

**GREEN  
CLIMATE  
FUND**

**Meeting of the Board**  
21 – 24 October 2024  
Songdo, Incheon, Republic of Korea  
Provisional agenda item 10

**GCF/B.40/02/Add.07/Rev.01**

19 October 2024

---

# Consideration of funding proposals – Addendum VII

## Funding proposal package for FP245

---

### **Summary**

This addendum contains the following seven parts:

- a) A funding proposal titled "Green City Kigali: a new model for urban development in Rwanda";
- b) No-objection letter issued by the national designated authority(ies) or focal point(s);
- c) Environmental and social report(s) disclosure
- d) Secretariat's assessment;
- e) Independent Technical Advisory Panel's assessment;
- f) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
- g) Gender documentation.

## Table of Content

Funding proposal submitted by the accredited entity	3
No-objection letter issued by the national designated authority(ies) or focal point(s)	67
Environmental and social report(s) disclosure	68
Secretariat's assessment	72
Independent Technical Advisory Panel's assessment	86
Response from the accredited entity to the independent Technical Advisory Panel's assessment	97
Gender documentation	99

# Funding Proposal

Project/Programme title:	<u><i>Green City Kigali: a new model for urban development in Rwanda</i></u>
Country(ies):	<u><i>Rwanda.</i></u>
Accredited Entity:	<u><i>Ministry of Environment</i></u>
Date of first submission:	<u><i>[2022/03/14]</i></u>
Date of current submission	<u><i>[2024/08/02]</i></u>
Version number	<u><i>[V.004]</i></u>



GREEN  
CLIMATE  
FUND

## Contents

Section A	<b>PROJECT / PROGRAMME SUMMARY</b>
Section B	<b>PROJECT / PROGRAMME INFORMATION</b>
Section C	<b>FINANCING INFORMATION</b>
Section D	<b>EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA</b>
Section E	<b>LOGICAL FRAMEWORK</b>
Section F	<b>RISK ASSESSMENT AND MANAGEMENT</b>
Section G	<b>GCF POLICIES AND STANDARDS</b>
Section H	<b>ANNEXES</b>

### ***Note to Accredited Entities on the use of the funding proposal template***

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

**Please submit the completed proposal to:**

[fundingproposal@gcfund.org](mailto:fundingproposal@gcfund.org)

**Please use the following name convention for the file name:**

“FP-[MoE]-[Rwanda/Kigali]-[2024/08/02]”

A. PROJECT/PROGRAMME SUMMARY				
<b>A.1. Project or programme</b>	Project	<b>A.2. Public or private sector</b>	Public	
<b>A.3. Request for Proposals (RFP)</b>	<u>Not applicable</u>			
<b>A.4. Result area(s)</b>		<b>GCF contribution</b>	<b>Co-financers' contribution</b>	
	<b>Mitigation total</b>	0 %	0 %	
	<input type="checkbox"/> Energy generation and access		0 %	
	<input type="checkbox"/> Low-emission transport	0 %	0 %	
	<input type="checkbox"/> Buildings, cities, industries and appliances	0%	0%	
	<input type="checkbox"/> Forestry and land use	0 %	0 %	
	<b>Adaptation total</b>	100%	100 %	
	<input checked="" type="checkbox"/> Most vulnerable people and communities	10 %	10 %	
	<input checked="" type="checkbox"/> Health and well-being, and food and water security	7%	7 %	
	<input checked="" type="checkbox"/> Infrastructure and built environment	83 %	83 %	
<input type="checkbox"/> Ecosystems and ecosystem services	0 %	0 %		
<b>A.5. Expected mitigation outcome</b>  <i>(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)</i>	<i>No mitigation outcome</i>  <i>Quantified co-benefit of 125,032 tonnes CO<sub>2</sub>eq</i>	<b>A.6. Expected adaptation outcome</b>  <i>(Core indicator 2: direct and indirect beneficiaries reached)</i>	<i>Indicate total number of direct and indirect beneficiaries</i>	
			<i>30,252 direct beneficiaries</i>	<i>1,132,686 indirect<sup>1</sup> beneficiaries</i>
			<i>Indicate % of direct beneficiaries vis-à-vis total population</i> <i>0.23% of population<sup>2</sup></i>	<i>Indicate % of indirect beneficiaries vis-à-vis total population</i> <i>8.7% of population</i>
<b>A.7. Total (GCF + co-finance)</b>	<u>35,107,775 USD</u>	<b>A.9. Project size</b>	Small (Upto USD 50 million)	
<b>A.8. Total GCF funding requested</b>	<u>27,995,786USD</u> <i>For multi-country proposals, please fill out annex 17.</i>			

<b>A.10. Financial instrument(s) requested for the GCF funding</b>	<input checked="" type="checkbox"/> Grant <u>27,995,786 USD</u> <input type="checkbox"/> Loan <u>Enter number</u> <input type="checkbox"/> Guarantee <u>Enter number</u> <input type="checkbox"/> Equity <u>Enter number</u> <input type="checkbox"/> Results-based payment <u>Enter number</u>		
<b>A.11. Implementation period</b>	5 years	<b>A.12. Total lifespan</b>	40 years
<b>A.13. Expected date of AE internal approval</b>	<i>This is the date that the Accredited Entity obtained/will obtain its own approval to implement the project/ programme, if available.</i>  <u>Click or tap to enter a date.</u>		<b>A.14. ESS category</b>  B
<b>A.15. Has this FP been submitted as a CN before?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>A.16. Has Readiness or PPF support been used to prepare this FP?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>A.17. Is this FP included in the entity work programme?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>A.18. Is this FP included in the country programme?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>A.19. Complementarity and coherence</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
<b>A.20. Executing Entity information</b>	The Executing Entity is the National Fund for Environment (FONERWA). FONERWA has a core mandate to mobilize, manage, monitor, and facilitate cross-sector access to green finance, and provide financial and technical support to catalyse climate-resilient development impacts at scale.		
<b>A.21. Executive summary (max. 750 words, approximately 1.5 pages)</b>			
<p><b>Climate Rationale</b></p> <p>Rwanda is one of the most vulnerable countries in the world to climate change and is increasingly experiencing the impacts of climate change. Current climate variability in Rwanda is already resulting in an increased incidence of drought, flooding and landslides. Increased heavy rainfall events<sup>3</sup> are causing floods, landslides, damage to houses, roads and other infrastructure as well as creating power cuts. The nationally determined contribution of Rwanda highlights that rainfall has become increasingly intense and the variability is predicted to increase by 5% to 10% by 2030. Changes in temperature and precipitation and their distributions are the key drivers of climate and weather-related disasters that negatively affect Rwandans and the country's economy. Temperature increases exhibit records in mean temperature rise from 1971 to 2016 between 1.4°C and 2.56°C in the south-west and eastern regions of Rwanda. The occurrence of prolonged dry spells from rising temperatures is creating create heat stress and new challenges for water management and storage to cope with the future water demand from Rwanda's growing urban population. The NDC reports that Rwanda still is water scarce with 670 m<sup>3</sup> of water per capita per year and 25% of the population are still unable to access safe drinking water.</p> <p>The Intergovernmental Panel on Climate Change (IPCC) in its 4<sup>th</sup> and 5<sup>th</sup> assessments have explicitly identified informal settlements within the global south as a key factor shaping climate-related risk. The Ministry of Infrastructure reports that that 62.60% of the urban population in Rwanda in 2016 live in informal settlements, while less than 20% of the urban population live in areas covered by master plans had storm water considerations. Climate and disaster related risks in cities cannot be addressed without the upgrade of informal settlements. In parallel, the upgrade of settlements will be incomplete without accounting for and incorporating the risks of climate change. Kigali, where official estimates</p>			

indicate the population living in unplanned settlements at a very high 77.3% (EICV 5)<sup>4</sup>, is at particular risk even compared to many of its neighbours. In addition, Rwanda has been identified as a country at very high risk of climate change events overall.

The project site is situated on Kinyinya Hill in Gasabo district, 6.5km to the north-east of the central business district of Kigali. The population of Gasabo is ranked as one of the most vulnerable districts to landslides in Rwanda (ranked second out of 30). The district is the most populated in Rwanda with 47% of the total population of Kigali<sup>5</sup> and contains 7% of all the housing in Rwanda that is susceptible to landslides due to its high population density, the high concentration of informal settlements located in landslide-prone areas and the weak building materials used in construction. The population in the project have high vulnerability to increasing climate-related risks. Within Kinyinya Hill it is estimated that 8,400 of the 8,660 households mapped (representing around 97% of the population) live informally, far higher than Kigali's very high levels and thus bringing the risks around unplanned settlements into even greater focus.

The project site resides with a larger 600ha area at Kinyinya Hill which has been designated by the GoR as a focal area for the development of communities employing urbanization models to provide affordable housing and infrastructure for target groups in sustainable and culturally compatible, climate-resilient urban communities, which establishes new standards that can be replicated elsewhere in Rwanda and beyond - setting a trajectory towards a Net Zero future. The first stages of this model community will be in the form of a mixed-use pilot situated on a 15.8-hectare parcel (Pilot Area) at the northwest of the Planning Area as well as the Upgrade of an existing informal settlement at Ngaruyinka, as the focal point, but with further transport interventions throughout the Murama cell, representing the western half of the 600ha area. This 600ha model area has been identified originally as the Green City Pilot and subsequently renamed to Green City Kigali (GCK). The GCK seeks to reflect the Rwandan context in terms of its current and future cultural and environmental climate. Doing so engages with the challenges vulnerability to climate change and increasing urban sprawl.

The upgrade of the informal settlement at Ngaruyinka has been identified as an informal settlement that is typical of its type in Kigali (formerly rural, then peri-urban and increasingly urban as the city of Kigali grows rapidly). Ngaruyinka, with poor infrastructure access, prevalence of low-income households, and located on sloped terrain has been identified as particularly vulnerable to present and future climate change threats as well as the other issues that affect a low income and informal community. Thus, the upgrade will focus on interventions that prepare it for the climate-based threats of today and tomorrow (adaptation) and minimize emissions during its construction and operations (mitigation), while developing a toolkit for climate responsive upgrade elsewhere within Rwanda and further afield. Further information on the site and its threats is provided within the Upgrade Feasibility Study (Annex 2) and in the Land Development Plan (Annex 23).

The upgrade of informal settlements within the frame of green city development is also pertinent to mitigation efforts. Under a business-as-usual projection, Rwanda's total emissions are forecast to more than double over the 2015-2030 period, rising from 5.3 million tCO<sub>2</sub>e in the base year to 12.1 million tCO<sub>2</sub>e in 2030 (excluding removals from the forest and land use sectors). The forecast indicates the growing contribution from fossil fuels to national emissions, arising from increasing demand for power generation, road transport and other modern energy uses. According to the nationally determined contribution (NDC) of Rwanda, a detailed assessment of identified GHG mitigation options for Rwanda estimates a total emissions reduction potential of around 4.6 million tCO<sub>2</sub>e in 2030 against the business as usual (BAU) emissions in the same year of 12.1 million tCO<sub>2</sub>e. The NDC presents an unconditional contribution with a reduction of 16 per cent relative to BAU in the year 2030; equivalent to an estimated mitigation level of 1.9 million tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) in that year. This is an unconditional target, based on domestically supported and implemented mitigation measures and policies. It also presents a conditional contribution: An additional reduction of 22 per cent relative to BAU in the year 2030; equivalent to an estimated mitigation level of 2.7 million tCO<sub>2</sub>e in that year. This represents an additional targeted contribution, based on the provision of international support and funding.

Within energy use, increased use of renewables to meet increasing energy demand dominates the mitigation potential. Significant emissions reduction potential exists across each of the main sub-sectors. Hydropower, covering large- and small-scale new generation, represents the largest share of the identified GHG reduction potential, followed by the use of solar energy for water heating, pumping for agricultural irrigation and off-grid electricity which together account for around a quarter of all mitigation.

The project supports activities under the conditional NDC target, Solar mini-grids, Off-grid and rooftop solar electrification, Solar water heater (SWH) programme.

Following the agricultural sources, major sources for 2015 included CO<sub>2</sub> emissions from fuel combustion for heating and cooking in buildings (LPG, kerosene), which accounted for 14% of the total, and CO<sub>2</sub> emissions from liquid fuel use in road transport (diesel, gasoline), which accounted for 13% of the total.

Emissions from Ngaruyinka Village are expected to follow similar trends under a BAU scenario with increasing levels of energy consumption for cooking, lighting and operating electrical appliances is expected to increase. Emissions from transport would also increase, with increased use of cars and motorcycles. In the solid waste sector, the BAU scenario includes increased emissions from solid waste disposal and wastewater.

There is a direct and well-documented link between gender equality, women's empowerment and climate change. Research shows that women are disproportionately more vulnerable to the effects of climate change, which can result in existing gender disparities becoming even more pronounced and harmful over time.<sup>6</sup> Rapidly advancing climate change will amplify chronic environmental threats, such as water scarcity and land degradation, which hits the poorest communities the hardest. Due to gender bias and inequalities related to education, economic empowerment, violence and other forms of oppression and marginalization, women are more likely to be poor than men, and this is true in the case of Rwanda. Among other disadvantaged groups who experience poverty, women are often the poorest of the poor, particularly if they face other challenges such as having a disability. Poor women are especially vulnerable to climate change as their incomes are often highly dependent on natural resources that are sensitive to climate shocks and variability, and in general, women possess fewer assets. They receive less education than their male counterparts, have less economic independence, and are not involved in political or household decision-making processes to the same degree that men are, a situation that is well-documented in Rwanda. Given this evidence base, and in line with the clear requirements of the GCF Gender Policy, it is critical that gender equality considerations and actions be integrated into all climate change adaptation and/or mitigation interventions.

### Proposed Interventions

The project at its core focuses on the sustainable upgrade of informal settlements, by piloting a realistic climate mitigative and adaptive multi-sectoral program of actions that can be used as a template for future upgrading at similar communities throughout Kigali and secondary cities. Thus, the project also includes technical assistance programs in order to facilitate this future upgrading expansion as well as to promote new sustainable greenfield housing development projects as well. Some of the specific interventions include:

- Integrated investments in resilient infrastructure, household energy solutions and community facilities in an informal settlement on Kinyinya hill - Ngaruyinka Village, to serve as a model for a resilient, low emission upgrade. This would include:
  - creating a green, permeable network of swales, gullies and detention-filtration-percolation areas to increase retention of water on the hill, improve stormwater management and reduce the risk of flooding and landslides;
  - establishing community composting, neighbourhood collection points, recycling centres to improve solid waste management, reducing emissions, increasing the productivity of urban agriculture and reducing the blockage of drains with solid waste;
  - expanding the central water supply (including connections), rainwater harvesting, point of use household water treatment technologies to improve the water supply and enhance water security during dry spells;
  - creating green rights of way network to improve transport and mobility, safety and security, using green construction methods and materials to minimize emissions;
  - establishing toilets with biogas recovery and providing training on sanitation improvements to improve health and reduce emissions;
  - installing solar PV and solar water heaters (SWH) and promoting the use of clean cooking technology, energy efficient lighting and appliances to reduce emissions; and
  - establishing a technical and vocational education and training (TVET) centre, community focal points and market squares to enhance green skills and livelihoods development in new value chains.
- Provision of Technical Assistance (TA) to support the scale up and replication of resilient, low emission approaches through:
  - developing training programs for building the capacity of construction sector workers and professionals to adopt best practices in green construction;
  - assess and select best practices in green construction that can be replicable in Rwanda
  - developing training events to enhance the institutional capacity of GoR agencies to support inclusive, green city development;
  - providing support relating to the planning and regulatory environment in order to develop an enabling environment that fosters increased investment in the green upgrade of informal settlements;



- conducting several types of events, including through social media, briefs, meetings, exchange visits, for raising awareness, and engaging citizens to increase their active participation in resilient, low emission initiatives; and
- developing a design template and blueprinting the GCK and the planning code for the GoR so that it can be easily and cost effectively replicated.

#### **Climate Impacts / Benefits**

The result is a project with strong climate benefits, as well as social, health, economic, environmental co-benefits. These climate benefits include a reduction of CO<sub>2</sub> emissions by 125,032 tCO<sub>2</sub>eq over the lifetime of the investments (see Annex 22 for details), as well as adapting to present and future climate risks. This will contribute to the targets set out in Rwanda's NDC. The project thus advances several of the Sustainable Development Goals (SDGs), including (climate benefit specific in bold):

- SDG 1 no poverty
- SDG 3 good health and well being
- SDG 5 gender equity and empowerment for all women and girls
- **SDG 6 clean water and sanitation**
- **SDG 7 affordable and clean energy**
- **SDG 8 decent work and economic growth**
- **SDG 9 industry, innovation and infrastructure**
- SDG 10 reduced inequalities
- **SDG 11 sustainable cities and communities**
- **SDG 13 climate action**
- SDG 17 partnerships for the goals

The project's expected results include:

- An upgraded urban settlement with public infrastructure that is low emission and resilient to flooding, landslides and heat stress as well as household energy use that is efficient, low emission and geared to low-income households to demonstrate innovation and best practice;
- increased awareness of low emission and climate resilient approaches and enhanced capacity across all stakeholder groups to support and participate in low emission and climate resilient upgrade projects; and
- an enabling environment to catalyse inclusive, climate resilient, low emission investments in urban settlements that will contribute to low-carbon pathways towards 2030 and beyond .

## B. PROJECT/PROGRAMME INFORMATION

### B.1. Climate context (max. 1000 words, approximately 2 pages)

#### Climate change problem

The project will address: 1) the high vulnerability and low resilience of informal urban settlements to climate change; and as a co-benefit, (ii) the potential high emission development pathway that would ordinarily occur with the re-development of an informal urban settlement in Kigali.

#### 1) Climate vulnerability and low resilience

##### Climate change impacts in the Central African region

Specific data on observations and projections for Rwanda is limited. IPCC reports that the central African region (which includes Rwanda) has experienced an increase of mean annual temperature by 0.75°C–1.2°C since 1960. The number of hot days, heatwaves and heatwave days increased between 1979–2016 and cold extremes have decreased. IPCC refers to projects that indicate that mean annual temperatures in Central Africa are projected to be on average, 0.6°C, 1.1°C and 2.1°C warmer than the 1994–2005 average under 1.5°C, 2°C and 3°C global warming scenarios. Children born in 2020, under a 1.5°C-compatible scenario will be exposed to 6–8 times more heatwaves in their lifetimes compared to people born in 1960; this exposure increases to 7–9 times more heatwaves at a 2.4°C temperature increase scenario. IPCC further reports that under temperature scenarios of 1.5°C - 2°C there may not be changes in mean rainfall, however, regional models predict increases of 10-25% in 3°C - 4°C scenarios, then combined with increasing intensity of extreme precipitation. This is projected to increase the likelihood of widespread flood occurrences before, during and after the mature monsoon season.<sup>7</sup>

**Current climate variability in Rwanda is already resulting in an increased incidence of drought, flooding and landslides.** Rwanda is one of the most vulnerable countries in the world to climate change<sup>8</sup> and is increasingly experiencing the impacts of climate change. Current climate variability in Rwanda is already resulting in an increased incidence of drought, flooding and landslides. Increased heavy rainfall events<sup>9</sup> are causing floods, landslides, damage to houses, roads and other infrastructure as well as creating power cuts. The nationally determined contribution of Rwanda highlights that rainfall has become increasingly intense and the variability is predicted to increase by 5% to 10% by 2030. Changes in temperature and precipitation and their distributions are the key drivers of climate and weather-related disasters that negatively affect Rwandans and the country's economy. Temperature increases exhibit records in mean temperature rise from 1971 to 2016 between 1.4°C and 2.56°C.

Rwanda's 3rd national communication to the UNFCCC reports that projections regarding rainfall patterns are uncertain, but the period 2015-2050 is generally expected to have a decreasing trend at in mean rainfall across the country with exception in the north-western highlands. High variability in mean rainfall with a tendency to decrease is expected especially in 2015-2023 and 2033-2042. More occurrences of extreme weather events (flooding and droughts episodes) might be also predicted from the fact that a number of positive and negative rainfall anomalies are projected in the periods.

**Rwanda is urbanising fast.** Between 2002 and 2015, Rwanda's urban population more than doubled increasing from 16% to 27% of the total population<sup>10</sup> and is expected to grow to 41% by 2050<sup>11</sup>. The capital city of Kigali accommodates about half of the urban population and is one of the fastest-growing cities in Africa. It is the most popular destination for rural migrants<sup>12</sup> and its population is expected to rise from 10.5 million in 2012 to 23.2 million in 2050. Following current growth patterns, Kigali needs to produce over 35,000 dwelling units per year but falls well short of this resulting in high levels of informal housing - more than 70% of housing is informal as most formal housing is too expensive for the average resident<sup>13</sup>.

**Current urbanisation trends have been toward low-density informal sprawl on unsuitable land,** creating vulnerable communities and threatening Rwanda's food security and the environment. Rising urban sprawl is forcing people to commute greater distances than necessary, with motorised transport resulting in congestion, high transport costs for the population and increased GHG emissions and air pollution. Based on number of registrations, total vehicle numbers are estimated to have grown from 47,631 in 2006 to 161,925 in 2015, representing an increase of over 300%. Motorcycles accounted for around 51% of total vehicles in 2015, followed by passenger cars (34%), and other vehicles including buses and trucks (15%), according to the updated NDC.

**Rwanda's high rate of urbanisation increases its overall vulnerability to climate change.** Urban households are vulnerable to climate change due to Rwanda's hilly topography and the high number of people living in unplanned settlements. Low infiltration rates for storm water create high runoff speeds leading to erosion and downstream flooding. Less than 20% of the urban population that live in areas covered by master plans had storm water considerations in 2016<sup>14</sup>. Moreover, low recharge rates for groundwater tables reduce the availability of groundwater as a potable water resource. These problems are accentuated by climate change.

**Many informal settlements are concentrated on sites most at risk from flooding and landslides** with poor quality housing and infrastructure less able to withstand extreme weather events. Moreover, informal settlements tend to be very dense with very little open/public space and often with corrugated iron roofs and poor ventilation that contribute to higher indoor temperatures. Impacts from rising maximum temperatures, more hot days and heat waves are greatest for infants and young children, the elderly, expectant mothers, and those with health problems. Rising minimum temperatures with fewer cold days is also extending the range and activity of some disease vectors including mosquito and tick-borne diseases with populations at risk from malaria expected to increase by 150% by 2050<sup>15</sup>. The Intergovernmental Panel on Climate Change (IPCC) in its 4<sup>th</sup> and 5<sup>th</sup> assessments have explicitly identified informal settlements within the global south as a key factor shaping climate-related risk.

**Residents in informal settlements experience greater water constraints during prolonged dry spells.** Periods of water stress arise due to a low capture and storage capacity and a high precipitation run-off rate<sup>16</sup>. Water demand is expected to increase rapidly by 2040 further increasing the pressure on water resources as more homes are connected to mains water supply (only 35% of households in Kigali have water piped into the home), industries develop, and the population grows<sup>17</sup>. The occurrence of prolonged dry spells from rising temperatures is creating heat stress and new challenges for water management and storage to cope with the future water demand from Rwanda's growing urban population. The NDC reports that Rwanda still is water scarce with 670 m<sup>3</sup> of water per capita per year and 25% of the population are still unable to access safe drinking water.

**There are an estimated 29,215 houses across the country that are vulnerable to landslides.** The exposure of housing in Kigali City is especially high due to the high and moderate slope susceptibility, high population density, the concentration of informal settlements and use of low-quality construction materials. All three districts in the City of Kigali have high and moderate slope susceptibility and exposure of housing to landslides<sup>18</sup>.

**The population of Gasabo is ranked as one of the most vulnerable districts to landslides** in Rwanda (ranked second out of 30). The district is the most populated in Rwanda with 47% of the total population of Kigali<sup>19</sup> and contains 7% of all the housing in Rwanda that is susceptible to landslides due to its high population density, the high concentration of informal settlements located in landslide-prone areas and the weak building materials used in construction.

**The project site is situated on Kinyinya Hill in Gasabo district, 6.5km to the north-east of the central business district of Kigali.** The site is located Kinyinya in one of the most populated sectors with more than 57,000 residents (11% of the district's population)<sup>20</sup>. 81% of Kinyinya's population live in unplanned settlements. The Kinyinya Hill site extends over approximately 600 ha with a population of 168,892 and is a typical 'hillcrest to wetland' landscape commonly found across Rwanda. There are several existing settlements on the hill with several more under development or consideration. There are a number of informal settlements on Kinyinya Hill, and the intention is to upgrade these via well-planned densification, greater land use efficiency and connection to infrastructure, and in accordance with the National Informal Urban Settlement Upgrading Strategy (2017). In a business as usual (BAU) scenario, densification will be achieved through conventional development practices which rely on carbon intensive construction materials and housing and infrastructure investments that fail to take account of the increased risk of flooding, landslides and prolonged dry periods.

**Erosion from storm water is a significant problem in the community** undermining the stability of buildings, roads and footpaths with the potential to cause landslides. The Ministry of Infrastructure reports that that 62.60% of the urban population in Rwanda in 2016 live in informal settlements, while less than 20% of the urban population live in areas covered by master plans had storm water considerations. High levels of run-off arise due to the construction of homes on steep slopes, a lack of culverts, ditches and other stormwater infrastructure combined with compacted soil and limited vegetation in the area. This results in low permeability and limited recharge of ground water, low levels of evapotranspiration and poor interception and evaporation of storm water leading to severe run off and erosion especially during the wettest months of April and November.



Figure 1: Ngaruyinka Village – existing location of significant eroded gullies and picture of uncontrolled stormwater channels in the community

**Water supply in the community is intermittent.** Ngaruyinka is connected to the public potable water utility line that comes from a Water Treatment Plant (WTP) managed by Water and Sanitation Corporation (WASAC) Ltd.. In order to obtain a household connection, residents need to pay the CAPEX for materials to connect, which is approximately 70 000 RWF and unaffordable for many residents. Households that lack a connection typically purchase water from the community kiosk. There is intermittent rationing of water in the system as the demand exceeds the supply and households tend to store water at home during periods when the supply is shut off. If households run out of water, they use other sources, such as local springs, surface water sources, other kiosks etc. Occasionally if there is a longer water shortage, water trucks supply water to the area, but this is too expensive for many residents. In the meantime, WASAC also recommends boiling the water prior to drinking for the people who cannot afford package water, but residents report that boiling water takes too long and is expensive due to the need to purchase charcoal, a high CO<sub>2</sub> emission fuel source. However, projects are currently underway to increase the supply available for the whole area, and WASAC is shifting to a better water quality management which shall not require boiling potable water before drinking by the time of project implementation.



