with three insurance companies (Radiant, SONARWA and Prime Insurance) to roll out these insurance schemes country-wide. Radiant Insurance Company has been designated (by GoR) to operate the programme in Kirehe and Gakenke. Many of the households in the project area are not yet fully conversant with how these insurance schemes will function. The project will mobilize farmers in the project area to join the insurance scheme, exploring means of raising the premium, e.g. through the SACCOs and VSLAs. Activities under this output will include: a) Confirm degraded agricultural lands and degradation hotspots (in conjunction with the EbA planning); (b) construct radical and progressive terraces on about 300ha, treated with manure and planted with crops such as beans, maize, bananas; (c) Rehabilitate the irrigation system in Bukinanyana by constructing at least one structure to capture and store rain water; (d) Facilitate land consolidation process for the resettled households (identify suitable crops, establish cropping cycles, in line with the adaptation plans and the established extension support cycle, mobilize farmers to participate (making their land available), facilitate the delivery of the extension services availed under the land consolidation programme; (e) Review the climate smart agriculture practices (many available online) and determine suitability for use by the project (taking into considerations gender and COVID-19 requirements); (f) Disseminate the information and make households aware of the various available options and support farmers to implement measures appropriate for them, through the regular extension service (Twigire Muhinzi); g) Update list of alternative livestock and the requirements for successful adoption and disseminate the information; h) Organize interested farmers into clubs and/or cooperatives which will generate initial funds (either through savings or link to micro loans), and support formulation of livestock merry-go-rounds (in the same manner as the one cow programme under Girinka); i) Collaborate with Radiant Insurance Company to disseminate information on crop and livestock insurance schemes and recruit households to register; j) Reflect on the process of facilitating adoption of climate smart agricultural practices to increase and sustain food production under uncertain climate scenarios in the four pilot areas and document lessons learnt (in conjunction with output 4.2).

Box 5: Structure and functioning of Twigire Muhinzi Extension System

Under the Twigire Muhinzi extension services, each village, in coordination with local leaders, selects one farmer promoter[57] (volunteer model farmer) to serve as an extension agent to fellow farmers for the village. The Farmer Promoter: (i) Mobilizes fellow farmers in the village to form TWIGIRE groups of 15-20 people according to their farms proximity and agreement to cultivate one crop. (ii) Receives training in basic agricultural technologies and extension skills so that they in turn disseminate agricultural information and knowledge to farmers in the village through TWIGIRE groups. (iii) establishes demonstration plots in which farmers in TWIGIRE groups meet 3 times during the season to learn about good agricultural practices and solidarity. (iv) Mobilizes farmers to consolidate their land, to select crops and to adopt practices recommended under the crop intensification programme. Practices include planting at the time recommended by the Ministry of Agriculture and Animal Resources (information passed through the Twigire Facilitators), use of recommended seeds and inputs such as agrochemicals, organic and mineral fertilizers. (v) Farmer Promoters from each sector group themselves into cooperatives for sustainability. Fellow farmers can also join these cooperatives.

At the Cell level, farmers are organized in Farmer Field School (FFS) groups of 25-30, with the TWIGIRE groups' members being priority. Each FFS group is supported by a Facilitator (with strong technical and facilitation skills), who leads them through a hands-on learning process. The Facilitators from several Farmer Field Schools group themselves into cooperatives and are hired by districts and Rwanda Agricultural Board to serve as professional extension services providers building the capacity of farmers and of farmer promoters based on Farmer Field School methodology.

77. Output 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha: The baseline assessment identified degradation hotspots across the landscape of the four pilot areas (Table 2 and map 2 of Annex 1). These hotspots will be confirmed by the ecosystems-based adaptation plans to be formulated under outcome 1. Informed by the Environmental and Social Impacts Management Plan (ESMP), Gender and Stakeholder Engagement Plans, the project will treat these hotspots to boost the sustained provision of ecosystems

[57] Criteria to select a farmer promoter include being a full resident in the particular village, having a good reputation, having good farming and communication skills and demonstration of interest in sharing information

services under the EbA context. This includes restoring forests to provide nature-based flood and erosion control, land stabilization in catchment areas and rehabilitating river banks to protect the water catchment services, reduce incidents of landslides and protect rivers and wetlands from siltation. 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 the Forest Landscape Restoration (FLR guidelines) guidelines.

78. 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[58], 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[59]. 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. The project will specifically promote research on indigenous trees and grass species which balance quick growth rates, economic potential and protection of the environment. This is necessitated by the fact that high levels of poverty, high population densities and associated land shortage present a significant challenge to establishing/expanding indigenous forests, since they are seen to compete with food production. Agroforestry is currently the more feasible option for producing wood products and ecosystem goods and services. The major agroforestry practices to be promoted by the project will include boundary planting, contour hedgerows, home gardens, silvopastoralism and woodlots. Activities under this output include: a) Confirm the degradation hotspots and determine the community groups to actively participate in each of the rehabilitation works; (b) Undertake assessment of potential for invasiveness of all species considered for reforestation and promote research on indigenous species for rehabilitation, identify candidates and integrate them into the rehabilitation packages; (c) Mobilize/sensitize local communities in the hotspots, and refine training on specific rehabilitation measures/works (tree husbandry, terrace making and reestablishment of cropping systems on the new terraces, riverbank protection, etc.); (d) 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; (e) implement land use zones in line with the EbA plans – e.g. survey and mark river channel boundaries to ensure clarity on all parties where utilization (annual crops, livestock rearing, etc.) should not cross; (f) Rehabilitate riverbanks by planting suitable grasses/trees, encouraging farmers who lose use of their lands for about a year (while establishing terraces) to take up such income generating activities; Maintain and protect seedlings (protect from grazing by livestock, monitor to replant if seedlings die off, weeding) for 2 years after planting; (g) Plant selected seedlings to reforest 200 ha; maintain and protect seedlings (protect from grazing by livestock, monitor to replant if seedlings die off, weeding) for 2 years after planting; h) reflect on the process of rehabilitating degradation hotspots (forests, hilltops and wetlands systems) to restore ecosystems services as the cornerstone of resilient livelihoods and document lessons learnt (in conjunction with output 4.2).

79. Output 2.3: Upgrading of housing and communal facilities around the Imidugudu to more climate smart versions in four villages benefitting about 500 households: Output 2.3 will test the implementation of the Imidugudu climate proofing model developed under output 1.3. The project will support the climate proofing of the IDPs, in a gender and COVID-19 responsive processes. The support will be spearheaded by the Rwanda Housing Authority (RHA) under the District Development Strategies (DDS) of both Kirehe and Gakenke, informed by the findings and recommendations of the ESMP. It will support the RHA and the Districts to refine the selection of the sites for the new villages, ensuring that medium to long-term climate information and the status of the ecosystems inform the choice. It will work on the designs of the new homes, ensuring that climate risks are factored into the building plans, thereby testing, or contributing 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). The project will also upgrade communal facilities by

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

[59] 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.

implementing the greening measures outlined in the IDP Greening Toolkit[60] (which will be updated by the project under output 3.1). Improving communal facilities will be contracted to the relevant private sector and will include upgrading 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 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. Activities for this output include: a) Provide technical input into the selection of sites, design and building of the new IDPs and climate resilient access roads[61], ensuring that each step incorporate measures to climate proof the process and the settlement programme; (b) Organize beneficiaries to establish nurseries, grow and plant various materials to green the public places in the new villages; (c) upgrade communal facilities to incorporate climate risks (roads, installing waste management systems, electricity installation (including solar power), d) reflect on the process of collaborating with government co-finance to upgrade houses to more climate resilient versions and document lessons learnt (in conjunction with output 4.2). The design of the infrastructure and housing will deliberately integrate resilience and fit for healthy living in response to COVID-19, minimizing exposure to and community spread of diseases such as COVID-19. Consultations with health professionals will be done in the design of the housing and infrastructure.

80. Output 2.4: Rainwater harvesting and alternative energy options piloted in a gender and COVID-19 responsive process to increase resilience of livelihoods under the Imidugudu programme: Under this output, the project will support the beneficiaries of the resettlement programme (described under output 2.3) 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. Implementation of this output will be closely guided by the ESMP and the Gender Action Plan. The project will support the acquisition of water storage facilities, based on best practices available. These could be tanks (underground and/or above ground as appropriate) for rain harvesting (minimum 3,000 litres). 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. It will also support the uptake of alternative household energy technologies, to increase clean energy options and reduce pressure on the forests and the ecosystems. It will assist households to construct at least thirteen communal cowsheds (each shared by about 40 households), acquire a cow per household (under the national Girinka Programme) and construct and operationalize biogas units for the homes. Households will be engaged in a participatory process to identify cattle breeds that meet a multi-criteria system (including sustainability).

81. Many households in the IDP villages have experienced challenges with the biogas; indeed observations during the project planning process (confirmed verbally by District and National Government Officers) show that many biogas units have failed due to a combination of facts: a) the fixed dome bio-digester commonly used tends to be expensive[62], is 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); b) The beneficiaries of the IDP villages are the very poor, many struggle with resources to maintain these systems (inadequate land, pasture and labour to feed the cows that produce the feed for the biogas) and an absence of a culture of maintenance, exacerbated by few available technicians to offer such services. The project will therefore utilize a mixture of household energy solutions which will include the following: a) explore cheaper, more efficient and less complex biogas systems such as the flexi-polyethylene tube digesters[63] 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

[60] https://rema.gov.rw/fileadmin/templates/Documents/rema_doc/pei/FINAL%20Green%20village%20toolkit%20Printed.pdf

[61] Climate proofing of infrastructure such as roads will include, but not limited to 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; 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). Specific measures will differ by site.

[62] Costing around Rwf 800,000 and Rwf 900,000 respectively (US$ 1260 and US$ 1410) for a $6m^3$ and $8m^3$ tanks, respectively

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

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.

82. The project will further create awareness and demonstrate available solar technologies and improved cookstoves, encouraging local traders to supply them to increase availability locally. The Village Savings and Loans Clubs will be encouraged to use the joint savings to purchase solar equipment and the improved cookstoves under their normal mutual support systems, wherever appropriate. Activities under this output include: (a) 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; (b) Disseminate improved household energy options depending on the choices and abilities of households – includes construction of the selected biogas and BioSanGas toilets, improved cookstoves and solar technologies; (c) Construct thirteen communal cowsheds and link the households to the Girinka programme to acquire one cow per willing household; (d) Acquire 500 water tanks (each a minimum of 3000 litres); (e) Train (or provide refresher courses) for at least 10 technicians (5 of them females) on electrical, plumbing, biogas and road maintenance. These technicians will be engaged in the construction of these facilities to ensure practical on the job training; f) reflect on the process of providing improved water and energy systems and their role on increasing resilience and document lessons learnt (in conjunction with output 4.2).

83. Output 2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes: 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. It 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. The Table below shows an initial private sector mapping that will be expanded during project implementation and used to build stronger private sector engagement in project implementation. 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). The project will refine the value chain and private sector engagement assessments undertaken during the project planning phase to create a list of active bulking and marketing opportunities and hence value chains and potential enterprises development opportunities; clear understanding of the challenges faced by households and potential entrepreneurs in accessing and utilizing current opportunities (in value chains and enterprise development); assess capacity needs and implement capacity building programmes and support the establishment of sustainable and scalable businesses. Activities under this output will include: i) analysis of market opportunities; ii) selection and implementation of income-generating activities to utilize the existing value chains (identified during the PPG and confirmed during inception phase), e.g. milk, coffee, fruits processing, poultry, mushrooms (detailed in Annex 12 – Baseline Assessment Report); iii) appropriate support to local communities on value-addition activities, including agro-processing and marketing skills; iv) financial education; v) formulation of sustainable financing options; vi) promote the development of local private sector agents such as agricultural service providers; vii) Establish an agribusiness forum for exchange on sustainable value chain development and private sector engagement; viii) reflect on the process of facilitating communities to utilize existing value chains and its contribution to building resilient livelihoods and document lessons learnt (in conjunction with output 4.2).

Private Sector Mapping

Private sector	Areas of contribution, participation and/or engagement with the project
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).
Communications companies (Television	The project will disseminate the communications and awareness raising strategy through these companies, including disseminating improved climate data.

stations, radio stations, cell phone companies (Artec, Liquid Telecom and MTN Rwandacell), Newspapers	
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.
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.
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. These equipment and systems will require building and maintenance, which will be provided by local technicians.
Local technicians with capacity to build and maintain cow sheds and improved biogas units	
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.

Outcome 3: Policies and cross sectoral coordination

84. 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 and other infrastructure is captured in the national and district planning, budgeting and public investment systems, to provide a basis for budgetary provisions for its roll out. It will update REMA's environmental planning tools to include principles of climate proofing. It will also increase the skills of institutions and platforms recently created by the GoR for cross sectoral coordination and disaster risk reduction. Building on the increased understanding and appreciation of the health-climate-environmental linkages due to COVID-19, the project will facilitate the involvement of the health sector in the cross-sectoral coordination capacity building process. The outcome will be delivered through two outputs, described below.

85. Output 3.1: 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: Annex 12 shows the extent to which policies relevant to the Imidugudu mainstream climate risks. The project will facilitate stakeholders, in a gender and COVID-19 responsive process, 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 (Rationale for mainstreaming climate proofing Imidugudu in these instruments is provided in Box 6). The review of the Human Settlement Policy (2015) is currently under way, and likely to be completed by the time project implementation starts. The PIF and PPG processes informed the review of the policy. The project will therefore support the Rwanda Housing Authority to develop a strategy for implementing the revised policy, including aligning its budgets to the new policy provisions, to replicate and upscale the climate proofing concept. The project will also review the following relevant policies and programmes and make recommendations for reforms to ensure that they provide strong basis for integrating climate risk into development processes, hence promoting replication and upscaling of the climate proofing concept: National Urban Housing Policy (2008), National Disaster Management Policy (2012) and National Disaster Risk Management Plan (2013); the Strategic Programme for Climate Resilience (SPCR) (2017); the National Strategy for Transformation (NST; 2017–2024); the National Land Use and Development Master Plan (2011) (under revision), Local Urban Development Plans (LUDPs), and Detailed Physical Plans /Area Action Plans (AAP's) for local implementation. It will then ensure that relevant environment and building protocols further integrate climate risk considerations. These include the Green Village Toolkit by REMA / PEI and the REMA's Environmental management Tools and Guidelines[64]. Activities under this output include: a) Review policies relevant to the Imidugudu (listed above), in a participatory and gender responsive process, recommend changes and advocate for their adoption; b) Update REMA's Environmental management Tools and Guidelines[65]; c) reflect on the process of using strategic policy reviews to ensure budgetary allocation for the upscaling of the climate proofing model in the Imidugudu programme and document lessons learnt (in conjunction with output 4.2).

86. Output 3.2: Technical and community institutions trained to improve their effectiveness in the cross sectoral coordination units and networks recently created by the Government of Rwanda: The project will strengthen the systems for cross sectoral and District coordination (described in Box 4) created recently by the GoR to make it easy for technical departments to coordinate the multiple decisions needed to climate proof Imidugudu programmes. At the District level, these include the District Disaster Management Committees (DIDIMACs), Sector Disaster Management Committees (SEDIMACs) and the Joint Action Development Forums (JADFs). They also include community level institutions representing the communities – the Monthly Community Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange y'Abaturage). Activities under this output will be implemented in a gender and COVID-19 responsive process and will include: a) Undertake training needs assessments for the disaster risk reduction and coordination committees, the JADF and the community institutions in the Kirehe and Gakenke districts and formulate a training programme, in conjunction with output 1.1; (b) Train the committees, JADF and the community institutions as per the training programme, in conjunction with output 1.1; c) reflect on the process of further strengthening capacities for the institutions mandated to coordinate cross sectoral and District coordination created recently by the GoR and the impacts on their capacities and document lessons learnt (in conjunction with output 4.2).

Box 6: Important Planning instruments and rationale for mainstreaming climate proofing

National Strategy for Transformation (NTS 1) 2017-2024: Rationale for mainstreaming climate proofing Imidugudu - The NTS 1 is the seven year strategy to implement Vision 2050. Planning at all other levels (sectoral and district) needs to be consistent with the NTS 1. The process of formulating a new vision commences at least two years prior to the end of a foregoing vision and involves all relevant central and local government institutions, the private sector and civil society. National, regional and international goals and targets are also used to inform the Strategy.
Rwanda's National Investment Policy (NIP, 2017): Rationale for mainstreaming climate proofing Imidugudu - The objective of the NIP is to guide Rwanda's National investment programmes by ensuring the: i) prioritization of investments that are based on strategic goals and that guide long-term budgeting; ii) improvement in the implementation of projects; iii) transparency and accountability during the investment cycle, which will enable central

[64] https://rema.gov.rw/rema_doc/Environmental%20Managemnent%20Practical%20Tools/1-Practical%20Tools%20for%20Sectoral%20Environmental%20Planning%20_Final%20Version_%2017-07-2010.pdf

[65] https://rema.gov.rw/rema_doc/Environmental%20Managemnent%20Practical%20Tools/1-Practical%20Tools%20for%20Sectoral%20Environmental%20Planning%20_Final%20Version_%2017-07-2010.pdf

and local government agencies to plan and prioritize effectively; and iv) engagement of the private sector and leveraging alternative sources of financing. MINECOFIN is responsible for the development and implementation of the NIP.

The National Decentralization Policy (2012): Rationale for mainstreaming climate proofing Imidugudu - The National Decentralization Policy (2012) seeks to institutionalize political, administrative and fiscal decentralization. The specific objectives of this policy are to: i) enhance the participation of citizens in initiating, implementing, monitoring and evaluating plans; ii) promote a culture of accountability and transparency; iii) encourage equitable local economic development; iv) promote joint development planning between central and local government; v) translate national policies and agendas into meaningful action for all citizens. This policy is implemented and monitored by the Ministry of Local Government (MINALOC).

District Development Strategies (2018-2024): Rationale for mainstreaming climate proofing Imidugudu - Each of the 30 districts in Rwanda are required to produce a seven-year District Development Strategy (DDS), which is informed by both MTDPs and SSPs. The DDSs detail: i) the district-specific priorities and targets over a seven-year period; ii) implementation strategies; iii) cost of implementation; and iv) an M&E framework. DDSs are prepared in a participatory manner with guidance from MINECOFIN and MINALOC.

The Rural Settlement Strategic Sector Plan (2018-2024): Rationale for mainstreaming climate proofing Imidugudu - A sector is defined as a key functional area of public service delivery[66]. Government institutions, ministries and agencies with similar objectives are grouped to form a sector[67] and the organization of these sectors is regulated by MINECOFIN. Every sector is required to develop a medium-term Strategic Sector Plan (SSP). This SSP framework guides all institutions in their contribution towards the Medium Term Development Plan (such as the National Strategy for Transformation). Each SSP provides details of: i) the cross-sectoral strategy for delivering results; ii) costs of implementation; and iii) a sector-specific M&E framework.

The Organic Law on State Finance and Property (No. 12/2013 of 12/09/2013): Rationale for mainstreaming climate proofing Imidugudu - The Organic Law requires that priorities that are identified within planning documents – at all levels of governance in Rwanda – form the basis for budget allocations. Priority actions identified in the planning documents of sectors and institutions need to be affordable on both an annual basis and in the medium term. MINECOFIN is responsible for the development and implementation of this law.

Outcome 4: Knowledge Management supported by participatory and effective monitoring and evaluation

87. This outcome 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 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. At least two knowledge sharing events will be held at the district level. This outcome is fundamental to monitoring the results of all the whole project, distilling and disseminating lessons. The outcome will be implemented through two outputs, described below.

88. Output 4.1: Development of participatory M&E plans and enhancement of communities' capacities to monitor, learn and sustain the climate proofing initiative: The project will design a participatory M&E plan linked to the adaptation plans (in conjunction with output 1.4) and integrate it into the M&E systems of the Twigire Muhinzi, District and/or relevant Sectors. It will train community groups to provide the skills required for their effective participation in gathering data for monitoring, reporting it and using it to compile and learn lessons – to support adaptive management. The M&E system will take full cognizance of the complexity of ecosystems-based adaptation initiatives, especially the uncertainties of attributing improvements in environmental status to the outcomes in the short, medium and long-

[66] Result Based Performance Management (RBM) Policy for Rwanda Public Service. 2015. MINECOFIN.

[67] A specific government institution, ministry or agency might contribute to more than one sector.

terms. At the district level, the implementation of the M&E system will link into existing GIS capacity in the Rwanda Land Management and Use Authority (RLMUA).

89. A project-specific monitoring and evaluation plan has been developed (described in Section 6 of this Prodoc and Annex 3). Activities under this output include: a) Building on participatory M&E plan produced via the EbA planning process, identify, in a participatory and gender responsive manner, additional indicators for the comprehensive monitoring of the effectiveness of the rural settlement programme on adaptive capacities of its beneficiaries. (b) Design and implement a training programme to equip the beneficiaries of the rural settlement programme in the project area to participate in data collection, storage, analysis and use of the outcomes of the process (in conjunction with output 1.1). (c) Design and implement a training programme for the technical institutions supporting the rural settlement programme on M&E, linking them to the GIS capacity of the Rwanda Land Management and Use Authority (in conjunction with output 1.1). (d) Refine the project Monitoring and Evaluation Framework (annex 3) to incorporate any amendments that may be necessary based on data or issues emerging from the planning process, and any refinement of the gender mainstreaming indicators. (e) Track project performance against the M&E framework quarterly, using UNDP Standard tools. (f) Carry out MTR and the TE and share lessons to improve current and future programming and implementation. (g) Reflect on the process of participatory M&E for communities under the EbA and Imidugudu Programmes and document lessons learnt (in conjunction with output 4.2).