Figure 2: Rainwater harvesting from roof tops is common throughout the village. Water kiosk where residents can purchase water. A household water connection in the community

**Most people living in Kigali use pit latrines as there is no central sewer network.** The common practice with pit latrines is to close them when they become full and to dig a new pit latrine in another location as it is difficult for exhauster trucks to reach many of the informal settlements in Kigali, and the cost for emptying is too high for most households. In Gasabo district, 47% of houses either have their own pit latrine (47%) or use a shared latrine (46%), only 4% of households have a flush toilet<sup>21</sup>. In Ngaruyinka Village, the pit latrine is the most commonly used but there is now limited space to cover them when full and build new ones. There are projects underway in Kigali to develop a central sewerage network system in the long term, for example the Kigali Centralized Sewerage System Phase II, which covers the Kinyinya sector. In addition, there are projects to improve the faecal sludge management for the safety of non-sewered users. The organic material in latrine pits may cause emissions of methane as a result of anaerobic decomposition. While not quantified, addressing sanitation will lead to a reduction of GHG emissions. The use of latrines makes communities vulnerable in cases of water scarcity due to risk of contamination.

**Current transport infrastructure is underdeveloped with poor accessibility, reliability and resilience** and posing threats to properties through erosion and flooding hazards. Roads are packed clay earth with erosion cracks and channels, and none are consistently wide enough for passing vehicles. Adjacent buildings and the slope of the

hill constrain road widths for roads across the slope, and some roads are very steep (10-20% gradient). There are many footpaths between houses and some up the hill, and erosion channels are present as well as erosion and flooding controls such as sandbags. There are numerous slip hazards especially in wet conditions, and railings and safe stairways are mostly lacking. Some brick channels exist for open drains, and ditches are common. Right of way lighting is present on buildings but is not continuous on thoroughfares. The poor infrastructure and inadequate lighting contribute to both safety and security risks. The community is served by one local bus terminus at the top of the hill and the motorcycle taxi service which operates throughout Kigali. Conditions for cycling are very poor and unsafe especially due to uneven surfaces, uncontrolled runoff and gradients.

**B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)**





## Theory of Change Narrative for Green City Kigali Project

**Impact: Paradigm Shift**

**B**

IF technical and financial support is provided to develop a replicable climate-resilient, low-emission upgrade of an informal settlement and capacity for scale-up is developed, THEN vulnerable households will have reduced exposure to landslides, flooding, and heat stress along with better living conditions and improved access to public services and employment opportunities, because climate risks will be mitigated and pathways established to ensure replication and scale-up across the country.

### Outcomes:

**1. Strengthened Adaptive Capacity, Heat Stress Mitigation, and Reduced Exposure to Climate Risks; Activities will focus on improving infrastructure and services to withstand climate risks such as flooding, landslides, and heat stress. This involves upgrading public infrastructure and implementing nature-based solutions for stormwater management.**

**2. Strengthened Institutional and Regulatory Systems for Climate-Responsive Planning and Development; Enhancing the capacity of governmental and institutional bodies to plan, regulate, and implement climate-responsive and low-emission development strategies.**

### Co-benefits:

#### I. Reduced Energy Intensity of Buildings, Cities, Industries, and Appliances

Promoting the use of renewable energy and energy-efficient technologies to lower the overall energy consumption and carbon footprint of urban areas.

#### II. Gender Empowerment through Inclusive Planning and Capacity Building

Ensuring that women and marginalized groups are included in the planning and implementation processes, thereby enhancing their roles and capacities in climate-resilient development.

#### III. Enhanced Local Employment and Skill Development

Creating job opportunities through the construction and maintenance of upgraded infrastructure and services, as well as through vocational training and skill development programs.

### Outputs and Activities:

#### **Output 1.1: Resilient Transport, Water, and Energy Infrastructure**

Activity 1.1.1: Detailed climate-resilient and emissions-reducing engineering design for Ngaruyinka Village; Developing comprehensive and integrated engineering designs that incorporate climate resilience and emission reduction principles.

Activity 1.1.2: Implement resilient green transport/mobility networks and green construction methods; Establishing a network of green transport options and utilizing sustainable construction materials and methods.

Activity 1.1.3: Implement resilient stormwater management systems using nature-based solutions; Utilizing nature-based solutions such as green ditches and permeable surfaces to manage stormwater and prevent erosion.

Activity 1.1.4: Expand, install, and ensure resilience of central water supply and rainwater harvesting systems; Enhancing the community's water security through improved central supply systems and rainwater harvesting.

Activity 1.1.5: Promotion and implementation of renewable energy and energy-efficient technologies; Supporting the adoption of solar PV, solar hot water heaters, and energy-efficient appliances.

### **Output 1.2 Improved Waste Management and community facilities**

Activity 1.2.1 Implementation of resilient Community-Based Solid Waste Management Systems

Activity 1.2.2 Establishment of resilient Community Facilities for Climate-Resilient Development

Activity 1.2.3 Improve sanitation with Biogas recovery system

### **Output 2.1: Capacity Building and community Engagement**

Activity 2.1.1: Capacity building for construction sector workers, professionals and community members at the climate-focused TVET center; Training workers and professionals on climate-resilient construction techniques and technologies.

Activity 2.1.2: Institutional capacity development for Government of Rwanda agencies/institutions; Strengthening the capacity of governmental bodies to implement and oversee climate-responsive initiatives.

Activity 2.1.3: Strengthening planning and regulatory frameworks to support an enabling environment; Developing and enforcing regulations and standards that facilitate climate-resilient urban development.

Activity 2.1.4: Awareness raising and citizen engagement for climate action; Engaging the community in climate action through awareness campaigns, workshops, and participatory planning processes.

### **Output 2.2 Knowledge Management and development**

2.2.1: Blueprinting the Green City Kigali and developing planning codes for the Special Purpose Vehicle (SPV).

2.2.2: Establishment of a knowledge management system.

2.2.3: Development of support program for recycling groups.

### **Barriers and Risks:**

B1: Challenges in community participation and behavior change; Difficulty in achieving active and sustained community engagement and changes in behavior necessary for the project's success.

B2: Potential delays in implementation due to regulatory or logistical issues; Regulatory hurdles and logistical complexities that could slow down the progress of project activities.

R1: Constraints in scaling up successful interventions; Limitations in resources, capacity, or infrastructure that might hinder the expansion of successful project components.

B3: Climate variability and extreme weather events; Unpredictable weather patterns and extreme events that could impact project timelines and effectiveness.

R2: Limited financial and technical capacity for climate investment; Insufficient financial resources and technical expertise to fully realize climate-resilient investments.

**Assumptions:**

- Created mechanisms for ongoing community support and project replication.
- Continued interest and investment from national and international stakeholders in green urban development.
- Availability and accessibility of sustainable technologies and resources at a global level.
- Favorable climate conditions that allow for the successful implementation of climate-resilient infrastructure.
- Consistent regulatory support and favorable policies for sustainable urban development.





	and access		industries, appliances		and communities	water security	environment	ecosystem services
Outcome 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outcome 2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Co-benefits are listed in section D.3.

Co-benefit number	Co-benefit					
	Environmental	Social	Economic	Gender	Adaptation	Mitigation
Co-benefit I	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Co-benefit II	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-benefit III	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The Theory of Change (ToC) effectively maps outcomes and co-benefits to the Green Climate Fund (GCF) Mitigation Results Areas (MRA) and Adaptation Results Areas (ARA), ensuring a clear alignment with GCF objectives. This mapping enhances the logical flow of the ToC by demonstrating how specific project activities contribute to broader mitigation and adaptation goals.

For Outcome 1: Strengthened Adaptive Capacity, Heat Stress Mitigation, and Reduced Exposure to Climate Risks, the ToC aligns with ARA 1 (Most Vulnerable People and Communities), ARA 2 (Health, Well-being, Food and Water Security), and ARA 3 (Infrastructure and Built Environment). Activities such as the integrated upgrading of public infrastructure and implementing nature-based solutions for stormwater management enhance the resilience of the built environment to climate impacts. This focus on adaptation ensures that vulnerable communities are better equipped to handle climate risks such as flooding, landslides, and heat stress, thereby improving their overall well-being and security.

For Outcome 2: Strengthened Institutional and Regulatory Systems for Climate-Responsive Planning and Development, the ToC aligns with MRA 3 (Buildings, Cities, Industries, Appliances) and ARA 1 (Most Vulnerable People and Communities). This outcome focuses on enhancing the capacity of governmental and institutional bodies to plan, regulate, and implement climate-responsive and low-emission development strategies. By strengthening regulatory frameworks and institutional capacities, the project ensures that climate-resilient and low-emission practices are integrated into urban planning and development, contributing to both mitigation and adaptation efforts.

In terms of co-benefits, the project provides comprehensive impacts across environmental, social, economic, gender, adaptation, and mitigation dimensions.

Co-benefit I: Reduced Energy Intensity of Buildings, Cities, Industries, and Appliances addresses the need to lower energy consumption and carbon footprint through the promotion of renewable energy and energy-efficient technologies. This co-benefit aligns with both mitigation and adaptation by ensuring that urban areas are more sustainable and resilient to climate change.

Co-benefit II: Gender Empowerment through Inclusive Planning and Capacity Building ensures that women and marginalized groups are included in the planning and implementation processes. This co-benefit addresses social, economic, and gender dimensions by empowering women and promoting gender equality in climate action, thereby enhancing the resilience of these groups to climate impacts.

Co-benefit III: Enhanced Local Employment and Skill Development focuses on creating inclusive job opportunities through the construction and maintenance of upgraded infrastructure and services, as well as through comprehensive vocational training and skill development programs accessible to all community members, including women, youth, and marginalized groups. This co-benefit aligns with

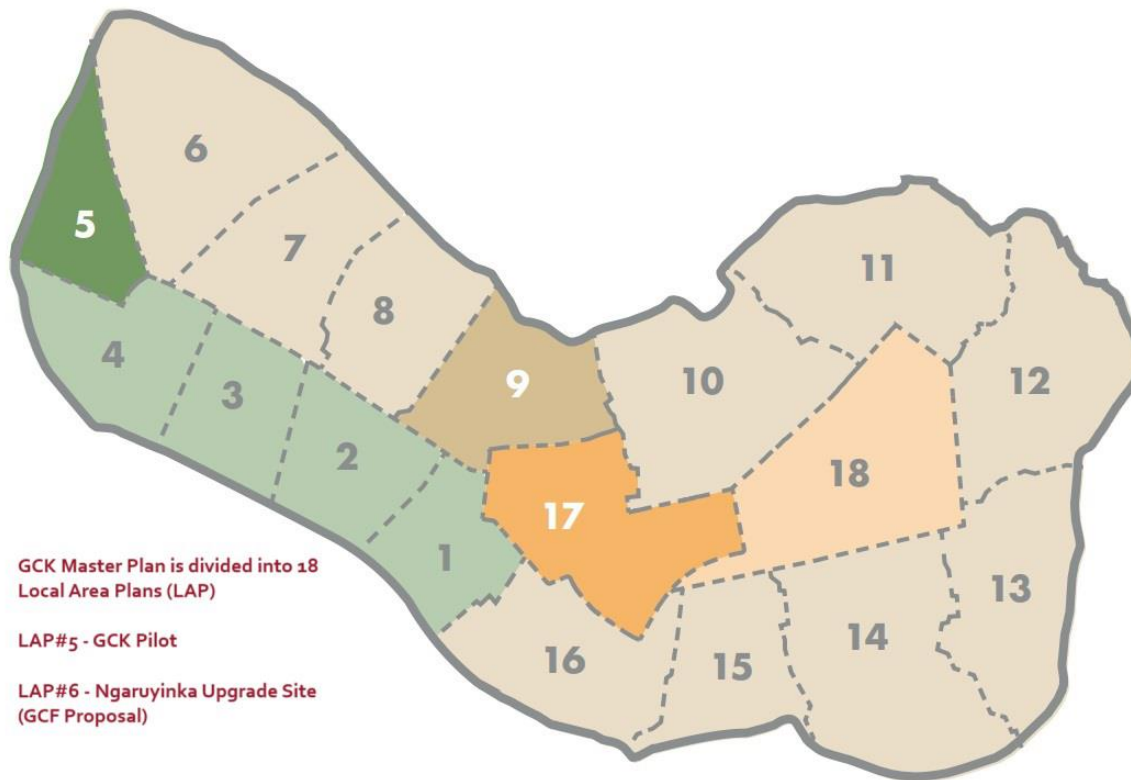
economic and social dimensions, ensuring that the entire workforce is equipped to support and sustain climate-resilient practices, thereby contributing to both mitigation and adaptation goals. This detailed outcome and co-benefit mapping ensures that the project's activities are directly linked to GCF's broader goals, providing a clear and comprehensive understanding of the project's contributions to both mitigation and adaptation efforts.

**B.3. Project/programme description (max. 2500 words, approximately 5 pages)**

The Project will upgrade an existing informal settlement (Ngaruyinka Village on Kinyinya hill) with low emission infrastructure that is resilient to climate change and support the use of renewable energy in the planned GCK pilot development. The informal settlement extends over 18ha on Kinyinya Hill, and the pilot is located nearby and extends over 16ha. The objective is to create a climate responsive model which can be scaled up and applied to multiple situations across Rwanda and the region. In order to promote the scale up and replication, the project will include activities to build awareness and develop institutional capacity.

The Green City Kigali is a pioneering project that seeks to address these crucial issues and create new paradigms with innovative, sustainable and place-specific urban models.

A 600 Ha Masterplan has been developed which divides 600 Ha the whole area into 18 – Local Area Plans. The GCK Masterplan aims to provide easily accessible workplace opportunities, education and amenities and boost economic development of Kinyinya Hill and Kigali in general. The Pilot area is realized in LAP5 while the Ngaruyinka upgrade is realized in LAP6 as indicated in the figure below:



The two neighborhoods are adjacent to each other, hence there will be synergies in their implementation, especially as they share infrastructures such as roads, public facilities, and others according to the Masterplan. The development of the Ngaruyinka upgrade with GCF funding will contribute to achieving the GCK goal in terms of the supply of affordable housing, climate change resilience, and resource efficiency. The residents of Kinyinya will be given priority to purchase houses in the pilot area.

The construction of the pilot area, which will commence by 2026, will provide job opportunities for the residents of the Ngaruyinka village, leading to holistic development and enhancing inclusivity.

The project comprises several outcomes, outputs, and activities identified through a participatory process:

#### Outcomes and Outputs

Outcome 1: Strengthened Adaptive Capacity, Heat Stress Mitigation, and Reduced Exposure to Climate Risks

#### **Output 1.1: Resilient Transport, Water, and Energy Infrastructure**

Activity 1.1.1: Detailed Climate-Resilient and Emissions-Reducing Engineering Design for Ngaruyinka Village including transport and mobility, stormwater management, water supply, sanitation, energy, solid waste management, community facilities ensuring the following characteristics of the design:

The activity involves developing comprehensive engineering designs that incorporate climate resilience and emission reduction principles, (i) coverage of key climate risk factors (heavy rain and landslides with coverage for future projection of climate change for these climate hazards), (ii) conducted in an integrated manner for infrastructure elements including geotechnical and hydrological study, (iii) ensure climate resilience during the construction phase, (iv) analysis of land ownership and necessary land ownership solutions (informed by the Resettlement Action Plan) to enable the construction in accordance with the design, (v) specification of materials and technologies to be deployed under construction, (vi) presenting detailed budget for construction including earth-stabilization measures where necessary, enabling determination of the use of pre- defined budget, (vii) presenting necessary vocational capacity building, including engineering capacity, enabling effective O&M of the constructed infrastructure, to be financed under Outcome 2, (viii) defining O&M costs to be further appropriated by the contractor delivering construction, and (ix) presenting key ToR aspects for the procurement of the construction company/consortium, and the oversight engineering consultant to supervise the construction. The detailed designs are essential to ensure that infrastructure can withstand the impacts of climate change, including increased rainfall and heat stress in order to achieve it's risk-reducing and resilience building impact for the community households (see feasibility study, page 45), and therefore this step is crucial to provide a solid foundation for all subsequent infrastructure development, ensuring it is both climate-proof and sustainable.

Activity 1.1.2: Implement Resilient Green Transport/Mobility Networks and Green Construction Methods

The poor quality of rights of way and access due to high levels of run-off and erosion presents significant slip and flood hazards, necessitating sustainable transport solutions (Feasibility Study, page 53). This activity involves developing a Green Rights of Way network using green construction methods and materials to enhance walkability, cycling, and public transport use. This network will improve safety and security, which are at further risk from increasing climate hazards, and establish critical links to key locations near the community to encourage sustainable means of transport and improve resilience and security.

Activity 1.1.3: Implement Resilient Storm Water Management Systems Using Nature-Based Solutions

Erosion problems significantly impact property and personal safety. Improved stormwater management is critical for helping the community adapt to increased rainfall events due to climate change (Feasibility Study, page 60). This activity focuses on establishing a green, permeable network of swales, gullies, and detention-filtration-percolation areas to prevent erosion by absorbing rainfall energy, reducing overland flow velocity, increasing infiltration, retaining soil moisture, and binding soil particles together. This Activity will include a stormwater conventional system backup if the detailed designs deems necessary to withstand 1-in-100 year flood events as per industry best-practices. Implementing rainwater harvesting systems on suitable households and community buildings will enhance water security.

Activity 1.1.4: Expand, Install, and Ensure Resilience of Central Water Supply and Rainwater Harvesting Systems

Water shortages are expected to worsen due to climate change, affecting vulnerable groups such as women, children, persons with disabilities, and elderly persons (Feasibility Study, page 67). This activity addresses this by expanding the central water supply system and implementing rainwater harvesting systems on suitable buildings. This will enhance water security and build climate resilience through improved water access.

#### Activity 1.1.5: Promotion and Implementation of Renewable Energy and Energy-Efficient Technologies

Affordability and low awareness are key barriers to the uptake of low-emission technologies at the household level (Feasibility Study, page 98). This activity involves promoting and implementing solar PV systems, solar water heaters, improved cookstoves, and energy-efficient lighting and appliances, and providing education and technical assistance related to these technologies. Investing in a range of low-emission technologies will enhance climate resilience and reduce greenhouse gas emissions.

#### Output 1.2 Improved Waste and Community management Systems

##### Activity 1.2.1: Implementation of Resilient Community-Based Solid Waste Management Systems

Poor management of solid waste contributes to GHG emissions, pollution, and public health impacts (Feasibility Study, page 75). This activity involves investing in community composting, neighborhood collection points, and recycling centers, and supporting awareness systems to motivate waste reduction, source-separation, and reuse. These measures will develop and operationalise value chains for community composting, neighborhood collection points, and recycling centers.

##### Activity 1.2.2: Establishment of Resilient Community Facilities for Climate-Resilient Development

Developing facilities such as a TVET center, community focal points, and market squares supports sustainable development and promotes community cohesion (Feasibility Study, page 83). This activity involves constructing a Technical and Vocational Education and Training (TVET) Centre, rehabilitating the market, and developing community spaces to provide training in climate-resilient construction practices and green technologies, and serve as hubs for community activities and economic development.

##### Activity 1.2.3: Improve Sanitation with Biogas Recovery Systems

Poor sanitation levels disproportionately impact the poorest households and are unsustainable. Developing biogas recovery systems will manage waste, provide renewable energy, and reduce public health risks (Feasibility Study, page 91). This activity involves constructing toilets at the TVET and market area connected to a biogas recovery system, and providing technical assistance for sanitation improvements and hygiene education.

#### Output 2.1: Capacity Building and community engagement

##### Activity 2.1.1: Capacity Building for Construction Sector Workers, Professionals and community members at the Climate-Focused TVET Center

Providing training and capacity-building programs focused on climate-resilient construction practices and the use of green technologies ensures that the workforce is equipped to support and sustain climate-resilient practices (Feasibility Study, page 110). This activity includes engineering capacity, enabling effective O&M of the constructed infrastructure as guided by the results of Activity 1.1.1. This activity involves developing a curriculum that includes the practical application of skills learned, identifying the target group and conducting a training needs assessment, developing training content and materials in collaboration with the Rwanda TVET Board, and obtaining accreditation for training programs.

##### Activity 2.1.2: Institutional Capacity Development for Government of Rwanda Agencies/Institutions



Strengthening the institutional capacity of government agencies to implement and manage climate-resilient initiatives ensures that policies and practices are effectively integrated and maintained (Feasibility Study, page 118). This activity involves identifying needs and developing a capacity-building programme on climate-resilient infrastructure programming, conducting a capacity needs assessment and establishing an evaluation process, and developing training content and materials along with a training and development calendar.

#### Activity 2.1.3: Strengthening Planning and Regulatory Frameworks to Support an Enabling Environment

Developing and implementing planning codes and regulations that support climate-resilient and low-emission investments creates a favourable environment for sustainable urban development (Feasibility Study, page 125). This activity involves documenting the development of the GCK, creating a design template for future developers to promote the scale-up and replication of sustainable and affordable housing projects, and developing and implementing a mainstreaming programme for regulatory reforms.

#### Activity 2.1.4: Awareness Raising and Citizen Engagement for Climate Action

Conducting awareness campaigns and engaging citizens in climate-responsive planning and development fosters community ownership and support for sustainable practices (Feasibility Study, page 132). This activity involves developing an inclusive Community Sustainability Committee, promoting waste separation, recycling, and composting through awareness campaigns, and developing a citizen engagement strategy and engagement tools.

#### Output 2.2 Knowledge Management and Development

##### Activity 2.2.1: Blueprinting the Green City Kigali and Developing Planning Codes for the Special Purpose Vehicle (SPV) facilitated by climate resilient knowledge management practices.

Creating detailed blueprints and planning codes guides sustainable urban development and ensures that the lessons learned from the GCK pilot project can be replicated in other areas (Feasibility Study, page 139). This activity involves developing a platform to store, manage, and disseminate knowledge on climate-responsive building methods and urban planning, tendering and procuring the necessary ICT equipment, collecting and documenting lessons learned on an annual basis, and developing and disseminating knowledge products.

##### Activity 2.2.2 Establishment of a knowledge management system

The establishment of a knowledge management system (KMS) is a critical component of the project, aimed at enhancing the collection, organization, dissemination, and utilization of knowledge related to climate-resilient and low-emission development. This system will serve as a central repository and interactive platform for sharing best practices, research findings, project results, and other relevant information among stakeholders involved in the Green City Kigali initiative and beyond.

##### Activity 2.2.3 Development of support program for recycling groups

The development of a support program for recycling groups aims to enhance the effectiveness and sustainability of community-based recycling initiatives. This activity will provide technical, financial, and organizational support to local recycling groups, enabling them to operate more efficiently and contribute significantly to waste management and environmental conservation efforts in Ngaruyinka Village.

#### **Implementation Strategy**

GCK proposes an approach to local economic development where the local community, government, and private sector work together. It is unique in requiring a financially reproducible model suitable for developing countries as a key part of its social, economic, and environmental sustainability aims.

The integrated upgrading of the site will serve as a model for community-based resilience strengthening that can be scaled-up to other parts of Kigali and secondary cities in Rwanda. The

design was guided by the National Informal Urban Settlement Upgrading Strategy (2017) developed by MININFRA and aims to increase resilience to climate change while also minimizing resettlement, land acquisition, and social disruption. Low-cost interventions were prioritized in order to increase the scope for scale-up and replication.

The Project will adopt a 'spatial' focus to facilitate the integration of sectors and stakeholders, including Government Institutions and Partners: City of Kigali, Ministry of Infrastructure (MININFRA), Rwanda Housing Authority (RHA), Rwanda Development Board (RDB), Rwanda Environmental Management Authority (REMA), Water and Sanitation Corporation (WASAC), Rwanda Energy Group (REG), Rwanda TVET Board, Rwanda Utilities Regulatory Authority (RURA), Green Global Growth Institute (GGGI), and Rwanda Transportation Development Authority (RTDA), to reach sustainable and climate-compatible urban development solutions. The design is informed by a programme of work undertaken over 26 months, including sector analyses, a feasibility study, and a Land Development Plan for upgrading Ngaruyinka Village, along with environmental and social safeguards documents and frameworks (Feasibility Study, Annex 2, Annex 23).

The integrated upgrading of Ngaruyinka Village will involve a comprehensive approach, ensuring all planned infrastructure—waste management solutions, water supply and sanitation schemes, stormwater solutions, and transport—is designed in conjunction to avoid contradictions and competition for narrow spaces. The engineering design will encompass geological and hydrological analysis to prevent maladaptation, physical damages, and economic losses.

The planning and design work actively involved local communities and stakeholders over more than a year, with steps such as selecting engagement methods, tailoring questionnaires, planning engagement actions, and implementing feedback mechanisms (Feasibility Study, Annex 2, Annex 23).

The project will integrate capacity-building efforts to promote long-term sustainability, with technical specialists supporting the implementation of activities. Consultation and continued dialogue with national and city-level administrative bodies will be maintained, and regular site visits and inspections will ensure the project's successful execution.

#### B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

The Ministry of Environment (the accredited entity) will lead in the overall management, reporting and supervision of the project with GCF. In Rwanda, FONERWA (the national fund for Environment and Climate Change) is the primary vehicle through which environment and climate change finance is channelled, programmed, disbursed and monitored, and therefore FONERWA will execute the project.

FONERWA was established in 2012 and invests in sustainable wealth creation and poverty reduction by providing strategic financing that accelerates Rwanda's commitment to building a strong climate resilient and green economy. In 2013, FONERWA obtained financing from the British International Climate Fund (ICF) of £22.5 million, making it the largest demand-based climate fund in Africa. FONERWA has provided funding to over 30 projects.

The following sections explain the project governance arrangements and information on the financial flows and implementation arrangements.

**Steering Committee:** The GCF activities will be overseen by a Steering Committee chaired by the Ministry of Environment Permanent Secretary. The Steering Committee will serve as the project coordination and decision-making body and will ensure it delivers its outputs and achieves its outcomes. The Committee will periodically review progress and evaluations, facilitate implementation (ensuring the necessary resources and support are provided in a timely manner) and provide guidance to the PMU. The Steering Committee will reflect the multi-sectoral nature of the project and will include senior-level representatives from GoR and partner organisations. The Steering Committee will meet every 6 months to review progress and approve work plans, budgets and any major changes in implementation. Members who are senior level representatives from the Government and partners in line with the mandate will include the Ministry of Infrastructure, Rwanda Housing Authority, City of Kigali, District Executive of Gasabo, as well as a civil society member.

Proposed role of the project Steering Committee is:

- Coordination of stakeholder involvement:

- Act as a focal point for all Government of Rwanda “policy owners” in areas covered by the Project
- Planning and budgeting:
  - Receiving and approving:
    - Project work plan & budget
    - Annual work plan and budget
    - Procurement plans
- Financial management:
  - Approving disbursements from the Project Bank Account to Executing Agencies
  - Managing the internal audit function and fiduciary risk
  - Receipt of external audit reports
- Monitoring & Evaluation:
  - Receiving and quality assuring quarterly budget execution and Project implementation reports
  - Approving reports in the required format for onward transmission to the CGF

Programme Management Unit: FONERWA will establish a Programme Management Unit (PMU) that will be housed within the Fund Management Team of FONERWA. Activities will be implemented using the Ministry of Environment existing management and financial systems. The Accredited Entity will participate in the recruitment of the PMU. The implementation of the project will be done in collaboration with relevant government partner organizations including: MININFRA, Rwanda Housing Authority (RHA), REG as well as the Ministry of Trade & Industry (MINICOM). (As indicated on page 128). FONERWA will be the hiring team and will coordinate delivery of the programme outputs.

The project activities and funding will be programmed through the PMU. Urban development projects are inherently complex and require strong project (and especially contract) management skills, requiring sufficient resources to allow for capacity building and high-quality delivery through consultant support to the PMU. Resources have been built into the cost estimates to ensure that the PMU receives the necessary support to carry out fiduciary, safeguards, technical supervision, and monitoring activities. The PMU will provide the Steering Committee with quarterly progress reports. The PMU will close its operations once the final project evaluation is completed and documentation required by the GCF has been completed and submitted to the Ministry of Environment and Steering Committee. The PMU will be staffed by professionally and technically qualified staff who hold experience with managing projects in the sector. These staff will be selected and recruited following FONERWA’s procedures.

The project PMU will be supplemented by a number of technical experts – providing either full time or part time inputs - to ensure that obligations on MoE (and its implementing entities) set out in the AMA with the Green Climate Fund can be met.

FONERWA’s responsibilities are summarized below:

- Planning the project activities
- Receiving funds from the Accredited Entity
- Disbursing grant funds to third parties, after due diligence
- Establishing and staffing the Project Management Unit in FONERWA
- Accounting for funds under its disposition, receiving reports from entities to which funds have been disbursed
- Preparing annual workplans and budgets
- Organising oversight and audit (internal, financial, procurement)
- Managing the provision of funding and payment of contractors and consultants engaged under the Project

PMU positions / input include:

- Project manager
- Finance officer
- Project administrator
- Communication Officer
- Procurement Specialist
- Waste management Engineer
- Community Development Specialist
- Renewable Energy Engineer
- Consultants to support on specific technical studies/surveys during implementation, progress, mid-term and end of project evaluation



FONERWA will oversee the staff working on the Ngaruyinka project, including leads for different activities and specialists such as gender and social experts. This ensures that all aspects of the project are managed effectively and that expertise is applied where needed.

#### **Technical Advisory Committee**

A Technical Advisory Committee will provide guidance to both the Steering Committee and the Project Management Unit (PMU). This committee is composed of members from entities affiliated with the Ministry of Environment, such as the Rwanda Green Fund, as well as other relevant government institutions including WASAC, REG, CoK, RHA, RURA, REMA, RTDA, and the Rwanda TVET Board. Members are selected through a formal request from the Executing Entity (EE) directed to the relevant institutions, asking them to appoint a focal point who will serve as the institution's representative on the committee. The Ministry of Environment (MoE), in its role as the Accredited Entity (AE), will also be represented on this committee.

#### **Sector Working Groups (SWGs)**

To facilitate the uptake and scaling of project interventions, the PMU will ensure that results are communicated through Sector Working Groups (SWGs). These groups serve as a forum for dialogue that includes development partners supporting the sector, as determined by the Government of Rwanda's division of labor. The SWGs help build synergies in policy formulation and implementation. The PMU will regularly report results to the SWGs and provide inputs for continuous improvement of project delivery.

#### **Planning Coordination Meetings**

In line with the Urban Planning Code (UPC), Planning Coordination Meetings will be held bi-monthly and will be open to the public. These meetings aim to:

- Coordinate and integrate plans and implementation decisions across development sectors and stakeholders in accordance with existing plans.
- Assess building permit and real estate development permit applications, preparing technical decisions where necessary.
- Monitor development decisions to ensure they align with applicable planning documents for land development and urban planning, considering the harmonization of technical aspects and various interests for the benefit of the public.
- Initiate the development of an interim development strategy where no urban planning document exists while starting the process for creating the required urban planning documents.
- Analyze and evaluate feasibility studies and development proposals responding to public tenders.
- 

#### **Community Upgrading Committee**

A Community Upgrading Committee has been established at the village level in Ngaruyinka. This committee will play a crucial role in facilitating information sharing and community participation, working closely with the Ngaruyinka Upgrading Project and other local agencies. The committee will help ensure contributions from landowners and residents and provide information on contracting, construction supervision, and maintenance.

#### **Flow of Funds**

In terms of the flow of funds, the Green Climate Fund (GCF) will disburse funds to the Ministry of Environment (MoE), the Accredited Entity (AE) responsible for the project. The MoE will then transfer these funds to FONERWA, the Executing Entity (EE), which will manage the funds for the Ngaruyinka project. FONERWA will make payments to contractors and service providers hired through a competitive procurement process, ensuring transparent and efficient use of the funds.

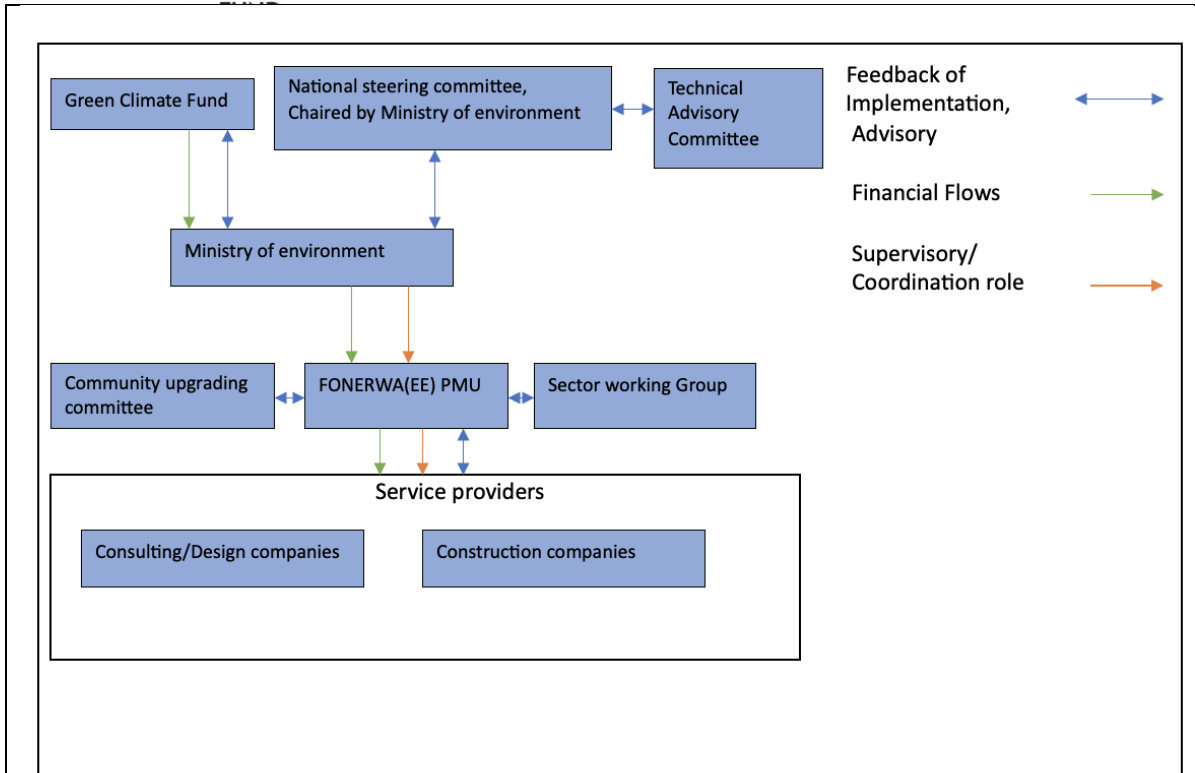


Figure 4: Organisation Chart

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

Rwanda is highly vulnerable to climate change effects, yet its readiness<sup>22</sup> to combat these effects is moderate, as evidenced by its ranking of 116 out of 181 countries in the ND-GAIN index (2016) for climate vulnerability<sup>23</sup>. It is the 29<sup>th</sup> most vulnerable and 94<sup>th</sup> least ready country. Climate change is expected to result in increased temperatures, intensified rainfall, and prolonged dry seasons in Rwanda, which are likely to exacerbate consequences of rapid urbanisation. This trend is expected to intensify in the future according to climate change projections. The nature, magnitude and urgency of climate related threats faced by vulnerable urban communities, coupled with the scale of investment required for this project are beyond the capacity of GoR.

Rwanda's topography and climatic profile make it prone to localised floods and landslides. 42% of the country's area is classified as having a moderate to very high susceptibility to landslides. Rwanda's steep slopes are prone to landslides, which are predicted to increase due to the high intensity rainfall events associated with climate change. Between 2010 (when a systematic recording system was established by MIDIMAR) and 2013, 74 people died, 22 persons were injured and over 573 houses were destroyed or damaged. The exposure of housing in Kigali City is especially high due to the high and moderate slope susceptibility, high population density, the concentration of informal settlements and use of low-quality construction materials. 43% of Rwanda's health facilities<sup>24</sup>, 25% of schools and 74% of district roads are exposed to landslides<sup>25</sup>. Its vulnerability is increased by high rates of urbanisation and the concentration of the majority of the urban population in unplanned, informal settlements which puts additional pressure on services and leads to increased risks from flooding and landslides. This problem is most acute in Kigali where informal settlements account for more than 70% of housing<sup>26</sup> as most formal housing is too expensive for the average resident - as compared to GNI per capita, Rwanda has the most expensive housing in Sub-Saharan Africa.

Rising demand for water is coinciding with periods of water stress due to prolonged dry spells, a low capture and storage capacity, and a high precipitation run-off rate<sup>27</sup>. There is a rising demand for water in a context of low per capita water availability and increasing need for substantial amounts of water for its growing cities, irrigation and industry. Poorly managed sanitation systems also pose a risk to the quality of limited water resources. Water demand is expected to increase rapidly by 2040 further increasing the pressure on water resources as more homes are connected to mains water supply (currently in Kigali, only 35% of households have water piped into the home), irrigated agriculture increases, industries develop, and the population grows<sup>28</sup>. Residents in informal settlements experience greater water constraints during prolonged dry spells. Rwanda's energy

supply is also at risk from the increasing rainfall variability and prolonged dry spells as hydropower accounts for 50% of the power supply to the country<sup>29</sup>.

Informal settlements tend to be very dense with very little open/public space and often with corrugated iron roofs and poor ventilation that contribute to higher indoor temperatures. Impacts from rising maximum temperatures, more hot days and heat waves are greatest for infants and young children, the elderly, expectant mothers, and those with health problems. Rising minimum temperatures with fewer cold days is also likely to extend the range and activity of some disease vectors including mosquito and tick-borne diseases with populations at risk from malaria increasing by 150% by 2050<sup>30</sup>. Infants and young children vulnerable living in informal settlements are particularly vulnerable due to the lack of public health measures to control vectors.

Rwanda remains dependent on international climate finance for the majority of its climate investments. This is due to constraints on its domestic finances. Rwanda is one of 46 designated Least Developed Countries (LDCs) with a Gross national income (GNI) per capita of USD830 — ranked 172 out of 192 countries<sup>31</sup>. It also has one of lowest Human Development Indexes ranked 159 out of 177<sup>32</sup>. Despite a range of fiscal incentives, attracting private investment in climate compatible development is challenging due to high transport costs, a small domestic market, limited access to affordable financing, inadequate infrastructure, ambiguous tax rules and a lack of skills in the workforce. Financial constraints are likely to continue given that the economy has fallen into its first recession since 1994 due to the COVID-19 (coronavirus) pandemic with gross domestic product (GDP) estimated to have fallen by 0.2 percent in 2020, compared to a projected expansion of 8 percent before the COVID-19 outbreak. The construction sector contracted by 7.2 percent in the first three quarters of 2020, as the lockdown slowed work and reduced the availability of supplies. The poverty headcount is forecast to rise by 5.1 percentage points (more than 550,000 people) in 2021. The pandemic-driven rise in the fiscal deficit (due to higher expenditures and lower tax revenues) is increasing public debt which is estimated to have reached nearly 66 percent of GDP in 2020. In this context, the grant financing from GCF is important in ensuring that climate investments do not add to its debt burden<sup>33</sup>. The project is also timely as it can influence investments in Rwanda's post-COVID Economic Recovery Plan (a stimulus package equivalent to about 4.4 percent of GDP on average per year).

There is high level political commitment and progressive legal and institutional structures in place to support low emission, climate resilient growth. Climate change has long been recognised at the highest political level as a major barrier to achieving Rwanda's medium- and long-term development goals as evidenced by national priorities identified in the updated NDC. GoR is an early adopter of low-carbon resilient development, and climate resilient development has been mainstreamed into Rwanda's planning and budgeting processes. Rwanda's progressive environment and climate legislation has created a critical enabling environment for developing and implementing progressive institutional arrangements, policies and strategies. The GoR also adopted innovative institutional arrangements to improve the coordination of environment and climate priorities as cross-cutting development issues. These include the Sector Wide Approach (SWAp) Secretariat in MoE, as well as the Natural Resources Sector Working Group and the Environment and Climate Change Sub-Sector Working Group, which serve as multi-stakeholder forums to discuss environment and climate-related issues<sup>34</sup>. However, tackling climate change remains highly conditional on the availability of international climate finance.

The request for GCF financing is needed to address key barriers to ensure that the country's rapid urbanisation takes place on a sustainable footing, taking into account current and future climate variability and shifting to a low emission trajectory. GCF support will help to demonstrate the viability of a resilient, low-emission regeneration and avoid a lock-in of emissions intensive growth that may otherwise arise as urbanisation accelerates. GCF support will help to catalyse the low emission, climate resilient transition of the construction sector investments creating new jobs. Without GCF support, GoR will not have adequate resources or capacity to take forward its ambitious plans to reduce the exposure of communities living in precarious, informal settlements to climate risks. GCF financing is also needed to strengthen GoR's institutional and regulatory systems for climate-responsive planning and development in urban areas and help to scale up investments to increase the adaptive capacity of vulnerable urban communities and lower the energy intensity of its cities. The support from GCF will thus be additional.

Despite its resource constraints, the GoR will be providing approximately 5.4m USD from its own budgetary sources. GCF finance is only used for the incremental climate costs. Please refer to the Annex 4 Budget for additional information.

MoE/AE is seeking a GCF grant to support the climate resilient infrastructure investments and provide TA to support the scale up and replication of the interventions. Specifically, this will include the

technical and financial support to construct climate resilient rights of way, improve stormwater management, improve year-round access to an improved water supply, improve the management of solid waste, improve sanitation and accelerate the uptake of low energy solutions at the household level, as well as establish a TVET centre on the site for long-term replication of these activities. It will also include a range of TA to develop capacity, improve the enabling environment, build awareness, and blueprint the GCK. The Feasibility Study (Annex 2) provides more detailed information about the selected interventions, as well as a multi-criteria analysis that assessed how well these interventions performed against the GCF investment criteria.

**B.6. Exit strategy (max. 500 words, approximately 1 page)**

The project design has been led by Rwanda Green Fund (EE) formerly known as FONERWA in close consultation and involvement of the MoE and other relevant government agencies and communities in the project area. This has ensured strong alignment of the planned investments with national and sectoral policies and strategies (NDC, NAP etc.) and a high level of country ownership and relevance for local communities. The project will be implemented in close collaboration with the City of Kigali as well as relevant utilities which ensures that key skills and expertise developed during implementation will be retained within national and local institutions. During project design, a dedicated community upgrading committee maintained a regular dialogue between the design team and the community, and this will be continued during implementation and later operation. A community WhatsApp group has been created as well to make information sharing easier. During implementation, these structures and processes will enable the project to continue working closely with the community and to develop local ambassadors that will be involved in the upgrade process to promote the approach in other areas through cross visits and other communication channels. All Operation & Maintenance (O&M) arrangements are in place and the local authority and community are committed to the arrangements for sustaining and maintaining the project interventions in the long term. All infrastructure investments will be undertaken in close collaboration with local entities and/or households. Individual households will maintain the roof-top water harvesting structures in their homes with service support and training from the suppliers including the provision of operation and Maintenance (O&M) guidelines and schedule (in Kinyarwanda). This will be built into supplier contracts along with the requirement for five-year warranties. These measures will be consolidated with additional training and awareness activities by the project to ensure the effective and efficient operation and maintenance of the infrastructure after the project has ended. The table below summarises the operation and maintenance responsibilities beyond the project period. The assignment of activities and budget for O&M of up-graded climate-responsive and emissions-reducing infrastructure shall be assigned based on the information provided to this end by Activity 1.1.1, further amended when construction is completed following completion of Activity 1.1.2.

Project Component	Responsibilities during O&M (funding by the responsible actor listed below; no GFC funding)
Transport / mobility improvements (Construction of green rights of way, green road construction methods)	City of Kigali will be responsible for road maintenance required. The community will perform some on-going maintenance.
Blue/Green stormwater management systems	City of Kigali will be responsible for maintaining the stormwater management systems. The community will perform some limited on-going maintenance.  Households will be responsible for maintaining the measures on their land.
Expansion of central water supply (100% connection rate)	WASAC will be responsible for O&M of the system, with funds from the water tariff from users.
Rainwater harvesting (as supplement to central supply)	System owners will be responsible for maintaining the systems
Filters for Household Water Treatment / Efficient Fixtures	Households would be responsible for maintaining any systems if purchased.

Biogas system at the TVET / market	Operation and maintenance will be managed by the TVET building management. There will be a small fee for public use of the toilets, which will help fund maintenance.
Training on on-site sanitation improvements / Improved Greywater management	Households will be responsible for maintaining the systems as they are implemented.
Community composting	The community will identify a team of persons responsible for the community composting.
Waste and Recycling collection stations	The waste collection company will pickup all waste and recyclables on a regular basis, funded by the collection fees. The community will repair the collection point if needed.
Solar PV and water heaters	Maintenance of solar PVs on public roads will be done by the City of Kigali  Maintenance for the solar PV system in the pilot will be done by a solar PV provider, funded by user-paid tariffs.  Maintenance of solar water heaters will be done by owners.
Clean cooking technology	Operation and maintenance will be done by the cook stove owner.
Community hubs & market squares	The City of Kigali will be responsible for maintenance of public spaces. The community will be responsible for some maintenance of public spaces as well.
Establishment of a Technical and Vocational Education and Training (TVET) Centre	The Rwanda TVET Board will be responsible for the operation and maintenance of the TVET Center.

The financial sustainability of the GCF investment is predicated on the strengthening of the enabling environment and the development of investable projects. The strengthening of policy and regulatory frameworks at the national level will create an enabling environment to foster more demand and investment in this area.

The capacity and awareness building interventions will strengthen institutional capacity for public private partnerships to scale up and replicate the Green City Kigali pilot and the upgrade with a decreasing level of external support. This will target key Government institutions including MoE, FONERWA, REMA, RHA, and CoK with a focus on developing capacity to support planning and programming sustainable upgrade projects and new climate responsive urban developments. The project will also develop the capacity of the private sector to design and deliver green regeneration projects targeting key actors including the construction industry and recycling industry and providing support to develop the required skills and expertise as well as to develop / strengthen partnerships with government and communities. Extensive engagement with the private sector during the design and construction phases will strengthen public-private partnerships for future green city initiatives.

The TVET Centre will play a key role in sustaining investments in capacity development. It will serve as a technical training focal point co-located within the upgrade and close to the pilot GCK site. Students will have easy access to completed works demonstrating the viability of investments in climate responsive urban development whether it is regeneration or a new build. The development of a governance structure and constitution with at least 50% representation from women and the development of a financial plan and mechanism will put the centre on a sound financial footing. The TVET will be integrated within the existing network of TVETS across the country and supported through the ongoing GoR TVET programme.

Knowledge generated through the development of the GCK pilot and upgrade as well as best practice and lessons learned through the implementation will be shared widely through an information portal



and used to scale up project interventions across the country. A comprehensive knowledge management intervention has been included to ensure that best practices and innovative technologies are accessible to practitioners, sustaining interventions beyond the project lifetime. These will be institutionalised by integrating this knowledge and learning into the curricula of the TVET. Further the project seeks to develop a project design template for future affordable and sustainable housing development in Rwanda based upon the design information produced during the development of detail design for the GCK pilot project. The goal is to lower the cost barriers to entry for future private developers for the development of environmentally sustainable, climate adaptive and mitigative, and economically affordable developments as opposed to conventional business-as-usual approaches. Thus, promoting sustainable urbanization in Kigali and Rwanda's secondary cities.

The MoE, as the AE, will be responsible for monitoring and evaluating the impact of project investments and the management and dissemination of information and lessons learned through Sector Working Groups to ensure inter-institutional learning and collaboration as well as mainstreaming into sector strategies and plans. This mainstreaming process will be led by REMA (which is the agency mandated to drive climate and environmental mainstreaming across government) working closely with key agencies and supported by the project during implementation.

C. FINANCING INFORMATION						
<b>C.1. Total financing</b>						
<b>(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)</b>	<b>Total amount</b>			<b>Currency</b>		
	27.9			million USD (\$)		
<b>GCF financial instrument</b>	<b>Amount</b>	<b>Tenor</b>	<b>Grace period</b>	<b>Pricing</b>		
(i) Senior loans	<u>Enter amount</u>	<u>Enter years</u>	<u>Enter years</u>	<u>Enter %</u>		
(ii) Subordinated loans	<u>Enter amount</u>	<u>Enter years</u>	<u>Enter years</u>	<u>Enter %</u>		
(iii) Equity	<u>Enter amount</u>			<u>Enter % equity return</u>		
(iv) Guarantees	<u>Enter amount</u>	<u>Enter years</u>				
(v) Reimbursable grants	<u>Enter amount</u>					
(vi) Grants	27,995,786 USD					
(vii) Results-based payments	<u>Enter amount</u>					
<b>(b) Co-financing information</b>	<b>Total amount</b>			<b>Currency</b>		
	7.17.2			million USD (\$)		
<b>Name of institution</b>	<b>Financial instrument</b>	<b>Amount</b>	<b>Currency</b>	<b>Tenor &amp; grace</b>	<b>Pricing</b>	<b>Seniority</b>
Rwanda Ministry of Finance	<u>Grant</u>	7,111,989	<u>million USD (\$)</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Click here to enter text.	<u>Options</u>	<u>Enter amount</u>	<u>Options</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Click here to enter text.	<u>Options</u>	<u>Enter amount</u>	<u>Options</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Click here to enter text.	<u>Options</u>	<u>Enter amount</u>	<u>Options</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
<b>(c) Total financing (c) = (a)+(b)</b>	<b>Amount</b>			<b>Currency</b>		
	35.1			million USD (\$)		
<b>(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)</b>	<i>Please explain if any of the financing parties including the AE would benefit from any type of guarantee (e.g. sovereign guarantee, MIGA guarantee)</i>					
	<p>NA</p> <p><i>Please also explain other contributions such as in-kind contributions including tax exemptions and contributions of assets.</i></p> <p>Costs are quantified in section b.</p> <p><i>Please also include parallel financing associated with this project or programme (refer to the co-financing policy).</i></p> <p>The Green City Kigali pilot development is located near the community upgrade site. The design and construction of infrastructure for the pilot site is being financed by KfW (water supply, sanitation, roads, etc). The design and construction of homes will be done by a private developer.</p> <p>Parts of the GCF-funded activities will support the GCK pilot intervention’s ambition towards reaching a net zero carbon in the future. To do this, the project plans to install a centrally managed solar PV mini-grid and solar hot water heaters for the new affordable homes planned in the pilot.</p>					
<b>C.2. Financing by component</b>						

Please provide an estimate of the total cost per component and output as outlined in section B.3. above and disaggregate by source of financing. More than one co-financing institution can fund a single component or output. Provide the summarised cost estimates in the table below and the detailed budget plan as annex 4.

Component	Output	Indicative cost million USD (\$)	GCF financing		Co-financing		
			Amount million USD (\$)	Financial Instrument	Amount million USD (\$)	Financial Instrument	Name of Institutions
<u>Outcome 1</u>	<u>Output 1.1</u> Click here to enter text.	25,856,043	21,927,958	Grants	4,387,459	Grants	Rwanda Ministry of Finance
							Rwanda Ministry of Finance
	<u>Output 1.2</u> Click here to enter text.	2,789,349	2,363,858	Grants	465,662	Grants	Rwanda Ministry of Finance
<u>Outcome 2</u>	<u>Output 2.1</u>	2,060,668	1,682,402	Grants	378,265	Grants	Rwanda Ministry of Finance
	<u>Output 2.2</u>	863,864	742,587	Grants	121,277	Grants	Rwanda Ministry of Finance
<u>Project Management</u>	Click here to enter text.	1.5	1.27	Grants	0.23	Grants	Rwanda Ministry of Finance
<u>Land compensation</u>	Click here to enter text.	2.028	0	Grants	2.02	Grants	Rwanda Ministry of Finance
<b>Indicative total cost (USD)</b>		35.1	27.9		7.1		

**C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)**

C.3.1 Does GCF funding finance capacity building activities?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
C.3.2. Does GCF funding finance technology development/transfer?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

These activities are essential for building local capacity, transferring technology, and creating a sustainable and resilient urban development model in Kigali. The GCF funding will play a critical role in achieving these objectives by providing the necessary financial support.