90. Output 4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the imidugudu program: The outcomes of this project are designed to strengthen the foundational capacities required to continue implementing climate-proofing measures in the Imidugudu programme and for on-going replication of similar initiatives country-wide. The project is therefore expected to contribute to the sustainability of all adaptation projects in and outside of the country. This output will promote dialogue, learning and cooperation between the project participants and other stakeholders inside and outside Rwanda, to catalyse upscaling. This will be achieved by engaging in communications and advocacy, knowledge networking and management. A comprehensive Communications and Knowledge Management Framework will be developed in Year 1, which will include strategic objectives, costed activities, roles, responsibilities, timeframes, workflows and institutional linkages to coordinate communications and knowledge management. The main elements of the Framework will include: (i) raising awareness through an effective community-led advocacy campaigns, supported by appropriate awareness-raising materials; (ii) developing and sharing communications pieces and knowledge products targeting different audiences (decision-makers, project partners, practitioners, community stakeholders), and using multiple formats, platforms[68] and media; (iii) engaging in local, national and regional adaptation knowledge-sharing events and communities of practice, ensuring that lessons learnt in the project pilot sites inform similar projects being implemented elsewhere, and that lessons from other projects are used in adaptive management of the proposed project; (iv) collating, organizing and making available all information relevant to the project – through a dedicated webpage linked to the websites of the key institutions engaged in the project – RHA, REMA, MINAGRI, Gakenke and Kirehe Districts Councils and UNDP. All relevant project documentation will be uploaded to the UNDP PIMS+ platform. 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.

91. Activities under this output will include: a) Develop a Communications and Knowledge Management Framework for the project. (b) Guided by the Framework: i) Establish and support a community-led advocacy programme for the project, working through Farmer Promoters and FFS Facilitators. (ii) Prepare and disseminate communications pieces and knowledge products targeting different audiences (decision-makers, project partners, aligned programmes, community stakeholders). The products should include policy briefs, technical reports, best-practice case studies for release via various knowledge platforms, social media (which could include Facebook and Instagram, with postings released via UNDP and Government of Rwanda platforms), YouTube video clips that can be accessed on mobile phones, radio interviews, articles in the printed media. (iii) Facilitate stakeholders to participate in local, national and regional lesson-sharing events convened by related projects and programmes, and compile lessons learnt reports or communications

[68] Sample platforms on which technical publications could be shared include: Climate Adaptation Knowledge Exchange (CAKE): http://www.cakex.org/ Ecosystems and Livelihoods Adaptation Network (ELAN) http://www.adaptationportal.org Nairobi Work Programme (NWP) http://unfccc.int/nwp Natureandpoverty.net The Nature Conservancy: http://conserveonline.org/workspaces/climateadaptation weADAPT - http://www.weadapt.org/

pieces based on this participation. (iv) Convene at least two lesson-sharing workshops during the project's lifespan (preferably linked to MTR and TE feedback sessions), and compile the proceedings into lesson-sharing reports. (v) Set up a dedicated knowledge management system (web-based) where all information relevant to the project can be accessed, in a well-archived form.

Partnerships:

92. The project builds on and integrates lessons learned as well as good practices from previous and on-going interventions relevant to the ecosystems-based adaptation, mainstreaming climate risk into national development processes and/or the targeted pilot areas. It will be implemented in close collaboration with key partners and stakeholders including from Government, civil society, CBOs and academia (see Stakeholder Engagement Plan, Annex 7). Coordination of partnerships will be led primarily by the Project Manager (PMU) guided by an action plan for engagement and collaboration with all the relevant partners, which will be developed by the PMU during the Project Inception Phase. Key initiatives on which the project will build, and partners are described below.

93. The National Human Settlements Program Imidugudu and the Integrated Development Programme (IDP) Model Village Project (2009 onwards) funded by Government. Led by the Rwanda Housing Authority, the Imidugudu program originates from the National Human Settlement Policy (2009)[69]. Its implementation is supported by the Rural Settlements Task Force, Rwanda Land Management and Use Authority, Rwanda Environment Management Authority (REMA), the Rwanda Development Board (RDB), and the Rwanda Development Bank. 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). Some Civil Society Organizations are also involved in the Imidugudu, where they promote housing for vulnerable groups without adequate shelter. Private sector engagement is an important factor in the urbanization and human settlement sector through import and sale of construction materials, and in the production of local buildings materials. The private sector is also involved in constructing and rehabilitating different categories of public and private buildings. The implementation of the Imidugudu programme is currently being boosted by the an IDP model green village Project, which supports the construction of residential houses, multipurpose hall, administration premises, health centres, classrooms and science laboratories and libraries, dining rooms, kitchens and stores; construction and running of Early Childhood Development Centres and playgrounds; Availing land for crops and livestock where applicable, distribution of cows under Girinka program[70] and construction of cowsheds; Provision of Integrated Handcraft production centre, ICT room and Installation ICT facilities; construction of access roads, rainwater harvesting facilities, and access to clean water and electricity, including alternative energy such as biogas. The government has committed to provide at least one IDP model green village in each of the 30 Districts of the country. Relationship to the proposed project: The RHA will provide funds for the construction of 500 upgraded, climate resilient houses connected to power (including solar) and waste management services. The project will undertake the greening activities associated with the new and existing IDP model villages (as described in Outcome 2).

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, with the detailed design of interventions, 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

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

[70] One cow per family, on revolving basis

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 will coordinate closely Sustainable Cities Impact Program, ensuring sharing of experiences and lessons.

95. Building the capacity of Rwanda's government to advance the National Adaptation Planning process – GEF-LDCG Project # 6986 – 2019 - 2023: Supported by the UN Environment: The LDCF project will assist the Government of Rwanda implement the NAP process by strengthening its: i) technical and institutional capacity for medium - and long-term adaptation planning; ii) technical capacity to mobilise funding for climate change adaptation; iii) scientific capacity to monitor, evaluate, and generate knowledge on adaptation interventions. Such strengthening will be achieved through three components, namely: i) technical and institutional capacity for the NAP process in Rwanda; ii) advancing climate-resilient technologies and practices; and iii) monitoring, reviewing and knowledge-sharing to learn from the NAP process in Rwanda. Relationship to this project: The proposed project will collaborate closely with the NAP project to utilize the capacities provided to METEO Rwanda and MINAGRI to avail better information for the development of the Imidugudu climate proofing model, the formulation of the community-based ecosystems-based adaptation plans and selection of the climate smart livelihood measures. It will also rely on the information on EbA generated via the NAP project research efforts and the training manuals to train stakeholders on EbA at all relevant levels. The formulation of the community-based EbA plans and the participatory plans for its implementation will be closely coordinated with the indicators generated to monitor the effectiveness of the NAP process, to ensure that the proposed project contributes to generating monitoring information for the national NAP monitoring process.

96. **Increasing the adaptive capacity of vulnerable Rwandan communities to adapt to the adverse effects of climate change:** Livelihood diversification and investment in rural infrastructures – GEF # 5495, supported by the Africa Development Bank (2016 – 2020). The project objective is to facilitate diversification of livelihoods away from traditional agricultural activities so as to most efficiently utilize the new infrastructure created by an electricity rollout programme, and consequently increase resilience to the negative impacts of climate change – in 3 districts (Rusizi, Nyamasheke and Karongi all of them in western Rwanda). In this regard, it is diversifying and strengthening climate resilient rural livelihood opportunities for vulnerable women and men by developing value chain and creating and linking demand to supply, training communities and raising awareness and abilities to link to these value chains. It is supporting community driven adaptation and reduced vulnerability to climate change via providing skills and awareness on the social dimensions of vulnerability and resilience to climate change and designing and implementing six community-based adaptation programmes. It is also increasing resilience of small-scale rural infrastructure to climate change by building one market facility and upgrading six others with specifications that takes into account anticipated climate risk and training District engineers and local contractors on climate risks on the design and construction of small-scale rural infrastructure. Relationship to the proposed project: The proposed project will likely start implementation when the lessons from the AfDB project have been made available via the terminal evaluation and knowledge sharing publications. The implementation of the proposed project will be informed by these lessons, particularly on linking communities to existing value chains, formulation and implementation of community-based adaptation plans, specifications for climate resilient infrastructure (to inform the climate proofing model development). It will also build on the training manuals developed by the AfDB project, to avoid duplication and waste.

97. **Reducing Vulnerability to Climate Change in North West Rwanda through Community-based Adaptation** - funded by the Adaptation Fund (2014 - 2022[71]), implemented by REMA. The project supports improved water and land management initiatives intended to restore ecosystem functions and services to reduce vulnerability to climate induced hydrological stresses such as flooding and landslides. It also supports diversification and strengthening of rural livelihoods to reduce the number of people reliant solely on farming especially on steep slopes and other ecologically sensitive areas. This is intended to promote the recovery of rehabilitated land and natural capital and to restore ecosystem services. Finally, it supports community-based adaptation through ecosystem-based approaches and the

[71] The first Phase was 2014-2019, with an extension to 2022.

integration of knowledge and lessons learned into communication materials disseminated widely via all relevant channels. **Relationship to the proposed project**: The proposed project tackles many similar issues as the Adaptation Fund Project including community-based EbA planning, diversifying livelihoods and knowledge management. The proposed project will build on training materials produced by the Adaptation Fund project to train stakeholders on ecosystems-based adaptation, which will include field visits to areas supported by the AF project. It will also collaborate on the lessons generated on the livelihood diversification and the adaptation planning process. The Ministry of Environment, which also hosts the Single Project Implementation Unit (SPIU) of REMA is in charge of the AF project, which will provide an excellent linkage for coordination and collaboration.

98. **Feed the Future Rwanda/ HingaWeze (HW) Project:** The Feed the Future Rwanda HingaWeze project is a five-year (2017-2022), $32.6 million USAID-funded project that aims to sustainably increase smallholder farmers' income, improve the nutritional status of women and children, and increase the resilience of Rwanda's agricultural and food systems to a changing climate. HingaWeze implements holistic interventions that target the interrelated issues of under-nutrition, food insecurity and barriers to agricultural productivity by focusing on the sustainable intensification of Rwandan smallholder farming systems, with an emphasis on climate-smart, nutrition-sensitive approaches. HingaWeze is utilizing innovative approaches to enhance the production of five value chains: high-iron beans, orange flesh sweet potato (OFSP), Irish potato, maize, and horticulture. By 2022, the project will have benefited over 700,000 smallholder farmers in ten target districts: Gatsibo, Kayonza, Bugesera, Ngoma (Eastern Province); Nyabihu, Rutsiro, Ngororero, Nyamasheke, and Karongi (Western Province); and Nyamagabe (Southern Province). **Relationship to the proposed project:** the proposed project will draw lessons from the Feed the Future Rwanda project on the involvement of private sector in the irrigation system, more effective utilization of existing value chains by households and integration of agriculture and livestock systems to improve household food security.

99. **Solar irrigation project:** Since 2018, in partnership with Energy for Impact, the Rwanda Development Organization (RDO), a local NGO, is implementing the solar irrigation project in all sectors of Kirehe District. The project builds capacity on irrigation technologies via (among others) demonstration plots for energy irrigation and supply of irrigation materials to farmers. Implemented under the GoR Small scale irrigation technology support program, the initiative provides 50% subsidy on the material cost for farmer uptake of irrigation systems. **Relationship to the proposed project**: The proposed project will link farmers in the four pilot sites to the irrigation projects, to benefit from the subsidy programme. the proposed project will work through local SACCOs to provide incentive grants to be accessed by potential irrigators to match the government subsidy.

100. **Teka Nourishing Iwemuhinzimworozi Programme (Agriculture and Livestock insurance):** This is a new Rwandan Government program supporting farmers to insure their crops and cows in collaboration with selected insurance companies (Radiant, SONARWA and Prime insurance). This program was approved by Cabinet meeting in November 2019, where insurance will be provided for two crops (maize and rice) and cross breeds or pure bred cows, via a subsidy arrangement. The insurance covers disaster, disease and accident that result in animal death for a cow aged between eight months and eight years. The insurance annual premium is 4.5% of the productive cow value; 7.02% for the expected value of rice and 8-10% for maize. The Government pays 40% as subsidy while assets owners pay 60%. **Relationship to the proposed project:** The proposed project will, through SACCOs, mobilize farmers and livestock owners in the four pilot areas, by providing some level of incentives to engage with the insurance schemes.

101. **Farm to Market Alliance Project** (FtMA)**:** This is the new name for the Patient Procurement Platform (PPP), a five years project (2019-2023) which supports farmers to procure cereals for the World Food Programme (WFP), supported by the Rwanda Development Organization (RDO), WFP, AGRA and relevant cooperatives. The project supports smallholder farmers to increase on-farm productivity and market access for their produce via contract farming in cooperatives, linked to input dealers willing to provide high quality seeds and fertilizers to farmers. So far, the project supports 24,000 farmers grouped into 80 cooperatives. The project is implemented by the Rwanda Development Organization in Kirehe District and Rwanda Rural Rehabilitation Initiative (RWARRI) in Gakenke district. **Relation to the proposed project:** The proposed project will mobilize farmers in the four pilot areas, via their cooperatives, to benefit from the cereal value chain provided by WFP via the FtMA project.

102. **Accelerating Progress towards the Economic Empowerment of Rural Women (RWEE)** is a project initiated by FAO and three other UN agencies (WFP, IFAD and UN Women) under the ONE UN initiative in 2015. The third Phase of the project ended in December 2019 but there is a high chance of another five years extension (2020-2024). The objective of the

RWEE project is to secure rural women's livelihoods and rights in the context of sustainable development. The joint global program has four outcome areas namely: improved food and nutrition security; increased income to secure their livelihoods; enhanced leadership, participation in rural institutions and; in shaping laws, policies, programs and gender responsive policy environment for the economic empowerment of rural women. **Relationship to the proposed project:** The proposed project will draw lessons and experiences on the economic empowerment of women, with a particular focus on transitioning women and the youth from agriculture to other economic activities, to create opportunities for household incomes and reduce vulnerability.

103. **Large-scale Forest Landscape Restoration (FLR) in Africa:** Tree-rich landscapes to foster biodiversity, climate change resilience and better livelihoods; June, 2020-2025. Funded by the BMU and implemented by a partnership of IUCN and the Rwanda Water and Forestry Authority, the project will -- **Location**: Nationwide, but focusing restoration work in Kirehe, Nyagatare and Kayonza (waiting for the rest of the details).

Risks and risk mitigation measures

104. This project is characterised as Medium risk due to the fact that the UNDP Social and Environmental Safeguards Screening Procedure (SESP) identified ten risks (ten categorized as Moderate and two categorized as of Low significance) and the fact that the beneficiaries are largely vulnerable communities. The SESP (Annex 4) contains the detailed risk analysis and the proposed risk mitigation measures. The project itself mainstreams climate proofing, adaptation and environmental sustainability and specific emphasis is given to gender equality in its design. In order to manage and mitigate risks, the project will follow a human-rights based approach, ensuring consistency with international and national law and UNDP's SES (Social and Environmental Standards) principle on Human Rights. Specific measures have been included in the project to ensure application of human rights principles.

105. Due to the Medium risk rating, PMU will formulate an Environmental and Social Impact Management Plan (ESMP) and establish a formal Grievance Mechanism at project inception, in accordance with UNDP's Social and Environmental Standards Policy. The ESMP will be developed in line with the Environmental and Social Impact Management Framework (ESMF) provided in Annex 8, and will include an Ethnic Minority Plan, if deemed necessary. In line with the ESMF, the ESIA will be undertaken for all the risks identified in the SESP, and any additional risks that might become apparent during the inception period (such as risks associated with COVID-19 outbreak and/or response measures). It is particularly important that the following activities are not, under any circumstances, implemented before the ESMP is completed: a) Building of 500 houses by government co-finance; b) rehabilitation of the degraded hotspots – including selection of trees and plants to rehabilitee the riverbanks and for reforestation; c) establishment of terraces and uptake of new cropping and livestock diversification programmes; d) construction of biogas and water harvesting structures. The Grievance Mechanism will ensure that stakeholders have a known and transparent channel and process through which any grievances can be directed and addressed.

106. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log (Annex 5), which will be updated annually, ahead of completion of the Project Implementation Report (PIR). Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5 or 4 and probability is rated at 3 or higher). Management responses to critical risks, as well as environmental and social grievances, will also be reported to the GEF in the annual PIR.

107. The risks rated as moderate relate to the areas described below.

108. Implementation of the EbA plans could lead to restricted access to resources (land and forest products) to households including marginalized individuals and groups. The project will develop Ecosystems-based Adaptation (EbA) Plans and support their implementation to rehabilitate the degraded lands and ecosystems, in order to restore the provisioning capacities of ecosystems as the basis for tackling vulnerability at the landscape level. The EbA plans are likely to introduce zones to guide land use. Their implementation will entail the rehabilitation of degraded hotspots as well as improved enforcement of laws, rules and regulations in compliance with land use plans. This is likely to prohibit harvesting of forest products (building poles, fire wood, wild fruits, grasses) and cultivation of ecologically sensitive areas such as hilltops, wetlands and designated river channels. Currently there is rampant disregard for the relevant rules and regulations, hence their enforcement will curtail the illegal harvesting of these products. In addition, farmers adopting soil conservation measures such as radical terracing and/or changing from annual to cash crops may

temporarily lose use of their lands (for a short period), suffering economic displacement. Building radical terraces takes 3-4 months and has to be done during the wet season (the soil is too compact in the dry season), when food is also grown, so there is an opportunity cost. Newly planted coffee and tea take 3 and 5 years, respectively, to yield benefits. This is likely to affect many of the households in category 1 and 2 of the Umubede classification (the very poor) as well as the residents of the Mahama refugee Camp.

109. Fortunately, the project will apply the government regulation on compensation under soil and water conservation infrastructure development. The regulation states that farmers should be compensated for perennial crops found in the farm before construction of terraces. It further dictates 120 days as the mandatory allowed notice period before the start of any soil and water conservation measures activities on fields with seasonal crops. The PMU will ensure compliance with these laws to compensate farmers for any economic displacement related losses incurred due to project implementation. Furthermore, households that lose immediate livelihood options (e.g. due to radical terracing construction or adoption of tree crops or protection of ecologically sensitive areas) will be prioritized in the get for employment in project activities – under the Vision 2020 Umurenge Programme (VUP). Additional requirements for SES compliance, if any, will be identified during the ESIA and included in the ESMP as appropriate.

110. In addition, the project will promote alternative household energy systems (biogas, solar technologies) and the uptake of climate smart agricultural practices and livelihood options, including better utilization of existing value chains, to increase land productivity and sale of produce to increase household incomes (outputs 2.1 and 2.4). These interventions promote the recovery of the ecosystems, providing cost effective measures of reducing exposure and sensitivity of the livelihoods to climate risks (using natural systems to regulate water flow to reduce likelihood of flooding and landslides, improving watersheds to increase water flow; combined with water harvesting systems, this will increase availability of water to reduce impacts of drought, rehabilitating degraded lands to increase land productivity and provide better measures against soil erosion and landslides while promoting crop productivity even under mild droughts).

111. There is a probability that duty-bearers (technical Specialist s of relevant institutions) do not have the capacity to meet their obligations in the Project. The responsibilities for project implementation lies with the Special Projects Implementation Unit (SPMU) of REMA, which will work closely with the Rwanda Housing Authority (Under the Ministry of Infrastructure) and District Authorities of Gakenke and Kirehe Districts (under the Ministry of Local Government). All these government units tend to be understaffed and the technical staff have many other responsibilities beyond projects. This makes it difficult to match the skills requirement for many different projects, while high workloads reduce the effectiveness of even staff members with relevant skills. This presents two types of risks: inadequate coordination and weak capacities. Inadequate coordination can delay decisions by some units affecting the pace of implementation by all. It can also derail co-ordination with other climate change projects in Rwanda, which would limit the capacity of implementing agency to learn from and build on the experiences of related projects. Weak capacities could cause delays in disbursements and lengthy procurement processes, negatively affecting project mobilization. This risk is heightened by the absence of UNDP support to implementation under National Implementation Modality, particularly on procurements of short-term staff/consultants and equipment.

112. The project design incorporates lessons on boosting capacity of GoR partner institutions. Accordingly, several measures will be put in place to mitigate these risks, outlined in the SESP. They include: a) Project deliverables will be included in the Imihingo (Performance Contracts) where possible to ensure project activities become integrated into workplans of both individuals and their units, promoting sustainability; b) Project implementation will be supported by a competent team of professionals that are dedicated full time to the project. To this end: i) the Government will recruit a Project Manager/Coordinator with strong managerial and technical skills, who will be on a full time basis (ToR in Annex 5): ii) REMA, which will host the Project Management Unit will provide a senior professional to coordinate the project; iii) The key partner institutions will appoint senior staff members dedicated to coordinate project implementation within their institutions as follows: Rwanda Housing Authority (1), Meteo Rwanda (2), District Authorities of Kirehe and Gakenke (1 each).

113. There is a probability that rights holders (project beneficiaries – farmers) do not have the capacity to claim their rights in the Project. Beneficiaries of the Imidugudu are amongst the poorest segments of society (categories 1 and 2 of the Ubudehe categorization of households in Rwanda. They may be reluctant to claim their right to participate in the project, hence be slow to actively participate in the uptake of crop intensification programme, accessing value chains, taking up climate smart agriculture measures and the associated training events. This may lead to elite capture of the project

benefits. The Stakeholder Engagement Plan, the Gender Action Plan and the ESMP will be used to mitigate this risk, supported by targeted capacity development, as described in the SESP.

114. There is a possibility that the project potentially reproduces discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits. The gender analysis found that in the rural areas, gender power relations, gender hierarchies and gender-based inequality and injustices practiced through gender biases and stereotypes still prevail. Hence, cultural views of women may impede their ability to take up some of the identified livelihood opportunities especially in construction (e.g. carpentry and bricklaying). This could be a huge problem if women headed households are amongst the families losing livelihood options in the short-term due to uptake of adaptation measures (e.g. building terraces, switching over to tea or coffee. The Gender Action Plan (Annex 9) and the ESMP will be used to mitigate this risk.

115. Land use zonation (in the implementation of the EbA plans) may necessitate land use changes such as change from annual crops to tree crops. Furthermore, the reforestation programme poses a slight risk of introducing alien invasive species. These changes may cumulatively alter ecosystems character and services. The ESMP will provide environmental and social provisions to be put in place to minimize any negative impacts on the environment and livelihoods, to ensure that the benefits of the project outweigh any potential negative impacts. In addition, targeted training will be provided to communities on among others tree husbandry and agroforestry practices to minimize negative human-induced impacts during the rehabilitation processes. In addition, the project will undertake research into indigenous tree species that optimize environmental and economic returns. To avoid the risk of introducing invasive alien species, reforestation will be guided by the Forest Landscape Restoration Concept, following the methodology introduced by the World Resources Institute (WRI) and IUCN and already tested in the country by the former Ministry of Natural Resources [72], as recently modified and applied for the Gatisbo FLR baseline conditions assessment[73].

116. The timing, implementation and effectiveness of measures implemented under outcome 2 (implementation of livelihood diversification, land rehabilitation and ecosystems rehabilitation measures) can be negatively affected by climate driven uncertainties and irregular weather events. Thus, the project outcomes are likely to be sensitive or vulnerable to potential impacts of climate change. As explained in the problem statement, climate change impacts have already manifested in Rwanda and in the project sites. In particular irregular rainfall patterns and drought, which are increasingly common occurrences, challenge the planning and implementation of project schedules, climate smart agriculture and reforestation. Fortunately, the project has a sharp focus on adaptation, seeking to climate proof the Imidugudu and to enhance the uptake of ecosystems-based adaptation to climate proof livelihoods in the four pilot sites. Several measures will be put in place to manage weather related risks: Output 1.3 will provide a model for climate proofing the Imidugudu and provide a practical step-by-step methodological approach to assist stakeholders (government, private sector, communities) to incorporate climate change adaptation measures into the planning and implementation of the Imidugudu programmes. Output 2.2 will implement the ecosystems-based adaptation plans to reduce vulnerability of the ecosystems and the livelihoods dependent on them. Output 1.5 will provide more accurate and relevant climate information to the communities and decision support tools for farmers to inform decisions on when to plant, depending on improved climate and weather services.

117. The GoR will build 500 new houses (co-finance) on sites that it has already zoned as improved villages, and on land that is fully acquired (following government procedure). It will also upgrade access roads and provide waste management facilities. The project will provide climate smart designs for the houses, build water harvesting structures, cowsheds and biogas processing units. There is a risk that the government budget for the for the baseline programme (building houses) may delay the project implementation. Furthermore, poor design and/or landscaping of the area, construction of houses and related infrastructure could lead to soil erosion, land degradation and/or pollution as a result of grouped settlements. Inadequate observance of safety measures could lead to poor practices during construction; hazards such as open pits (incomplete water and biogas construction), careless placement of building materials, lack of safety gear by builders and laborers, and open random spaces on the incomplete roads, etc. could pose potential safety risks to

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

[73] 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.

local workers and communities. Furthermore, use of substandard materials on any of the construction (houses, roads, water harvesting) could cause failure of structural elements of the infrastructure, posing risks to communities and local workers (e.g. collapse of buildings or infrastructure). In addition, poor selection of sites, failure to follow prescribed guidelines (taking short-cuts out of ignorance or deliberately), could expose the new structures to landslides, erosion, flooding or extreme climatic conditions. Furthermore, the use of solar may lead to an increase in the disposal of hazardous waste such as used batteries. These could also pose potential safety risks to communities.

118. The ESMP and the SHEP will be used to mitigate this group of risks. Implementation of the National Imidugudu program is supported by the Rural Settlements Task Force, Rwanda Land Management and Use Authority, Rwanda Environment Management Authority (REMA), the Rwanda Development Board (RDB), and the Rwanda Development Bank – all of which have strict rules, regulations and guidelines for safety and waste management in buildings and infrastructure development. 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 numerous already build up villages that require upgrading to make them resilient. Building of the houses and the related infrastructure will follow laid down procedures and guidelines, provided by the Government of Rwanda contained in various ministerial policies such as Environmental Organic Law N° 04/2005; National Environment Policy, 2003 and the Transport policy, 2008. Specific instruments will include:

a) Sector Guidelines for Environmental Impact Assessment (EIA) for the Housing Projects in Rwanda (https://eia.nl/docs/mer/diversen/rwanda-eia-guidelines-housing-construction.pdf);
b) REMA's Tool and Guideline[74], which contains 11 Practical Tools for Sectoral Environmental Planning, namely i) Building Constructions; ii) Rural Roads; iii) Water Supply; iv) Sanitation Systems; v) Forestry; vi) Crop Production; vii) Animal Husbandry; ix) Irrigation; x) Fish Farming; xi) Solid Waste Management
c) Rwanda Building Code – of the Rwanda Housing Authority (2015 – currently under review, with the participation of the relevant stakeholders[75]
d) Ministerial Orders N° 005/2008 and N° 007/2008 establishing respectively modalities of inspecting companies or activities that pollute the environment and the list of protected animal and plant species and others.
a) Rwanda National Land Use Planning Guidelines (2017) - http://www.rlma.rw/uploads/media/LUP_Guidelines_Final_Published.pdf;
b) Code of practice for construction and demolition waste management — https://members.wto.org/crnattachments/2018/TBT/RWA/18_0145_00_e.pdf
c) REMA's Guidelines for Environmental Impact Assessment For Waste Management In Rwanda - https://www.commissiemer.nl/docs/mer/diversen/os_rwanda-eia-guidelines-waste-management-2009.pdf
d) Certification from the Rwanda Standards Board, British Standards (BS) will be crucial for the local engineering sector to adapt usage of these material, replicate it or scale up to other construction sites in the country

119. Under these guidelines, the buildings will be designed by qualified architects and the relevant bills of quantities (specification of strength and quantities of materials to be used) will be undertaken by qualified building/structural engineers. Similarly, the roads will be designed by qualified civil engineers and the bills of quantities provided by qualified structural engineers. The actual building will be supervised by teams of qualified engineers and foremen, in line with the laid down procedures approved by the relevant ministries. Regular inspections of all construction works will be undertaken in line with the approved guidelines. Electricity connections will be done in line with the guidelines on Environmental, Health and Safety Plan developed by EDCL (Energy Development Cooperation Limited) under the Electricity Access Rollout Progamme (EARP) And Scaling -up Energy Access Project (SEAP) - http://www.reg.rw/fileadmin/user_upload/50_APPROVEDEHSFORTHEELECTRIFICATIONOFNORTHERNZONEBYAIL_FINALREPORT.pdf

120. In addition, the PMU will ensure that workers use personal protection equipment (PPE) during all construction activities and other relevant activities as required by the building code. These will include: Provision of Health and Safety training for all personnel; Follow documented procedures for all site activities; Keep accident reports and records; Inform local

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74 https://rema.gov.rw/rema_doc/Environmental%20Managemnent%20Practical%20Tools/1-Practical%20Tools%20for%20Sectoral%20Environmental%20Planning%20_Final%20Version_%2017-07-2010.pdf

75 Includes the City of Kigali (CoK), Rwanda Standards Board (RSB), Ministry of Infrastructure (MININFRA), Institute of Engineers of Rwanda (IER), Rwanda Institute of Architects (RIA), RAPEP, Rwanda Environment Management Authority (REMA), Ministry of Environment (MoE) and Rwanda Development Board (RDB).

communities about the work and the potential dangers; Have emergency measures (toolkits) for quick and First Aid in case of accidents; Installation of hygiene facilities like clean water, toilets, etc. In addition, the PMU will establish a Grievance Redress Mechanism to provide systems and resources for the project to receive and address concerns about its impact on the relevant stakeholders. This will be done in line with UNDP guidelines on Grievances Response Mechanisms.

121. Benefiting from the planned villages will involve moving to the new houses permanently, with the risk of disrupting livelihoods. Similarly, consolidating land under the Crop Intensification Programme (CIP) may affect land tenure arrangements. Fortunately, these two process do not entail any loss of lands for any households; they retain their original land parcels while gaining new climate smart dwellings with a small new kitchen garden area. In accordance with the law, an Environmental and Social Impact Assessment (ESIA) will be undertaken and an Environment and Social Impact Management Plan (ESMP) developed (guided by the ESMF in Annex 8). A Resettlement Action Plan (RAP) will also be developed, in accordance with National laws and UNDP safeguard policies. These plans will be approved by the Project Board, and will guide project implementation. No construction or movement to new houses will be undertaken before the completion of the ESMP and the RAP. In addition, households will be supported (under output 2.1) to consolidate land so they can access farming under the Crop Intensification Programme (which has high levels of support by extension service, including organized access to agricultural inputs and value chains). Under the MINAGRI guidelines, the CIP is a process of commercialization of disparate lands where farmers retain their lands but agree to produce under a set of management rules: they plant the same crops at the same time and subject the crop to similar management practices, harvest at a set time and sell through the same market avenues.

122. There is a risk that project operations will be affected by COVID-19. The first effect will be delays in activities due to COVID-19 response measures, such as lockdowns, restrictions on meetings etc.. In a project with several training and consultations activities, possible delays are a real risk. In view of this, the project will put in place mechanisms for alternative approaches to training events and meetings where possible. Shifting of budgets from travel and face-to-face meetings towards virtual meetings will be implemented, while ensuring that budget thresholds are not exceeded within and across project outcomes and outputs. At the project inception, the delays envisaged for the first and subsequent years will be built into the annual workplans. An adaptive management approach is embedded in the project where possible delays due to COVID-19 are monitored and responded to more frequently instead of waiting for annual workplans and the MTR.

123. There is also a risk that project activities, if not planned and implemented taking into account COVID-19, could compound the spread of infections. This could be directly through project activities facilitated by the PMU, or indirectly through stakeholders who work directly with project beneficiaries such as extension workers. Protective and prevention measures such as the use of PPE, social distancing, group sizes etc. will be applied in implementing project activities, in line with available government and scientific guidance in place. The PMU and partners will undergo training on COVID-19 risk management, and project inception activities will include COVID-19 awareness and training.

124. There is a risk that COVID-19 could reduce project impacts by affecting the adaptive capacity of communities, access to markets and livelihood opportunities. The disruptions that COVID-19 has already caused to value chains in project areas, and the potential further impacts could be substantial. Fortunately, the project has been designed to enhance recovery and contribute to building forward better through health, climate compatible approaches. It supports value chain strengthening, ecosystem based measures in the design of Imidugudu, and reduce exposure to respiratory diseases by integrating healthy energy solutions in the design and upgrading of Imidugudu thereby promoting healthy living. These will find their way into the climate-proofing model that the project will develop for upscaling through the nation-wide Imidugudu programme that the project supports. The project will also contribute to recovery through its livelihood and employment and enterprise supporting activities that promote trade in solar, biogas and improved cookstove products. These are all integrated into the project outputs and activities. The involvement of the health departments in project activities at the national and district activities as part of the strategy will ensure that COVID-19 and wider health issues are taken into account in the design and implementation of interventions and policies.

125. Risks rated as low

Stakeholder participation plan

126. The stakeholder engagement plan (Annex 7) outlines the strategies for stakeholders' engagement during project implementation. Stakeholder engagement during project planning and implementation is summarized below.

127. **Stakeholder engagement and participation during project planning:** A gender-responsive and culturally sensitive inclusive stakeholder consultation process underpinned the project formulation. Consultation started during the formulation of the project concept (PIF) and was entrenched during the project formulation (PPG). During the PIF formulation, several small consultation meetings culminated in the National Portfolio Formulation Exercise (NPFE) meeting, all of which allowed stakeholders to identify priorities for the country's allocation under the LDCF. All relevant stakeholder groups (Government Organizations, Multilateral and Bilateral Agencies, NGOs, local communities and the private sector) attended a project formulation inception workshop held in Kigali in March 2019. The meeting provided an open and transparent process for the stakeholders to review the project objectives and strategies, budgets and implementation arrangements, indicators, identify baseline programmes and co-finance.

128. The PPG Inception workshop was followed by detailed stakeholder engagement in the four pilot areas in two Districts through the baseline data collection process, the results of which are documented in Annex 12 (available separately here https://www.dropbox.com/sh/2xn6lblrrcxw49o/AAA2QVk9xS0861uXj1EXun-Pa?dl=0). During the baseline data collection several field visits were conducted to each of the four pilot areas as outlined in the PPG Inception report. Collectively, the field visits and consultations highlighted the diverse social, cultural, environmental and ecological conditions in the pilot areas and the unique requirements for addressing climate risks, including diversifying livelihoods.

129. A second baseline information validation workshop was held in Musanze in December 2019, which reviewed the baseline reports, refined the project strategy and results in the light of the baseline assessments, crafted specific project outputs and discussed project implementation sites and identified project partners. The consultation process continued for the following three months (Jan to March 2020) via follow-up meetings, email communication and Skype calls. The consultation culminated with an online Prodoc Validation Workshop in March 2020, where the stakeholders endorsed the submission package. The stakeholder participation plan in Annex 7 was discussed and approved.

130. **Stakeholder engagement and participation during project implementation:** The implementation of the project will be based on extensive gender and COVID-19 responsive engagement with stakeholders at all levels across the landscape. Table 1 in **Annex 7** (stakeholder engagement plan) outlines the main roles/ responsibilities during project implementation for various project stakeholders at all levels. At a broad level, participation and representation of stakeholders will be conducted through the project governance structures outlined in Figure 4 (Project Organogram) and through the existing governance structures at District and local levels (e.g. JADF, community planning platforms (Monthly Community Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange y'Abaturage)). Community representatives and technical staff from village and Sector levels will be members of committees and teams assigned to plan and coordinate on-ground activities (such as adaptation planning). To the greatest extent possible, membership to committees will have equal representation of women, men and the youth. The community representatives and stakeholders will be trained as trainers and focal points to build capacities and to utilise participatory mapping, contextual interpretation of climate information and livelihood diversification interventions.

131. Civil society, academia and the private sector will be engaged as relevant, especially in the formulation of the climate proofing model (output 1.3) and the livelihoods diversification initiatives under outcome 2 (such as effective utilization of existing value chains, insurance schemes, credit schemes, etc.). Stakeholders will be consulted and engaged throughout the project implementation phase to: (i) promote understanding of the project's outcomes; (ii) promote stakeholder ownership of the project through engagement in planning, implementation and monitoring of the interventions; (iii) communication to the public in a consistent, supportive and effective manner; and (iv) maximisation of linkage and synergy with other on-going projects. The following government institutions will be part of the project and sit on the Project Board: the Rwanda Environment Management Authority, Rwanda Housing Authority, Rwanda Land Management and Use Authority, Ministry of Agriculture and Animal Industry, Ministry of Local Governments and the Districts Decentralized Structures.

132. South-South and Triangular Cooperation (SSTrC): Learning opportunities and technology transfer from peer countries will be further explored during project implementation. To present opportunities for replication in other countries, the

project will codify good practices and facilitate dissemination through global on-going South-South and global platforms (Outcome 4), such as Africa Solutions Platform, the UN South-South Galaxy knowledge sharing platform and PANORAMA[76]. In addition, to bring the voice of Rwanda to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on climate proofing rural settlement programmes. The project will furthermore provide opportunities for regional cooperation with countries that are implementing initiatives on ecosystems-based adaptation in geopolitical, social and environmental contexts relevant to the proposed project in Rwanda.

Gender equality and Women's Empowerment:

133. A gender analysis and gender action plan are attached as Annex 9. Despite considerable progress in political participation in public offices, women in rural areas of Rwanda are socially, economically and culturally disadvantaged and have poorer access to resources and information, have poorer representation and less authority than men and are often marginalized in decision-making over household resources and incomes. The baseline assessment showed several gender gaps: More men (68.25%) reported being members of community organizations compared to 50.75% of the women (Gap – 17.5). More men (59%) than women (40%) had had done something to address deforestation in the last one year. In general, more men and the youth reported to have taken up improved practices after receiving training.

134. The assessment also found that more men (45%) had received training on climate change compared to 34% of the women. Consequently, 58.75% of the male respondents reported that they understood climate change issues relatively well, compared to 47.25 of the women. 36% of the men, compared to 29% of the women reported having been trained on soil conservation. 46% of the men compared to 36% of the women had received training on livestock farming. 26% of the men, compared to 13% of the women reported to have been trained on business management. The youth suffer similar challenges as the women. This predisposes both groups to higher levels of vulnerability and poverty, loss of voice and therefore higher chances of being excluded from project activities and benefits. The PPG took pro-active steps to include men, women and youth in the formulation of the project, thus all the project activities are gender responsive to the greatest extent possible. The gender action plan will be utilized to ensure that project implementation is done in a gender responsive manner, ensuring equal opportunities for women, men and the youth in all project initiatives. Assessments, evaluations and monitoring of project activities will be based on gender disaggregated indicators to ensure feedback and course correction where necessary. The gender strategy proposed for the project is in line with the national efforts in mainstreaming gender, as outlined in the Gender Monitoring Office.

135. The project's gender strategy comprises of three key elements:

a) Training of all project stakeholders on gender mainstreaming, to ensure that everyone understands the importance of mainstreaming gender into the project initiatives and the way to achieve it. All technical staff as well as community members and their local leaders will be trained (or provided with refresher courses);

b) Ensuring that all activities are implemented in a gender responsive manner. A gender specialist will be appointed on the project team to provide guidance and support throughout the implementation process. This will promote conscious integration of gender-based groups in community-based activities (including training as well as the piloting and developing of alternative livelihoods). Existing tools and those developed during project implementation will be explicitly inclusive of gender criteria. Reporting on the projects progress will place special emphasis on how men, women and the youth are engaged in the various project activities.

c) Involvement and representation of women in project implementation and management structures: Women will be encouraged to apply to all positions in the project structure. Similarly, membership to project committees will be made as gender sensitive as possible.

Innovativeness, Sustainability and Potential for Scaling Up

136. This project has three innovative elements: *Model for climate-proofing settlements:* While there is agreement that climate proofing is a cost-effective measure for safeguarding investments into the rural settlement, there is no clear model for doing so. Developing one is therefore highly innovative. This model will be integrated in nature as it brings together elements of climate-informed planning, design of settlements and buildings, resilient production and livelihood

[76] https://panorama.solutions/en

practices and ecosystem-based adaptation all in one model. To promote its roll out, the project will undertake cost benefit analysis of likely options and provide estimated costs for implementation and determine the institutional arrangement that would be needed for its effective uptake. It will also provide practical guidelines such as prototype climate-resilient settlement designs, policy briefs (with recommendations for policy and regulatory changes that might be required, training materials that are deemed necessary to support the uptake of the model.

137. *Application of new building codes for climate proofing:* The partnership with the Government, via the Rwanda Housing Authority is unique. Under output 2.3, the government will provide three new IDP villages (benefiting 500 households), providing the project an opportunity to utilize the process to test recommendations for refining the selection of the sites for the new villages, ensuring that medium to long-term climate information and the status of the ecosystems inform the choice. It will work on the designs of the new homes, ensuring that climate risks are factored into the building plans, thereby testing, or contributing to the development of building codes for climate proofed Imidugudu to be developed under outcome 1. It will support the building process, ensuring that all relevant government guidelines apply and that the stakeholders engaged in the building process, including the private sector contractors, have been trained on climate proofing (training provided under output 1.4).

138. *Nature based solutions:* The ecosystems-based adaption plans will offer systematic and holistic tools to reduce exposure and sensitivity to climate risks at the landscape level. These plans will enable the communities to treat a few degradation hotspots to improve the ecological integrity and delivery of ecosystems services by whole landscapes. Research on indigenous species (trees and grasses) with high potential for economic returns to be used in the rehabilitation of degraded landscapes will further support climate smart business opportunities while rehabilitating ecosystems services. The plans will therefore guide the creation of climate resilient livelihood options and will sustain them post project. While nature-based solutions are likely more cost effective than infrastructural solutions, the project combines both, with significant gains in efficiencies and effectiveness for both. Establishment of rural enterprises will increase household incomes and diversify livelihoods, adding to adaptive capacities.

139. 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 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. Finally, the project will adopt digital technology in communications including mobile based applications and use of social media to disseminate information to communities.