Total Budgets for Capacity-Building Activities:

2.1.1 Capacity Building for Construction Sector Workers, Professionals and community members at the Climate-Focused TVET Center: \$646,916

2.1.2 Institutional Capacity Development for Government of Rwanda Agencies/Institutions: \$145,663

2.1.3 Strengthening Planning and Regulatory Frameworks to Support an Enabling Environment: \$535,860

2.1.4 Awareness Raising and Citizen Engagement for Climate Action: \$930,353

2.2.1 Blueprinting the Green City Kigali and Developing Planning Codes for the Special Purpose Vehicle facilitated by sustainable Knowledge management practices (SPV): \$280,802



## D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

*This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).*

### D.1. Impact potential (max. 500 words, approximately 1 page)

Continued urban development on a business as usual basis (BAU) will lock Rwanda into unsustainable, high carbon pathways with low resilience to climate change. Unsustainable consumption and production patterns and inadequate responses to address climate change, also undermine efforts to end poverty and to achieve sustainable development. One third of the reduction in poverty between 2014 and 2017 was due to the movement of people from the rural areas to urban areas<sup>35</sup>. Sustainable urbanisation will encourage the movement of workers currently dependent on rainfed agriculture into more productive sectors raising wages and skills (urban workers in Rwanda earn, on average, twice the rural wage for similar work in similar sectors of employment<sup>36</sup>). It is critical for Kigali to “get ahead” of its rapid expansion with a more intensive program to apply climate resilient approaches. Higher density walkable cities reduce levels of urban sprawl and travel distances to work resulting in lower transport costs for the population and reduced GHG emissions and air pollution as well as reduced development of housing on steep slopes which are vulnerable to flooding and landslides. Please refer to section E for tables on the project indicators.

**Adaptation Impact Potential:** The proposed GCF project contributes to increased climate-resilient development in the following ways:

GCF adaptation results area A1.0 – Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions: climate-related disasters are expected to increase in Kigali as a result of increased heavy rain events. This is a major risk to the project community. The proposed permeable road construction materials, as well as better stormwater management, will allow more infiltration and less and slower runoff, which will help protect houses, roads, other infrastructure, resulting in 5.4M USD in economic assets protected from the impact of extreme climate-related disasters.

GCF adaptation results area A2.0 – increased health and well-being, and food and water security: increasing duration of droughts, increased temperatures and changing rainfall patterns are expected to lead to decreasing water quality and quantity, increase in vector borne diseases, and heat stress in the project area. The proposed rainwater harvesting tanks and expansion of the central water supply system will result in year-round access to reliable and safe water for 1,634 people.

GCF adaptation results area A3.0 - Increased resilience of infrastructure and the built environment to climate change threats. Increasing average rainfall and rain intensity is expected to pose an increased risk to for flooding and landslides, which will result in damage to houses, roads and other infrastructure, water shortages, and power cuts. The proposed interventions will results in increased resilience for 7.8 km of roads, 5.4km of walking and cycling pathways, and 735 physical structures (based on number of households, including annex buildings in community compounds).

The project will also contribute to the following GCF adaptation outcomes:

GCF Outcome A5: Strengthened institutional and regulatory systems for climate-responsive planning and development. The project will strengthen the institutional capacity among GoR agencies to facilitate and oversee climate resilient low emission development of urban infrastructure and buildings. It will also blueprint the GCK and planning code for the GoR to promote the scale-up and replication of the project and reduce the design costs of future green city developments. The project will result in three institutional and regulatory system improvements.

GCF Outcome A7: Strengthened adaptive capacity and reduced exposure to climate risks. The project will result in strengthened adaptive capacity and reduced exposure to climate risks for 30,252 beneficiaries through the improvements made in physical infrastructure.

**Quantified Mitigation co-benefits:** The project also contributes to low-emission sustainable development pathways.

GCF mitigation result M1.0: Reduced emissions through increased low-emission energy access and power generation. The solar street lights installed by the project will result in a savings of 76.2t CO<sub>2</sub>eq/year, and the solar PV and solar water heaters will result in a savings of 0.9 tCO<sub>2</sub>/year/average household.

GCF mitigation result M2.0: Reduced emissions through increased access to low-emission transport. The project will result in a savings of 2,019t CO<sub>2</sub>eq/year through modal shifts in transportation compared to the BAU scenario.

GCF mitigation result M3.0: Reduced emissions from buildings, cities, industries and appliances. The project will result in a carbon savings of 2,524 tCO<sub>2</sub>eq through the use of green construction materials in the roads, drainage systems, and TVET. The TVET will also have an operation savings of 9 tCO<sub>2</sub>eq/year due to the green measures installed.

The project will also contribute to the following GCF mitigation outcome:

GCF Outcome M7.0: Lower energy intensity of buildings, cities, industries and appliances. The TVET project will demonstrate lower energy intensity in buildings through the efficient design proposed (estimated to use less than 2,100 kWh/month).

### D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

The proposed activities have been designed to ensure that they will have an impact beyond a one-off project investment. Several activities are highlighted below to explain the potential for scaling up and replication; potential for knowledge sharing and learning; contribution to creation of an enabling environment; contribution to regulatory framework and policies; and contribution to climate-resilient development pathways. To promote scale up and replication, the project has focused on delivering high quality, cost-effective investments, combined with effective lesson learning and high visibility of strategic interventions.

**The establishment of a Technical Vocational Education Training Centre** focused on training students on climate resilient construction methods will facilitate long-term knowledge sharing and learning. Capacity building for construction sector workers and professionals will lead to increased scaling up and replication of the activities implemented under the project.

**Awareness raising and citizen engagement in climate responsive regeneration, coupled with the knowledge management system** will promote knowledge sharing and learning across Kigali and Rwanda. These activities will encourage more citizens to adopt the measures implemented in the project, such as the use of rainwater harvesting systems.

**Blueprinting the GCK and planning code for the GoR** will support replication of the project. The project will document the development of the GCK. A design template, ToRs, and project(s) manual will be developed to utilize the sustainable design information developed during the detail design of the 16ha mixed use, sustainable and affordable housing project to create a design template for future developers to utilize that promote the scale up and replication of the GCK pilot and thereby the scale up and replication of sustainable and affordable housing projects that promote climate mitigative and adaptive principals, resource efficiency, local materials and labour – reducing the planning and design costs of future green city developments.

**Providing support relating to the planning and regulatory environment in order to develop an enabling environment that fosters increased investment in the green upgrade of informal settlements** will support the broader implementation of the work demonstrated as part of this project.

### D.3. Sustainable development (max. 500 words, approximately 1 page)

The project is expected to result in extensive co-benefits and advances several of the Sustainable Development Goals (SDGs), including (climate benefit specific in bold):

- SDG 1 no poverty
- SDG 3 health
- SDG 5 gender equity and empowerment of all women and girls
- **SDG 6 water and sanitation**
- **SDG 7 clean energy**
- **SDG 8 decent work and economic growth**
- **SDG 9 resilient infrastructure**
- SDG 10 reduced inequalities
- **SDG 11 sustainable cities and communities**
- **SDG 13 climate action**
- SDG 17 partnerships for development

#### Environmental co-benefits

1. Scale up of successful approaches will increase rural-urban migration due to increasing opportunities available in Kigali which will reduce the pressure on Rwanda's natural resources from farming of marginal lands.
2. Stormwater management systems will increase groundwater recharge. Reduced stormwater runoff will also improve the water quality in the nearby wetland.
3. Rainwater harvesting systems will reduce pressures on the use of surface water sources, which benefit plants and animals in those habitats.
4. Improved sanitation systems will prevent groundwater contamination.
5. The green rights of way have reduced widths with strategic pinch points, which promote walking and cycling. This has a positive impact on air quality and carbon emissions.
6. Green construction methods use locally sourced materials, which reduces the transport of materials from farther locations, thus reducing air emissions and noise.
7. Improved solid waste management will reduce the amount of litter in the area.
8. Community composting allows for recovery of nutrients, reducing the need to import artificial fertilizers.
9. Recycling allows for greater recovery of resources, which reduces the use of virgin materials.
10. Trainings and guidelines for best practice climate change adaptive and mitigative household upgrading.

**Social co-benefits including health impacts**

11. Improved access to water will reduce the time that women and children spend collecting water, allowing them to engage in other activities
12. Improved quality of water will improve the health of residents, especially children, who currently suffer from water-borne diseases.
13. Street lighting will improve the safety and security in the community, especially for women.
14. Improved drainage systems will result in health benefits due to reduction in the incidence of injuries from slipping and from shocks associated with flooding and diseases.
15. Clean cooking technology will result in improved health for women and children, as well as reduced time, physical burden and security risks involved for collecting firewood.
16. The planned roads and pathways will promote active mobility, such as walking and cycling, which promote health. Also, the low degree of vehicle permeability and traffic calming measures reduce serious injuries or fatalities from accidents.
17. Increase skills due to the new TVET will reduce poverty levels and reduce dependency on agriculture.

**Economic co-benefits**

18. Sustainable urbanisation has the potential to accelerate economic growth as it will encourage the movement of workers currently dependent on rainfed agriculture into more productive sectors raising wages and skills (urban workers in Rwanda earn, on average, twice the rural wage for similar work in similar sectors of employment and incomes in Kigali are five times higher than in rural areas<sup>37</sup>). The project will also help to integrate Kigali's economy with bordering districts.
19. Kigali is one of the fastest-growing African cities. Urbanization has already accounted for 37% of national structural change in Rwanda, and urban areas have accounted for 48% of national labour productivity growth over the past 15 years<sup>38</sup>. With a blueprint for climate resilient urbanisation and successful scale up, these positive trends can be accelerated to enable Kigali to emerge as a strong urban economic powerhouse in the East Africa region.
20. Scale up of well managed urbanisation will drive down transport and trade costs for goods and people, increasing economic density and facilitating the transmission of knowledge and ideas, increasing economies of scale and opportunities for specialization, and improving firms' access to both critical services and a large pool of labour with a wide variety of skills leading to increased productivity. International evidence suggests that a 1 percentage point increase in the urban population is associated with a 3–8% increase in a country's per capita income<sup>39</sup>.
21. Investments in public infrastructure will raise the productivity of urban land, crowding in private investment and raising land values. The investments will also reduce losses and costs associated with disaster response and rehabilitation costs from extreme weather events.
22. The TVET will facilitate training to enable more people, especially women, to access off-farm jobs
23. Women will save time through improved water access, which can allow them to pursue other economic activities.
24. The toilet biogas system will provide fuel for cooking meals at the TVET, which reduces costs for buying charcoal or liquified petroleum gas (LPG).
25. Community composting system will provide job opportunities.
26. The TVET will train students on climate resilient construction approaches and allow them to access jobs.

27. The proposed transport infrastructure will facilitate safe, secure and active transport, with fewer injuries and assaults, and better overall health, which also benefits economic productivity.
28. Stronger and more resilient homes as a result of training in household upgrade best practice.

#### **Gender-sensitive development impact**

The project will result in increased resilience of vulnerable households, including women and girls, and enhanced efficient and low emission household energy use. The following impacts are expected:

29. Resilient and low-carbon technologies and infrastructure for improved access to water and electricity of residents, reducing time spent by women and girls on domestic activities (unpaid care work) and alleviate that burden. This will allow women to participate in other income generating activities and will solve an issue of girls dropping out of school.
30. Women-friendly and safe public spaces resulting in reduced gender-based violence;
31. Gender-sensitive community centre creating space for recreation and economic activities of women;
32. Gender-sensitive public space and facilities; and
33. Women's social and political empowerment through increased participation and leadership in the community centre and community activities.

#### **D.4. Needs of recipient (max. 500 words, approximately 1 page)**

**Rwanda's capacity to adapt to climate change is low.** Rwanda ranks 151 out of 181 countries in the ND-GAIN index<sup>5</sup> (2018) for climate vulnerability<sup>40</sup> and 98<sup>th</sup> in terms of readiness – meaning that it is highly vulnerable to climate change effects, yet its readiness<sup>41</sup> to combat these effects is moderate. Due to its dense river network and large wetlands, Rwanda is prone to riverine floods. There have been year-on-year increases in loss and damage from weather related hazards. The impacts of climate change in Rwanda are exacerbated by a range of anthropogenic factors including the loss of forest and vegetative cover, steep slopes and a high dependence on traditional rain-fed agriculture by the majority of the population.

**As women are traditionally responsible for households' water availability and food security their burdens are expected to increase disproportionately due to climate change<sup>42</sup>.** The future economic cost of climate change was estimated at an additional impact of 1% of GDP each year by 2030. About 38% of Rwanda's population lives below the poverty line (with 16% of the population living in extreme poverty), with women (representing a higher 39.5% poverty level), disabled, widowed, and rural populations disproportionately affected<sup>43</sup>.

**Rwanda's high rate of urbanisation increases its overall vulnerability to climate change.** Urban households are vulnerable to climate change due to Rwanda's hilly topography and the very high number of people living in unplanned settlements. Infiltration rates for storm water are low creating high runoff speeds leading to erosion and downstream flooding and siltation. Less than 20% of the urban population that live in areas covered by master plans had storm water considerations in 2016<sup>44</sup>. Moreover, low recharge rates for groundwater tables reduce the availability of groundwater as a potable water resource. These problems are accentuated by climate change. The rapid increase in rural-urban migration has resulted in the widespread development of slums (particularly in Kigali which is the most popular destination for rural migrants<sup>45</sup>). At 460 persons per square kilometre Rwanda's population density is among the highest in the world and is expected to increase further due to an annual population growth rate of 2.4%<sup>46</sup>.

**Many informal settlements are concentrated on sites most at risk from flooding and landslides** with poor quality housing less able to withstand extreme weather events and a lack of risk-reducing infrastructure. Homes, possessions and assets for generating income are not generally covered by insurance. This problem is most acute in Kigali where informal settlements account for more than 70% of housing<sup>47</sup> as most formal housing is too expensive for the average resident - as compared to GNI per capita, Rwanda has the most expensive housing in Sub-Saharan Africa. Moreover, informal settlements tend to be very dense with very little open/public space and often with corrugated iron roofs and poor ventilation that contribute to higher indoor temperatures. Impacts from rising maximum temperatures, more hot days and heat waves are greatest for infants and young children, the elderly, expectant mothers, and those with health problems. Rising minimum temperatures with fewer cold days is also likely to extend the range and activity of some disease vectors including mosquito and tick-borne diseases with populations at risk from malaria increasing by 150% by 2050<sup>48</sup>.

**42% of the country's area is classified as having a moderate to very high susceptibility to landslides.** Rwanda's steep slopes are prone to landslides, which are predicted to increase due to the high intensity rainfall events associated with climate change. 43% of Rwanda's health facilities<sup>49</sup>, 25% of schools and 74% of district roads are exposed to landslides. Between 2010 (when a systematic recording system was established by MIDIMAR) and 2013, 74 people died, 22 persons were injured and over 573 houses were destroyed or damaged<sup>50</sup>.

**Rising demand for water is coinciding with periods of water stress** due to prolonged dry spells, a low capture and storage capacity, and a high precipitation run-off rate<sup>51</sup>. There is a rising demand for water in a context of low per capita water availability, and increasing need for substantial amounts of water for its growing cities, irrigation and industry. Water demand is therefore expected to increase rapidly by 2040 further increasing the pressure on water resources as



more homes are connected to mains water supply (currently in Kigali, only 35% of households have water piped into the home), irrigated agriculture increases, industries develop and the population grows<sup>52</sup>. Residents in informal settlements experience greater water constraints during prolonged dry spells. Rwanda's energy supply is also at risk from the increasing rainfall variability and prolonged dry spells as hydropower accounts for 50% of the power supply to the country<sup>53</sup>.

**The risk of landslides for housing in Kigali City is especially high due to the high and moderate slope susceptibility, high population density, the concentration of informal settlements and use of low-quality construction materials.**

The key challenges identified by the local administration include: 1) unplanned settlements; 2) poor quality of road network; 3) uncoordinated transport services; 4) inadequate water and waste management systems; 5) limited participation of the private sector; 6) limited access to electricity and low usage of solar and biogas system; and 7) low youth productivity and employment<sup>54</sup>.

**The Government of Rwanda's ability to address these challenges is limited due to financial constraints.**

Existing programs and interventions are insufficient to adequately address the challenges described above. In addition, the COVID-19 pandemic has increased pressures on already stretched government spending. This project cannot be implemented without GCF support.

#### D.5. Country ownership (max. 500 words, approximately 1 page)

##### Existing national climate strategy

Most of the country's climate-related policy milestones and strategic frameworks have significantly been informed by vulnerability analyses and studies including:

Baseline national Vulnerability index conducted in 2015 and the follow up provincial and District vulnerability index of 2019. Since 2015, Rwanda has undertaken to assess social-economic and spatial vulnerability to climate change. The 2019 study aimed to provide a report on a new District vulnerability assessment and comparative Index for the 30 Districts, based on household vulnerability survey data, and on the "National Disaster Risk Atlas of Rwanda" (MIDIMAR, 2015) and other relevant national and international reports and publications; and Policy and strategy recommendations to address current vulnerabilities.

Notably in 2022, the World Bank produced a Country Climate Development Report (World Bank, 2022) for Rwanda which assessed Rwanda's economy to be extremely vulnerable to external shocks, including climate change. According to the report, Rwanda suffered its first economic recession since 1994, with the GDP contracting by 3.4% and that the vulnerability is further highlighted by the low level of adjusted net savings. In response to the projected rapid increase in urbanization, Rwanda's urban jurisdictions, the City of Kigali and the secondary cities have recently developed master plans that aim to incorporate climate change and environmental concerns.

The analyses have consequently been embedded in Rwanda's national development frameworks. These include:

- the Vision 2050 blueprint which aspires to take Rwanda to upper- middle-income-country status by 2035 and high-income status by 2050. It places emphasis on developing basic infrastructure in urban centres to among other things aim for green/eco-friendly cities and neighbourhoods.
- NST-1 (2018-24) has identified accelerated Sustainable Urbanization' is a key priority which includes the promotion of local construction materials, improved urban transportation services and the development of basic infrastructure for 250 km of new residential zones. The Urbanisation and Rural Settlement Sector Strategic Plan 2018–2024 is intended to deliver the urban component of NST 1;
- Other key strategic orientation for urbanization include, but are not limited to, The Green Growth and Climate Resilience Strategy (GGCRS), (2023) the National Roadmap for Green Secondary Cities Development
- the National Environment and Climate Change Policy enacted in 2019
- National Land Use and Development Master Plan, and The National Gender Policy (2021 revision) stresses the importance on improvement of adaptive capacities to climate change and variability for both men and women.

##### Rwanda Engagement with the GCF

Rwanda has demonstrated capacity to implement a GCF-funded projects and consistently delivers results against targets set out in its national strategies. Rwanda has also established strong institutional frameworks and the accredited entity MOE has a reliable track record for implementing climate change projects. For example, MoE is implementing the Strengthening Climate Resilience in Northern Rwanda Project approved by the GCF Board in March 2018.

##### Alignment with existing policies

Rwanda was one of the first countries in Africa to submit to submit a tougher climate target to the UN, withwithwith a target to cut 38% of its emissions and at least 16% (unconditional) by 2030 compared with a business-as-usual baseline. With technical and financial support, Rwanda could reduce its total emissions by 4.6 million tonnes of CO2 by 2030 through the deployment of hydro and solar energy, improved energy efficiency in industrial processes, introduction of vehicle emission standards, rolling out electric vehicles and promoting on-farm biogas use.

Rwanda's adaptation actions in the NDC draw upon the Green Growth and Climate Resilience Strategy (GGCRS).).). The GGCRS is central to the achievement of the government key development target of becoming a developed climate-resilient, low-carbon economy by 2050. Moreover, the GGCRS directly informs and is planned to support and promote green urbanisation and the promotion of green innovation in industrial and private sectors; integrated approach to land use and human settlements; critical skills and attitudes for service and industrial sectors. ThusThusThus, the proposed GCP will help to deliver against key programmes of action in the GGCRS including supporting integrated approaches to sustainable land use planning and management as well as integrated water resource management and planning; diversifying energy sources with promoting green technology; green industry and private sector development; developing low carbon peri-urban systems; and disaster management.

It is noted that full implementation of the GGCRSGGCRSGGCRS, the NDC and other strategic developmental areas including urbanization will require predictable sustainable and reliable support in the form of finance, capacity building and technology transfer to which this proposal has the potential to contribute.

**Capacity of Accredited Entities or Executing Entities to deliver**

Planned interventions will benefit from the existence of strong policy and institutional frameworks to address climate change issues. The introduction of comprehensive climate legislation in Rwanda created a critical enabling environment for the development and implementation of progressive institutional arrangements, policies and strategies for addressing climate threats and low carbon growth. Strong political will and ownership exists at the highest levels and there are active climate champions across national government. The MoE (AE) and FONERWA (EE) have experience delivering results on GCF-funded projects, such as the on-going GCF-funded Gicumbi project in Rwanda, as well as successfully managing other large programs focused on climate change mitigation and adaptation. As the national climate and environment fund, Rwanda Green Fund, FONERWA (the nominated executing entity) already manages a significant portfolio of climate finance and is therefore well equipped to implement the project. FONERWA channels finances on a competitive basis to Government agencies, Districts, CSOs and the private sector. Delivering GCF project interventions through a proven and capable national institution such as FONERWA with high levels of accountability will therefore further strengthen country ownership. The MoE and FONERWA will draw from this experience in order to successfully implement this project.

**Role of National Designated Authority**

REMA (the NDA) has been actively engaged during the preparation of the proposal and will continue to be involved during implementation, particularly in the proposed mainstreaming activities. FONERWA routinely works closely with NDA and particularly had on-going consultations with REMA's climate change unit, responsible for preparing national communications and representation at international climate change negotiations. This has increasingly proven instrumental in supporting the analysis of climate threats and vulnerability baseline included in this proposal. As such, the design is based on a thorough understanding of the threat and the vulnerability level and provides a comprehensive evidence base for action. FONERWA will continue to closely collaborate with the NDA throughout the project cycle.

Engagement with civil society organizations and other relevant stakeholders, including indigenous peoples, women and other vulnerable groups

Country ownership is rooted in high-level GoR commitment to delivering Carbon neutral and climate resilience targets set out in Vision 2050. This underscores the need to target all-of society partnerships in delivering on the targets. There is a strong emphasis on ensuring the participation of multiple stakeholders in the project including the local authority, civil society, the local community as well as the private sector. The project development process involved multiple rounds of public consultation to ensure the interventions maximised benefits for local people that benefited from stakeholder engagement (described in more detail in Annex 7). Working closely with the local authority will ensure that planning and development at the local level takes account of climate change during and beyond programme activities. Building capacity at the local level will ensure that future plans incorporate adaptation and mitigation. FONERWA, in partnership with the Rwanda Development Bank (BRD) catalyses climate investment flows to private sector through range of financial instruments (grants, loans, guarantees, etc. that respond to critical financial incentives and technical innovations to advance national climate action. By partnering effectively with the private sector and enhancing access to training on climate resilient infrastructure, the proposed investment will support new markets and business activities around infrastructure and construction services at the local and national level.

**D.6. Efficiency and effectiveness (max` . 500 words, approximately 1 page)**

Without GCF support, GoR will not have adequate resources or capacity to take forward its ambitious plans to reduce the climate risk exposure of communities living in informal settlements. Please refer to Annex 3 and Annex 22 for details regarding the economic and financial analysis of the proposed interventions and the carbon calculations.

**Overview of the financial costs and benefits of the project**

Investing in the upgrade of a village to form a climate-responsive blueprint for upscaling and replication is a significant departure from a conventional financial model. Typically speaking, any significant infrastructure upgrade would be



planned and financed by local government across a 40-60 year horizon or - as in the case of significant road infrastructure - financed as a stand-alone project through user tolls, general taxation or government borrowing.

Infrastructure upgrades are typically accompanied by increases in property value with follow-on increases in tax income which help pay for the original infrastructure upgrades. This may have the detrimental effect of pushing out the existing local occupants from homes they can no longer afford, who will then create new informal settlements elsewhere.

The proposed project for climate-responsive upgrades is therefore not only important in creating a scaleable, replicable model which can be deployed elsewhere but also needs to carefully consider wider socioeconomic impacts affecting the existing population. To facilitate this, the adaptation and mitigation measures for the project have been proposed on the basis of providing long-term cost-savings, allowing local residents to boost their household wealth in parallel with the expected increases in local property value, reducing the risk of financially-induced eviction and/or migration.

From a financial perspective, the project is a subsidy-based model where initial capital cost investment is offset by long-term improvements in the health and wealth for local households, minimising detrimental impacts on local residents (formally known as economic displacement and economic deadweight). Only one (solar streetlighting) of the proposed interventions was monetisable at a scale benefiting the village as a whole outside of individually impacted households. The upgrade of streetlighting from conventional to solar-powered would typically be a cost burden borne by local government and financed through tax revenues. Due to data limitations and because the upgrade would be financed by GCF, the financial analysis is based on a BAU comparison with conventional streetlighting.

In terms of replicability and scalability, any departure from the subsidy-based model should be accompanied by a detailed assessment of distributional impacts to ensure that existing households are not "priced out" of their current homes from the impacts of infrastructure improvements.

### **Overview of economic evaluation**

Separate from a financial evaluation which only considers direct financial impacts from any proposed project or intervention, an economic evaluation views all potential benefits and costs, both direct and indirect, seen from both the local perspective and a regional/national perspective. Where these costs and benefits cannot be quantified, they are assessed on a qualitative basis. The economic evaluation contains the monetisable and quantifiable adaptation and mitigation measures for the project directly affecting a subset of households benefitting from the project. These have been estimated on the basis of providing long-term cost-savings, allowing local residents to boost their household wealth in parallel with the expected increases in local property value, reducing the risk of financially-induced eviction and/or migration.

Quantified benefits have initially focussed on the following mitigation measures:

- Water harvesting on existing homes - additional hours available for working and savings from reduction in purchase of water
- Savings from generation of power by solar PV
- Savings from use of solar water heating
- Carbon savings
- Savings expected from the change in land use

The main benefit, improvement to local quality of life, could not be quantified at the present time so is not included in this analysis. Additionally, adaptation measures at a societal level could not be quantified at this time due to a lack of data for quantification and monetisation of the specific planned interventions, e.g. those improving transport and waste activities.