140. Scaling up and sustainability will be achieved via four core strategies, described below.

141. Mainstreaming climate proofing into the housing and other policies related to the rural settlement will create pathways for replication and scale up, as it will ensure that future investments in the Imidugudu mainstream climate risk. Given the high level of involvement of the RHA in the project and the development of the cost effective climate proofing model, the project will influence the institution's budgeting processes to include climate proofing, ensuring long-term upscaling.

142. The project will also improve cross sectoral coordination to support the mainstreaming and replication. It will also codify knowledge and promote its dissemination to further support replication and upscaling. Consolidation and sharing of lessons and best practices at local, national and international levels will trigger upscaling.

143. Implementing the project through government and local institutions mandated to support the rural settlement and other development in the rural areas will build practical skills, operational capacities and ownership of the project initiatives, creating powerful incentives for upscaling.

144. Similarly, community and farmer level interventions will be aligned with the needs of the beneficiaries so that they are part of the community and household livelihood strategies. In its mainstreaming efforts, the project will promote the inclusion of climate adaptation activities and integrated use of climate information in the work of extension workers. The involvement of the private sector and the building of local business skills enables the project interventions to be taken up beyond the external financing of the project.

5. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): 11: Sustainable cities and communities; 1. No poverty; 2. Zero hunger; 5. Gender Equality; ,13: Climate Actior and 15 Life on land				
This project will contribute to the following country outcome (UNDAP/CPD, RPD, GPD): By 2023 Rwandan Institutions and communities are more equitably productively and sustainably managing natural resources and addressing climate change and natural disasters.				
	Objective and Outcome Indicators	**Baseline**	**Mid-term Target**	**End of Project Target**
Project Objective: To climate proof the Rural Settlement Programme of Rwanda via ecosystems/landscape approach (piloted in Kirehe and Gakenke Districts)	**Mandatory** Indicator 1: # Direct project beneficiaries disaggregated by gender (individual people)	0 (project yet to start)	1,100,000 [77] (50% women)	2,211,600 (50% women)[78];
	Mandatory LDCF Core Indicator 2: Hectares of land under improved management and/or protection for climate resilience (to recover productivity and delivery of ecosystems services as a basis for resilient Imidugudu).	0 (project yet to start)	10,000 ha[79]	25,566 ha[80]
	Mandatory LDCF Core Indicator 3: Change in vulnerability indices for the four villages assessed during the project formulation	Gasharu - 0.493 Bukinanyana – 0.490 Muramba – 0.487 Muzo/Kagano – 0.428	This indicator will be measured and reported at TE	Maximum vulnerability for all villages under 0.4 (NB: the lower the value the less vulnerable)
Project component 1	Enhanced institutional capacities, knowledge and climate information to integrate climate risks into the planning and implementation of ecosystems-based adaptation in the Imidugudu programme			
Project Outcome 1: Enhanced institutional capacities, knowledge and climate information to integrate climate risks into the	Indicator 4: Number of plans completed and available; these include: i) prototype climate proofing model; ii) EbA plans; iii) climate information and decision-tools	No climate proofing model exists; no EbA plans exist; no climate information and decision-tools specific to the project area exist	**Draft** climate proofing model defined (includes definition and **preliminary** information on requirements for its application such as institutional arrangement, prototype climate-resilient settlement designs, cost of	i) Final Climate proofing model delivered; ii) Four final EbA plans; iii) Climate information and decision-tools specific to the project area designed and being disseminated

[77] Includes 50,000 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), 20,000 people with diversified and strengthened livelihoods and sources of incomes, 1,000,000 people benefitting from new and improved climate information systems, 30,000 people trained

[78] 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, 2,000,000 people benefitting from new and improved climate information systems, 60,000 people trained. An additional 3 million people are expected to benefit indirectly – these include people in the rest of Kirehe and Gakenke Districts as well as the rest of the country benefiting from the consultations on climate proofing model development, policy dialogues and the awareness raising programmes that support national uptake (upscaling/replication) of the model.

[79] Currently, in the four pilot mini-catchments, there are 10,410 ha of land facing moderate to extremely high risks of soil erosion and about 7,000 ha of degraded forests. In addition, there are 288 ha and 47km of degraded wetlands and riverbanks, respectively. Rehabilitating these degraded lands, forests, wetlands and riverbanks will improve the ecological integrity (and ecosystems services) throughout the 25,566 ha landscape, for the benefit of 107,651 people in in 191 villages.

[80] See above footnote

planning and implementation of ecosystems-based adaptation in the Imidugudu programme			climate proofing Imidugudu throughout the country, etc.); Four draft EbA plans; climate information and decision-tools specific to the project area designed and being disseminated	
	Indicator 5: Change in the capacity indices (using UNDP capacity scoring system) for RHA, Local Authorities of Kirehe and Gakenke, Cooperatives and Production SACCOs, Twigire Muhinzi serving the four landscapes (capacity to support climate proofing)	RHA – 68% Local Authority Kirehe – 56%, Gakenke – 58% Cooperatives SACCOs – 35% Production SACCOs – 32% Twigire Muhinzi serving the four landscapes – baseline to be established in Yr 1	RHA – 73% Local Authority Kirehe – 61%, Gakenke – 63% Cooperatives SACCOs – 45% Production SACCOs – 45% Twigire Muhinzi serving the four landscapes – 5 percentage points over the baseline	RHA – 78% Local Authority Kirehe – 66%, Gakenke – 68% Cooperatives SACCOs – 55% Production SACCOs – 55% Twigire Muhinzi serving the four landscapes – 10 percentage points over the baseline
Outputs to achieve Outcome 1	1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups; 1.2: Climate-risk assessments methods and information provided to support adaptation planning as an on-going practice with a focus on the local level in the project areas; 1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes; 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process; 1.5: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites			
Project component 2	Adaptation measures implemented in targeted landscapes following the landscape-approach			
Outcome 2:	Indicator 6: Percentage of men and women in the four landscapes targeted by the project with surplus produce for sale, combined with change in annual household incomes (for those who sell).	Produce for sale: Men: 31.5% of those sampled in the baseline assessment; Women: 26.2% Youth: - negligible Income from sale of produce by all groups less than RWF 200,000 per year ($214)	Percentage selling surplus produce increase to: Men: 35% of the men farmers Women: 30% of the women farmers Youth: 25% of the youth engaged in farming Incomes from sale of produce increase by at least 10% for all groups	Percentage selling surplus produce increase to: Men: 40% of the men farmers Women: 35% of the women farmers Youth: 40% of the youth engaged in farming Incomes from sale of produce increase by at least 25% for all groups

	Indicator 7: Change in rating of the four pilot areas along the criteria set by the government for an IDP (see Table 1 of the Prodoc)[81]	Muzo/Kagano - 0.22 Muramba - 0.29 Gasharu - 0.31 Bukinanyana - 0.50	Muzo/Kagano - 0.4 Muramba - 0.4 Gasharu - 0.4 Bukinanyana - 0.6	Muzo/Kagano - 0.7 Muramba - 0.7 Gasharu - 0.7 Bukinanyana - 0.7
Outputs to achieve Outcome 2	2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas; 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone o resilient livelihoods – covering at least 500 ha distributed across the 23,560ha; 2.3: Upgrading of housing and infrastructure around Imidugudu to more climate smart versions in four villages benefitting about 500 households; 2.4: Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme; 2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes			
Project component 3	Policies and cross sectoral coordination			
Outcome 3: Improved Policy and coordination for effective integration of climate risks into the Imidugudu program	Indicator 8: Number of planning frameworks and tools that integrate climate proofing Imidugudu.	0	Draft recommendations available to mainstream climate proofing of Imidugudu in the NTS 1, Rwanda's National Investment Policy, the National Decentralisation Policy, two District Development Strategies, the Rural Settlement Strategic Sector Plan and the Organic Law on State Finance and Property (No. 12/2013 of 12/09/2013;	Approved recommendations available to mainstream climate roofing of Imidugudu in the NTS 1, Rwanda's National Investment Policy, the National Decentralisation Policy, two District Development Strategies, the Rural Settlement Strategic Sector Plan and the Organic Law or State Finance and Property (No. 12/2013 of 12/09/2013

[81] IDPs are expected to be a catalyst to urban development, they are expected to be supported by basics such as: planned/consolidated dwellings constructed with good quality permanent materials, have access to modern energy systems such as electricity, biogas, liquid petroleum gas, solar technologies, be equipped with water harvesting systems such as water tanks, have an established Girinka programme (access to one cow per family with a communal shed), be served by public facilities such as a community hall, health facility, Early Childhood Centre and a technical training centre, members have access to land under the land consolidation program (with its improved extension services, commercialization and access to value chains), have well developed access roads (tar, murram) and that members have insurance, preferably for crop and/or livestock. The four villages were rated depending on the extent to which they meet these requirements – on a scale of 0 to 1. These ratings are not objective measurements but quick judgment – they will be confirmed during the inception period and consequently used as a composite indicator signifying progress towards climate resilient Imidugudu.

	Indicator 9: REMA's toolkit and guidelines mainstream climate risks and climate proofing Imidugudu with Practical Tools for Sectoral Environmental Planning covering the following thematic areas: i) Building Constructions; ii) Rural Roads; iii) Water Supply; iv) Sanitation Systems; v) Forestry; vi) Crop Production; vii) Animal Husbandry; ix) Irrigation; x) Solid Waste Management; xi) The IDP Greening Toolkit[82]	REMA's Tool and Guideline currently do not mainstream climate proofing Imidugudu	Updated guidelines exist in draft form for i) Building Constructions; ii) Rural Roads; iii) Water Supply; iv) Sanitation Systems; v) Forestry; vi) Crop Production; vii) Animal Husbandry; ix) Irrigation; x) Solid Waste Management; xi) The IDP Greening Toolkit	Updated guidelines finalized and approved by REMA for i) Building Constructions; ii) Rural Roads; iii) Water Supply; iv) Sanitation Systems; v) Forestry; vi) Crop Production; vii) Animal Husbandry; ix) Irrigation; x) Solid Waste Management; xi) The IDP Greening Toolkit
Outputs to achieve Outcome 3	3.1: Strategic review of policies, national and district strategies, programmes and planning tools to ensure they capture climate proofing of Imidugudu in the investmen decision-making processes; 3.2: Technical and community institutions trained to improve their effectiveness in the cross sectoral coordination units and networks recently created by the GoR			
Project component 4	KM and Learning			
Outcome 4 - Outcome 4: Knowledge management and M&E strengthened to support iterative adaptation planning	Indicator 10: Monitoring information available and used in project reports	0 (project yet to start)	Participatory M&E plans ready and under implementation – already generating information to inform PIR;	M&E fully implemented – demonstrated by PIR reports attaining minimum ratings of Marginally Satisfactory; MTR and TE attaining minimum rating of Satisfactory
	Indicator 11: Number of technical publications highlighting lessons and experiences from the project	0 (project yet to start)	At least one policy publication presented at a national level meeting	At least three policy and technical publications presented at national and/or regional level meetings
Outputs to achieve Outcome 4	4.1: Development of participatory M&E plans and enhancement of communities' capacities to monitor, learn and sustain the climate proofing initiative 4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the imidugudu program			

[82] https://rema.gov.rw/fileadmin/templates/Documents/rema_doc/pei/FINAL%20Green%20village%20toolkit%20Printed.pdf

6. MONITORING AND EVALUATION (M&E) PLAN

145. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex 3 details the roles, responsibilities, and frequency of monitoring project results. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[83]. The costed M&E plan included below, and the Monitoring plan in Annex 3, will guide the LDCF GEF-specific M&E activities to be undertaken by this project. In addition to these mandatory UNDP and LDCF GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

Additional LDCF GEF monitoring and reporting requirements:

146. Inception Workshop and Report: A project inception workshop will be held within 60 days of project CEO endorsement, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework and monitoring plan, and identify new challenges to its implementation, especially those associated with COVID-19 pandemic and its response measures.
d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule Project Board meetings and finalize the first-year annual work plan.
h. Formally launch the Project.

GEF Project Implementation Report (PIR):

147. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the Project Board. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

LDCF Core Indicators:

[83] See https://www.thegef.org/gef/policies_guidelines

Monitoring and Evaluation Plan and Budget:			
LDCF GEF M&E requirements	Responsible Parties	Indicative costs (US$)	Time frame
		27 for IC and 28 for LC)	
TOTAL indicative COST		**250,000**	

7. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism:

154. Implementing Partner: The Implementing Partner for this project is REMA, which is also the implementing partner for many of the GEF projects in Rwanda. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document. 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. The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination with all other projects and partners, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

155. Responsible Parties: Responsible parties will be identified and contracted during the project implementation as necessary.

156. Project stakeholders and target groups: The implementation of the project will be based on extensive engagement with stakeholders at all levels across the landscape. **Table 1** in **Annex 7** (stakeholder engagement plan) outlines the main roles/ responsibilities during project implementation for various project stakeholders at all levels and describes their engagement in the project. At a broad level, participation and representation of stakeholders will be conducted through the governance structures put in place by the project as outlined and depicted in the organogram in the Governance and Management Arrangements section (Figure 4), and through the existing governance structures at District and local levels (e.g. JADF, community planning platforms (Monthly Community

Work (Umuganda), the parents evening forum (Umugoroba w'Ababyeyi) and general village assemblies (Inama Rusange y'Abaturage)). Community representatives and technical staff from village and Sector levels will be members of committees and teams assigned to plan and coordinate on-ground activities (such as adaptation planning). To the greatest extent possible, membership to committees will have equal representation of women, men and the youth. The community representatives and stakeholders will be trained as trainers and focal points to build capacities and to utilise participatory mapping, contextual interpretation of climate information and livelihood diversification interventions.

157. Civil society, academia and the private sector will be engaged as relevant, especially in the formulation of the climate proofing model and the livelihoods diversification initiatives under outcome 2 (such as accessing value chains, insurance schemes, credit schemes, etc.). Stakeholders will be consulted and engaged throughout the project implementation phase to: (i) promote understanding of the project's outcomes; (ii) promote stakeholder ownership of the project through engagement in planning, implementation and monitoring of the project interventions; (iii) communication to the public in a consistent, supportive and effective manner; and (iv) maximisation of linkage and synergy with other on-going projects. The following government institutions will be part of the project and sit on the Project Board: The Ministry of Environment, represented by Rwanda Environment Management Authority (REMA); The Ministry of Lands and Forestry, represented by the Rwanda Water and Forestry Authority (RWFA) and the Rwanda Land Management and Use Authority (RLMUA); The Ministry of Agriculture and Animal Resources , including the Rwanda Agriculture Board (RAB); Ministry of Local Governments; Districts Decentralized Structures.

158. UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is also responsible for the Project Assurance role of the Project Board/Steering Committee.

159. The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition

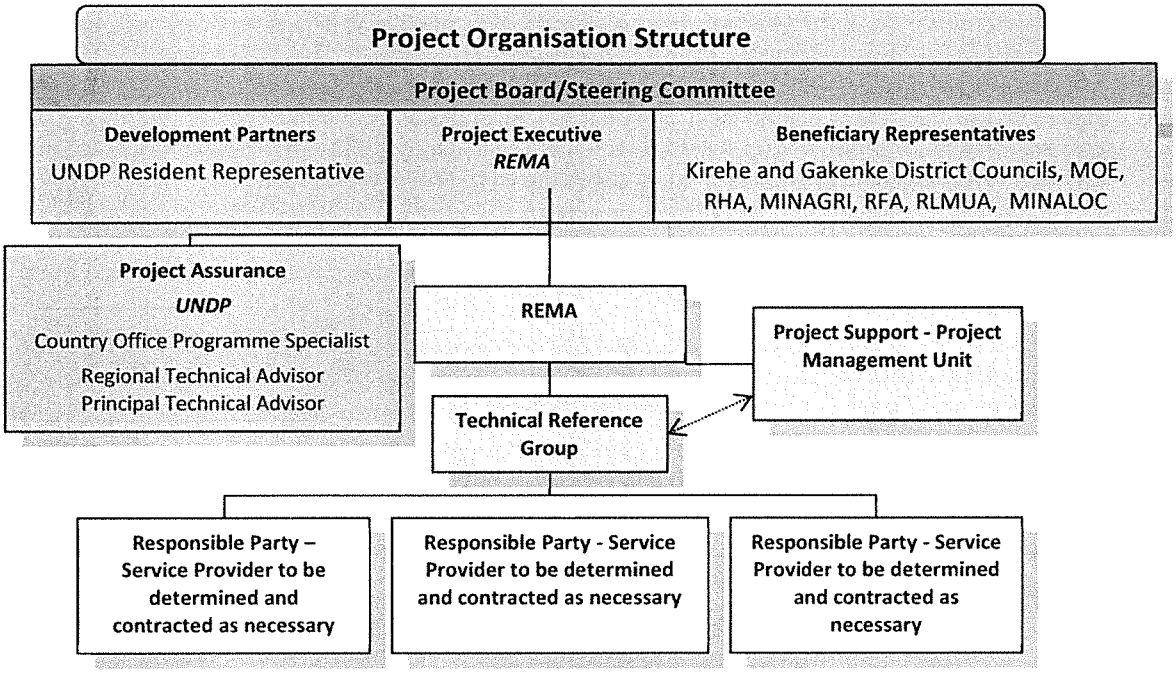
160. In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

161. Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
- Agree on project manager's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
- Ensure coordination between various donor and government-funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Track and monitor co-financing for this project;
- Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
- Appraise the annual project implementation report, including the quality assessment rating report;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Review combined delivery reports prior to certification by the implementing partner;

- Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Address project-level grievances;
- Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Figure 4: Project organization structure



162. The composition of the Project Board must include the following roles:

a. Project Executive: Is an individual who represents ownership of the project and chairs the Project Board. The Executive is normally the national counterpart for nationally implemented projects. The Project Executive is: Engineer Coletha RUHAMYA, the Director General of REMA.
b. Beneficiary Representative(s): Individuals or groups representing the interests of those who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often civil society representative(s) can fulfil this role. The Beneficiary representative (s) is/are: Kirehe and Gakenke Local District councils representatives, Nominated representatives from the Ministries of Infrastructure, Environment, Agriculture and Animal Resources and Local Government, Rwanda Housing Authority, and Rwanda Forestry Authority. The specific names will be confirmed at project Inception. The roles and responsibilities of each of these stakeholders is described in the Stakeholder Engagement Plan (and summarized in Table 1 of Annex 7). A common role for each of the stakeholders is to coordinate the project with relevant projects and programmes under their mandate. This will be achieved through annual planning events such as annual plans, PIR and Board meetings.

c. Development Partner(s): Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project. The Development Partner representative on the Project Board is the UNDP Resident Representative.

d. Project Assurance: UNDP performs the quality assurance role and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. UNDP provides a three – tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels. Project assurance is totally independent of the Project Management function. All three units have the primary role of coordinating the project with relevant projects, including existing and planned GEF and other bilateral projects.

163. **Project extensions:** The UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs during the extension period must be covered by non-GEF resources.

8. FINANCIAL PLANNING AND MANAGEMENT

164. The total cost of the project is USD 31,215,638. This is financed through a LDCF grant of USD 8,355,638, USD 500,000 in cash co-financing to be administered by UNDP and USD 22,360,000 in other co-financing. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the LDCF resources and the cash co-financing transferred to UNDP bank account only.

165. Confirmed Co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. Co-financing will be used for the following project activities/outputs (Table 6):

Table 6: Table of Co-Financing

Co-financing source	Co-financing type	Co-financing amount USD	Planned Co-financing Activities/Outputs	Risks	Risk Mitigation Measures
UNDP	Cash	500,000	To provide technical support and knowledge management to ensure that all the project activities are informed by national and international best practices, the project outputs meet international standards and knowledge is collated and shared widely. Participating in project meetings including Project Board meetings and contributing to the production of project reports	Very low risk, related to a reduction of UNDP core budgets for Rwanda over time.	UNDP Rwanda has prioritized adaptation and climate proofing of development gains. The fact that it has provided a letter of co-finance means it will find alternative funds for this project, should its core funds be reduced.
Rwanda Housing Authority	Grant	6,000,000	Building 500 houses and connecting power and waste management systems	Very low. RHA and the two districts have prioritized the construction of	The rural settlement is a government programme which is supported by the Rural Settlements Task

	In kind	4,000,000	Participating in project meetings including Project Board meetings and contributing to the production of project reports	the climate resilient dwellings in the three villages (Muzo/Kagano, Muramba and extension of Gasharu) and have budgeted the construction. If the budget is not fully financed during the preferred period (project years 2 to 4) the project will experience delays.	Force, Rwanda Land Management and Use Authority, Rwanda Environment Management Authority (REMA), the Rwanda Development Board (RDB), and the Rwanda Development Bank. The PB will keep these organizations informed on the project progress and will lobby them to ensure the co-finance is provided timely.
Ministry of Agriculture and Animal Resources	In kind	5,360,000	Upscaling project activities through the Twigire Muhinzi extension services. The project will be implemented in four 191 villages, a small part of the two districts. The Twigire Muhinzi will be equipped to upscale the project in the rest of the districts	Very low. The Ministry of Agriculture uses Twigire Muhinzi extension service in all districts of the country. Their operations are financed through government allocation to the Ministry.	The project will provide training to the District technical staff on climate proofing, climate smart agriculture, livelihoods and value chains. The teams will use their regular allocations to attend the training events and to incorporate the new skills into the rest of the extension service for the entire districts.
Kirehe District	In kind	2,000,000			
Gakenke District	In kind	2,000,000			
REMA	In kind	USD 3,000,000	Housing of the SPIU and the PMU, which will coordinate the project; Coordinating policy work related to the project, participating in the updating of the REMA Environment Management Tools, upscaling the project lessons to the rest of the country.	None	N/A
Total		**22,860,000**			

166. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager/TA and UNDP Country

Office will seek the approval of the BPPS/GEF team to ensure accurate reporting to the GEF: a) Budget re-allocations among outcomes in the project budget with amounts involving 10% of the total project grant or more; b) Introduction of new budget items that exceed 5% of original GEF allocation. Any over expenditure incurred beyond the available LDCF grant amount will be absorbed by non-LDCF/GEF resources (e.g. UNDP TRAC or cash co-financing).

167. Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. The audit cycle and process will be discussed during the Inception workshop.

168. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

169. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen with 3 months of posting the TE report to the UNDP ERC.** The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

170. Transfer or disposal of assets: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file[88]. The transfer should be done before Project Management Unit complete their assignments.

171. Financial completion (closure): The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision). The project will be financially completed **within 6 months of operational closure or after the date of cancellation.** Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

172. Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/GEF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.

88 See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default

9. TOTAL BUDGET AND WORK PLAN

Atlas Proposal or Award ID:	00097909	Atlas Primary Output Project ID:	00101455
Atlas Proposal or Award Title:	Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda		
Atlas Business Unit	RWA 10		
Atlas Primary Output Project Title	Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda		
UNDP-GEF PIMS No.	6083		
Implementing Partner	REMA		

Atlas Activity (LDCF Component)	Atlas Implementing Agent	Atlas Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Account Description	Amount in USD							See Budget Note:
						Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	
Outcome 1	REMA	62160	LDCF	71300	Local consultants	150,000	100,000	50,000	50,000	12,050	0	362,050	1
				71200	International Consultants	20,000	20,000	20,000	0	0	0	60,000	2
				72100	Contractual Services-Companies	70,000	200,000	130,000	0	0	0	400,000	3
				75700	Training, Workshops and Confer	85,000	120,000	100,000	96,000	74,500	0	475,500	4
				71600	Travel	2,000	4,000	4,000	4,000	4,000	600	18,600	5
				72800	Information Technology Equipmt	102,750	0	0	0	0	0	102,750	6
				74200	Audio Visual&Print Prod Costs	10,000	15,000	15,500	15,000	15,000	10,600	81,100	7
		Sub-Total Outcome 1 - LDCF				**439,750**	**459,000**	**319,500**	**165,000**	**105,550**	**11,200**	**1,500,000**	
Outcome 2	REMA	62160	LDCF	71300	Local consultants	36,000	36,000	36,000	36,000	36,000	0	180,000	8
				71400	Contractual Services - Individ	32,000	32,000	32,000	32,000	32,000	32,000	192,000	9
				72100	Contractual Services-Companies	91,500	350,000	450,000	370,000	320,000	200,000	1,781,500	10
				72300	Materials & Goods	300,000	600,000	800,000	800,000	800,000	389,000	3,689,000	11
				71600	Travel	10,000	12,000	12,600	13,000	13,000	13,170	73,770	12
		Sub-Total Outcome 2 - LDCF				**469,500**	**1,030,000**	**1,330,600**	**1,251,000**	**1,201,000**	**634,170**	**5,916,270**	
Outcome 3	REMA	62160	LDCF	72100	Contractual Services-Companies	0	50,000	50,000	28,000	0	0	128,000	13
				75700	Training Workshops and Confer	0	90,000	90,000	45,000	0	0	225,000	14
				74200	Audio Visual&Print Prod Costs	0	20,000	20,000	7,000	0	0	47,000	15
		Sub-Total Outcome 3 - LDCF					**160,000**	**160,000**	**80,000**	**0**	**0**	**400,000**	
Outcome 4	REMA	62160	LDCF	71400	Contractual Services - Individ	24,000	24,000	24,000	24,000	24,000	24,000	144,000	16
				71600	Travel	1,000	1,000	1,000	1,000	1,000	1,000	6,000	17
				Sub Tot outcome 4 - LDCF		**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**150,000**	
			UNDP	71200	International Consultants	32,000	0	20,000	0	0	20,000	**72,000**	18

		04000		71300	Local consultants	30,000	30,000	30,000	30,000	30,000	30,000	180,000	19
				75700	Training, Workshops and Confer	0	0	36,000	0	0	40,000	76,000	20
				72800	Information Technology Equipmt	8,500	1,000	1,500	1,500	1,500	1,000	15,000	21
				71600	Travel	0	0	4,000	0	4,000	4,000	12,000	22
			Subtotal outcome 4 - UNDP			**70,500**	**31,000**	**91,500**	**31,500**	**35,500**	**95,000**	**355,000**	
			Sub-Total Outcome 4 LDCF+UNDP			**95,500**	**56,000**	**116,500**	**56,500**	**60,500**	**120,000**	**505,000**	
PMC	REMA	62160	LDCF	71400	Contractual Services - Individ	54,600	54,600	54,600	54,600	54,600	54,600	327,600	23
				72800	Information Technology Equipmt	10,000	0	0	0	0	0	10,000	24
				74100	Professional Services	4,500	4,500	4,500	4,500	4,500	4,500	27,000	25
				71600	Travel	4,000	4,000	4,000	4,000	4,000	4,768	24,768	26
			Total PMC - LDCF			**73,100**	**63,100**	**63,100**	**63,100**	**63,100**	**63,868**	**389,368**	
		04000	UNDP	**71200**	International Consultants	0	0	40,000	0	0	50,000	**90,000**	27
				71300	Local consultants	0	0	25,000	0	0	30,000	**55,000**	28
				Sub-Tot UNDP PMC				**65,000**			**80,000**	**145,000**	
		Sub-Tot PMC UNDP+LDCF				**73,100**	**63,100**	**128,100**	**63,100**	**63,100**	**143,868**	**534,368**	
SUB-TOTAL Project - LDCF						**1,007,350**	**1,737,100**	**1,898,200**	**1,584,100**	**1,394,650**	**734,238**	**8,355,638**	
Sub-Total Project - UNDP						**70,500**	**31,000**	**156,500**	**31,500**	**35,500**	**175,000**	**500,000**	
Project Grand Total LDCF + UNDP						**1,077,850**	**1,768,100**	**2,054,700**	**1,615,600**	**1,430,150**	**909,238**	**8,855,638**	

Summary of Funds

	Amount	Amount	Amount	Amount	Amount	Amount	Total
	Year1	Year 2	Year 3	Year 4	Year 5	Year 6	Amount
LDCF	1,007,350	1,737,100	1,898,200	1,584,100	1,394,650	734,238	**8,355,638**
UNDP	70,500	31,000	156,500	31,500	35,500	175,000	**500,000**
Gov't of Rwanda (cash & in-kind)						22,360,000	**22,360,000**
TOTAL							**31,215,638**

Budget Notes

1	**Local Consultants** Output 1.1: Training • Consultancy firm/s to develop thirteen[89] sets of training modules to support integrating climate risk into the rural settlements for 171 days @ $550/day as detailed in the list of modules below, factoring in any new additional measures necessitated by the COVID-19 pandemic and the response measures. 171 X $550 =**$94,050** • Consultancy firm to train technical staff of relevant ministries (from National, District and Cell levels) @$550/day for 20 days (different topics) = **$550x20 = $11,000** • Community level training:

[89] These courses are drawn from the capacity assessment report (in Annex 12) and consultations with the stakeholders.

- Consultant to train 30 TOTs at District and Cell level @ $400 per day for 20 Days at the 2 districts headquarters = 20 X $400 X 2 = **$16,000**
- Trained Experts to conduct training at Cell and community levels @ $65 per day for 88[90] days at 15 locations = $65 X 88 X 15 = $85,800 plus contingency of $200 = **Total $86,000**

Training Modules to be developed:

- Downscaling climate information for local level planning – National and district level training to support outputs 1.3, 1.4 and 2.3 -20 days
- Developing ecosystems-based adaptation plans – Community level training to support output 1.4 and 2.3 -30 days
- Climate-risk assessments methods – district and community level training to support outputs 1.3, 1.4 and 1.5 – 10 days.
- Climate proofing Imidugudu models – definition of concept and requirements for its roll out – national level training to support output 1.1, 2.3 and outcomes 3 and 4 – 15 days.
- PICSA as a tool for climate information and decision-making tools to support planning of Imidugudu and community-based adaptation measures piloted in four communities – local level training to support output 1.5 and implementation of outcomes 2 – 15 days.
- Climate smart technologies for rehabilitating degraded/ unproductive land via agro-ecological interventions to reverse the effects of unsustainable agricultural practices – local level training to support output 2.1 – 20 days.
- Climate smart technologies to protect and rehabilitate ecologically sensitive segments of the landscape such as hills, riverbanks and lake shores, wetlands, watersheds, etc. – local level training to support output 2.2 – 20 days.
- Practical measures to green the rural settlements in line with an updated Greening and Climate Proofing Toolkit – district and local level training to support outputs 2.3 – 10 days.
- Diversifying livestock management systems – district and local level training to support output 2.1 – 10 days.
- Financial literacy - existing value chains and their requirements, existing financial institutions and their loan/subsidy packages and tips on how to practically join/engage with them – local level training to support implementation of output 2.5 – 20 days.
- Radical and progressive terracing techniques, other soil and water conservation techniques, agroforestry, plant husbandry and watershed services – district and local level training to support outputs 2.1 and 2.2 – 10 days.
- Gender mainstreaming in development programmes – importance, methods and benefits – local level training to support the whole project – 6 days
- Mainstreaming climate risks into policies – importance and local level participation – 5 days.

Total Cost output 1.1 = $94,050+$11,000+$16,000+$86,000 = $207,050

Output 1.2:

Local consultant to collate the information and climate risk assessment tools and methods developed by the Joint Program on Support to Ministry of Disaster Management and Refugees and make it ready for dissemination to local communities, integrating any new measures necessitated by the COVID-19 pandemic and the response measures – at **$550*20 = Total cost output 1.2 = $11,000**

Output 1.3: Developing climate proofing model

1) Local Consultant to assist **Rwanda Housing Authority to** coordinate the formulation of the climate proofing model via the following activities, integrating any new measures necessitated by the COVID-19 pandemic and the response measures (100 days spread through 60 months):
   - Establish a Climate Proofing Technical Committee and Terms of Reference for its operations;
   - Undertake stakeholder mapping and identify relevant stakeholders to be consulted;
   - 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;
   - Undertake the consultative process in line with the stakeholder consultation strategy (at all levels);
   - Collate the inputs from the stakeholder consultations into several climate proofing options; assess the feasibility of the various options via cost benefit analysis including considerations of social, economic and environmental feasibility using multi-criteria approaches.

[90] Ranging from 5-7 days per course

	• 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). • 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); • Reflect on the process and document lessons learnt (in conjunction with output 4.2). **Cost = $55,000 (at $550/day for 100 days spread over 60 months).** **Output 1.5: Meteo-Rwanda capacitated to provide high quality climate information to support uptake of gender and COVID-19 responsive adaptation measures in the four project sites and nationally** Cost of a local consultant (Meteorological technologist) to assist **Meteo Rwanda** to set up and operationalize a numerical weather prediction and climate modelling centre. The consultant will undertake the following activities (50 days spread over 36 months): • Review global best practices for such a centre and make recommendations for the project and the Meteo-Rwanda actions; • Assess the capacity of Meteo-Rwanda to take up recommended global best practices; • Provide the recommended design and capacity building required to operationalize the centre and improve the quality, relevance and accuracy of the climate information provided by the centre; • Assist with the set up and operationalization of the concept; • conduct climate risk and sensitivity analyses and provide input into the development of the cost-effective climate proofing model/defining and PICSA advisory services; • Reflect on the process and document lessons learnt (to contribute to and in conjunction with output 4.2). **Cost = $550/dayx50 = $27,500** A National consultant to assist Meteo-Rwanda to: • Assess the RAB and Twigire Muhinzi of Kirehe and Gakenke experiences of rolling out PICSA advisory services and make recommendations for the project to roll out the same in the project areas, integrating any new measures necessitated by the COVID-19 pandemic and the response measures (30 days spread out in one year); **Cost = $550/dayx30 = $16,500** **Vulnerability Assessment:** Cost of hiring the services of an individual to undertake the vulnerability assessment to refine the baseline vulnerability assessment and provide specialized technical support to the ecosystems based adaptation planning @ 90 days @ $500/day (includes hiring/providing data enumerators, transport, data collection and analysis in the eight cells) – in year 1. The consultant will integrate any new measures necessitated by COVID-19 and the response measures into the vulnerability assessment. S/he will also reflect on the process and document lessons learnt (to contribute to and in conjunction with output 4.2). **Total = $45,000** **Total cost Local Consultants under outcome 1 = $207,050+$11,000+=$55,000+$27,500+$16,500+$45,000=$362,050**
2	**International Consultant:** International climate scientist to provide technical expertise to the national consultants, RHA and the Technical Teams on the development of the climate proofing model @ $1000/day for 20 days/year for 3 years = $60,000 (Total inclusive costs – includes cost of travel and any DSA as relevant) = **$60,000.** The IC will ensure international standards are met regarding the choice of methodologies, integration of risks associated with COVID-19, technical quality of the work and publication of findings in refereed journals (contribute to and in conjunction with output 4.2). **Total = $ 60,000**
3	**Contractual Services Companies** **Output 1.4:** The cost of hiring a local organisation with comparative advantage (experience and capacities) to facilitate the local communities to develop Ecosystems-based Adaptation Plans, integrating any new measures necessitated by the COVID-19 pandemic and the response measures. The output will be implemented via the following activities of output 1.4. This is expected to take 500 days spread over three years at a daily fee of $800/day. **Cost = $800/dayx500 = $400,000.** The organization will undertake the following activities: • Mobilize communities from 191 villages and conduct training to ensure their effective participation in the design of the adaptation plans (in conjunction with output 1.4);

	• Review available EbA planning tools and select the most appropriate for application under the Rwanda pilot areas conditions; • Conduct planning meetings - facilitate a discussion on the importance of the landscape for each of the stakeholders and sectors and how the actions of one stakeholder group or sector can influence the vulnerability and adaptation prospects of others, either positively or negatively; • Review and stock taking of socio-ecological information and information on the institutional and regulatory context; • Analyse climate change scenarios and assess current and future vulnerabilities (includes updating/ground trothing the vulnerability assessment report); • Identify, select and appraise adaptation options – including trade-offs; • Develop a clear, long-term implementation strategy, a financing and sustainability strategy; • Develop an M&E system for the EbA plans to support adaptive management, learning and upscaling; • Develop and disseminate guidelines to integrate the EbA plan into day to day activities of the local communities and the existing development programmes, policies, frameworks and planning mechanisms at the local level; • Design a sustainability strategy to ensure continued implementation of the EbA plans and start its operationalization before the end of the proposed project. • Reflect on the development and delivery of the training programmes, provision of information to support adaptation planning as an on-going practice at the local level and the EbA planning processes and document lessons learnt (to contribute to and in conjunction with output 4.2). **Total = 400,000**
4	**Costs of training workshops and conferences** - includes food, daily assistance allowances, hiring of marquee/venue etc.: Training workshops for training on the themes listed under Budget Note 1: a) Cell level training – 5 events per year for 3 years at an average cost of $13,500 per event (average of 30 participants per event)– 5*3*$13,500 = **$202,500** b) District and National level conferences and meetings related to climate proofing model development @ 2 events per year for 3 years at an average cost of $13,500 per event (average of 30 participants per event) – 2*3*$13,500 = $ 81,000 c) Consultative workshops to develop 4 EbA plans, disseminate information on climate risks tools and rolling out of PICSA services (covering 191 villages) - 8 events per year for 4 years at an average cost of $6,000 per event (with an average of 50 participants per event) – 8*4*$6,000 = **$192,000** **Total = $202,500+$81,000+$192,000 = $475,500.**
5	**Travel** 1) Travel related to training under output 1.1, EbA planning, disseminating climate risks methods and rolling out of PICSA advisory services and climate proofing development meetings. • Travel costs for local consultants for training at US$100 per day for 42 days (including car hire and driver): $100X42=**$4,200** • Travel costs for participants of Cell level training at five events per year for two years = ten events at $20 dollars per person for about 30 participants per event = $20X30 participants X 10 events = **$6,000** • Travel costs for National and district climate proofing model development at two events per year for three years = 6 events at an average cost of $500 per event = $500x6 events= **$3,000** • Travel cost for PMU staff on supervision missions, Management and Administrative Support, Field Activities Implementation and Technical Monitoring of Outcome 1 = 12 missions of about 3 days per mission (36 days) in six years; vehicle/driver/fuel at US$150 per day = US$150 X 36= **$5,400** **Total= $4,200+$6,000+$3,000+$5,400 = $18,600**
6	Cost of equipment for setting up the numerical weather prediction and climate modelling centre at Meteo Rwanda (2 mini cluster computers $45,000; 4 portable 1TB storage disks, and $3,250; 1 fixed storage for data archiving and data manipulation $39,000; 2 high capacity desktops (for to remote the clusters) and connection installations $6,000, 1 60-inch TV screen and accessories $3,500 (for wide visualisation of the generated weather graphs); and 2 digital GPSs $6,000 **Total = $102,750**
7	Cost of printing and dissemination of reports on findings of assessments, workshop materials at an average of $3,000 per year per district for at least 5 years = $=3,000*2districts*6 years = **$36,000** Cost of printing of community facilitation materials for EbA planning, PICSA roll out and other educational and informative material for the six-year duration = $236.12 x 191 villages = **$45,100**

	Total - $36,000+$45,100 = $81,100
Outcome 2	
8	**Local Consultants** • Senior engineer (under RHA) to provide specialized technical assistance to the settlement schemes on the ground to ensure that the construction works follow all the national and international standards and safeguards, in line with the ESMP, and working closely with the project gender and safeguards specialists. The consultant will provide services for approximately 14 days per quarter for at least 4 years (total of 225 days) at a rate of $400/day (spread over 5 years). S/he will review the process and generate lessons to contribute to output 4.2. Cost - $400x225 = **$90,000.** • Climate scientist to provide technical support to the PMU and to ensure that the rural settlement co-finance is climate informed and integrates climate risks, in line with the model developed under output 1.1 (interactively). The climate scientist will provide technical input into the selection of sites, design and building of the new IDPs and related infrastructure (such as roads), ensuring that each step incorporate measures to climate proof the process and the settlement programme, and, integrates any new measures necessitated by the COVID-19 pandemic and the response measures. The consultant will provide services for approximately 14 days per quarter for at least 4 years (total of 225 days) at a rate of $400/day (spread over 5 years). S/he will review the process and generate lessons to contribute to output 4.2. Cost - $400x225 = **$90,000.** **Total Local Consultants under Outcome 2 = $90,000+$90,000=$180,000**
9	**Contractual services - individuals** a) **Senior Safeguards Specialist** who will prepare the ESMP and the Grievance mechanism and ensure they guide implementation of the entire project. The consultant will lead the updating of the SESP to include any new risks and mitigation measures associated with the COVID-19 pandemic and the response measures. These will be the basis of the ESMP, which will be reviewed and updated periodically (at least once a year) to generate lessons to contribute to output 4.2 (320 days spread over six years) @$300/day. **Cost** – 320daysx$300/day = $96,000 = about $16,000 per year spread over the 6 years of the project). b) **Senior Gender Specialist** to refine the Gender Action Plan, integrating any new measures necessitated by the COVID-19 pandemic and the response measures, provide gender training and ensure that gender is mainstreamed into project implementation, M&E and reporting. The consultant will periodically review the process (at least once a year) and generate lessons to contribute to output 4.2. Cost – (320 days spread over six years) @$300/day. Cost – 320daysx$300/day = $96,000 = about $16,000 per year spread over the 6 years of the project). Total **Contractual services – individuals under outcome 2 = $96,000+$96,000=$192,000** over six years.
10	**Contractual Services – Companies** 1. **Improved energy and domestic water systems experts:** These funds will hire the services of a contractor experienced with rural energy and water supply systems to implement activities of output 2.4, integrating any new measures necessitated by the COVID-19 pandemic and the response measures. The entity will: a. 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 (@ $4,000). b. Organize the construction of at least 500 of the selected Biogas and BioSanGas toilets, via VUP while training technicians for long-term maintenance. Each BioSanGas costs around $700. Cost = 500x$700 = $350,000. c. Acquire and distribute improved cookstoves and solar technologies @ $100,000. d. Construct communal cowsheds and link the households to the Girinka programme to acquire one cow per willing household (linked to the livestock diversification scheme under output 2.1). Assuming 85% uptake of cows = 425 cows @ $500/cow and cowshed = $212,500. e. Acquire and install at least 500 water tanks @ $400 (minimum capacity of 3000 litres) – $200,000. f. Train (or provide refresher courses) for at least 10 technicians (5 of them females) on electrical, plumbing, biogas and road maintenance. These technicians will be engaged in the construction of these facilities to acquire on-the-job-training experience - $30,000. g. Cost of expert design, independent validation of quality of delivery against design, sustainability and impact, and documentation of final delivery report for 150 days spread over two years @ $500/day = $75,000. **Total cost** – $4,000+$350,000+$100,000+$212,500+$200,000+$30,000+$75,000=**$971,500**
	Enterprise Development experts: These funds will hire the services of an enterprise development entity who will implement output 2.5, integrating any new measures necessitated by the COVID-19 pandemic and the response measures, as follows: • Building on the PPG assessments, refine the analysis of market opportunities @$4,000.