## E. LOGICAL FRAMEWORK

### E.1. Project/Programme Focus

- Reduced emissions (mitigation)
- Increased resilience (adaptation)

### E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

Assessment Dimension	Current state (baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
<b>Scale</b>	Currently, there is limited capacity to invest in climate resilient physical infrastructure and limited capacity of vulnerable households to transition to resilient, efficient and low emission practices.	<u>Medium</u>	Enhanced capacity for low emission, climate-resilient upgrades reducing risks of landslides, flooding, and heat stress... Better living conditions and access to services...	Sustainable upgrades of settlements, piloting a multi-sectoral program for future replication. Includes technical assistance for greenfield development.
<b>Replicability</b>	The Government of Rwanda (GoR), under its Economic Development and Poverty Reduction Strategy EDPRS (II), has pioneered this vision of a Green City Concept and will be the first of its kind in Rwanda.	<u>High</u>	Investments in resilient infrastructure, household energy solutions and community facilities in an informal settlement on Kinyinya hill - Ngaruyinka Village, to serve as a model for a resilient, low emission upgrade. If implemented successfully, the green city concept could be replicated in the development of secondary cities across the country with green technologies and innovations for green and climate resilient urbanization	The establishment of a Technical Vocational Education Training Centre focused on training students on climate resilient construction will facilitate long-term knowledge sharing and learning; Capacity building for construction sector workers and professionals will lead to increased scaling up and replication of the activities implemented under the project. Blueprinting the GCK and planning code for the GoR will support replication of the project.
<b>Sustainability</b>	GoR is an early adopter of low-carbon resilient development, and climate resilient development has been mainstreamed into Rwanda's planning and budgeting processes. Rwanda's progressive environment and climate legislation has created a critical enabling environment for developing and implementing	<u>Medium</u>	The paradigm shift is possible if the enabling environment is improved so as to foster investment. The sustainability of the intervention is strengthened by institutionalizing practices and tools for low-carbon and resilient planning and building.	Providing support relating to the planning and regulatory environment in order to develop an enabling environment that fosters increased investment in the green upgrade of informal settlements will support the broader implementation of the work demonstrated as part of this project.

	<p>progressive institutional arrangements, policies and strategies. The GoR also adopted innovative institutional arrangements to improve the coordination of environment and climate priorities. However, there is a need to enhance the institutional and technical capacity to plan and develop low emission and resilient investments</p>			
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--

**E.3. GCF Outcome level: increased resilience (IRMF core indicators 1-4, quantitative indicators)**

GCF Result Area	IRMF Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final <sup>1</sup>	
<p><u>ARA1 Most vulnerable people and communities</u></p>	<p><u>Total Direct and Indirect Beneficiaries reached</u></p>	<p>Annual project reports  Gender responsive household survey (See Annex 11 for indicators)</p>				<p>Targets to be set at the Inception phase of the project</p>
<p><u>ARA2 Health, well-being, food and water security</u></p>	<p><u>Core 2: Direct and indirect beneficiaries reached</u></p>	<p>Annual project reports</p>			<p><b>1634 total</b></p>	
	<p><u>Supplementary 2.6: Beneficiaries (female/male) living in buildings that have increased resilience against climate hazards</u></p>	<p>Project Annual Reports Interim evaluation and final evaluation reports (See Annex 11 for indicators)</p>	<p>Erosion from storm water is a significant problem in the community and poses a risk to buildings</p>		<p>817 females 817 males</p>	<p>Technologies and practices are applied successfully</p>
	<p><u>Core 2: Direct and indirect beneficiaries reached</u></p>	<p>Annual project reports  Gender responsive household survey</p>	<p>Not all households are connected to water supply.</p>		<p>1634 total</p>	<p>Technologies and practices are applied successfully</p>

<sup>1</sup> The final target means the target at the end of project/programme implementation period. However, for core indicator 1 (GHG emission reduction), please also provide the target value at the end of the total lifespan period which is defined as the maximum number of years over which the impacts of the investment are expected to be effective.

		(See Annex 11 for indicators)	Intermittent water rationing			
	<u>Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security</u>				817 females 817 males	
<u>ARA3 Intrastructure and built environment</u>	<u>Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions</u>	- Detailed climate-resilient and emissions-reducing engineering design for Ngaruyinka Village (see Activity 1.1.1)	Entire community is vulnerable to extreme climate-hazards resulting in flooding and landslides	Detailed climate-resilient and emissions-reducing engineering design for Ngaruyinka Village (see Activity 1.1.1)	5.4M USD (based on Detailed climate-resilient and emissions-reducing construction for Ngaruyinka Village (see Activity 1.1.2) based on independent engineering verification post-construction	Based on protection of entire village area (18ha or 180,000m2), based on value of USD 30 per square meter (per land valuation conducted).

**E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)**

Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage
<u>Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development</u>	There is a need for enhancing the institutional and technical capacity to plan and develop low emission and resilient investments	<u>medium</u>	Documenting best practices and provide guidance for enhancing national building standards will increase the institutional and technical capacity to	Blueprinting the GCK and planning code for the GoR will support replication of the project	<u>Multiple sub-national areas within a country</u>

<u>pathways in a country-driven manner</u>			plan low emission and resilient investments		
<p><u>Core indicator 8: Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards</u></p>	<p>Limited awareness of best practices and approaches to resilient, low carbon housing and infrastructure, limited examples of good practices</p>	<p><u>low</u></p>	<p>Increased knowledge and the diffusion of good practices results in deployment of the approaches and solutions developed in the GCK-project.</p>	<p>The project is the first of its kind and limited effective opportunities for knowledge generation and learning processes without an example to showcase. Concretely, the Technical Vocational Education Training Centre focused on training students on climate resilient construction will facilitate long-term knowledge sharing and learning; Capacity building for construction sector workers and professionals will lead to increased scaling up and replication of the activities implemented under the project.</p>	<p><u>Multiple sub-national areas within a country</u></p>

**E.5. Project/programme specific indicators (project outcomes and outputs)**

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
1. Strengthened Adaptive Capacity heat stress mitigation and Reduced Exposure to Climate Risks	# of households having access to risk reducing infrastructure and basic services	Independent final evaluation report	0		301households	Independent final evaluation

Implement resilient green transport/Mobility networks	Length of improved streets, m	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	7,787	Infrastructure to be completed as per feasibility study.
	Length of improved pathways and walking & cycling link, m	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	5,397	Infrastructure to be completed as per feasibility study.
Implement resilient storm water management systems using nature-based solutions	Area of planted green swales, m2	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	14,709	Infrastructure to be completed as per feasibility study.
	Area of planted step swales	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	5,052	Infrastructure to be completed as per feasibility study.
	Number of infiltration ponds	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	22	Infrastructure to be completed as per feasibility study.
	Area of terraced rain gardens, m2	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	30,333	Infrastructure to be completed as per feasibility study.
Expand, install and ensure resilience of central water supply and rain water harvesting systems.	Percentage of households with a water access point	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	TBC	To be quantified through detailed design (activity 1.1.1)	100%	Infrastructure to be completed as per feasibility study.
	Percentage of households connected to central water supply	Report from water company based on Detailed design and construction (see Activity 1.1.1 and 1.1.2)	13% (43 out of 321)	To be quantified through detailed design (activity 1.1.1)	100%	Infrastructure to be completed as per feasibility study.



	Number of households with rainwater harvesting tanks installed	Report from RWH tank provider based on Detailed design and construction (see Activity 1.1.1 and 1.1.2)	6	To be quantified through detailed design (activity 1.1.1)	321	Infrastructure to be completed as per feasibility study.
Promotion and Implementation of Renewable Energy and Energy-Efficient Technologies	<u>GHG emissions reduced, avoided or removed/sequestered</u>	Annual project reports. The indicator measures the reduction of GHG emissions in CO <sub>2</sub> e compared to baseline emissions. (KWh from solar PV, 0 kg CO <sub>2</sub> e per KWh, compared to grid emissions factor)	Quantity of CO <sub>2</sub> e emitted in the BAU scenario		Solar street lights: 76.2 t CO <sub>2</sub> eq / year Households: 0.9 tCO <sub>2</sub> eq/year/ average household	Data to determine the baseline is available. Data to estimate GHG emissions reduced is available.
	<u>Emissions reduced, avoided or removed/sequestered</u>	Ex ante modelling. Household use of vehicles will be used as an indicator for monitoring.	Quantity of CO <sub>2</sub> eq emitted in the BAU scenario		2,019t CO <sub>2</sub> eq / year	
	<u>Improved low-emission vehicle fuel economy</u>	Percentage of trips made by public transport/walking and Cycling			80%	
	<u>Emissions reduced, avoided or removed/sequestered</u>	Annual project reports A process-based life cycle assessment (LCA) has been conducted to estimate GHG emissions difference between the BAU and the Green scenario.	Quantity of CO <sub>2</sub> e emitted in the BAU scenario		Combined carbon savings through construction – 2,524 tCO <sub>2</sub> eq TVET operation savings: 9 tCO <sub>2</sub> eq / year	Data to determine the baseline is available. Data to estimate GHG emissions reduced is available.
	Number of households with installed solar water heating	Report from solar water heating provider based on Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	1,430	Infrastructure to be completed as per feasibility study.
	Percentage of households in the	Report from solar PV provider based on Detailed design and	0	To be quantified through	85%	Infrastructure to be completed as per feasibility study.

	GCK pilot connected to the solar mini-grid	construction (see Activity 1.1.1 and 1.1.2)		detailed design (activity 1.1.1)		
	Percentage of owners/tenants who are satisfied with the upgraded neighbourhood	External Mid-term review, External, Final evaluation report based on the survey covering services delivered by up-graded infrastructure as provided by the Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	90	Infrastructure to be completed as per feasibility study.
	Number of construction sector workers and professionals trained in best practices for climate-resilient and emissions reducing, green construction	Independent engineering verification post-construction based on Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	180	Infrastructure to be completed as per feasibility study.
	Community centre upgrade Marketplace roof and frame of local timber inc. rain harvesting & solar PV m2 Market stalls nr Public benches nr Children's play furniture nr Junior football pitch m2 Public realm, parking & drop-off in volcanic stone setts with non-permeable pointing m2	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	160 84 1 1200 800	Infrastructure to be completed as per feasibility study.
	Number of events aiming at raising awareness and engaging citizens to	Reports from technical assistance experts	0	To be quantified through	20	

	increase their active participation in resilient, low emission initiatives			detailed design (activity 1.1.1)		
	Number of efficient cook stoves purchased by households	Household survey	0		50	
2. Strengthened Institutional and Regulatory Systems for Climate-Responsive Planning and Development	Number of climate-responsive policies, regulations, and institutional frameworks developed, adopted, and implemented	Report from technical assistance expert	0		5	
Institutional capacity development for Government of Rwanda agencies/institutions.	Number of government officials receiving training on inclusive climate-resilient, green city development	Report from technical assistance expert			50	
	Establishment of a sustainably financed and technically responsive (engineering capacity, access to materials, spare parts) O&M system for the project area.	Independent engineering verification post-construction based on Detailed design and construction (see Activity 1.1.1)				To be quantified through detailed design (activity 1.1.1)
Blueprinting the Green City Kigali and developing planning codes for the Special Purpose Vehicle (SPV).	2.2 A design template for GCK developed	Detailed design and construction (see Activity 1.1.1 and 1.1.2)			1	
	2.3 Development of support program for recycling groups	Report from technical assistance expert			1	
	2.4 Number of reports, gap analyses, briefs, etc on the	Report from technical assistance expert			5	

	analysis of green city development standards and planning frameworks					
	2.5 Introduction of a design template based on the project results in the development standards, planning frameworks and enabling regulations	Independent engineering verification based on Detailed design and construction delivered in accordance with Activity 1.1.1 and 1.1.2		1	2	
	2.6 Knowledge management system established	Report from technical assistance expert. Report from ICT provider		1	1	
Awareness raising and citizen engagement for climate action.	Number of households received training on improved greywater management and improved sanitation	Report from technical assistance expert, Household survey	0	To be quantified through detailed design (activity 1.1.1)	100	Infrastructure to be completed as per feasibility study.
	Number of recycling and waste collection points installed	Detailed design and construction (see Activity 1.1.1 and 1.1.2)	0	To be quantified through detailed design (activity 1.1.1)	2	Infrastructure to be completed as per feasibility study.
	Number of households using community composting facility	Household survey based on Detailed design and construction (see Activity 1.1.1 )	0	To be quantified through detailed design (activity 1.1.1)	100	Infrastructure to be completed as per feasibility study.

**E.6. Project/programme activities and deliverables**

Activities	Description	Sub-activities	Deliverables
Output 1.1 Resilient Transport, Water, and Energy Infrastructure			
	<i>Develop Detailed climate-resilient and emissions-reducing</i>	<ul style="list-style-type: none"> <li>- Prepare technical design specifications</li> <li>- Prepare tender documents</li> </ul>	

<p><i>Activity 1.1.1 Detailed climate-resilient and emissions-reducing engineering design</i></p>	<p><i>engineering design for Ngaruyinka Village, including transport and mobility, stormwater management, water supply, sanitation, energy, solid waste management, community facilities</i></p>	<ul style="list-style-type: none"> <li>- Procurement and delivery of the detailed integrated design with specific characteristics as presented in Activity 1.1.1 of the FP.</li> </ul>	<p>Detailed integrated design following best international standards to ensure climate resilience and emissions reduction.</p>
<p><b>1.1.2 Transport and mobility</b></p>	<p>Develop a Green Rights of Way network using green construction methods and materials to ensure year-round and all-weather usability.</p>	<ul style="list-style-type: none"> <li>- Prepare technical design specifications and detailed design documents</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Review and evaluate one year post installation</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- 7,787 m of climate proofed roads established</li> <li>- 5,397 km of climate proofed walking and cycling paths established</li> </ul> <p>Evaluation report prepared and disseminated to all stakeholders including the community</p>
<p><b>1.1.3 Stormwater management</b></p>	<p>Install a green, permeable network of swales, gullies and detention-filtration-percolation areas to prevent erosion by absorbing rainfall energy, reducing overland flow velocity, increasing infiltration, retaining soil moisture, and binding soil particles together.</p>	<ul style="list-style-type: none"> <li>- Prepare technical design specifications and detailed design documents</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Review and evaluate one year post installation</li> </ul>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- Installation of 14,709 m<sup>2</sup> of planted green wales, 5,052m<sup>2</sup> of planted step swales, 22 infiltration ponds, and 30,333m<sup>2</sup> terraced rain gardens</li> </ul> <p>Evaluation report prepared and disseminated to all stakeholders including the community</p>
<p><b>1.1.4 Water supply</b></p>	<p>Expand the Central Water Supply in the community and install rainwater harvesting and point of use household water treatment technologies</p>	<p>Central water supply expansion:</p> <ul style="list-style-type: none"> <li>- Prepare technical design specifications and detailed design documents of expansion of central water supply</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> </ul> <p>Rainwater harvesting systems:</p> <ul style="list-style-type: none"> <li>- Identify buildings where RWH will be installed</li> <li>- Prepare designs, tender documents and procurement of service providers</li> <li>- Installation of RWH systems in consultation with HH (especially women members of HH)</li> </ul> <p>Point of Use Water Treatment:</p> <ul style="list-style-type: none"> <li>- Educate communities members about options available and assist with connection them to suppliers and financing.</li> </ul> <p>All:</p>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- 100% households connected to the Central Water Supply</li> <li>- 321 rainwater harvesting systems installed</li> <li>- 5 trainings held on point of use water treatment options</li> </ul> <p>Evaluation report prepared and disseminated to all stakeholders including the community</p>

		Review and evaluate one year post installation	
1.1.5 Energy	Support the adoption of solar PV, improved cookstoves, energy efficient lighting and appliances	<p>Solar PV in Pilot:</p> <ul style="list-style-type: none"> <li>- Prepare detailed design documents</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Review and evaluate one year post installation</li> </ul> <p>Solar street lighting:</p> <ul style="list-style-type: none"> <li>- Prepare detailed design documents</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Provide training on proper operation and maintenance</li> <li>- Review and evaluate one year post installation</li> </ul> <p>Technical assistance:</p> <ul style="list-style-type: none"> <li>- Provide trainings related to the use of improve cook stove, energy efficient lighting and appliances.</li> </ul> <p>Connect households with micro-financing options</p>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- Solar PV mini-grid serves 85% of the pilot households.</li> <li>- Solar water heaters installed in 1,430 pilot homes.</li> </ul> <p>Evaluation report prepared and disseminated to all stakeholders including the community</p>
<b>Output 1.2 Improved Waste Management and community facilities</b>			
-			
1.2.1 Sanitation	Develop a toilet system with biogas recovery at the TVET / market area Provide education about latrine and/or septic tank options and greywater improvements	<p>Biogas system:</p> <ul style="list-style-type: none"> <li>- Prepare detailed design documents and confirm design and operation details with relevant stakeholders (Rwanda TVET Board, etc)</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Provide training on proper operation and maintenance</li> <li>- Review and evaluate one year post installation</li> </ul> <p>Technical assistance: Prepare training materials for educating community members about latrine upgrades and maintenance, as well as about greywater management.</p>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- Toilets with biogas digestion system installed</li> <li>- Biogas system trainings and follow up provided</li> <li>- Sanitation improvements and greywater management trainings held</li> <li>- Evaluation report prepared and disseminated to all stakeholders including the community</li> </ul>
1.2.2 Solid waste management	Community composting, neighbourhood collection points and recycling centres	<ul style="list-style-type: none"> <li>- Establish a community composting organisation</li> <li>- Prepare detailed design documents, in coordination with stakeholders, including the City of Kigali, waste collection company, community members, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Composting organisation established</li> <li>- Detailed engineering designs completed</li> <li>- Composting facility operational and accessible to all households</li> </ul>



		<ul style="list-style-type: none"> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> <li>- Outreach efforts to encourage behaviour changes and public participation</li> <li>- Review and evaluate one year post installation</li> </ul>	<ul style="list-style-type: none"> <li>- 100 households report that they compost organic waste</li> <li>- 2 neighbourhood waste collection and recycling points established</li> </ul> <p>Evaluation report prepared and disseminated to all stakeholders including the community</p>
1.2.3 Community facilities	Establishment of a TVET, market improvements and other community facilities	<p>TVET Center</p> <ul style="list-style-type: none"> <li>- Prepare technical design specifications and detailed design documents, in collaboration with all stakeholders, including Rwanda TVET Board, etc.</li> <li>- Prepare construction tender documents</li> <li>- Construction procurement and delivery</li> <li>- Tender for provision of TVET equipment</li> <li>- Install equipment</li> <li>- Review and evaluate one year post installation</li> </ul> <p>Market Improvements and other Community improvements (playground, field, etc):</p> <ul style="list-style-type: none"> <li>- Prepare technical design specifications and detailed design documents, in collaboration with stakeholders.</li> <li>- Prepare tender documents</li> <li>- Procurement and delivery</li> </ul> <p>Review and evaluate one year post installation</p>	<ul style="list-style-type: none"> <li>- Detailed engineering designs completed</li> <li>- TVET Center constructed</li> <li>- Market rehabilitated and other community improvements completed.</li> <li>- Evaluation report prepared and disseminated to all stakeholders including the community</li> </ul>
<b>Output 2.1 Capacity Building and community Engagement</b>			
2.1.1 Capacity building for construction sector workers and professional workers at the climate-focused TVET center	Providing training and capacity-building programs focused on climate-resilient construction practices and the use of green technologies ensures that the workforce is equipped to support and sustain climate-resilient practices.	<ul style="list-style-type: none"> <li>- Develop a curriculum that includes practical application of skills learned.</li> <li>- Identify the target group and conduct a training needs assessment.</li> <li>- Develop training content and materials in collaboration with the Rwanda TVET Board.</li> <li>- Obtain accreditation for training programs.</li> </ul>	<ul style="list-style-type: none"> <li>- Development of a curriculum with practical and theoretical modules on climate-resilient construction and green technologies.</li> <li>- Creation of training manuals, digital resources, and case studies.</li> <li>- Report on identified target groups and a detailed Training Needs Assessment (TNA) report.</li> <li>- MoU with the Rwanda TVET Board and submission of accreditation application package, leading to the accreditation certificate(s) for the training programs.</li> </ul>

			<ul style="list-style-type: none"> <li>- Implementation plan and schedule for pilot training sessions with evaluation reports and participant feedback.</li> </ul>
<p>2.1.1 Community engagement, ownership, gender equality and sustainability</p>	<p>Establish an inclusive Community Sustainability Committee in the community and develop the capacity. Develop and operationalise an operation and maintenance (O&amp;M) plan and provide training and capacity development for the community and local authority to operate and maintain the investments. Implement the gender action plan.</p>	<ul style="list-style-type: none"> <li>- Establish an inclusive Community Sustainability Committee in the village</li> <li>- Assess capacity needs</li> <li>- Provide capacity support to maintain and operate infrastructure</li> <li>- Provide capacity support to enable the committee to act as a source of advice and information to households</li> <li>- Provide capacity support to enable the committee to act as a focal point for external engagement to share experiences and expertise to promote scale up and replication</li> <li>- Identify and support community ambassadors to promote scale up and replication</li> <li>- Conduct an awareness campaign with the community to promote separation of waste, recycling and composting</li> <li>- Suppliers of solar PV, improved cookstoves, energy efficient lighting and appliances monitored to ensure technical and customer support is provided to households to operate equipment optimally and maintain in good condition</li> </ul> <p>Gender action plan (see Annex 8 for more details):</p> <ul style="list-style-type: none"> <li>- Gender and leadership capacity building support</li> <li>- Establish a gender mainstreaming committee within the community or on-going oversight</li> <li>- Ensure women's full and equal participation on the upgrade committee</li> <li>- Build the capacity of key decision makers and stakeholders involved in the upgrade to ensure wrap-around support for women's greater engagement</li> <li>- Establish a formal complaint mechanism regarding women's participation and gender equality in the upgrade process</li> <li>- Community sensitization and engagement around gender-based violence and women's rights</li> <li>- Address specific safety concerns related to infrastructure upgrades that were raised by women as well as men</li> <li>- Establish a Women's Safe Space (WSS) and Gender Champions Group (GCG) at community level to ensure sustainability of gains made</li> </ul>	<ul style="list-style-type: none"> <li>- Community Sustainability Committee established and functioning effectively</li> <li>- O&amp;M plan developed and operationalised</li> <li>- Community and local authority trained to maintain infrastructure</li> </ul> <p>For details regarding the gender activities, please see Annex 8. The Gender Action Plan details the goals and indicators for each of the activities listed to the left.</p>

		<ul style="list-style-type: none"> <li>- Community sensitization to promote women in higher-paying trades that are currently male-dominated</li> </ul> <p>Ensure women's equal access to and benefit from community upgrade interventions</p>	
2.1.2 Awareness raising and citizen engagement in climate responsive regeneration	<p>Awareness raising campaigns organised on climate resilient urban development. This will include community meetings, radio programmes, audio-visual communication materials and visits to Kinyinya Hill to explore the upgrade.</p> <p>Citizen engagement programmed developed to strengthen the role of citizens and community in climate responsive regeneration</p>	<ul style="list-style-type: none"> <li>- Capacity development of target institutions to deliver high quality awareness campaigns</li> <li>- Awareness strategy co-developed with target institutions</li> <li>- Awareness materials prepared</li> <li>- Awareness campaigns organised</li> <li>- Social media engagement</li> <li>- Awareness events organised</li> <li>- Briefing papers prepared</li> <li>- Short video clips prepared and posted</li> <li>- Exchange visits</li> <li>- Campaign results tracked and used to extend reach</li> <li>- Campaign reviewed and updated annually</li> <li>- Citizen engagement strategy developed</li> </ul> <p>Citizen engagement tools developed and deployed to understand needs and priorities and engage communities in co-designing upgrades and regeneration schemes</p>	<ul style="list-style-type: none"> <li>- Monthly community meetings held</li> <li>- 2 posts on social media per week</li> <li>- 1 Short video clip prepared and posted per month</li> <li>- 1 awareness events organised per month</li> <li>- 5 briefing papers prepared</li> <li>- 5 exchange visits</li> <li>- Citizen engagement tools developed and deployed</li> </ul>
2.1.3 Institutional capacity development of GoR agencies/Institutions	<p>Identify needs, develop and deliver capacity building programme for GoR staff from City of Kigali, Ministry of Infrastructure, Ministry of Environment, and Rwanda Housing Authority.</p>	<ul style="list-style-type: none"> <li>- Identify and select participants</li> <li>- Conduct capacity needs assessment</li> <li>- Develop a capacity building programme</li> <li>- Develop training content and materials</li> <li>- Develop training and development calendar</li> <li>- Conduct capacity development activities</li> </ul> <p>Establish and implement an evaluation process</p>	<ul style="list-style-type: none"> <li>- Training materials developed</li> </ul> <p>Capacity building programme developed, delivered and evaluated</p>
<b>Output 2.2 Knowledge Management and development</b>			
2.2.1 Blueprinting the GCK and Planning code for SPV	<p>Document the development of the GCK. Design template, ToRs, and project manual developed to support the scale up and replication of GCK.</p>	<ul style="list-style-type: none"> <li>- Develop ToRs and contract consultant</li> <li>- Develop design template, ToRs, and project manual</li> </ul>	<ul style="list-style-type: none"> <li>- Design template, ToRs and project manual completed</li> </ul>
<b>E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)</b>			
<p>The project will utilise and adapt FONERWA's established and operating framework and M&amp;E procedures that have been used for other development funds such as DFID, KfW and UNDP and for other GCF projects. Detailed workplans are developed under a logical framework structure within which activities are linked to defined and quantified outputs, under outcome themes and connected to higher level impact statement and indicators. The M&amp;E systems will provide systematic reports of progress against both process and performance indicators and will be used to identify areas for specific management attention and will result in revision</p>			

to annual implementation plans and, where necessary in-year plans and budgets (see dashboard below). All data gathered (household survey) will by default be disaggregated by sex and age, as well as other variables such as disability and poverty, including in baseline survey to ensure a meaningful assessment of inclusive green city development.

Implementing partners will be responsible for reporting against the agreed indicators, under the oversight of the dedicated PMU supported by the FONERWA M&E team. The M&E systems will also contribute to learning and review of approaches in light of experience throughout the project lifetime to optimise performance and impact.

The following positions are planned for the project:

- An internationally experienced M&E professional to design detailed M&E systems, develop detailed operational guidelines, assess progress and to work with technical specialists to develop corrective actions for “at risk” components where necessary and to provide capacity building
- An M&E officer, based in the Gasabo District in Kigali at the point of service provision to undertake data collection and first level quality assurance

The M&E officer will conduct regular field visits to validate reports from construction, waste management and solar heating / PV installation companies.