	• Implement selected income-generating activities, providing direct materials and financial support to link potential entrepreneurs to markets and to improve production, processing, packaging and sales estimated to cost at least $150,000 per project site; total of 4 sites x $150,000 = $600,000 (to be disbursed on evidential enterprises' selected and demonstrated to be viable). • Identify private sector players relevant to the selected enterprises and facilitate their uptake of value addition activities (e.g. agro-processing of avocado and other fruits, vegetables, poultry feeds and products), estimated to cost $ 25,000 per project site ------- 4 sites x $ 25,000 /site = $100,000. • Identify sources of financial resources (banks, MFIs, SACCOs and VSLA); assess their requirements and develop an awareness raising package (summarizing these requirements) @ $5,000. • Disseminate the information widely, using cost effective avenues – such as including the information in the package used to train farmers, public barazas/meetings/fora, etc., estimated to cost about $10,000. • Train SACCOs and VSLA on financial management, recruitment, business planning, agro-processing, marketing, etc. @ 5,000 • Working through marketing cooperatives, mobilize producers to link up with established value chains e.g. for maize, milk, coffee, fruits (such as avocado) @$ 5,000. • Establish an agribusiness forum for exchange on sustainable value chain development and private sector engagement @$1,000. • Cost of formulating and operationalizing a sustainable financing plan @$5,000 • Cost of expert design, independent validation of quality of delivery against design, sustainability and impact, and documentation of final delivery report: 150 days spread over two years @ $500/day = $75,000 • Reflect on the process and document lessons to contribute to and in conjunction with output 4.2 Cost = $4,000+$600,000+$100,000+$5,000+$10,000+$5,000+$5,000+$1,000+$5,000+$75,000=**$810,000** **Grand total contractual services companies under outcome 2 =$971,500+$810,000 = $1,781,500**
11	**Materials and Goods** **1) Climate smart agriculture and livestock production systems:** These funds will be used by the extension service of Kirehe and Gekenke (under MoU with REMA) to support the uptake of climate smart agriculture and livestock production systems under output 2.1, integrating any new measures necessitated by the COVID-19 pandemic and the response measures. This will be implemented via the Twigire Muhinzi system, Farmer Field Schools: • Facilitate farmers in all the villages to consolidate land and start farming under the Crop Intensification Programme to increase access to inputs (fertilizers, high quality seeds, processors and markets) (cost of travel, provided under travel). • Supplement government subsidies for at least 1,000 farmers to acquire solar irrigation pumps @ 500 per pump = $500,000. • Building on PPG baseline assessments, refine the assessment of potential livestock diversification opportunities such as small ruminants, poultry, piggery, rabbits, etc. and the challenges for adopting them and make recommendations to address the challenges and diversify; and mainstream the recommendations into the Twigire Muhinzi packages @$10,000. • Support at least 200 households to take up the diversified livestock programme (form support groups/clubs and subsidize start-up packs for at least 40 groups @ around $5,000 per group/club) = $200,000. • Cost of reviewing the climate smart agriculture practices (many available online) and determine suitability for use by the project and include the recommendations into the Twigire Muhinzi packages @$1,000. • Direct support to households to adopt these climate smart measures (purchases of relevant tools and other necessary materials as starter packs for Farmer Field Schools @ $5,000 per FFS for at least 50 FFSs = $250,000 (to be defined and approved by the PMU). • Finance collaboration with Radiant Insurance company to disseminate the details of the GoR crop and livestock insurance programme and recruit households – through the Twigire Muhinzi – linking the payments of premiums to the earnings from VUP (see implementation of outputs 2.1, 2.2, 2.3 - @ $10,000. • Reflect on the process and document lessons learnt (in conjunction with output 4.2). Tot = $500,000+$10,000+$200,000+$1,000+$250,000+$10,000 = **$971,000** **2) Rehabilitation of degraded hotspots**: These funds will be used by the Ministry of Agriculture, in conjunction with the district authorities to implement the activities of output 2.2, via the VUP work programme (under MoU with REMA). The entity will organize communities to implement land husbandry activities: a) Refine training on specific rehabilitation measures/works (tree husbandry, terrace making and reestablishment of cropping systems on the new terraces, riverbank protection, etc.) – only cost of travel, charged under travel. b) Identify potential entrepreneurs who can, with the support of the project, establish tree nurseries via business arrangements. This should be done in line with the Gender Action Plan and the ESMP (Environmental and Social Management Plan) to ensure that farmers/households who lose use of their lands for about a year (while establishing terraces) get preference in the uptake of such income generating activities. Noting that the project will balance efficiency,

	effectiveness and the preferential treatment of the vulnerable – establish 30ha of nursery sites (distributed evenly across the 191 villages) @ 2,000/ha (cost of establishing the nursery grounds, planting and nurturing the seedlings – watering, plant husbandry) = 30hax$2,000/ha=$60,000; c) Labour cost for planting trees and grasses = US$7 per person day for about 4000 person days per project site = $7x4000 daysx4 sites = $112,000. d) Draw up plans and finance their implementation to maintain and protect seedlings (protect from grazing by livestock, monitor to replant if seedlings die off, weeding) for 3 years after planting @ $24,000 per project site = $24,000x4=$96,000. e) Establish terraces and re-establish cropping systems (planting maize, bananas, beans, etc.) (300 ha) @$3,000/ha = **$900,000**. Total = **$60,000+$112,000+$96,000+$900,000 = $1,168,000.**
	Upgrading houses to more climate secure versions for 500 households with climate smart facilities, integrating any new measures necessitated by the COVID-19 pandemic and the response measures: These funds will be used by the RHA to complement the government co-finance to implement output 2.3 to upgrade housing: a) cost of upgrading at least 30km of roads @$35,000/km = $1,050,000; b) cost of installing waste management systems in four villages @$10,000/village=$40,000. c) Cost of installing electricity (including solar power) for 500 households @approximately $600 per household = $300,000. d) Cost of establishing health and Imidugudu required amenities (community halls for educational purposes and trading grounds) @$40,000 per village (for 4 villages) = $160,000. **Total = $1,050,000+$40,000+$300,000+$160,000=$1,550,000.** **Grand Total materials and goods for outcome 2= $971,000+$1,168,000+=$1,550,000 = $3,689,000**
12	Cost of travel to implement the activities of outcome 2 (hiring and fuelling vehicles and motorcycles; drivers, subsistence allowances) at $10,000 for yr 1, $12,000 for yr2, $12,600 for yr 3, $13,000 for years 4 and 5; $13,170 for yr6. Total $73,770.
Outcome 3	
13	**Contractual services - company** These funds will hire the services of an entity to facilitate policy reform and update the Environmental Planning guidelines under outcome 3 (Outputs 3.1 and 3.2), integrating any new measures necessitated by the COVID-19 pandemic and the response measures. The funds will cover: a) Cost of 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.** (b) cost of updating REMA's Environmental management Tools and Guidelines[91] to mainstream climate risks consideration 12 manuals @ 5 days per manual = 60 days @$800/day = **$48,000.** (c) Cost of disseminating policy briefs and lobbying the relevant authorities for the adoption of the recommended changes and upgrades to relevant policies as necessary – 50 days @$800/day = **$40,000**. The entity will reflect on the processes of using strategic policy reviews to ensure budgetary allocation for the upscaling of the climate proofing model in the Imidugudu programme and capacity building for improved coordination and document lessons learnt (to contribute to and in conjunction with output 4.2). Total Cost - $40,000+$48,000+$40,000 = **$128,000.**
14	**Training Workshops and conferences** Cost of fifteen policy review meetings (venues and conferences catering, transport and subsistence allowances) at approximately $15,000 per three-day meeting with 30 participants = 15x$15,000 = **$225,000.** Meetings include district Cell and National levels, for technicians and policy makers, civil society, academia and community groups.
15	**Audio Visual&Print Prod Costs** – costs of printing and disseminating assessment reports, pamphlets, policy briefs, etc. at **$47,000** for six years
Outcome 4	
16	**Contractual Services – individuals** **1) M&E Specialist**. With the support/supervision of the PM, the specialist will spearhead the implementation of outputs 4.1 as follows: • Working with the Safeguards Specialist to integrate any additional risk measures associated with the COVID-19 pandemic and building on the participatory M&E plan produced via the EbA planning process, identify, in a

[91] https://rema.gov.rw/rema_doc/Environmental%20Managemnent%20Practical%20Tools/1-Practical%20Tools%20for%20Sectoral%20Environmental%20Planning%20_Final%20Version_%2017-07-2010.pdf

	participatory and gender responsive process, additional indicators for the comprehensive monitoring of the effectiveness of the rural settlement programme on adaptive capacities of its beneficiaries. • Design and implement a training programme to equip the beneficiaries of the rural settlement programme in the project area to participate in data collection, storage, analysis and use of the outcomes of the process (in conjunction with output 1.1) • Design and implement a training programme for the technical institutions supporting the rural settlement programme on M&E, linking them to the GIS capacity of the Rwanda Land Management and Use Authority (in conjunction with output 1.1) • Refine the project Monitoring and Evaluation Framework (annex 3) to incorporate any amendments that may be necessary based on data or issues emerging from the planning process, and any refinement of the gender mainstreaming indicators • Track project performance against the M&E framework quarterly, using UNDP Standard tools • Facilitate the MTR and the TE and share lessons to improve current and future programming and implementation Cost - **$144,000** over six years at 2,000 per month for 72 months
17	**Travel** Cost of travel for local consultants organizing participatory M&E process with Twigire Muhinzi – at $1,000 per year for 6 years = **Total $6,000**
18	**International Consultants – UNDP Funds** i. Year 1 – one IC – safeguards experts to provide technical expertise to the development of the ESMP – 32 days @ $1,000 daily (all inclusive costs – travel, DSA). Total - $32,000 ii. Year 3 and 6 – one IC each year to support the KM sharing events (one per event) to support the preparation of the KM sharing meetings, preparing guidelines for the meetings, outlines for technical papers and editing the publications – 20 days per event – Total 40 days @$1,000 (total inclusive cost). Total - $40,000 ($20,000 in yr 3 and $20,000 in yr6). Total – **$72,000**
19	**Local consultant - UNDP Funds** 2) **Senior Communications and Project Specialist:** Local contractor posted to the SPIU as UNDP's contribution to government support to boost the capacity of the SPIU – 600 days spread over six years. The specialist will spearhead the implementation of output 4.2 as follows: • Design, in a participatory, gender and COVID-19 responsive processes, a project communications strategy and support its dissemination. • Establish and support a community-led advocacy programme for the project, working through Farmer Promoters and FFS Facilitators. • Prepare and disseminate communications pieces and knowledge products targeting different audiences (decision-makers, project partners, aligned programmes, community stakeholders). • Facilitate stakeholders to participate in local, national and regional lesson-sharing events convened by related projects and programmes, and compile lessons learnt reports or communications pieces based on this participation. • Convene at least two lesson-sharing workshops during the project's lifespan (preferably linked to MTR and TE feedback sessions) and compile the proceedings into lesson-sharing reports. • Set up a dedicated knowledge management system (web-based) where all information relevant to the project can be accessed, in a well-archived form. • Support consultants and institutions in charge of implementing other outputs to reflect on the processes and document lessons to inform adaptive management and implementation of similar initiatives. • Collate all the lessons and produce technical publications on lessons learnt from this project. **Total Cost – 600daysx$300/day = $180,000 (approximately $ 2,500 per month).**
20	**Conferences and workshops - UNDP Funds** One inception workshop @ $10,000 in yr 1; two knowledge management sharing events – at $30,000 for the first (yr 3) and $36,000 for the end of project knowledge sharing workshop (with around 40 participants at a minimum). Includes payments for at least 10 sponsored technical presentations sharing relevant knowledge at each event, at @$1,000 each ($20,000) and publication of the proceedings ($5,000 for the 1st and $7,000 for the 2nd). Also cost of venues, food, travel, DSAs. **Total cost - $10,000+$30,000+$36,000 = $76,000**

21	**Information technology** - UNDP Funds – Purchase and running costs of laptop and software, camera, phones for REMA, RHA, Kirehe and Gakenke districts: 4 laptops @ $2,500 each (including software and licences) = $10,000; one camera per office @ $1,000 each = 4,000; 4 printers @$250 each = $1,000. **Total = $15,000**
22	**KM sharing Travel costs** - UNDP Funds; Travel of technical staff of the project to international fora to share project experiences (via presentations approved by the PM) and learn lessons from similar initiatives – at least 3 trips (year 3, 5 and 6) - for two people (staff members from different institutions and representatives of local communities at) $2,000 per person per trip = **$12,000** (tickets, daily subsistence allowances and on the ground transportation). Total = **$12,000**
PMC	
23	**Contractual services – individuals** a) Salary of a Financial/Administrative Accountant (at $ 800/month for 72months) = **Total $57,600** b) Salary of Project Manager /Coordinator (at $2,500/month) for 72 months - **Total = $180,000** c) Project Procurement Specialist (240 days spread over six years) – 300daysx$300/day = **$90,000** (budgeted at $1,250/month throughout the six-year project duration). **Total – $57,600+$180,000+$90,000 = $327,600**
24	Cost of 3 computers for the PMC at $2,500 each (including software and licenses) = **$7,500**; 2 cell phones at $400 each **($800)** and running costs of $283.3/year for six years (average) = **$ 1,700**. Total = $7,500+$800+$1,700 = **$10,000**
25	Cost of annual audits **@ $4500 per year for 6 years – Total = $27,000.**
26	**Travel** related to the inception workshop, Project Board meetings, PMU management and supervision travel, PIR and monitoring gender and results framework indicators (car hire, fuel, drivers, daily subsistence allowances) for the implementation of the project activities at $4,000 per year for yrs 1- 5 and $ 4,768 for yr6. -- **Total - $24,768;**
27	**International Consultants – UNDP Funds** • Years 3 - Mid-Term Review - **$40,000** • Year 6 - Terminal Evaluation - **$50,000** Total -- $ 90,000
28	**National Consultants – UNDP Funds** • Years 3 -- Mid-Term Review - **$25,000** • Year 6 - Terminal Evaluation - **$30,000** **Total - $55,000**

10. LEGAL CONTEXT

Option a. Where the country has signed the Standard Basic Assistance Agreement (SBAA)

173. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Rwanda and UNDP, signed in 1977. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

174. This project will be implemented by REMA in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply. The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

11. Risk Management

175. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

176. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

177. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

178. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

179. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

180. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

181. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

182. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

183. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

184. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

185. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable

conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

186. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

187. Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

188. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

189. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

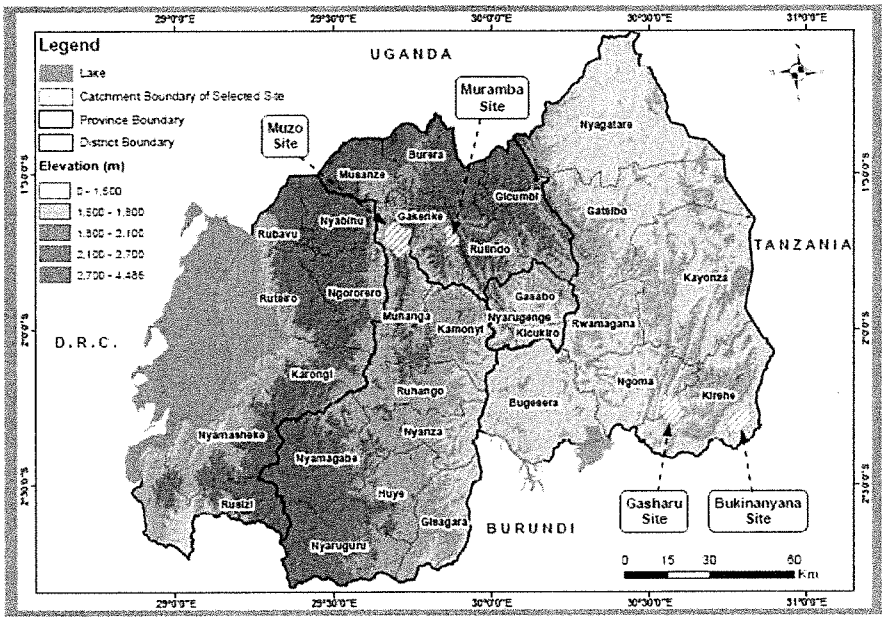
190. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

191. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, mutatis mutandis, in all sub-contracts or sub-agreements entered into further to this Project Document.

12. MANDATORY ANNEXES

Annex 1: Maps and geospatial coordinates of the project area

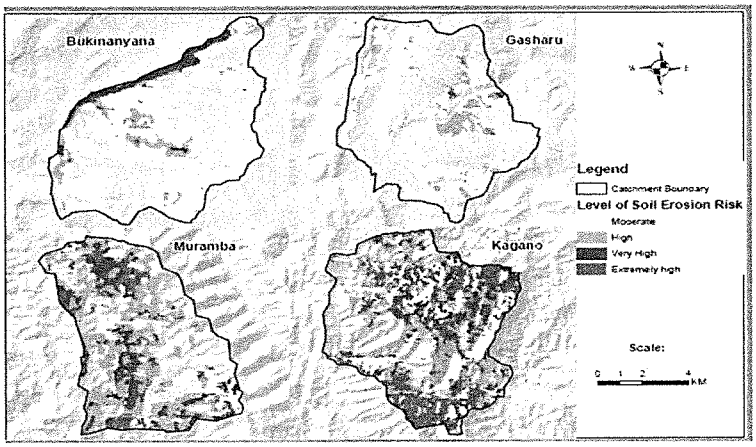
Figure 5: Map 1 -Project sites location



Geospatial coordinates of the project area

Bukinanyana is *located between Long: 30°44'46.24"E, Lat: 2°14'41.52"S (Upper Left corner's coordinates); and Long: 30°50'1.46"E 30.834003, Lat: 2°20'28.95"S (Lower Right corner's coordinates).* Gasharu *located between Long: 30°31'51.95"E, Lat: 2°12'37.97"S (UL coordinates); and Long: 30°37'4.87"E, Lat: 2°19'2.25"S (LR coordinates).* Muramba is located between Long: *Muramba is located between Long: 29°50'25.65"E, Lat: 1°40'4.12"S (UL coordinates) and Long: 29°54'17.47"E, Lat: 1°44'37.17"S (LR coordinates).* Kagano is located between *Long: 29°39'4.40"E, Lat: 1°39'7.04"S (UL coordinates) and Long: 29°45'40.73"E, Lat: 1°46'46.77"S (LR coordinates)*

Figure 6: Map 2 - Location of four project sites showing risks of soil erosion



Annex 2: Multi Year Annual Workplan

Activity	All activity indicators will be developed during the inception period by the stakeholders, led by the PMU and reported in each six monthly and annual reports	**Responsible Party**	**Year 1**				**Year 2**				**Year 3**				**Year 4**				**Year 5**				**Year 6**			
			Q 1	Q 2	Q 1	Q 2	Q 3	Q 4	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Project Inception including IW	Inception report/ PMU established	REMA																								
Formulate an ESMP	ESMP to guide rest of project implementation	PMU																								
Outcome 1: Enhanced institutional capacities, knowledge and climate information to integrate climate risks into the planning and implementation of ecosystems based adaptation in the Imidugudu programme																										
Output 1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups																										
1		PMU																								
2		PMU																								
3		PMU																								
4																										
Output 1.2: Climate-risk assessments methods and information provided to support adaptation planning as an on-going practice with a focus on the local level in the project areas																										
5		PMU																								
6																										
7																										
Output 1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes																										
8		PMU																								
9		PMU																								
10		PMU																								
11		PMU																								

12		PMU																								
13		PMU																								
14		PMU																								
Output 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process																										
15		PMU																								
16																										
17		PMU																								
18		PMU																								
19																										
20																										
21																										
22																										
23																										
24																										
Output 1.5: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites																										
25																										
26																										
27																										
28																										
29																										
Outcome 2: Adaptation measures implemented in targeted landscapes following the landscape-approach																										
Output 2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas																										
30																										
31																										
32																										
33																										
34																										
35																										
36																										
37																										
38																										

39																										
Output 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha																										
40		PMU																								
41		PMU																								
42		PMU																								
43		PMU																								
44		PMU																								
45		PMU																								
46																										
47																										
Output 2.3: Upgrading of housing and infrastructure around Imidugudu to more climate smart versions in four villages benefitting about 500 households																										
48		PMU																								
49																										
50																										
51		PMU																								
Output 2.4: Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme																										
52																										
53																										
54																										
55																										
56																										
Output 2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes																										
57																										
58																										
59																										
60																										
61																										
62																										
Outcome 3: Policies and cross sectorial coordination																										
Output 3.1: 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																										

63		PMU																								
64																										
65		PMU																								
Output 3.2: Technical and community institutions trained to improve their effectiveness in the cross sectoral coordination units and networks recently created by the GoR																										
66		PMU																								
67																										
68		PMU																								
Outcome 4: Knowledge management and learning																										
Output 4.1: Development of participatory M&E plans and enhancement of communities' capacities to monitor, learn and sustain the climate proofing initiative																										
69		PMU																								
70																										
71		PMU																								
72																										
73																										
74																										
Output 4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the imidugudu program																										
75		PMU																								
76		PMU																								
77																										
78																										
79																										

Table 7: Activity Coding

Outcome 1: Enhanced institutional capacities, knowledge and climate information to integrate climate risks into the planning and implementation of ecosystems based adaptation in the Imidugudu programme		
Output 1.1: Training programmes and their sustainability mechanisms designed and delivered to provide specialized technical skills and awareness on landscape approaches to climate risk management for technical staff of all relevant Departments and community groups		
1	PMU	Identify all the relevant groups that need to be trained (including architects, engineers, planners, community groups, etc.) and refine the capacity assessment undertaken during the project formulation (Annex 12) with emphasis on training needs assessment and identify further training needs
2	PMU	Review existing training manuals and determine suitability for training under this project and/or modify as necessary, develop training modules with a clear and costed work plan for implementation

3	PMU	Conduct training in a gender responsive and participatory process
4	PMU	Reflect on the development and delivery of the training programmes and document lessons learnt (in conjunction with output 4.2).
Output 1.2: Climate-risk assessments methods and information provided to support adaptation planning as an on-going practice with a focus on the local level in the project areas		
5	PMU	Disseminate information to local communities on the climate risk assessment tools and methods developed by the Joint Program on Support to Ministry of Disaster Management and Refugee
6		Train relevant groups on the access and use of the existing information and networks (in conjunction with output 1.1
7		Reflect on the process and document lessons learnt (in conjunction with output 4.2).
Output 1.3: Climate-proofed Imidugudu models developed in a science-led highly participatory process and piloted in four landscapes		
8		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
9		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
10		Undertake the consultative process in line with the stakeholder consultation strategy (at all levels)
11	PMU	Collate the inputs from the stakeholder consultations into several climate proofing options; assess the feasibility of the various options via cost benefit analysis including considerations of social, economic and environmental feasibility using multi-criteria approaches
12	PMU	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)
13	PMU	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)
14	PMU	Reflect on the process of model development and piloting and document lessons learnt (in conjunction with output 4.2)
Output 1.4: Four Ecosystems-based Adaptation Plans developed in a science-led and highly participatory process		
15		Mobilize communities and conduct training to ensure their effective participation in the design of the adaptation plans (in conjunction with output 1.4)
16		Review available EbA planning tools and select the most appropriate for application under the Rwanda pilot areas conditions
17		Conduct planning meetings - facilitate a discussion on the importance of the landscape for each of the stakeholders and sectors and how the actions of one stakeholder group or sector can influence the vulnerability and adaptation prospects of others, either positively or negatively
18		Review and stock taking of socio-ecological information and information on the institutional and regulatory context
19		Analyze climate change scenarios and assess current and future vulnerabilities (includes updating/ground trothing the vulnerability assessment report)
20		Identify, select and appraise adaptation options – including trade-offs; (g) Develop a clear, long-term implementation strategy, a financing and sustainability strategy
21		Develop an M&E system to support adaptive management, learning and upscaling
22		Develop and disseminate guidelines to integrate the EbA plan into day to day activities of the local communities and the existing development programmes, policies, frameworks and planning mechanisms at the local level
23		Design a sustainability strategy to ensure continued implementation of the EbA plans and start its operationalization before the end of the proposed project

24		Reflect on the EbA planning process and document lessons learnt (in conjunction with output 4.2)
Output 1.5: Climate information based decision-making tools provided to support uptake of adaptation measures in the four project sites		
25		Set up and equip the numerical weather prediction and Climate Modeling Center
26		conduct climate risk and sensitivity analyses and provide input into the development of the cost effective climate proofing model/defining and PCSA advisory services
27		Develop and disseminate awareness raising strategy on increased quantity, quality, relevance and access of climate data for decision-making
28		Partner with RAB and Twigire Muhinzi of Kirehe and Gakenke and roll out PICSA advisory services
29	PMU	Reflect on the process and document lessons learnt (in conjunction with output 4.2)
Outcome 2: Adaptation measures implemented in targeted landscapes following the landscape-approach		
Output 2.1: Climate smart agricultural practices adopted to increase and sustain food production under uncertain climate scenarios in the four pilot areas		
30		Confirm degraded agricultural lands and degradation hotspots (in conjunction with the EbA planning)
31		Construct radical and progressive terraces on about 300ha, treated with manure and planted with crops such as beans, maize, bananas
32		Rehabilitate the irrigation system in Bukinanyana by constructing at least one structure to capture and store rain water
33	PMU	Facilitate land consolidation process for the resettled households (identify suitable crops, establish cropping cycles, in line with the adaptation plans and the established extension support cycle, mobilize farmers to participate (making their land available), facilitate the delivery of the extension services availed under the land consolidation programme
34		Review the climate smart agriculture practices (many available online) and determine suitability for use by the project
35		Disseminate the information and make households aware of the various available options and support farmers to implement measures appropriate for them, through the regular extension service (Twigire Muhinzi)
36		Update list of alternative livestock and the requirements for successful adoption (list in Annex the Baseline Assessment Report – Annex 12) and disseminate the information
37		Organize interested farmers into clubs and/or cooperatives which will generate initial funds (either through savings or link to micro loans), and support formulation of livestock merry-go-rounds (in the same manner as the one cow programme under Girinka)
38		Collaborate with Radiant Insurance Company to disseminate information on crop and livestock insurance schemes and recruit households to register
39	PMU	Reflect on the process of facilitating adoption of climate smart agricultural practices to increase and sustain food production under uncertain climate scenarios in the four pilot areas and document lessons learnt (in conjunction with output 4.2)
Output 2.2: Degradation hotspots (forests, hilltops and wetlands systems) identified by the EbA plans are rehabilitated to restore ecosystems services as the cornerstone of resilient livelihoods – covering at least 500 ha distributed across the 23,560ha		
40	PMU	Confirm the degradation hotspots and determine the community groups to actively participate in each of the rehabilitation works
41	PMU	Undertake assessment and promote research on indigenous species for rehabilitation, identify candidates and integrate them into the rehabilitation packages
42	PMU	Mobilize/sensitize local communities in the hotspots, and refine training on specific rehabilitation measures/works (tree husbandry, terrace making and reestablishment of cropping systems on the new terraces, riverbank protection, etc.)

43	PMU	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
44	PMU	Implement land use zones in line with the EbA plans – e.g. survey and mark river channel boundaries to ensure clarity on all parties where utilization (annual crops, livestock rearing, etc.) should not cross'
45		Rehabilitate riverbanks by planting bamboo and/or other suitable grasses/trees, encouraging farmers who lose use of their lands for about a year (while establishing terraces) to take up such income generating activities. Maintain and protect seedlings (protect from grazing by livestock, monitor to replant if seedlings die off, weeding) for 2 years after planting
46		Plant selected seedlings to afforest 200 ha; maintain and protect seedlings (protect from grazing by livestock, monitor to replant if seedlings die off, weeding) for 2 years after planting
47	PMU	Reflect on the process of rehabilitating degradation hotspots (forests, hilltops and wetlands systems) to restore ecosystems services as the cornerstone of resilient livelihoods and document lessons learnt (in conjunction with output 4.2)
Output 2.3: Upgrading of housing and infrastructure around Imidugudu to more climate smart versions in four villages benefitting about 500 households		
48	PMU	Provide technical input into the selection of sites, design and building of the new IDPs and related infrastructure (such as roads), ensuring that each step incorporate measures to climate proof the process and the settlement programme
49		Organize beneficiaries to establish nurseries, grow and plant various materials to green the public places in the new villages
50		Facilitate the implementation of other greening measures
51	PMU	Reflect on the process of collaborating with government co-finance to upgrade houses to more climate resilient versions and document lessons learnt (in conjunction with output 4.2)
Output 2.4: Rainwater harvesting and alternative energy options piloted to increase resilience of livelihoods under the Imidugudu programme		
52	Twigire Muhinzi/ PMU	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
53		Disseminate improved household energy options depending on the choices and abilities of households – includes construction of the selected biogas and BioSanGas toilets, improved cookstoves and solar cooking and lighting technologies
54		Construct thirteen communal cowsheds and link the households to the Girinka programme to acquire one cow per willing household
55		Acquire 500 water tanks (each a minimum of 3000 liters); (e) Train (or provide refresher courses) for at least 10 technicians (5 of them females) on electrical, plumbing, biogas and road maintenance
56		Reflect on the process of providing improved water and energy systems and their role on increasing resilience and document lessons learnt (in conjunction with output 4.2)
Output 2.5: Beneficiaries of the Imidugudu supported to utilize existing value chains to increase resilience via higher household incomes		
57	PMU/ contractual services, company	Undertake analysis of market opportunities
58		Select and implementation income-generating activities to utilize the existing value chains (identified during the PPG and confirmed during inception phase), e.g. milk, coffee, fruits processing, poultry, mushrooms
59		Provide appropriate support to local communities on value-addition activities, including agro-processing and marketing skills; iv) financial education; v) formulation of sustainable financing options

60		Promote the development of local private sector agents such as agricultural service providers
61		Establish an agribusiness forum for exchange on sustainable value chain development and private sector engagement
62		Reflect on the process of facilitating communities to utilize existing value chains and its contribution to building resilient livelihoods and document lessons learnt (in conjunction with output 4.2)
Outcome 3: Policies and cross sectorial coordination		
Output 3.1: 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		
63	REMA/PMU	Review policies relevant to the Imidugudu (listed above), in a participatory and gender responsive process, recommend changes and advocate for their adoption
64		Update REMA's Environmental management Tools and Guidelines[92]
65		Reflect on the process of using strategic policy reviews to ensure budgetary allocation for the upscaling of the climate proofing model in the Imidugudu programme and document lessons learnt (in conjunction with output 4.2)
Output 3.2: Technical and community institutions trained to improve their effectiveness in the cross sectoral coordination units and networks recently created by the GoR		
66	REMA/ PMU	Undertake training needs assessments for the disaster risk reduction and coordination committees, the JADF and the community institutions in the Kirehe and Gakenke districts and formulate a training programme, in conjunction with output 1.1
67		Train the committees, JADF and the community institutions as per the training programme, in conjunction with output 1.1
68		Reflect on the process of further strengthening capacities for the institutions mandated to coordinate cross sectoral and District coordination created recently by the GoR and the impacts on their capacities and document lessons learnt (in conjunction with output 4.2)
Outcome 4: Knowledge management and learning		
Output 4.1: Development of participatory M&E plans and enhancement of communities' capacities to monitor, learn and sustain the climate proofing initiative		
69	PMU	Building on participatory M&E plan produced via the EbA planning process, identify, in a participatory and gender responsive process, additional indicators for the comprehensive monitoring of the effectiveness of the rural settlement programme on adaptive capacities of its beneficiaries.
70	PMU	Design and implement a training programme to equip the beneficiaries of the rural settlement programme in the project area to participate in data collection, storage, analysis and use of the outcomes of the process (in conjunction with output 1.1)
71	PMU	Design and implement a training programme for the technical institutions supporting the rural settlement programme on M&E, linking them to the GIS capacity of the Rwanda Land Management and Use Authority (in conjunction with output 1.1)
72	PMU	Refine the project Monitoring and Evaluation Framework (annex 3) to incorporate any amendments that may be necessary based on data or issues emerging from the planning process, and any refinement of the gender mainstreaming indicators
73	PMU	Track project performance against the M&E framework quarterly, using UNDP Standard tools
74	PMU	Carry out MTR and the TE and share lessons to improve current and future programming and implementation
Output 4.2: Best practices, lessons collated and shared, KM products codified and disseminated to support continued adaptation planning and implementation for the imidugudu program		
75	PMU	Establish and support a community-led advocacy programme for the project, working through Farmer Promoters and FFS Facilitators

[92] https://rema.gov.rw/rema_doc/Environmental%20Managemnent%20Plractical%20Tools/1-Practical%20Tools%20for%20Sectoral%20Environmental%20Planning%20_Final%20Version_%2017-07-2010.pdf

76	PMU	Prepare and disseminate communications pieces and knowledge products targeting different audiences (decision-makers, project partners, aligned programmes, community stakeholders)
77	PMU	Facilitate stakeholders to participate in local, national and regional lesson-sharing events convened by related projects and programmes, and compile lessons learnt reports or communications pieces based on this participation
78	PMU	Convene at least two lesson-sharing workshops during the project's lifespan (preferably linked to MTR and TE feedback sessions), and compile the proceedings into lesson-sharing reports
79	PMU	Set up a dedicated knowledge management system (web-based) where all information relevant to the project can be accessed, in a well-archived form

Annex 3: Monitoring Plan (Detailed budget below)

Result	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions

Project Objective: To provide tools and capacities to climate proof the Rural Settlement Programme of Rwanda via ecosystems/landscape approach (piloted in Kirehe and Gakenke Districts)	**Mandatory** Indicator 1: # direct project beneficiaries disaggregated by gender (individual people)	MTR - Total 600,000 including 22,000 people in 191 villages (50% women) TE – Total 2,211,600 including 108,000 people in in 191 villages (50% women)	The indicators show the number of people whose vulnerability to the adverse effects of climate change is reduced as a result of physical and natural assets made more resilient under via the project and access to climate information. Direct beneficiaries are defined as people who directly receive positive impact from reduced vulnerability by physical and natural assets made more resilient to climate variability and change as well as from increased availability of relevant, timely climate information and training.	For all the indicators, the M&E Specialist will lead a participatory process to refine all indicators and data collection methods, and establish a participatory M&E system. For this indicator, data will be collected via the record keeping of the community associations such as the Farmer Field Schools, , etc. they will be provided with data templates and trained on how to keep records. The Project Field Officers (seconded from the Ministries) will collect these forms and collate them into six monthly reports.	Six monthly – as the project reports are produced six monthly	PM and the M&E Specialist	Project reports, PIR	Unusual climate events may delay project implementation and/or interfere with benefits if they occur before the climate smart measures being implemented by the project take hold.

	Mandatory GEF Core Indicator 3: Hectares of land under improved management and/or protection for climate resilience (to recover productivity and delivery of ecosystems services as a basis for resilient Imidugudu	MTR - 10,000 ha[93] TE - 25,566 ha[94]	This indicator captures quantitative figures for the physical and natural assets made more resilient under the project.	As above.	Six monthly – as the project reports are produced six monthly	PM	Project reports, PIR	Unusual climate events may delay project implementation and/or interfere with benefits if they occur before the climate smart measures implemented by the project take hold.
	Mandatory GEF Core Indicator 4: Change in vulnerability indices for the four villages assessed during the project formulation	TE - Maximum vulnerability for all villages less than 0.4 (the indicator will be measured at TE only)	The indicator shows the extent to which vulnerability has reduced due to the combined effect of addressing exposure and sensitivity to climate change while building adaptive capacity - thus the extent to which livelihoods have been made more resilient.	Repeat of the baseline vulnerability assessment (using same methodology and the database created at PPG and available)	This should be repeated once just before the TE in the 6th year.	PM	Vulnerability assessment report	Assumptions: a) All the co-finance is made available in a timely manner; b) no unusual climate events before the climate smart measures implemented by the project take hold.
Project component 1								
Project Outcome 1: Enhanced institutional capacities, knowledge & climate information to integrate climate risks into the planning and implementation	Indicator 5: Number of plans completed and available; these include: i) prototype climate proofing model; ii) EbA plans.	MTR – two drafts available TE – two plans completed and approved	This indicator captures the number of new/improved tools and climate information system under deployed to assist people and livelihoods to be	Analysis of the project reports, especially the documents describing the EbA plans and the Prototype climate proofing model	Annually, during the PIR	PM	Documents describing the EbA plans, climat	Assumption – project implementation is not delayed by unusual unpredictable events such as the

[93] Currently, in the four pilot mini-catchments, there are 10,410 ha of land facing moderate to extremely high risks of soil erosion and about 7,000 ha of degraded forests. In addition, there are 288 ha and 47km of degraded wetlands and riverbanks, respectively. Rehabilitating these degraded lands, forests, wetlands and riverbanks will improve the ecological integrity (and ecosystems services) throughout the 25,566 ha landscape, for the benefit of 107,651 people in in 191 villages.

[94] See above footnote

of ecosystems-based adaptation in the Imidugudu programme			made more resilient and hence less vulnerable to the adverse effects of climate change				e proofing model	corona virus outbreak.
	Indicator 6: Change in the capacity indices (using UNDP capacity scoring system) for RHA, Local Authorities of Kirehe and Gakenke, Cooperatives and Production SACCOs, Twigire Muhinzi serving the four landscapes (capacity to support climate proofing)	At TE - RHA – 78%; Local Authority Kirehe – 66%, Gakenke – 68%; Cooperatives SACCOs – 55%; Production SACCOs – 55%; Twigire Muhinzi serving the four landscapes – 10 percentage points over the baseline	The UNDP capacity scoring system is an index arrived at after assessing existing systemic, institutional, and individual capacities for formulating and implementing policies, formulating and implementing programs to operationalize policies, mobilizing partnerships for implementation of such programs, gathering and utilizing knowledge to inform plans, monitoring, evaluation and reporting. An initial capacity assessment was undertaken during PPG, which will be refined by the PM during project inception	*This data will be collected by the PM, facilitated by the M&E specialist*	At inception, at MTR and at TE	PM, M&E Officer	PIR, MTR, TE	That project mobilization is rapid; The PMU and the supporting staff/ consultants e.g. M&E and all others are recruited at the start of the project; The Districts provide resources (co-finance) for the officers trained by the project to carry out field work as part of their regular work
Outcome 2: adaptation measures implemented via landscape approach	Indicator 7: Percentage of men and women in the four landscapes targeted by the project with surplus produce for sale, combined with change in	Percentage selling surplus produce increase to: Men: 40% of the men farmers (from 31.5%)	This indicator captures the number (as a percentage of the total population in the project sites) whose vulnerability	This data will be captured via the participatory M&E process by the FFS, SACCOs and Twigire Muhinzi. It	Six monthly	PM, M&E Officer	Participatory M&E reports of FFS,	Assumed that the local and national economies recover rapidly from the effects of closure due to corona virus,

	annual household incomes (for those who sell).	Women: 35% of the women farmers (from 26.2%) Youth: 40% of the youth engaged in farming (from negligible) Incomes from sale of produce increase by at least 25% for all groups (from RWF 200,000 per year --$214)	to the adverse effects of climate change is reduced through diversified and strengthened livelihoods and sources of income as a result of the project.	*will be collected by the PM, facilitated by the M&E specialist*			SACCOs,Twigire Muhinzi. PIR	and that the category 1 and 2 beneficiaries will be motivated adequately to join the existing value chains.
	Indicator 8: Ranking of Village Amenities in four villages	Ranking rise to 0.7 for all villages from baselines of 0.22, 0.29, 0.31, 0.50 for (respectively) Muzo/Kagano, Muramba, Gasharu and Bukinanyana	This indicator captures the extent to which the IDPs provided by the government (500 households) implement measures to increase climate resilience – hence the number of households whose vulnerability decline due to additional greening measures of the IDP	Data will be collected via the participatory M&E processes	Six monthly	PM, M&E Officer	Participatory M&E reports	In addition to the assumptions above, it is further assumed that the co-finance is availed in a timely manner
Outcome 3: Improved Policy and coordination for effective integration of climate risks into the Imidugudu program	Indicator 9: Number of planning frameworks and tools that integrate climate proofing Imidugudu	Approved recommendations available to mainstream climate roofing of Imidugudu in the NTS 1, Rwanda's National Investment Policy, the National Decentralisation Policy, two District Development Strategies, the Rural Settlement Strategic Sector Plan and the Organic Law on State	This indicator measures the extent to which national climate policies and plans are enabled by stronger climate information decision-support services as a result of the project.	Tracking the policy reform process	Annually	PM and the M&E specialist	PIR	It is assumed that the policy reform will not be unduly delayed by slow bureaucratic procedures.