Regarding the infrastructure engineering aspects related to the project deliverables, FONERWA will share with GCF the following documents:

- (a) Detailed design as specified in Activity 1.1.1 upon completion.
- (b) Independent engineering report post-construction as specified in Activity 1.1.2
- (c) Vocational training plan once designed as specified in Activity 1.2.4
- (d) O&M operations manual, including budget appropriation, engineering capacity (covering human resources, access to materials and technology), governance, and.

FONERWA has the overall responsibility for monitoring and evaluation of the project. FONERWA will report to the GCF:

- (a) Annual performance reports, including financial management reports, which will include dates and amounts dispersed for each funded activity and compliance with financial covenants;
- (b) An interim evaluation and a final evaluation report. The evaluations will assess the performance of the project against expected results and outcomes. These evaluations will cover all activities but has not been repeated for each performance indicator in the elaborated M&E plan as in Annex 11.
- (c) The annual performance reports will provide an account, based on the performance by each indicator, based on the logical framework of the project, including a report on gender.

**Data collection, management and reporting system.** A fit-for-purpose data collection, management and reporting system will be deployed based on existing routines and practices within Fonerwa. The PMU will collect and collate data on an annual and bi-annual basis throughout the project life-time. The annual reports will provide the basis for annual reports to GCF and will contain updates on the performance against indicators (see elaboration in Annex 11). The reports will provide details on the project achievements and the M&E officer will use a dashboard to indicate complete activities, unexpected successes or failures, delays and risk of increased costs. The table below illustrates the dashboard. This will help the PMU to prioritize efforts.

Table 1: M&E Dashboard

Ranking	Description	Criteria
	Above expectations	Activities and results exceed workplan targets Results are achieved at a lower cost than expected Results are achieved faster than expected Unexpected positive results
	On target	Activities and results align with the workplan



	Below target	Activities and results fall below workplan targets Results are achieved but at a higher cost than expected Results are achieved but with delays Unexpected negative side-effects	
	Cancelled	Activities have been cancelled	
	Completed	Activities have been completed	

## F. RISK ASSESSMENT AND MANAGEMENT

### F.1. Risk factors and mitigations measures (max. 3 pages)

#### Selected Risk Factor 1

Category	Probability	Impact
<u>Technical and operational</u>	<u>High</u>	<u>High</u>

#### Description

The ongoing COVID 19 pandemic continues to disrupt movement (including travel) and supply chains that delay implementation of the project and result in increased costs.

#### Mitigation Measure(s)

COVID 19 is a black swan event that is impossible to predict. It is hoped that overall increased vaccination against the disease globally will reduce the negative impacts of future surges and potential variants. However, nothing can be taken for granted and future lockdowns that affect movement of EE personnel, consultants and construction crews are possible. In addition, lockdowns both locally or at other global locations may impact supply chains that affect construction materials availability and/or cost. Management of these risks are proposed through the careful monitoring of the ongoing situation by the PMU of the EE, recording impacts and reporting back to GCF on events that may impact the overall implementation schedule. While it is not currently anticipated, similar extensions to those granted by GCF during the PPF period, may be required. Regarding costs, it is especially important, beyond the climate change mitigation benefits described elsewhere, that the detail designers and further contractors make use of local materials in construction that avoid imports and further FX risk. USD inflation, as a result of supply chain issues created by COVID, will need to be carefully monitored.

#### Selected Risk Factor 2

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>High</u>

#### Description

Unexpected site, especially sub-surface, conditions are encountered on site.

#### Mitigation Measure(s)

It is important that geotechnical and hydrological surveys of the site are carried out prior to commencement of detail design to determine any unforeseen site conditions as possible (topographical surveying has already been completed for the area as part of the FS). Further monitoring of unexpected site conditions during the construction phase by contractor(s) and PMU will be required, and design changes made as required.

#### Selected Risk Factor 3

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>

#### Description

Materials unavailability

#### Mitigation Measure(s)

The proposed design concept relies upon the use of sustainably produced and locally sourced building materials. However, Rwanda has a limited green building materials industry. The issue of inadequate local supply has been a challenge faced by other contractors who must then source expensive and unsustainable materials from overseas. In order to mitigate this risk, the design of the project should be carefully undertaken in conjunction with local materials producers to ensure availability and to identify solutions where supply may be considered an issue, construction timeframes should allow for longer lead times that might be required for a more BAU construction project.

#### Selected Risk Factor 4

Category	Probability	Impact
----------	-------------	--------



<u>Technical and operational</u>	<u>Low</u>	<u>Medium</u>
<b>Description</b>		
Inadequate or inappropriate infrastructure or systems and further that user fees collected do not cover operations costs.		
<b>Mitigation Measure(s)</b>		
The FS has relied upon engagement with various local infrastructure providers and municipal authorities to ensure that options being proposed are appropriate, reliable and financially sustainable. The detail design stage of the project will need to integrate a strong stakeholder engagement process with these providers to ensure consistent review of proposed systems to ensure they are appropriate and maintainable and that responsible authorities are ready to take over their operations and maintenance following handover.		
<b>Selected Risk Factor 5</b>		
<b>Category</b>	<b>Probability</b>	<b>Impact</b>
<u>Governance</u>	<u>Low</u>	<u>High</u>
<b>Description</b>		
Risk of poor planning and resource management.		
<b>Mitigation Measure(s)</b>		
The need to ensure sufficient budget, clear and detailed feasibility study and further design (schematic supplied with this application and further detail design), procurement of appropriate support and ongoing oversight by the EE's PMU. The systems and process to build this organizational capacity to address this risk has been presented within this application and will be need to be provided by the EE as part of project implementation and through the PMU either as direct hire or via consultant experts.		
<b>Selected Risk Factor 6</b>		
<b>Category</b>	<b>Probability</b>	<b>Impact</b>
<u>Credit</u>	<u>Low</u>	<u>High</u>
<b>Description</b>		
<i>The risk of VAT rebate not being secured by AE/EE through the GoR's Ministry of Finance (MINECOFIN)</i>		
<b>Mitigation Measure(s)</b>		
Current tax advice sought indicates that the project and structure qualifies for VAT rebate. However, VAT rebate arrangements will be reflected in an agreement between the EE and the implementing entity(s) before works proceed and for assurance purposes it will therefore be secured by the AE/EE from the outset.		
<b>Selected Risk Factor 7</b>		
<b>Category</b>	<b>Probability</b>	<b>Impact</b>
<u>Technical and operational</u>	<u>Low</u>	<u>Medium</u>
<b>Description</b>		
Risk that solar PV and water heater system specified as part of the FS and application is not appropriate to final design of affordable housing units. In addition, avoiding risks with regard to installation of systems (implementation)		
<b>Mitigation Measure(s)</b>		
The EE works with the urban and architectural design consultant for the design of the affordable housing units to ensure that systems specified and their capacities, or equivalent, are known, appropriate and inform the design. Further that the design and construction makes available a standard connection and roof based fitting for the future systems install. That there is a procurement of a contractor (s) to supply and fit the PV and SWH systems and that this procurement includes all the required gender, training and equality aspects. The opportunity should be marketed via a public education program (see training below) to the owners of the affordable homes so that they are able to see the benefits both in terms of climate and energy costs from having these systems fitted. Further that the defects liability period for the systems is enforced by EE on behalf of the owners, with the owners understanding that upon its		

end the systems will be the operations responsibility of each owner. Training in the use and benefits of the system are provided to owners.		
Selected Risk Factor 8		
Category	Probability	Impact
<u>Technical and operational</u>	<u>High</u>	<u>Low</u>
Description		
Availability of the affordable housing at the GCK 16ha pilot for install of solar PV and SWH systems.		
Mitigation Measure(s)		
The construction timetable for the affordable housing on the pilot site is anticipated to run in parallel with this GCF programme. It is possible that if the later phases of the construction of the affordable homes is delayed, these will not be completed until post-2027. Some of these homes may be pre-sold prior to completion of construction and households will be able to enter into the contract prior to the 2027 end date. Arrangements should be considered to hold over any balance of the funds for these homes or as an extension of the timeline should there be delays that inhibit solar PV and SWH install.		
Selected Risk Factor 9		
Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>
Description		
Avoid damage to private property during construction of bulk infrastructure.		
Mitigation Measure(s)		
Learning from the World Bank financed Rwanda Urban Development Project (RUDP I), a number of unexpected damage was caused to homes during road construction and especially when compacting and excavating for the roads. Considering the poor build quality of many of the homes at Ngaruyinka upgrade site, in particular, this is a reasonable probability risk. With the knowledge that this was an issue at a site with homes of similar socio-economic background and build quality at RUDP, this is a risk that the detail design consultant, contractor(s) and the EE ultimately can anticipate for in their work and it will be a requirement that a plan is incorporated into their work to mitigate this issue as far as is possible.		

Since the 1990s Rwanda has set a social foundation for anti-corruption efforts by establishing policies and procedures to prevent corruption/reduce vulnerability to corruption and sanctioning misbehavior through prosecutions. Specifically, a reduction in administrative corruption is of note for a large project such as the one proposed. The systems in place will reduce the potential for prohibited activities. Additionally, commitment to campaigns for individuals to report corruption has created a societal norm for intolerance. As a result, Rwanda moved from a state of high corruption 20 years ago to a level on par with middle income countries. The International Monetary Fund published an assessment of Anti Money Laundering and Combating Financing of Terrorism in 2015 indicating that while the risk of AML/CFT is low, at that time more could be done to bolster the systems in place to address the issue. At present, the GoR has robust measures to fight money laundering and terrorist financing. This was done first by enacting the law N° 001/FIC/2022 of 16/02/2022 on Regulations relating to anti-money laundering, combating the financing of terrorism. The Rwanda government has also put in place a special agency for this purpose named Financial Intelligence Center (FIC) with a clear mission to promote financial system integrity by conducting effective financial intelligence to counter money laundering, the financing of terrorism and related financial crimes in governmental institutions, projects, and parastatal agencies under the supervision of the Ministry of Finance and economic planning. MoE and the GCF Project under its supervision will also comply with FIC regulations. The MoE also has an Internal Audit function as well as regular audit conducted by the Office of the Auditor General to carry out the efficiency and effectiveness of internal controls. Regarding higher level security threats, at present, there are no UN Security Council Sanctions against Rwanda. The UN Security Council Consolidated Sanctions list indicates approximately 20 individuals with ties to Rwanda, a small percentage of whom may live in the country. This list has been circulated to the AEs and will be cross checked when hiring for the project and once project sites are selected to ensure these individuals will not be involved in any manner with the Project or its activities, either as a counterparty, implementer, or beneficiary. To report and remedy any risks that may occur, the MoE will maintain a Project level grievance redress mechanism to which anyone can report on the occurrence of prohibited activities. Any complaints believed to contribute to prohibited activities will be referred to the appropriate authorities in Rwanda. Assuming all staff will be made

aware of the prohibited activities, all subcontractors/counterparties will be screened for engagement of activities and made aware of their obligations to alert the PMU and/or submit grievances related to such activities occurring as part of the Project, the overall impact of the money laundering and financing of terrorism risk on the Project will be LOW.

## G. GCF POLICIES AND STANDARDS

### G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

This is a Category B project according to GCF Safeguards because of the limited number of possible adverse impacts, the site-specific nature of these possible impacts, and that these potential impacts can be avoided or mitigated by adhering to generally recognized performance standards, procedures, guidelines or design criteria. Seven of Ten Policy Safeguards were triggered: **PS1 Assessment and Management of Environmental and Social Risks and Impacts, PS2: Labour and Working conditions; PS3: Resource efficiency and pollution prevention; PS4: Community health, safety and security and PS5: Land acquisition and Involuntary Resettlement. PS6: Biodiversity conservation and sustainable management of living natural resources and PS 8: Cultural heritage.**

Potential positive and negative impacts that will affect the existing environment in the village direct and direct area of influence have been analysed in the ESIA report (Chapter 7). The proposed interventions such as rainwater harvesting, stormwater management will increase drought resilience, groundwater recharge, ecosystem services and heat island. Stormwater management will substantially improve the sanitation challenges affecting water quality water quality. Roads network upgrading will have high resilience to network disruption and minimize flood and erosion risks in the community.

**Involuntary displacement and resettlement.** Assessment of the project sites indicates that implementation through the right of way (RoW) will affect certain households and associated economic activity in the area. These impacts are currently being studied as part of the ESIA and RAP that are underway. The RAP provides detailed documentation of all affected individuals and properties, encompassing residences, land, crops, and other pertinent assets. It includes transparent valuation procedures and accurate compensation estimates. Furthermore, the RAP delineates compensation methodologies, outlines a livelihood restoration plan, and elucidates the mechanisms for its implementation in accordance to national legal framework and international best practices.

Fulfilment of the action items included in the attached E&S Management Plan (ESMP), adherence to the national laws and regulations, internationally recognized standards, the WBG/IFC EHS general Guidelines applicable to the project will facilitate the project implementation in a sustainable manner.

The ESIA (Annex 6) considered the environmental and social management planning process and documentation for the Project and gaps between these and GCF's requirements. Where necessary, corrective measures, intended to close these gaps within a reasonable period of time, are summarized in the Environmental and Social Management Plan (ESMP). Through implementation of these measures, the Project is expected to be designed and operated in accordance with Performance Standards objectives.

The project has been designed to achieve international standards on general occupational Health safety for workers including traffic management plan, SEAH-related risks, environmental protection and, operations savings to adhere to programme EDGE of IFC among other standards. A

GoR's social framework for resettlement planning is based on a cost-, risk- and an impact-based approach to protecting people, the environment, and public resources with a strong emphasis is on risk management and achieving sustainable development outcomes. The urban upgrading scheme is designed in a way to ensure minimal resettlement to avoid social disruption and minimise costs. In the event that any households and businesses are affected the following general principles and timing apply.

In planning phase:

- Community members to be solicited during pre-construction, construction and post-construction to discuss their fears, expectations and suggestions about how subsequent phases of upgrading can be informed;
- Landowners are financially compensated for land, structures and crops as provided for by the expropriation law no. 32/2015 of 11/06/2015 relating to Expropriation in the Public Interest article 3 stipulates that only Government shall carry out expropriation and only in the public interest and with prior and just compensation and follow the guidelines in the High-level RPF;
- Landowners and tenants will be expected to find alternate accommodation preferably in the neighbourhood.
- A notice period of at least 3 months to find alternative accommodation for both property owners and tenants shall be respected. This is particularly relevant for projects which have been initiated through an externally proposed program and not by the resident community themselves. For projects initiated by resident communities, tenant households shall be given a 3-month notice period if any private rental contract cannot be continued.
- Business owners may continue to operate and their employees should expect to continue to work, but the District will be in communication with them to ensure that by the time construction begins, they have relocated to another site.
- A clear schedule of construction works shall be posted at the sector and cell offices and shared with the community on a weekly basis.

During construction:

- Businesses, the operations of which will be disturbed by construction works, have to relocate to a temporary site.
- Local authority will closely monitor works by the Contractor if applicable and ensure minimum disturbances and maximum safety measures for the community.
- A specialized Grievance Redress Committee will be formed for the project's purpose, aiming to support advocacy efforts and promptly address any community-raised concerns.

After construction:

- Continued monitoring of the project impact shall be performed in order to make any adjustment of the National program when necessary.
- Continued community consultations.

**Resettlement** - Involuntary resettlement will be minimised but may be required to install measures to increase resilience such as the Right of Way. Resettlement will be managed in a way that the affected households jointly agree on a minimum notice and effect period; if not agreed, 3 month-notice period shall be seen reasonable; and is able to install their livelihood in an alternative location at comparable or improved level, in line with IFC PS5. A detailed compensation framework, a livelihood restoration plan, Grievance Redress Mechanism and Resettlement implementation plan which include a preliminary budget and schedule are provided.

#### **Indigenous Peoples**

The GCF PS 7 related to Indigenous People will not be triggered by this project. As per the 2003 post genocide constitution, revised in 2015, demonstrated that there is no indigenous people in Rwanda and all forms of discrimination based upon ethnicity are prohibited while guaranteeing all people equal rights. Provisions are to pay particular attention to the needs of vulnerable groups, landless, elderly, women and children.

With that said, taking into consideration the scope of application of the GCF Indigenous Peoples Policy, this is to confirm that there are no indigenous people and historically marginalized groups found in the project area (Ngaruyinka village).

PS7 only becomes relevant in Rwanda for trans-boundary projects.

### **G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)**

In line with the principles and rationale of the GCF Gender Policy, a gender assessment and gender action plan have been conducted as part of the proposal for the Ngaruyinka Village Upgrade project. The gender assessment and GAP were developed based on primary field research, including focus group discussions and in-depth individual interviews, conducted with men and women community members of various ages and backgrounds living in the target project area. The findings of the assessment determined numerous ways in which women and girls are uniquely vulnerable due to widespread gender discrimination and violence, lack of participation in decision making processes, lack of access to economic opportunities, the heavy burden of unpaid care work, and lack of financial control and agency, at household and community level. In response, the GAP outlines various holistic measures to meaningfully and sustainably address the scope and depth of vulnerabilities revealed in the gender assessment, cutting across individual, household, community and village upgrade committee levels.

The interventions proposed in the GAP are based on best practice work in the gender and development sector to ensure sustainable and transformative results for maximum impact and 'value for money' from a fund's investment perspective and have been further informed and contextualized by tried-and-tested successful approaches already implemented in the Rwandan context. In line with the broader project outputs and the main findings of the gender assessment, three key gender dimensions were developed for the GAP to ensure women's full and equal participation in, and benefit from, all aspects of the upgrade outputs, in both the short and long term.

**Dimension 1: Participation and Leadership** - This dimension addresses specific gaps and inequalities in the current context that inhibit women from effectively participating in decision making processes and leadership roles related to the upgrade, as well as village governance more broadly and its impact on future responses to climate change events and community ownership of the social and environmental gains made during the upgrade process.

#### **Dimension 2: Safety and Rights**

This dimension addresses the gender barriers women and girls currently face at the home and community level that directly and substantially constrain their ability to benefit from many aspects of the upgrade, as well as to have the free time and agency to be able to participate in decision making processes related to the upgrade.

#### **Dimension 3: Wrap-around Stakeholder Engagement for Women's Equal Access and Benefit**

This dimension addresses gender issues across some of the larger surrounding structures, systems and key



stakeholders that will directly influence women's access to, participation in, and ability to safely and equally benefit from specific upgrade interventions. This dimension targets these areas in a multi-layered manner to ensure women's safe and meaningful inclusion from end to end.

Some key gender-related results to be expected include 50/50 representation from both women and men on the upgrade committee, as well as among community management roles, leadership positions and decision-making processes, as well as women's greater influence and involvement across the board.

The AE will ensure activities are implemented and expected outcomes will be achieved. As the chair of the project's Steering Committee, the MoE will monitor project progress. with special emphasis on the developed Gender Action Plan.

### G.3. Financial management and procurement (max. 500 words, approximately 1 page)

#### Financial Management

The GoR has robust public financial management systems in place, and these will be applied to ensure the effective management of the project. The project will follow GoR procedures for planning, budget, and accounting, as outlined in the following:

- Organic law n° 12/2013/ol of 12/09/2013 on state finances and property (Official Gazette n° Special of 05/11/2013);
- Ministerial order n°001/16/10/tc of 26/01/2016 relating to financial regulations (Official Gazette n° Special of 03/02/2016); and
- Supporting operational manuals issued by the Ministry of Finance and Economic Planning (MINECOFIN).

MINECOFIN applies the Medium-Term Expenditure Framework (MTEF) approach for planning and budgeting, which means that funds received by the MoE are "on budget" from the Government's point of view are will be included in the MTEF process. This process includes the presentation of the annual budget to Parliament. GoR uses the International Public Sector Accounting Standard (IPSAS) related to modified cash accounting principles issued by the International Federation of Accountants.

The MoE and FONERWA are the primary entities receiving and management project funds. They will use the Government's financial management systems and procedures, including the computerised Integrated Financial Management Information System (IFMIS) which embeds key internal into operations. The budget classification used within IFMIS facilitates production of Government accounts which are consistent with the internationally recognised UN system of national accounts Classification of the Functions of Government (COFOG).

Project funds from the GCF will be received into a dedicated MoE bank account held at the National Bank of Rwanda in US Dollars.

The selection of partner institutions / contractors will be managed by FONERWA's Fund Management Committee.

The tendering process will include assessment of the capacity of their financial management. No loans will be made under the project. The existing financial management systems for the project will be strengthened by the appointment of a number of key posts to ensure that fiduciary risk is identified and managed, including:

1. A finance officer based in the PMU to manage financial accounting and reporting arrangements;
2. An internal auditor (based in MoE); and
3. A procurement specialist based in the PMU;

All supporting financial records will be properly filed and retained to facilitate internal control systems, and the project will maintain its own asset register of all major items procured for the project.

Financial reporting to MoE will take place quarterly although key internal controls (such as production of expenditure reports and bank reconciliations) will be monthly. Consolidated financial reports will be presented to the Project Steering Committee every three months.

Financial reports will be provided to the GCF in accordance with Clause 17 of the AMA.

#### Internal and External Audits

An internal auditor is provided for as part of MoE's oversight role. This will be a full time post funded through the AE fee. This person will supplement MoE's and FONERWA's internal audit capacity, with a mandate to assess the internal control systems in any implementing entities in receipt of funds under the project. Project funds will be subject to internal audit, which will be implemented through a compliance based annual Internal Audit (IA) workplan. In line with the AMA, the project will be audited annually by independent external auditors in consultation with the Office of the Auditor General.

#### Procurements

Procurements will be conducted under the regulatory regime in Rwanda which applies to all Government entities including MoE and FONERWA. Relevant regulation includes:

- Law n° 62/2018 of 25/08/2018 on public procurement as amended to date;



- Ministerial order n° 002/20/10/TC of 19/05/2020 establishing regulations on public procurement, standard bidding documents and standard contracts and as amended to date.

Embedded within these regulations are fundamental principles such as fairness, transparency, accountability, and the promotion of a competitive economy. By adhering to these regulations, the procurement process mitigates the risk of market distortions by fostering a level playing field for all participants. Transparent procedures, including open bidding processes and clear evaluation criteria, ensure that contracts are awarded based on merit and value proposition rather than favoritism or undue influence. Furthermore, the promotion of competition within the procurement ecosystem drives efficiency and innovation, as vendors are incentivized to deliver high-quality goods and services at competitive prices. This not only benefits the project by maximizing value for money but also contributes to the broader economic development agenda by stimulating market dynamism and entrepreneurship. For further insights into the procurement plan and specific strategies employed to ensure adherence to regulatory principles, stakeholders are encouraged to refer to Annex 10,

- 

#### G.4. Disclosure of funding proposal

- No confidential information:** The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.
- With confidential information:** The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:
- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
  - redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

## H. ANNEXES

### H.1. Mandatory annexes

- Annex 1 NDA no-objection letter(s) ([template provided](#))
- Annex 2 Feasibility study - and a market study, if applicable
- Annex 3 Economic and/or financial analyses in spreadsheet format
- Annex 4 Detailed budget plan ([template provided](#))
- Annex 5 Implementation timetable including key project/programme milestones ([template provided](#))
- Annex 6 E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):  
[\(ESS disclosure form provided\)](#)
  - Environmental and Social Impact Assessment (ESIA) or
  - Environmental and Social Management Plan (ESMP) or
  - Environmental and Social Management System (ESMS)
  - Others – Resettlement Action Plan, Strategic Environmental and Social Assessment
- Annex 7 Summary of consultations and stakeholder engagement plan
- Annex 8 Gender assessment and project/programme-level action plan ([template provided](#))
- Annex 9 Legal due diligence (regulation, taxation and insurance)
- Annex 10 Procurement plan ([template provided](#))
- Annex 11 Monitoring and evaluation plan ([template provided](#))
- Annex 12 AE fee request ([template provided](#))
- Annex 13 Co-financing commitment letter, if applicable ([template provided](#))
- Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

### H.2. Other annexes as applicable

- Annex 15 Evidence of internal approval ([template provided](#))
- Annex 16 Map(s) indicating the location of proposed interventions
- Annex 17 Multi-country project/programme information ([template provided](#))
- Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- Annex 20 First level AML/CFT (KYC) assessment
- Annex 21 Operations manual (Operations and maintenance)
- Annex 22 Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)<sup>2</sup>
- Annex 23 Land Development Plan (Additional Annex per GoR requirements)

\* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.

<sup>1</sup> Based on population of Kigali, 2012 Census.

<sup>2</sup> Calculated as percentage of Rwanda's population (12,955,736): <http://www.statistics.gov.rw/publication/size-resident-population/> Accessed 28 October 2021.

<sup>2</sup> Annex 22 is mandatory for mitigation and cross-cutting projects.

<sup>3</sup> In terms of rainfall, there was a small reported decline in the number of rainy days between 1961 and 2016 (with a reduction of between 54 and 250 mm in mean rainfall across the country). However, rainfall is expected to be more intense in the rainy seasons while dry seasons will be longer and dryer. Third National Communication: Report to the United Nations Framework Convention on Climate Change. Republic of Rwanda, Kigali.

<sup>4</sup> Integrated Household Living Conditions Survey 5 (EICV 5)

<sup>5</sup> Gasabo District (2013). District development plan, Gasabo (2013-18)

<sup>6</sup> Overview of linkages between gender and climate change; UNDP, 2017.

<sup>7</sup> IPCC (2022) Final Draft IPCC WGII Sixth Assessment Report Chapter 9

<sup>8</sup> Ranked no. 8 according to the Climate Risk Index 2020: [https://germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020\\_14.pdf](https://germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_14.pdf)

<sup>9</sup> In terms of rainfall, there was a small reported decline in the number of rainy days between 1961 and 2016 (with a reduction of between 54 and 250 mm in mean rainfall across the country). However, rainfall is expected to be more intense in the rainy seasons while dry seasons will be longer and dryer. Third National Communication: Report to the United Nations Framework Convention on Climate Change. Republic of Rwanda, Kigali.

<sup>10</sup> Based on an analysis of geocoded population data where settlements are classified as urban if they contain a minimum of 5,000 persons living at a minimum density of 1,000 persons per square kilometre (WB 2019). EICV5 figures (based on census data) which use a different classification of urban area (based on the presence of infrastructure which risks overlooking densely populated areas on the edge of planned areas), report that 18.4% of the population currently lives in urban areas.