		Finance and Property (No. 12/2013 of 12/09/2013						
	Indicator 10: Change in REMA's toolkit and guidelines on mainstreaming climate risks and climate proofing Imidugudu.	Updated guidelines finalized and approved by REMA, namely i) Building Constructions; ii) Rural Roads; iii) Water Supply; iv) Sanitation Systems; v) Forestry; vi) Crop Production; vii) Animal Husbandry; ix) Irrigation; x) Solid Waste Management; xi) The IDP Greening Toolkit						
Outcome 4 M&E and Knowledge management	Indicator 11: Monitoring information available and used in project reports	M&E fully implemented – demonstrated by PIR reports of minimum Marginally Satisfactory ratings; MTR and TE rating of Satisfactory (minimum)	These indicators measure the extent to which M&E provides quality information and lessons for reporting, adaptive management and upscaling.	Data will be captured through the project and participatory M&E processes.	Six monthly	PM and the M&E specialist	PIR	That project mobilization is rapid, no undue delays in implementation due to unpredictable disrupting effects (such as corona virus).
	Indicator 12: Number of technical publications highlighting lessons and experiences from the project	At least three good quality publications presented at national and/or regional level meetings						

Monitoring and Evaluation Plan and Budget:			
LDCF GEF M&E requirements	Responsible Parties	Indicative costs (US$)	Time frame
Inception Workshop	Implementing Partner PM/Coordinator	10,000 (under Budget Note 20, Yr1)	Within 60 days of CEO endorsement of this project.
Inception Report	PM/Coordinator	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	PM/M&E Officer	5,000 per year, total 30,000 – as part of the M&E Officers cost under Budget note 16	Annually prior to GEF PIR. This will include LDCF core indicators.
Monitoring of Gender Action Plan, stakeholder engagement plan and the ESMP	*Project Gender and Safeguards Specialists*	5,000 per year, total 30,000 as part cost of Safeguards and M&E specialists under Budget note 9	On-going.
GEF Project Implementation Report (PIR)	RTA UNDP Country Office[95] PM/Coordinator	None	Annually typically between June-August
Monitoring all risks (UNDP risk register)	UNDP Country Office PM/Coordinator	2,000 per year, total 12,000 – as part of the M&E Officers cost under Budget note 16	On-going.
Supervision missions	UNDP Country Office	None[96]	Annually
Oversight missions	RTA and BPPS/GEF	None**Error! Bookmark not defined.**	Troubleshooting as needed
Mid-term LDCF Core indicators in the CCA Tracking Tool	*REMA*	2,000 per year, total 12,000 – as part of the M&E Officers cost under Budget note 16	Before mid-term review mission takes place.
Independent Mid-term Review (MTR)	Independent evaluators	65,000 (UNDP Grant - under budget notes 27 for IC and 28 for LC)	April to June 2025
Terminal GEF *and LDCF* Core indicators	REMA	1,833.33 per year, total 11,000 – as part of the M&E Officers cost under Budget note 16	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE)	Independent evaluators	80,000 (UNDP Grant - under budget notes 27 for IC and 28 for LC)	January to March 2028
TOTAL indicative COST		**250,000**	

[95] Or equivalent for regional or global project

[96] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

Annex 4: Social and Environmental Screening Procedure (SESP)

192. The SESP is in dropbox here https://www.dropbox.com/sh/2xn6lblrrcxw49o/AAA2QVk9xS0861uXj1EXun-Pa?dl=0

Annex 5: UNDP Atlas Risk Register

The Atlas Risk Register is in dropbox here https://www.dropbox.com/sh/2xn6lblrrcxw49o/AAA2QVk9xS0861uXj1EXun-Pa?dl=0

Annex 6: Overview of Technical Consultancies

Consultant	Time Input	Tasks, Inputs and Outputs
		For Project Management
Local / National contracting		
Project Manager/Coordinator *Rate: $392/week*	*312 weeks / over 6 years*	*The Project Manager (PM) will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors.* *Duties and Responsibilities* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms.* • *Manage the overall conduct of the project.* • *Plan the activities of the project and monitor progress against the approved workplan.* • *Execute activities by managing personnel, goods and services, training and low-value grants, including drafting terms of reference and work specifications, and overseeing all contractors' work.* • *Monitor events as determined in the project monitoring plan, and update the plan as required.* • *Provide support for completion of assessments required by UNDP, spot checks and audits.* • *Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the FACE form.* • *Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports.* • *Monitor progress, watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results.* • *Ensure that changes are controlled and problems addressed.* • *Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.* • *Prepare and submit financial reports to UNDP on a quarterly basis.* • *Manage and monitor the project risks – including social and environmental risks initially identified as per the ESMF; assess new risks associated with COVID-19 pandemic and its response measures and submit any new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log.* • *Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required.* • *Prepare the inception report no later than one month after the inception workshop.* • *Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.* • *Prepare the GEF PIR;* • *Assess major and minor amendments to the project within the parameters set by UNDP-GEF;* • *Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans;* • *Monitor and track progress against the GEF Core indicators.* • *Support the Mid-term review and Terminal Evaluation process.*

Consultant	Time Input	Tasks, Inputs and Outputs
Project Accountant/Finance Assistant/Finance officer *Rate - $385 per week*	*312 weeks / over 6 years*	*Duties and Responsibilities* • *Keep records of project funds and expenditures, and ensure all project-related financial documentation are well maintained and readily available when required by the Project Manager;* • *Review project expenditures and ensure that project funds are used in compliance with the Project Document and GoR financial rules and procedures;* • *Validate and certify FACE forms before submission to UNDP;* • *Provide necessary financial information as and when required for project management decisions;* • *Provide necessary financial information during project audit(s);* • *Review annual budgets and project expenditure reports, and notify the Project Manager if there are any discrepancies or issues;* • *Consolidate financial progress reports submitted by the responsible parties for implementation of project activities;* • *Liaise and follow up with the responsible parties for implementation of project activities in matters related to project funds and financial progress reports.*
Project procurement officer *Rate - $300 per day*	*240 days / over 6 years*	***Duties and Responsibilities*** • *Develop project procurement plans;* • *Facilitate procurement of goods and services in a timely manner, ensuring compliance with GoR regulations;* • *Prepare reports on procurement, generate lessons and share them widely – in conjunction with the M&E specialist;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms.*
International / Regional and global contracting – N/A		
For Technical Assistance		
Local / National contracting - Outcome 1		
Consultancy firms with expertise in developing training materials and conducting training of trainers (ToT) *Rate – varies but averages out to about $ 1,200 per week*	*About 100 weeks in 2 years*	***Duties and responsibilities*** • *Develop training materials on the following themes, incorporating any COVID-19 related issues (risks and response measures) in the package:* • *Downscaling climate information for local level planning – National and district level training to support outputs 1.3, 1.4 and 2.3 -20 days* • *Developing ecosystems-based adaptation plans – Community level training to support output 1.4 and 2.3 -30 days* • *Climate-risk assessments methods – district and community level training to support outputs 1.3, 1.4 and 1.5 – 10 days.* • *Climate proofing Imidugudu models – definition of concept and requirements for its roll out – national level training to support output 1.1, 2.3 and outcomes 3 and 4 – 15 days.* • *PICSA as a tool for climate information and decision-making tools to support planning of Imidugudu and community-based adaptation measures piloted in four communities – local level training to support output 1.5 and implementation of outcomes 2 and 2 – 15 days.* • *Climate smart technologies for rehabilitating degraded/ unproductive land via agro-ecological interventions to reverse the effects of unsustainable agricultural practices – local level training to support output 2.1 – 20 days.* • *Climate smart technologies to protect and rehabilitate ecologically sensitive segments of the landscape such as hills, river banks and lake shores, wetlands, watersheds, etc. – local level training to support output 2.2 – 20 days.* • *Practical measures to green the rural settlements in line with an updated Greening and Climate Proofing Toolkit – district and local level training to support outputs 2.3 – 10 days.* • *Diversifying livestock management systems – district and local level training to support output 2.1 – 10 days.*

Consultant	Time Input	Tasks, Inputs and Outputs
		• *Financial literacy - existing value chains and their requirements, existing financial institutions and their loan/subsidy packages and tips on how to practically join/engage with them – local level training to support implementation of output 2.5 – 20 days.* • *Radical and progressive terracing techniques, other soil and water conservation techniques, agroforestry, plant husbandry and watershed services – district and local level training to support outputs 2.1 and 2.2 – 10 days.* • *Gender mainstreaming in development programmes – importance, methods and benefits – local level training to support the whole project – 6 days* • *Mainstreaming climate risks into policies – importance and local level participation – 5 days.* • *Consultant to train 30 TOTs at District and Cell level* • *Supervise ToTs to conduct training @ Cell and community levels*
Imidugudu Implementation Expert *Rate* - $550/day	*100 days spread over the six years*	***Duties and Responsibilities*** • *Establish the Climate Proofing Technical Committee and Terms of Reference for its operations;* • *Undertake stakeholder mapping and identify relevant stakeholders to be consulted;* • *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;* • *Undertake the consultative process in line with the stakeholder consultation strategy (at all levels);* • *Collate the inputs from the stakeholder consultations into several climate proofing options; assess the feasibility of the various options via cost benefit analysis including considerations of social, economic and environmental feasibility using multi-criteria approaches.* • *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).* • *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);* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Reflect on the process and document lessons learnt (in conjunction with output 4.2).*
Meteorological technologist Rate - $550/day	*50 days*	***Duties and Responsibilities*** • *Review global best practices for such a centre and make recommendations for the project and the Meteo-Rwanda actions;* • *Assess the capacity of Meteo-Rwanda to take up recommended global best practices;* • *Provide the recommended design and capacity building required to operationalize the centre and improve the quality, relevance and accuracy of the climate information provided by the centre;* • *Assist with the set up and operationalization of the concept;* • *conduct climate risk and sensitivity analyses and provide input into the development of the cost effective climate proofing model/defining and PICSA advisory services;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Reflect on the process and document lessons learnt (to contribute to and in conjunction with output 4.2).*
PICSA roll out support consultant *Rate - $550/day*	*30 days*	***Duties and responsibilities*** • *Assess the RAB and Twigire Muhinzi of Kirehe and Gakenke experiences of rolling out PICSA advisory services and make recommendations for the project to roll out the same in the project areas;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;*

Consultant	Time Input	Tasks, Inputs and Outputs
Vulnerability assessment experts *Rate - $500/day*	*90 days*	***Duties and responsibilities*** • *Design a methodology to undertake/update the baseline vulnerability assessment including COVID-19 related issues wherever relevant;* • *Design questionnaire for data collection* • *Recruit and train data enumerators* • *Test the questionnaire and date enumeration* • *Undertake data collection in eight cells (stratified sampling)* • *Clean the data and upload to data analysis packages* • *Analyse the data and write the reports*
Companies Ecosystems-based Adaptation Planning experts Rate - $800/day	*500 days spread throughout the first three years*	***Duties and responsibilities*** *Overall, the service provider will facilitate the local communities to develop Ecosystems-based Adaptation Plans via the following activities of output 1.4, incorporating any COVID-19 necessitated measures (to be identified during the inception workshop).* • *Work with the Safeguards experts to ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Mobilize communities from 191 villages and conduct training to ensure their effective participation in the design of the adaptation plans (in conjunction with output 1.4);* • *Review available EbA planning tools and select the most appropriate for application under the Rwanda pilot areas conditions;* • *Conduct planning meetings - facilitate a discussion on the importance of the landscape for each of the stakeholders and sectors and how the actions of one stakeholder group or sector can influence the vulnerability and adaptation prospects of others, either positively or negatively;* • *Review and stock taking of socio-ecological information and information on the institutional and regulatory context;* • *Analyze climate change scenarios and assess current and future vulnerabilities (includes updating/ground trothing the vulnerability assessment report);* • *Identify, select and appraise adaptation options – including trade-offs;* • *Develop a clear, long-term implementation strategy, a financing and sustainability strategy;* • *Develop an M&E system for the EbA plans to support adaptive management, learning and upscaling;* • *Develop and disseminate guidelines to integrate the EbA plan into day to day activities of the local communities and the existing development programmes, policies, frameworks and planning mechanisms at the local level;* • *Design a sustainability strategy to ensure continued implementation of the EbA plans and start its operationalization before the end of the proposed project.* • *Reflect on the development and delivery of the training programmes, provision of information to support adaptation planning as an on-going practice at the local level and the EbA planning processes and document lessons learnt (to contribute to and in conjunction with output 4.2).*
International / Regional and global contracting		
International climate scientist Rate - $1000/day	*20 days spread over 3 years*	***Duties and responsibilities*** • *Provide technical expertise to the RHA and the Technical Teams on the development of the climate proofing model on internationally acceptable methods and standards;* • *Lead on the cost benefit analysis of the various climate proofing options identified and justify the choice of one or several methodologies;* • *Provide technical expertise in assessing the requirements (financial, institutional, policy) required to roll out the climate proofing model nationally;* • *Attend at least one workshop discussing the final products;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Develop a lessons learnt product on the process and ensure its publication in a refereed journal.*

Consultant	Time Input	Tasks, Inputs and Outputs
		Outcome 2: Adaptation measures implemented
Engineer Rate $400/day	*225 days over six years*	***Duties and Responsibilities*** • *To* provide specialized technical assistance to the Government co-finance on upgrading the 500 houses to climate smart versions (rural settlement co-finance)is in line with national and international standards. s/he will ensure that the construction works follow all the national and international standards and safeguards, in line with the ESMP, and working closely with the project gender and safeguards specialists.
Climate scientist Rate $400/day	*225 days over six years*	***Duties and Responsibilities*** • *To provide technical support to the PMU and to ensure that the implementation of the Government Co-finance upgrading of the 500 households (rural settlement co-finance) is climate informed and integrates climate risks, in line with the model developed under output 1.1 (interactively). The climate scientist will provide technical input into the selection of sites, design and building of the new IDPs and related infrastructure (such as roads), ensuring that each step incorporate measures to climate proof the process and the settlement programme.* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;*
Gender Expert *Rate - $300/day*	*320 days spread throughout the six years*	***Duties and Responsibilities*** • *Ensure gender compliance of the all the project activities including training of all project players on gender.* • *Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled;* • *Oversee/develop/coordinate implementation of all gender-related work;* • *Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Work with the M&E Specialist and Safeguards Specialist to ensure reporting, monitoring and evaluation fully address the gender issues of the project;*
National Expert – Safeguards *Rate - $300/day*	*320 days spread throughout the six years*	***Duties and Responsibilities*** *The SESP and the ESMF outlines the project risks and the safeguard measures to be adopted, respectively. Additional risks will be identified during the inception period where relevant, including COVID-19 associated risks. The National Expert – Safeguards will ensure the ESMF is implemented and safeguards are secured as described below.* • *Monitor progress in development/implementation of the project ESMP/ESMF ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled;* • *Oversee/develop/coordinate implementation of all safeguard related plans;* • *Ensure social and environmental grievances are managed effectively and transparently;* • *Review the SESP annually, and update and revise corresponding risk log; mitigation/management plans as necessary;* • *Ensure full disclosure with concerned stakeholders;* • *Ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation;* • *Work with the M&E Specialist to ensure reporting, monitoring and evaluation fully address the safeguard issues of the project*
Improved energy and water harvesting systems experts (company or NGO) *Rate - $500/day*	*500 days spread over two years*	***Duties and responsibilities*** • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms* • *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.* • *Organize the construction of at least 500 of the selected biogas and BioSanGas toilets, via VUP while training technicians for long-term maintenance.*

Consultant	Time Input	Tasks, Inputs and Outputs
		• *Acquire and distribute improved cookstoves and solar technologies* • *Construct communal cowsheds and link the households to the Girinka programme to acquire one cow per willing household (linked to the livestock diversification scheme under output 2.1).* • *Acquire and install at least 500 water tanks* • *Train (or provide refresher courses) for at least 10 technicians (5 of them females) on electrical, plumbing, biogas and road maintenance. These technicians will be engaged in the construction of these facilities to acquire on-the-job-training experience*
Enterprise Development experts *Rate - $ 500/day*	*150 days spread over two years*	***Duties and responsibilities*** • *Will have expertise and experience facilitating value chains development in Rwanda.* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms* • *Building on the PPG assessments, refine the analysis of market opportunities.* • *Implementation selected income-generating activities, providing material and technical support to potential entrepreneurs.* • *Identify private sector and facilitate their uptake of value addition activities (e.g. agro-processing of fruits, vegetables, poultry feeds and products).* • *Under financial education, identify sources of financial resources (banks, MFIs, SACCOs and VSLA); assess their requirements and develop an awareness raising package (summarizing these requirements).* • *Disseminate the information widely, using cost effective avenues – such as including the information in the package used to train farmers, public barazas, etc.* • *Train SACCOs and VSLA on financial management, recruitment, business planning, etc.* • *Working through marketing cooperatives, mobilize producers to link up with established value chains e.g. for maize, milk, coffee.* • *Establish an agribusiness forum for exchange on sustainable value chain development and private sector engagement.* • *Formulation a sustainable financing plan.* • *Reflect on the process and document lessons to contribute to and in conjunction with output 4.2*
Outcome 3: Policy reforms and cross sectorial coordination		
Policy reforms experts – company or CSO *Rate - $800/day*	*50 days spread over three years*	***Duties and responsibilities*** • *Facilitate participatory policy reforms (review policies listed in outcome 3 and present findings in workshops;* • *Update the Environmental Planning guidelines under outcome 3 (Outputs 3.1 and 3.2).* • *Formulate a strategy for disseminating the recommendations of the policy reforms (in policy briefs and other relevant avenues/products);* • *Implement the strategy and lead the lobbying of the relevant authorities for the adoption of the recommendations.* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms.* • *Reflect on the processes of using strategic policy reviews to ensure budgetary allocation for the upscaling of the climate proofing model in the Imidugudu programme and capacity building for improved coordination and document lessons learnt (to contribute to and in conjunction with output 4.2).*
Outcome 4: M&E Specialist		
Project Monitoring and Evaluation Officer	*72 months*	***Duties and Responsibilities*** • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Monitor project progress and participate in the production of progress reports ensuring that they meet the necessary reporting requirements and standards;*

Consultant	Time Input	Tasks, Inputs and Outputs
Rate - $2,000/month		• *Ensure project's M&E meets the requirements of the Government, the UNDP Country Office, and UNDP-GEF; develop project-specific M&E tools as necessary;* • *Oversee and ensure the implementation of the project's M&E plan, including periodic appraisal of the Project's Theory of Change and Results Framework with reference to actual and potential project progress and results;* • *Oversee/develop/coordinate the implementation of the stakeholder engagement plan;* • *Oversee and guide the design of surveys/ assessments commissioned for monitoring and evaluating project results;* • *Facilitate mid-term and terminal evaluations of the project; including management responses;* • *Facilitate annual reviews of the project and produce analytical reports from these annual reviews, including learning and other knowledge management products;* • *Support project site M&E and learning missions;* • *Visit project sites as and when required to appraise project progress on the ground and validate written progress reports.*
Communications and Knowledge Management Specialist *Rate* - $500/day	*288 days spread through the six years*	***Duties and Responsibilities*** • *Support the development and implementation of a project communication and stakeholder engagement strategy as per guidance provided in the Stakeholder Engagement Plan (available as Annex), ensuring gender mainstreaming (see Gender Action Plan, available as Annex to the Project Document).* • *Establish and support a community-led advocacy programme for the project, working through Farmer Promoters and FFS Facilitators* • *Prepare and disseminate communications pieces and knowledge products targeting different audiences (decision-makers, project partners, aligned programmes, community stakeholders)* • *Facilitate stakeholders to participate in local, national and regional lesson-sharing events convened by related projects and programmes, and compile lessons learnt reports or communications pieces based on this participation* • *Convene at least two lesson-sharing workshops during the project's lifespan (preferably linked to MTR and TE feedback sessions), and compile the proceedings into lesson-sharing reports* • *Set up a dedicated knowledge management system (web-based) where all information relevant to the project can be accessed, in a well-archived form.* • *Support consultants and institutions in charge of implementing other outputs to reflect on the processes and document lessons to inform adaptive management and implementation of similar initiatives;* • *Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms;* • *Collate all the lessons and produce technical publications on lessons learnt from this project.*
Mid-Term Review Terminal Evaluation Specialists	US$55,000 ($25K MTR, 30K TE)	***Duties and responsibilities*** • *Mid-Term Evaluation in line with the UNDP-GEF ToRs* • *Terminal Evaluation in line with the UNDP-GEF ToRs*
Outcome		
International / Regional and global contracting		
International climate modelling scientist *Rate:* *$ 1,000/day (all inclusive cost)*	*60 days in three years*	***Duties and responsibilities*** • *Provide specialist advice on international standards of climate proofing in the buildings/construction sector;* • *Provide specialist advice on international standards on cost benefit analysis of the climate proofing options;* • *Support the stakeholder consultation process on climate proofing the Imidugudu – providing guidelines and outlines of the technical writing to be submitted by the climate proofing technical committee, reviewing the papers and readying them for publication, locally and internationally.*

Consultant	Time Input	Tasks, Inputs and Outputs
International Safeguards expert *Rate:* *$ 1,000/day (all inclusive cost)*	*40 days in 2 years*	***Duties and responsibilities*** • *Support the national Safeguards Specialist and the project stakeholders to undertake an ESIA (including assessment of relevant additional risks associated with the COVID-19 pandemic and response measures – at all levels);* • *Use the findings to refine the draft ESMP, building on the findings of the SESP report (Annex 5) to develop a costed Environmental and Social Impact Management Plan, following the FIPC principles fully;* • *Develop the Action Plan and Monitoring Plan for the ESMP;* • *Train project staff and stakeholders on the implementation of the ESMP;* • *Contribute to the reflection to identify and document lessons associated with the process..*
MTR and TE experts	*$ 90,000 - $40 for MTR* *$50,00 for TE*	***Duties and responsibilities*** • *Mid-Term Evaluation in line with the UNDP-GEF ToRs* • *Terminal Evaluation in line with the UNDP-GEF ToRs*

Annex 7 – Stakeholder Engagement Plan

193. The SHEP is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submission

Annex 8 – Environmental and Social Impacts Management Framework

194. The ESMF is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submission

Annex 9 – Gender Analysis and Action Plan

195. The GAP is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submission

Annex 10 – LDCF Core Indicators (Tracking Tool)

196. The Tracking tool is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submissionAnnex 11 – Project Taxonomy

197. The project taxonomy is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submission

198. Annex 12: Baseline Assessment Report

199. The baseline assessment report is in dropbox here https://www.dropbox.com/home/PIMS%206083%20LDCF%20III%20Rwanda/Annexes%20for%20submission