<sup>11</sup> Based on an analysis of geocoded population data where settlements are classified as urban if they contain a minimum of 5,000 persons living at a minimum density of 1,000 persons per square kilometre (WB 2019). EICV5 figures (based on census data) which use a different classification of urban area (based on the presence of infrastructure which risks overlooking densely populated areas on the edge of planned areas), report that 18.4% of the population currently lives in urban areas.

<sup>12</sup> In 2014, 57% of Rwanda's population had migrated to Kigali at some point in their lives in REMA (2019). "Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019.

<sup>13</sup> REMA (2019). "Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019

<sup>14</sup> MININFRA (2017). Water and Sanitation Sector Strategic Plan 2018 - 2024. Kigali: MININFRA.

<sup>15</sup> SEI (2009): Economics of Climate Change in Rwanda

<sup>16</sup> The current water availability per capita has been reduced to 504 m<sup>3</sup>/annum (CM/annum), which is close to the definition of absolute water scarcity. Almost all of the country's water resources are lost through evaporation or run-off to downstream countries. RWFA's Baseline Study: Water Users and Water Uses in Level 2 Catchments in Rwanda, 2017 and RWFA (2015) Rwanda's National Integrated Water Resources Master Plan

<sup>17</sup> EICV (2017). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>18</sup> REMA (2019) Climate Change Vulnerability, page 17 and MIDIMAR (2015) The National Risk Atlas of Rwanda, page 103

<sup>19</sup> Gasabo District (2013). District development plan, Gasabo (2013-18)

<sup>20</sup> NISR (2012). District profile: Gasabo.

<sup>21</sup> NISR (2012). District profile: Gasabo.

<sup>22</sup> Readiness measures a country's ability to leverage investments and convert them to adaptation actions by considering economic, governance and social readiness.

<sup>23</sup> Vulnerability measures the country's exposure, sensitivity, and ability to cope with the negative effects of climate change by considering vulnerability in six life-supporting sectors: food, water, ecosystem service, health, human habitat and infrastructure.

<sup>24</sup> Health facilities include health posts, health centres, VCT centres, community-owned health facilities, private clinics, private dispensaries, prison dispensaries, police/military hospitals, district hospitals and national referral hospitals.

<sup>25</sup> MIDIMAR (2015). National risk atlas of Rwanda.

<sup>26</sup> REMA (2019). "Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019

<sup>27</sup> The current water availability per capita has been reduced to 504 m<sup>3</sup>/annum (CM/annum), which is close to the definition of absolute water scarcity. Almost all of the country's water resources are lost through evaporation or run-off to downstream countries. RWFA's Baseline Study: Water Users and Water Uses in Level 2 Catchments in Rwanda, 2017 and RWFA (2015) Rwanda's National Integrated Water Resources Master Plan

<sup>28</sup> EICV (2017). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>29</sup> Droughts reduce the generating capacity of hydroelectric dams, while floods increase soil erosion and siltation, which can damage dams. The drought in 2004 reduced hydropower capacity so much that the government was forced to rent diesel power plants to meet domestic demand in Republic of Rwanda (2011): Green Growth and Climate Resilience. <http://www.uncsd2012.org/content/documents/364Rwanda-Green-Growth-Strategy-FINAL.pdf>.

<sup>30</sup> SEI (2009): Economics of Climate Change in Rwanda

<sup>31</sup> World Bank (2019). <https://data.worldbank.org/country/RW>

<sup>32</sup> [https://www.nationsonline.org/oneworld/human\\_development\\_low.htm](https://www.nationsonline.org/oneworld/human_development_low.htm)

<sup>33</sup> World Bank (2021) Protect and Promote Human Capital in a post-COVID-19 World. 16th edition of the World Bank Rwanda Economic Update. January 2021

<sup>34</sup> Caldwell, D., Dyszynski, J., Roland R (2015) Climate compatible development in the 'Land of a Thousand Hills': Lessons from Rwanda. By Debbie Caldwell, CIDT Associate; Jillian Dyszynski, CIDT Associate; Rachel Roland, CIDT

<sup>35</sup> EICV (2017). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>36</sup> World Bank. 2019. "Future Drivers of Growth in Rwanda: Innovation, Integration, Agglomeration, and Competition." Conference Edition. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO

<sup>37</sup> World Bank. 2019. "Future Drivers of Growth in Rwanda: Innovation, Integration, Agglomeration, and Competition." Conference Edition. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO

<sup>38</sup> World Bank. 2019. "Future Drivers of Growth in Rwanda: Innovation, Integration, Agglomeration, and Competition." Conference Edition. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO

<sup>39</sup> Ibid

<sup>40</sup> *Vulnerability* measures the country's exposure, sensitivity, and ability to cope with the negative effects of climate change by considering vulnerability in six life-supporting sectors: food, water, ecosystem service, health, human habitat and infrastructure.

<sup>41</sup> *Readiness* measures a country's ability to leverage investments and convert them to adaptation actions by considering economic, governance and social readiness.

<sup>42</sup> NEPAD (2012): African Gender, Climate Change and Agriculture Support Program (GCCASP) – Rwanda Consultation Report.

<http://www.nepad.org/system/files/Rwanda%20National%20Consultation%20Report.pdf>

<sup>43</sup> EICV5 (2018). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>44</sup> MININFRA (2017). Water and Sanitation Sector Strategic Plan 2018 - 2024. Kigali: MININFRA.

<sup>45</sup> In 2014, 57% of Rwanda's population had migrated to Kigali at some point in their lives in REMA (2019). "Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019.

<sup>46</sup> EICV5 (2018). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>47</sup> REMA (2019). "Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019

<sup>48</sup> SEI (2009): Economics of Climate Change in Rwanda

<sup>49</sup> Health facilities include health posts, health centres, VCT centres, community-owned health facilities, private clinics, private dispensaries, prison dispensaries, police/military hospitals, district hospitals and national referral hospitals.

<sup>50</sup> MIDIMAR (2015). National risk atlas of Rwanda.

<sup>51</sup> The current water availability per capita has been reduced to 504 m<sup>3</sup>/annum (CM/annum), which is close to the definition of absolute water scarcity. Almost all of the country's water resources are lost through evaporation or run-off to downstream countries. RWFA's Baseline Study: Water Users and Water Uses in Level 2 Catchments in Rwanda, 2017 and RWFA (2015) Rwanda's National Integrated Water Resources Master Plan

<sup>52</sup> EICV (2017). The Fifth Integrated Household Living Conditions Survey, EICV5 (2016/17).

<sup>53</sup> Droughts reduce the generating capacity of hydroelectric dams, while floods increase soil erosion and siltation, which can damage dams. The drought in 2004 reduced hydropower capacity so much that the government was forced to rent diesel power plants to meet domestic demand in Republic of Rwanda (2011): Green Growth and Climate Resilience. <http://www.uncsd2012.org/content/documents/364Rwanda-Green-Growth-Strategy-FINAL.pdf>.

<sup>54</sup> Gasabo District (2013). District development plan, Gasabo (2013-18)





Republic of Rwanda  
Ministry of Environment

**RWANDA ENVIRONMENT  
MANAGEMENT AUTHORITY  
(REMA)**



Kigali, on 10 JUL 2024  
N° 1454/DG/2024

To: The Green Climate Fund ("GCF")

Dear Madam,

**Re: Funding proposal for the GCF by Ministry of Environment regarding the Green City Kigali Project.**

We refer to the project titled "*The Green City Kigali Project*" in Rwanda as included in the funding proposal submitted by The Ministry of Environment to us on 6 July 2024.

The undersigned is the duly authorized representative of Rwanda Environment Management Authority, the National Designated Authority of Rwanda.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Rwanda has no-objection to the project as included in the funding proposal;
- (b) The project as included in the funding proposal is in conformity with the national priorities, strategies and plans of Rwanda;
- (c) In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Ms. Juliet Kabera  
Director General/ GCF National Focal Point  
Rwanda Environment Management Authority  
RWANDA

## Environmental and social safeguards report form pursuant to para. 17 of the IDP

<b>Basic project or programme information</b>	
<b>Project or programme title</b>	Green City Kigali: a new model for urban development in Rwanda
<b>Existence of subproject(s) to be identified after GCF Board approval</b>	Yes
<b>Sector (public or private)</b>	Public
<b>Accredited entity</b>	Ministry of Environment of Rwanda (MOE Rwanda)
<b>Environmental and social safeguards (ESS) category</b>	Category B
<b>Location – specific location(s) of project or target country or location(s) of programme</b>	Kigali City, Republic of Rwanda
<b>Environmental and Social Impact Assessment (ESIA) (if applicable)</b>	
Date of disclosure on accredited entity's website	Friday, September 20, 2024
Language(s) of disclosure	English
Explanation on language	English is an official language of Rwanda. As per country officials, disclosure in English only is sufficient.
Link to disclosure**	<a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107519&amp;token=c317704e7b32218059f41cc4acd027ec173329e3">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107519&amp;token=c317704e7b32218059f41cc4acd027ec173329e3</a>
Other link(s)	MOE Rwanda ESS Disclosure Website: <a href="https://www.environment.gov.rw/reports">https://www.environment.gov.rw/reports</a> (All subsequent documents will be permanently and publicly accessible via the link provided.)
Remarks	An ESIA consistent with the requirements for a Category B project is contained in the ESS package of “Green City Kigali: A New Model for Urban Development in Rwanda” Project.
<b>Environmental and Social Management Plan (ESMP) (if applicable)</b>	
Date of disclosure on accredited entity's website	Monday, September 9, 2024
Language(s) of disclosure	English
Explanation on language	English is an official language of Rwanda. As per country officials, disclosure in English only is sufficient. The ESMP table is included in the ESIA.
Link to disclosure**	<a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107519&amp;token=c317704e7b32218059f41cc4acd027ec173329e3">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107519&amp;token=c317704e7b32218059f41cc4acd027ec173329e3</a>
Other link(s)	MOE Rwanda ESS Disclosure Website: <a href="https://www.environment.gov.rw/reports">https://www.environment.gov.rw/reports</a> (All subsequent documents will be permanently and publicly accessible via the link provided.)
Remarks	An ESMP consistent with the requirements for a Category B project is contained in the “Environmental and Social Impact Assessment of the project”.



<b>Environmental and Social Management System (ESMS) (if applicable)</b>	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
<b>Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), Indigenous Peoples Planning Framework (IPPF) (if applicable)</b>	
Description of report/disclosure on accredited entity's website	RAP, SESA, RPF, ESMF, SEP, Gender Assessment Report, GAP / Friday, September 20, 2024
Language(s) of disclosure	English
Explanation on language	English is an official language of Rwanda. As per country officials, disclosure in English only is sufficient.
Link to disclosure**	<p>Individual Document links<sup>1</sup></p> <p>Annex 6b Resettlement Action Plan (RAP):  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107518&amp;token=864119d711e1eaa209a64c60f0e1ec421d12ba78">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107518&amp;token=864119d711e1eaa209a64c60f0e1ec421d12ba78</a></p> <p>Annex 6c Strategic Environmental and Social Assessment (SESA):  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107401&amp;token=a419abe8d56d9ac0f85172bbd96fda0ce4633546">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107401&amp;token=a419abe8d56d9ac0f85172bbd96fda0ce4633546</a></p> <p>Annex 6d Resettlement Policy Framework (RPF):  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107400&amp;token=002f3b4a521279233aa83d0a344fceb46e1523">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107400&amp;token=002f3b4a521279233aa83d0a344fceb46e1523</a></p> <p>Annex 6g Environmental and Social Management Framework (ESMF)*:  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107515&amp;token=e181e01f7592f812ffc4098608c6d5a7cb5fd027">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107515&amp;token=e181e01f7592f812ffc4098608c6d5a7cb5fd027</a></p> <p>Annex 7 Stakeholder Engagement Plan (SEP):  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107399&amp;token=094f3f31a57c3f9ff1368e6ea0794b0f68af1a56">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107399&amp;token=094f3f31a57c3f9ff1368e6ea0794b0f68af1a56</a></p> <p>Annex 8a Gender Assessment Report:  <a href="https://www.environment.gov.rw/index.php?eID=dumpFile">https://www.environment.gov.rw/index.php?eID=dumpFile</a></p>

<sup>1</sup> Please note due to the architecture of the MOE Rwanda website, individual document hyperlinks may become inaccessible after general website updates. However, all documents remain accessible through the index page: <https://www.environment.gov.rw/reports>

	<a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107513&amp;token=cde153108659a238079bf0d8f91e4a84c132b1c3">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107513&amp;token=cde153108659a238079bf0d8f91e4a84c132b1c3</a> Annex 8b Gender Action Plan (GAP): <a href="https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107517&amp;token=e89abe9386e1557b9f43fc074df4918e33403fcd">https://www.environment.gov.rw/index.php?eID=dumpFile&amp;t=f&amp;f=107517&amp;token=e89abe9386e1557b9f43fc074df4918e33403fcd</a>
Other link(s)	MOE Rwanda ESS Disclosure Website: <a href="https://www.environment.gov.rw/reports">https://www.environment.gov.rw/reports</a> (All subsequent documents will be permanently and publicly accessible via the link provided.)
Remarks	Other disclosed ESS documents related to the project include the Resettlement Action Plan (RAP), Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), the Stakeholder Engagement Plan (SEP), Gender Assessment Report, the Gender Action Plan (GAP) and The Strategic Environment and Social Assessment (SESA).
<b>Disclosure in locations convenient to affected peoples (stakeholders)</b>	
Date	Monday, September 9, 2024
Place	<p><b>Rwanda Green Fund</b>  Career Centre Building,  5Th Floor, KG 541 St,  Kigali, Rwanda  <a href="mailto:info@greenfund.rw">info@greenfund.rw</a></p> <p><b>Ministry of Environment</b>  Pension Plaza,  KN 3 Rd, Kigali  <a href="mailto:info@environment.gov.rw">info@environment.gov.rw</a></p> <p>The hard copies of the ESS documents have also been made available to the local administration offices (Kigali City and Gasabao District).</p> <p><b>Kigali City</b>  KN 3 Ave, 8, Kigali  P.O. Box 3527 Kigali  <a href="mailto:info@kigalicity.gov.rw">info@kigalicity.gov.rw</a></p> <p><b>Gasabo district (including in the Ngaruyinka village)</b>  KG 7 Avenue, Kigali  P.O. Box 237, Kigali  <a href="mailto:info@gasabo.gov.rw">info@gasabo.gov.rw</a></p>
<b>Date of Board meeting in which the FP is intended to be considered</b>	
Date of accredited entity's Board meeting	N/A
Date of GCF's Board meeting	Monday, October 21, 2024

\* An updated Environmental and Social Management Framework (ESMF) will be disclosed on the MOE website under the link provided and in the physical locations of the project sites, after

the first disbursement, which is scheduled on 24 November 2024 and prior to the second disbursement, which is scheduled on 25 December 2024.

\*\* Subsequent to the disclosure of the form to the Board and active observers on 20 September 2024, the following update has been made: The links to the disclosure have been revised due to a general website update related to the architecture of the MOE Rwanda website.

**Note: This form was prepared by the accredited entity stated above.**

## Secretariat's assessment of FP245

Proposal name:	Green City Kigali: A new model for urban development in Rwanda
Accredited entity:	Ministry of Environment
Country:	Republic of Rwanda
Project size:	Small

### I. Overall assessment of the Secretariat

1. The funding proposal is presented to the Board for consideration with the following remarks:

Strengths	Points of caution
The project consistently scores medium to high across all impact criteria (confirmed by iTAP) and <b>delivers climate impact to the urban poor</b> in Rwanda.	Give additional emphasis to the development of regulation, standards and urban designs as a key methodology for replication and scale-up of the initiative.
The project counts on the <b>strong involvement of local communities</b> in the planning and development process. The strong community structures will ensure that integrated infrastructure investments will be implemented, well-managed and maintained, effectively addressing local climate resilience needs.	Systematically explore future financing models for scaling up the project results, particularly public-private collaborations, alongside project execution; and
The project activities include improving the planning and policy frameworks for enabling <b>scalability and replicability</b> of the interventions. By creating a blueprint for green city development, the project aims to reduce future design costs and promote the adoption of similar initiatives in other areas of Kigali and nationwide.	
<b>Capacity-building and knowledge-sharing:</b> A Technical and Vocational Education Training Centre is to be established to provide training in climate-resilient construction methods. This will facilitate long-term knowledge-sharing and capacity-building among the community, construction sector workers and government officials.	

2. The Board may wish to consider approving this funding proposal in accordance with the term sheet agreed between the Secretariat and the accredited entity (AE) and, if considered appropriate, subject to the conditions set out in annex II of document GCF/B.40/02.

### II. Summary of the Secretariat's assessment

## 2.1 Project background

3. Rwanda is among the most climate-vulnerable countries, already experiencing significant impacts from climate change. These impacts include increased incidence of drought, flooding and landslides. Climate variability has already led to heavy rainfall events causing infrastructure damage, loss of livelihoods and lives. The challenges faced by Rwandan communities, particularly those in informal settlements, are compounded by absent or inadequate climate risk-reducing infrastructure and limited capacity to manage climate risks. Upgrading these settlements in a climate-resilient and low-carbon manner is essential for securing the well-being of the population and supporting sustainable development.

4. The proposed project aims to address these climate challenges through a comprehensive approach that includes upgrading informal settlements with climate-resilient networked infrastructure and improving access to low-carbon decentralized basic services and building local capacity. By integrating these interventions, the project seeks to create a scalable model for climate-resilient urban development in Rwanda and the region. The project presents **strong adaptation impacts with significant mitigation co-benefits** for over 30.000 men and women among the most vulnerable populations.

5. The project **has strong climate benefits**, as well as social, health, economic and environmental co-benefits. The climate benefits include a reduction of carbon dioxide (CO<sub>2</sub>) emissions by 125,032 tonnes of carbon dioxide equivalent (t CO<sub>2</sub> eq) over the lifetime of the investments. The targeted interventions are expected to benefit 30,252 direct and 1,132,686 indirect beneficiaries. The beneficiaries will gain from comprehensive resilience building interventions and enhanced capacity to manage climate risks.

6. The total project financing is USD 35,1 million. GCF is requested to provide a grant of USD 27,9 million and grant co-financing of USD 7,1 has been secured from the Government of Rwanda. The project is categorized under environmental and social safeguards category B and is set to be implemented over 5 years, with a total lifespan of 40 years.

## 2.2 Component-by-component analysis

### Outcome 1: Strengthened Adaptive Capacity, Heat Stress Mitigation, and Reduced Exposure to Climate Risks (total cost: USD 28.6 million; GCF cost: USD 24.3 million)

7. Outcome 1 focuses on strengthening the adaptive capacity of the community by comprehensively upgrading the entire project area (18ha) with climate-risk-reducing infrastructure, and improving community access to decentralized resilient and low-carbon basic services and community to enhance resilience to climate risks such as flooding, landslides, and heat stress. Key interventions include developing green rights of way to improve transport and mobility, implementing stormwater management systems using green, permeable networks and rainwater harvesting, and expanding the central water supply.

8. Moreover, the project addresses sanitation by installing biogas recovery toilets and providing sanitation training, along with promoting low-emission technologies, such as solar photovoltaic (PV), and improved cookstoves to reduce carbon emissions. Solid waste management will be improved through community composting and recycling centres, and community facilities will be enhanced by constructing a Technical and Vocational Education and Training (TVET) centre to serve as a hub for learning and innovation.

9. The project ensures active community involvement through an inclusive sustainability committee that will oversee infrastructure maintenance and promote waste separation and recycling. The TVET centre will provide vocational training for climate-responsive upgrades, fostering a skilled workforce.

10. Output 1's strengths lie in its holistic approach to infrastructure upgrades, active community involvement and comprehensive capacity-building. It integrates resilient transport and water systems, sustainable energy solutions and effective waste management, setting a benchmark for future sustainable developments in Rwanda.

*Outcome 2: Strengthened Institutional and Regulatory Systems for Climate-Responsive Planning and Development; Enhancing the capacity of governmental and institutional bodies to plan, regulate, and implement climate-responsive and low-emission development strategies. (total cost: USD 2.9 million; GCF cost: USD 2.4 million)*

11. Outcome 2 focuses on building institutional capacity and creating an enabling environment for climate-resilient, low-emission investments. This component aims to prepare the enabling environment to scale up and replicate the climate-responsive approaches piloted in Outcome 1. This includes enhancing the capacity of Rwandan government agencies through key activities such as conducting capacity needs assessments and developing targeted training programmes for the City of Kigali, the Ministry of Infrastructure, the Rwanda Housing Authority, and other similar entities.

12. Further, Outcome 2 seeks to establish an enabling environment for sustainable investments by integrating green city standards into regulatory and planning frameworks. This involves regulatory reforms and developing mainstreaming solutions to align with national strategies like the Green Growth and Climate Resilience Strategy. A robust knowledge management system will also be developed to store, manage and disseminate information on climate-responsive urban development.

13. These efforts will ensure that sustainable urban development practices are deeply embedded within government institutions, promoting consistent application and enabling future investments in green city projects. By focusing on institutional training, regulatory integration and knowledge-sharing, Outcome 2 lays a solid foundation for the widespread adoption of climate-resilient urban practices across Rwanda.

*Project management (total cost: USD 1.5 million; GCF cost: USD 1.27 million)*

14. The Ministry of Environment (MOE) will oversee the overall management, reporting and supervision of the project. FONERWA, the Rwanda Green Fund, will execute the project, leveraging its extensive experience in managing climate finance since 2012. A Steering Committee chaired by the Permanent Secretary of the Ministry of Environment and including senior representatives from multiple sectors will coordinate stakeholder involvement, approve work plans and budgets, and ensure necessary resources and support. The programme management unit (PMU), established within FONERWA, will handle day-to-day operations, collaborate with relevant government entities, and ensure high-quality delivery through consultant support.

15. A Technical Advisory Committee, comprising representatives from affiliated entities like the Water and Sanitation Corporation, Rwanda Energy Group, and the Rwanda Housing Authority, will provide specialized guidance to the PMU and Steering Committee. Sector working groups will facilitate continuous improvement through dialogue with development partners, while bimonthly planning coordination meetings will ensure alignment with existing plans and public engagement. Additionally, a Community Upgrading Committee in Ngaruyinka will engage residents, facilitate information sharing and oversee local project activities.

16. The GCF portion of this project management cost is less than 5 per cent of the total requested GCF funding and is compliant with the GCF Policy on Fees

### **III. Assessment of performance against investment criteria**



### 3.1 Impact potential

*Scale: N/A*

17. The project demonstrates significant potential to contribute to GCF objectives in adaptation, with also significant mitigation co-benefits. The project **comprehensively enhances climate resilience** of 30,252 men and women in vulnerable and poor informal settlements. Further, the project will contribute to sustainable development in Rwanda, improve livelihoods of the urban poor, improve living conditions and enhance the health and well-being of the residents, potentially positively impacting further 1,132,686 indirect beneficiaries. The project will also achieve notable reductions in greenhouse gas emissions through the provision of resilient and low-carbon basic services in the energy sector (installation of solar streetlights, solar PV and water heaters), promoting low-emission transport, and using green construction materials, collectively resulting in a reduction of 125,032 t CO<sub>2</sub> eq over the lifetime of the investments.

### 3.2 Paradigm shift potential

*Scale: N/A*

18. The project is a paradigm shift in upgrading climate-vulnerable informal settlements. Supporting planning and regulatory environments will change the paradigm of public sector investments into poor urban neighbourhoods and develop an enabling environment for increased green investment, aiding broader implementation of the project's demonstrated work. The proposed activities have been designed to ensure an impact beyond a one-off project investment, focusing on scaling up and replication, knowledge-sharing, enabling environment creation, regulatory framework contributions and climate-resilient development pathways. The establishment of a TVET Centre will facilitate long-term knowledge-sharing on climate-resilient construction methods, while capacity-building for construction workers will enhance scaling up and replication. Awareness-raising, citizen engagement, and a knowledge management system will promote knowledge-sharing across Kigali and Rwanda, encouraging citizens to adopt measures implemented in the project. Blueprinting the GCK and planning code for the Government of Rwanda will support project replication, with a design template and project manual promoting scalable sustainable housing projects.

### 3.3 Sustainable development potential

*Scale: N/A*

19. The project aims to achieve extensive co-benefits across several Sustainable Development Goals (e.g. 6, 7, 8, 9, 11 and 13). It will result in environmental benefits such as enhancing groundwater recharge, improving water quality, promoting walking and cycling to reduce emissions, and strengthening the local economy and industry. Additionally, improved solid waste management, community composting, and recycling efforts will conserve resources and reduce pollution. The project will improve water access and quality, enhancing health outcomes, especially for women and children. Street lighting, better drainage systems and clean cooking technologies will further enhance community health and safety. Economic benefits include accelerating economic growth by shifting workers from agriculture to more productive sectors, through public infrastructure investments. The project will also provide job training, particularly for women, and create job opportunities through composting and climate-resilient construction. Gender-sensitive impacts include reducing domestic burdens on women, creating safe public spaces, and promoting women's participation and leadership in community activities. Overall, the project's co-benefits include environmental preservation, social well-being, economic growth, and gender equity.

### 3.4 Needs of the recipient

*Scale: N/A*

20. The project effectively addresses the vulnerability and financing needs of Rwanda by targeting its high susceptibility to climate impacts such as increased rainfall variability, prolonged dry spells, landslides and rising temperatures. The proposed interventions, including constructing climate-resilient infrastructure, improving water and sanitation systems, enhancing stormwater management and promoting low-emission transport solutions, are designed to help Rwanda transition to a low-emission, climate-resilient development pathway while addressing the immediate needs of its vulnerable populations. Rwanda's limited domestic financial resources and high poverty rates (53%) exacerbate this vulnerability. The country's economic constraints and high poverty levels complicate attracting private investment for climate-compatible development. Thus, international climate finance, such as the GCF grant, is vital for Rwanda to meet its climate resilience and adaptation needs without increasing its debt burden.

### 3.5 Country ownership

*Scale: N/A*

21. The project aligns with the nationally determined contribution of Rwanda and contributes to its targets, such as reducing CO<sub>2</sub> emissions and enhancing community resilience. The project addresses issues in the National Informal Urban Settlement Upgrading Strategy and the City of Kigali Master Plan. It integrates with the country's broader development agenda and builds institutional capacity for sustainable urban development. Leveraging the enabling policy and institutional frameworks of Rwanda, the project also aligns with existing strategies like the National Strategy for Transformation and the National Adaptation Plan. The involvement of key government agencies, including the Ministry of Environment (AE), and the executing entity (EE) FONERWA, ensures strong country ownership and alignment with Rwanda's climate and development agenda. The project was developed through extensive stakeholder consultations, ensuring it reflects the needs and priorities of the most vulnerable.

### 3.6 Efficiency and effectiveness

*Scale: N/A*

22. The total cost for this project is USD 35.1 million, with a GCF contribution of USD 27.9 million in grant, with additional funding from the Rwanda Ministry of Finance amounting to USD 7.1 million, resulting in a leverage ratio of approximately 1:0.26.

23. The economic analysis for this project is conducted at the household level, evaluating the broader impacts of the project, including cost-effectiveness, household benefits, carbon savings and the value of forestry savings. The CO<sub>2</sub> reduction cost for GCF is approximately USD 86/t CO<sub>2</sub> which is on the higher end of the GCF portfolio, however this is compensated by the adaptation benefits including improved infrastructure, enhanced living conditions and significant environmental impacts, which are not monetized in its economic analysis.

24. Full grant is requested from GCF as the populations targeted by this project are among the most economically vulnerable in Kigali (2/3 living in extreme poverty). They lack the financial capacity to afford the upfront costs of critical infrastructure. Reliable access to basic services is absent, therefore providing electricity and clean water is crucial for improving resilience - in particular in crisis situations - living conditions, health and economic opportunities in an area where the climate change impact has been felt. These services are fundamental for the targeted populations to achieve a basic standard of living and participate in the local economy. By providing the necessary asset through grant funding, the aim is to ensure that they receive necessary services without additional financial burden.

## IV. Assessment of consistency with GCF safeguards and policies

## 4.1 Environmental and social safeguards

25. The review of the Green City Kigali Project has confirmed the AE's suggested categorization of the Project into Category B in terms of GCF's environmental and social safeguards policy and system. The project will have multiple positive impacts for improved social conditions and elements of environmental protection (green-right-of-way, nature-based adaptation solutions). The ESS Annexes and other documents are well prepared, with sound methodology and comprehensively cover environmental and social risks and impacts. However, the preparation of the ESIA, RAP and SEP seems to have taken place upon the project's submission to GCF in 2021. Due to the timeframe of the appraisal process, these documents are now 2-3 years old. The Secretariat and the Accredited Entity together have agreed to contract an update and revision of the core ESS documents immediately after project start and the second disbursement to be conditional upon the delivery of such updated documents.

26. **Project overview.** The Project will upgrade an existing informal settlement in Ngaruyinka Village that extends over 18ha on Kinyinya hill in Gasabo district in Kigali city, Rwanda with low emission infrastructure that is resilient to climate change. The proposed project will also support the installation of a solar PV mini-grid to pilot renewable energy supply to a 16ha mixed-used greenfield project near the Ngaruyinka Village. The GCF investments in both sites are part of a much larger development scheme (a 600ha Green City Kigali" project) designated by the Government of Rwanda to demonstrate a model of climate responsive upgrading of informal settlement and green urbanisation, which can be scaled up and replicated across Rwanda and the region. The project will also include activities to build awareness and develop institutional capacity for providing affordable housing and resilient infrastructure for vulnerable urban communities. The project is expected to generate positive environmental and social co-benefits, such as increasing groundwater recharge through stormwater management and rainwater harvesting systems, improved access to water and electricity, and increased resilience of vulnerable households, including women and girls. The review of the Green City Kigali Project has confirmed the AE's suggested categorization of the Project into Category B in terms of GCF's environmental and social safeguards policy and system. The project will have multiple positive impacts for improved social conditions and elements of environmental protection (green-right-of-way, nature-based adaptation solutions). The ESS Annexes and other documents are well prepared, with sound methodology and comprehensively cover environmental and social risks and impacts. However, the preparation of the ESIA, RAP and SEP seems to have taken place upon the project's submission to GCF in 2021. Due to the timeframe of the appraisal process, these documents are now 2-3 years old. The Secretariat and the Accredited Entity together have agreed to contract an update and revision of the core ESS documents immediately after project start and the second disbursement to be conditional upon the delivery of such updated documents.

27. **Environmental and social risk category.** The project is categorized by the AE as moderate risk (Category B) given that the likely environmental and social impacts of the project will be restricted to the project's influence area and are readily addressed through the implementation of mitigation measures. The Secretariat confirms the assigned risk category, which is within the E&S risk accreditation scope of the AE. As the project proposed for the GCF funding is part of a broader urban development scheme under which there are simultaneous investments and various funding partners, the AE has prepared an environmental and social safeguard package that contains documentation scoped at the broad scheme level which involves higher E&S risk activities. In addition to an environmental and social management framework (ESMF) prepared at the master planning stage for the entire 600ha GCK project, the AE submitted documentation scoped specific to the GCF project. That is an environmental and social impact assessment (ESIA) with associated environmental and social management plan (ESMP), resettlement action plan (RAP) and stakeholder engagement plan (SEP). The ESIA

identifies the main environmental and social risks and impacts of the GCF project. The ESIA also includes an exclusion list to ensure that no Category A activities are funded under the project.

28. **ESS1 (assessment and management of environmental and social risks and impacts).** The ESIA identifies that the potential negative impacts and risks are mostly confined to the local area, including: land acquisition and land use; physical and economic displacement; pollution of soil and water sources; air quality; noise and vibration; impact on surface and groundwater supplies; hazardous waste and pesticide risks; risks to cultural heritage; community health, safety and security risks; potential adverse socio-economic impacts; and labour and occupational health and safety (OHS) risks. Regarding the conflict sensitivity analysis, the ESIA envisions land tenure conflicts in the project area and develops conflict resolution strategies and resettlement action plan to ensure that the project will engage with community leaders and residents to facilitate dialogue and mediation, work with local authorities to clarify land ownership and usage rights, implement compensation and resettlement action plans where necessary, and ensure that all conflict resolution processes are transparent, inclusive, and fair. Secretariat acknowledges that the safeguards documentation is prepared in high quality, however, the scope of the interventions proposed for GCF financing goes beyond the upgrading of informal resettlements in the Ngaruyinka Village. Funding from GCF is also proposed for supporting renewable energy deployment in the GCK pilot site, which is a new greenfield commercial and residential project located outside the Ngaruyinka Village. Therefore, further work on the ESIA (Annex 6a) is required to ensure the scope of the environmental and social due diligence matches with the activities proposed for GCF financing in both sites (18ha upgrading and 16ha greenfield). It is also noted that ESIA, RAP and SEP were developed in 2021. While the specific risks and impacts of proposed activities will not have changed, some baseline information and contextual circumstances may have changed in the past three years (such as valuation of land/assets, and community attitudes etc.). Hence, the AE is recommended to conduct further consultation to confirm whether there is any major change in the project's operating environment.

29. **ESS2 (labour and working conditions).** The ESIA identifies a series of risks faced by project workers, including injuries during construction of infrastructure and settlement upgrading, child labour or forced labour given the low skills required and source of income needed, and discrimination and gender-based violence on sites as the project is targeting women, youth and historically marginalized groups as beneficiaries. The AE commits to respect and protect the fundamental rights of workers by following the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work. It will provide the project workers understandable documentation of employment terms and conditions, including their rights under national law on hours of work, wages, overtime, compensation and benefits. The project will exclude forced or child labour and will take OHS measures to establish and maintain a safe working environment including supply chain workers. As specified in the ESMP, the project will prepare a labour management procedure (LMP) and OHS plan at each site to identify physical hazards associated with the work involved such as operating at height, sharp materials, the use of heavy equipment and possible exposure to dust, noise and hazardous substance that may be present in the demolition waste, construction materials and construction machinery.

30. **ESS3 (resource efficiency and pollution control).** The ESIA identifies that the project may lead to dust and noise during the construction; wastes such as soil, wood chips, metal scraps and paper wrappings, among other, generated throughout construction and during the project operation; clearance of 34,303sqm vegetation covered by crops and cut of 2,164 trees; pollution from leakage of hazards substances used by construction machineries; and contamination and odour nuisance from biogas system connected with sanitation facilities. To minimize these risks, the project will put into place a waste management plan to collect and segregate wastes and ensure safe storage; ensure vegetative cover on unpaved surfaces to main the soil structure in the project area; maintain low dust levels during construction; install

scrubbers on the exhausts of emitting machinery; use noise absorbent padding in flexed plant installations, retain and continue planting greenbelts; manage any liquid and solid wastes to ensure that they do not contaminate the surface water in the stream and the underground waters; implement a revegetation plan to restore cleared areas by the contractor. As possible accidents or emergencies may occur on any of the project activities, the AE will provide for emergency management plans that will apply to all worksites and be available to project workers, subcontractors and others involved in the project in case of emergencies. The emergency management plan will also cover the implementation of occupational health and safety requirements.

31. **ESS4 (community health, safety and security).** The project aims to decrease risks of natural disaster emergencies, such as flooding and landslides, for communities. The ESIA identifies potential negative impacts to communities, including exposure to diseases, effects on ecosystem services and hazardous materials, and possible accident or emergencies on any of the project activities. An ESMP is devised to address these challenges by developing and implementing an emergency management plan and include security requirements in the community health, safety and security plan, that will be developed by the contract and approved by the AE. The project will also avoid vehicle movements at night, use of silencers for machinery work, verify drivers' behaviour with regards to driving speed and safety, and plan vehicle routes to avoid settlements where possible. The ESMP also requires including the security requirements in the Community Health, Safety and Security Plan based on a risk assessment and ensure that the Voluntary Principles on Human Rights and ESS4 requirements are addressed. In case the Project activities include prevention of malaria spread, pesticides might have an impact on the surrounding habitats and community health and safety.

32. **ESS5 (land acquisition and involuntary resettlement).** The ESIA identifies land acquisition and resettlement risks and impacts that will result from project activities, including displacement of 11 residential houses, 15 commercial structures, 7 structures will be partially affected, and 394 households will be economically displaced. The AE has submitted a separate resettlement action plan (RAP) (Annex 6b of the funding proposal) and estimated the cost of resettlement to be mobilised for the expropriation and all accompanying measures for the project affected people. The resettlement plan addresses detail compensation for land and structures, resettlement of displaced persons (DPs) or persons affected by the project (PAPs), and loss of livelihood opportunities. All DPs identified in the census survey, which encompasses all individuals having formal legal rights to the land lost and occupants, regardless of ownership of the land lost are entitled to compensation, assistance and rehabilitation as provided in the project's resettlement plan. All DPs will be given notice in sufficient advance and will be requested to vacate premises and dismantle affected structures prior to project implementation. The DPs will be compensated according to the official compensation rates. The acquisition of the land and private properties will be carried out in accordance with Rwanda Expropriation law for public interest. All the affected people will be compensated before commencement of Construction works. The RAP is of high quality and comprehensively covers issues that would be required under good international practice. The AE is suggested to resolve any potential issue regarding the land tenure conflicts and monitor land tenure issues throughout the project lifecycle, including to set up grievance mechanisms for affected residents and continuously assessing the effectiveness of the set conflict resolution strategies. The AE is also suggested to ensure all categories of affected households and communities should be consulted, full compensation for land and other assets, including those with customary claims to land; and those with no legally recognized claims (for the informal settlements); and adequate restoration and improvement of livelihoods (for the informal settlers).

33. **ESS6 (biodiversity conservation and sustainable management of living natural resources).** The ESIA identifies that the project will fund small scale activities in an urban neighbourhood and will not have any significant impact on biodiversity or ecosystem services. The ESIA briefly discusses the protected areas and critical habitats in the vicinity of the project



site and concludes that these are not present within the project area. The project interventions will all take place in an urban neighbourhood of Kigali. The ESIA also notes that although no critical habitat was identified in the project area, land will be occupied permanently and temporarily during construction requiring clearance of existing vegetation and possible removal of habitats and species of nature conservation interest. The AE is suggested to update the analysis following the revision of the ESIA, and where needed, to create and maintain a buffer between the project and other land uses to mitigate microclimate modification.

34. **GCF Indigenous Peoples Policy & ESS7 (Indigenous Peoples).** The AE has undertaken a review taking into consideration the Indigenous Peoples Policy scope of application and confirmed that there are no historically marginalized groups found in the project area.

35. **ESS8 (cultural heritage).** While the AE has assessed that there are no physical cultural heritage sites in the project area, for any chance finds that may be cultural heritage, the ESMP states that stakeholder engagement should be part of the mitigation measures on how to manage cultural heritage. The AE has therefore prepared a dedicated annex on chance find procedures to ensure all chance finds of cultural heritage (e.g. graves, old ceramic, old building fragments) are reported immediately to the relevant authority. Where possible, the project should avoid excavation in the ultimate neighbourhood of a chance find, fence the chance find and await instructions from the competent authority. The ESIA also specifies that the project should also allow people's access to them during the project implementation.

36. **Implementation arrangements.** The ESIA describes the roles and responsibilities among the AE and the executing agencies on the implementation of the project's safeguards instruments. It is noted that the executing entity, FONERWA, will establish a project management unit (PMU) consisting of a project manager who will be in charge of the overall project coordination including the implementation of safeguards instrument. An Environmental and Social Management (ESS) Specialist will be hired to oversee the environmental and social safeguards implementation for the entire project, conducts further screening on all sub-components, ensures all project staff are appropriately trained on environmental and social safeguards implementation, and liaises with specific staff to meet these obligations. FONERWA will also monitor the implementation of all safeguard documents and ensure that the environmental and social risks are avoided or minimized.

37. **Stakeholder engagement and grievance redress mechanism (GRM).** The AE has conducted stakeholder consultations during the design phase of the project from 2019 to 2021. These consultations were documented in Annex 7 of the Funding Proposal. The ESIA and SEP outline the key stakeholders identified, the organization and feedback from the stakeholder engagement activities, and a proposed stakeholder engagement plan to be followed by the AE and EE throughout the project implementation. As the safeguards due diligence extends to the GCK pilot site, the AE is suggested to keep the SEP updated and incorporate findings of all project sites in the updated documentation. Given the scope and scale of the proposed project, the appropriate structure for handling grievances includes the AE'S GRM which is the umbrella structure as well as GRMs hosted by the EE that are independent of government judicial procedures, provide a survivor-centred process to accommodate serious grievances, and facilitate access to the GCF's independent redress mechanism. For this project, the EE will have a survivor-centered project-level GRM process available to all project staff, participants and beneficiaries that will seamlessly integrate with that system for sharing of grievances as appropriate. All project staff, participants and beneficiaries will be made aware of the grievance process through public notices in the local language through mechanisms deemed appropriate through consultations with the stakeholders for distributing the information most effectively.

38. **Sexual Exploitation, Sexual Abuse, and Sexual Harassment (SEAH).** The revised GCF Environmental and Social Policy adopted by decision B.BM-2021/18 requires safeguarding from sexual exploitation, abuse and harassment (SEAH) in GCF-financed activities. The AE has identified potential SEAH-related risks that could arise from the recruitment of temporary and



permanent workers for the construction and operation of the project. The screening process will ensure that the sub-component does not exacerbate the risks of gender-based violence, including SEAH. In case of SEAH-related occurrences, the AE outlines the procedure for addressing SEAH-related grievances - that includes the AE GRM, which serves as the overarching framework, and independent GRMs hosted by the EE. The AE has committed to ensure that the GRM is survivor-centered and provide a streamlined process for accessing the GCF's independent redress mechanism.

39. To ensure the smooth flow of information regarding grievances, the EE will implement a project-level GRM process that prioritizes the needs of survivors and is accessible to all project staff, participants, and beneficiaries. This process will be fully integrated with the existing system for sharing grievances. In addition, all key stakeholders of the project will be informed about the grievance processes through public notices in the local language. The information will be shared after consulting with stakeholders for effective communication. GBV and SEAH complaints will be addressed at specialized referral centres called Isange One-Stop Centres (IOSC). These centres provide comprehensive services to GBV survivors, including medical care, psychosocial support, police and legal assistance, and collection of legal evidence. The project's safeguard staff will work closely with the Grievance Redress Committee (GRC) representative to ensure the proper handling and reporting of GBV and SEAH-related complaints. The EE will establish a project-level GRM accessible to all project personnel, participants, and beneficiaries. This mechanism will integrate with the existing system to address grievances as needed. The project will monitor gender mainstreaming and efforts to fight against GBV. All SEAH-related activities that require budgetary support are mapped and budgeted for in the gender action plan. The AE will hire a gender specialist with expertise in SEAH safeguarding who will provide technical assistance to the project.

## 4.2 Gender policy

40. The AE has provided a gender assessment and action plan and therefore complies with the GCF gender policy. The project aims to provide a new model for urban development in Rwanda that increases the resilience of vulnerable households, including women and girls.

41. The project will address several key challenges faced by women, including poverty, limited access to resources and basic services, and restricted financial services and employment opportunities. Gender norms are significant barriers that limit women's agency, decision-making power and access to education and health care, as are issues of gender-based violence, unpaid care work and the unequal division of labour. Women also face limited participation in decision-making processes and leadership roles, compounded by safety concerns in public spaces and inadequate access to essential facilities and services. These challenges are further exacerbated by gender disparities in decision-making, financial autonomy and mobility restrictions, all of which are influenced by entrenched gender stereotypes.

42. To tackle these issues, the project will implement a range of activities focused on gender and leadership capacity-building, establishing a gender mainstreaming committee, and ensuring women's participation in decision-making bodies. Key initiatives include building the capacity of decision-makers and stakeholders, establishing a formal complaint mechanism for accountability and addressing gender-based violence through community engagement. The project will invest in a village-wide street lighting system, establish a Women's Safe Space and Gender Champions Group. It will engage various stakeholders to promote women's equal access to benefits, higher-paying trades, and community resources. Additional efforts will include trainings and providing women and girls' with essential skills, such as riding bicycles, to enhance their mobility and autonomy.

43. The gender action plan defines activities, indicators and targets for women's participation and benefit with corresponding timelines, budget and gender expertise.

## 4.3 Risks

### 4.3.1. Overall programme assessment (low risk)

44. The project aims to upgrade the Ngaruyinka Village informal settlement on Kinyinya Hill with climate-resilient infrastructure and promote renewable energy in the nearby GCK pilot development, covering a combined area of 34 hectares. Its objective is to establish a scalable climate-responsive model applicable across Rwanda and the region, emphasizing community resilience and low-emission urban development. The project activities are structured around two main outputs: (i) climate-responsive investments to upgrade the informal settlement, provide critical transport links, and support renewable energy investments in the GCK pilot project; and (ii) increased capacity for inclusive climate-responsive upgrades and enabling an environment for climate-resilient, low-emission investment. The project, with a total cost of USD 29,929,602, will be funded by USD 23,602,590 from GCF as a grant, with additional co-financing totalling USD 6,327,012 from the Rwanda Ministry of Finance, resulting in a co-financing ratio of 1:0.26.

### 4.3.2. Accredited entity/executing entity capability to execute the current programme (low risk)

45. The Ministry of Environment (MOE), serving as the AE for this project, will assume responsibility for overall project management, supervision and reporting to GCF. FONERWA, acting as the EE will implement and execute the project. FONERWA was established in 2012 and acts as the national fund for environment and climate change. It plays a pivotal role in the environmental and climate finance landscape of Rwanda, channelling, programming, disbursing and monitoring funds in this sector. The AE has two approved projects with GCF under implementation, namely FP217 Building Resilience of Vulnerable Communities to Climate Variability in Rwanda's Congo Nile Divide through Forest and Landscape Restoration, and FP073 Strengthening Climate Resilience of Rural Communities in Northern Rwanda. Based on the proven track record, the AE is expected to implement this project in accordance with the requirements of its accreditation master agreement (AMA) and the legal terms of the funded activity agreement, which is still under development. FONERWA has a proven track record and is currently the EE for FP023, which is under implementation in the country.

### 4.3.3. Programme-specific execution risks (low risk)

46. **Materials sourcing and compatibility challenge.** Based on the project scope as outlined in the funding proposal, it is noted that the project may face challenges due to the limited availability of local green building materials and potential mismatches in solar PV and water heater systems for affordable housing. These mismatches may arise from initial system specifications not fully aligning with final design needs or installation complexities. The AE acknowledges this risk and proposes mitigation measures, including: (i) engaging local providers to source suitable materials; (ii) ensuring stakeholder input for system adjustments; and (iii) integrating appropriate capacities and fittings through design consultants.

47. **Project viability (and concessionality).** The use of grants (100 per cent concessionality) is reasonable given the country context. The funding proposal highlights that Rwanda is highly vulnerable to climate change, facing increased temperatures, intensified rainfall, and prolonged dry seasons, which exacerbate rapid urbanization challenges. Additionally, the funding proposal reflects that the country's steep slopes and high rainfall intensity make it prone to landslides and floods, impacting housing, health facilities, schools and infrastructure. The limited availability of affordable housing and local green building materials further complicates sustainable urban development. As mentioned in the funding proposal, Rwanda's dependence on international climate finance due to constrained domestic finances

and the economic impact of the coronavirus disease 2019 pandemic underscores the necessity of GCF funding. GCF support is crucial to ensure sustainable urbanization, build climate-resilient infrastructure, and transition to a low-emission pathway.

#### 4.3.4. Compliance risk (medium risk)

48. As described above, this project is being implemented through a governmental entity, the Ministry of Environment (MOE). As part of the government itself, the MOE is subject to the public accountability laws and regulations of Rwanda. Other public agencies, such as the Office of the Attorney General and Public Auditors have authority over the MOE with respect to any potential irregularities that might occur. The MOE itself has indicated that it has a team within its agency that will manage and oversee activities undertaken; the MOE has been accredited by GCF and has at least one other project under implementation.

49. Most of the proposed activities will be implemented through local units or municipalities, which are also subject to the public accountability laws of Rwanda. The proposed activities, themselves, do not suggest any elevated level of compliance risks. The AE has indicated that its own risk assessment is in the low or medium range.

50. While the MOE is an AE for GCF and has policies and procedures acceptable to GCF, the MOE did indicate during the course of review of this proposal that it would like some additional training and capacity-building for its staff in terms of anti-money laundering and related issues. In fact, the MOE has agreed to have some of those training and capacity-building measures integrated into its project activities.

51. Based on a review of the proposed activities, along with a review of the measures the MOE intends to undertake in this project, the compliance risk is rate as medium.

#### 4.3.5. GCF portfolio concentration risk (low risk)

52. In case of approval, the impact of this proposal on the GCF portfolio concentration in terms of results area and single proposal is immaterial.

#### 4.3.6. Recommendation

53. It is recommended that the Board consider the above factors in its decision.

Summary risk assessment		Rationale
Overall programme	low	The funding proposal has an overall risk assessment of <b>low</b> based on the issues highlighted. It is recommended that the Board consider the above factors in its decision.
Accredited entity (AE)/executing entity (EE) capability	low	
Project-specific execution	low	
GCF portfolio concentration	low	
Compliance	Medium	

## 4.4 Fiduciary

54. The Rwanda MOE will serve as the AE and will implement the project through the Rwanda Green Fund (FONERWA), which is the EE for all activities of the programme. The AE will be accountable for the overall management of the project, including project implementation, supervision, financial management and project monitoring and reporting. The AE, together with the EE, will establish a project management unit within the EE. The AE will oversee the project through its Single Project Implementation Unit.

55. The AE will open a GCF account for the project to receive the GCF proceeds and reflowed funds (e.g. tax refunds), if applicable, in accordance with the AMA. The project funds will be received into a dedicated MOE bank account held at the National Bank of Rwanda in USD. These funds will then be transferred to the EE.

56. The project will follow the Government of Rwanda procedures for planning, budgeting, and accounting. In its accounting system, the government has adopted the International Public Sector Accounting Standards, which are based on modified cash accounting principles issued by the International Federation of Accountants. The AE and EE will use the Government of Rwanda financial management systems and procedures, which are embedded in their internal operations. The procurement process will also be conducted in accordance with the regulatory regime in Rwanda, which applies to all government entities, including the AE and EE.

57. The project funds will be subject to an internal audit based on the annual internal audit workplan. There will be a full-time project-funded internal auditor (funded by the AE fee) to supplement the internal audit capacity of the AE and EE. In addition, there will be an annual external audit for the project in line with the AMA.

## 4.5 Results monitoring and reporting

58. This is an adaptation project that will contribute to GCF ARAs 1, 2 and 3. In addition, the project has a strong mitigation co-benefit. The project is expected to reach 30,252 direct beneficiaries, and 1,132,686 indirect beneficiaries. It also anticipates a GHG impact of 125,032 tCO<sub>2</sub> eq.

59. The results management arrangements proposed under the project were refined over four rounds of review and intensive engagement with the AE. Specifically, the project was re-conceptualised to an adaptation project with a mitigation co-benefit, whereas it was originally proposed as a cross-cutting project. Changes were made to the project theory of change to ensure that it was clear, logically coherent, and linked to the climate rationale and activities proposed under the project.

60. The project logical framework was also refined over multiple rounds to ensure that the proposed indicators and targets were realistic and linked to the proposed theory of change. The AE was also provided advice for refining the supporting annexes, including the Budget, Implementation Timetable, Monitoring and Evaluation Plan, beneficiary calculations and mitigation calculations.

61. A consistent observation throughout the project was the need to ensure consistency across different sections of the proposal, including the FP narrative (sections B2 and B3), theory of change, logical framework, timeline, and monitoring and evaluation plan. Intensive engagement was undertaken with the AE to address this point throughout the review process.

## 4.6 Legal assessment

62. The Accreditation Master Agreement was signed with the Accredited Entity on 23 June 2016, and it became effective on 1 August 2017, which was amended and restated pursuant to a first amendment and restatement agreement which was signed and became effective on 14 May 2019, and was further amended and restated pursuant to a second amendment and restatement agreement dated 23 November 2022 and became effective on 26 January 2023 (the “AMA”).

63. The accredited entity has not provided a legal opinion/certificate confirming that it has obtained all internal approvals, and it has the capacity and authority to implement the project.

64. The proposed project will be implemented in the Republic of Rwanda. GCF has signed a bilateral agreement on privileges and immunities with the Government of Rwanda. on 8 November 2022. It became effective on 25 May 2023.

65. To address the matters raised in this section, it is recommended that any approval by the Board is made subject to the following conditions:

- (a) Submission by the accredited entity to the Fund of a certificate or legal opinion, in form and substance satisfactory to the GCF Secretariat, within 120 days after Board approval confirming that the accredited entity has obtained all final internal approvals needed by it and has the capacity and authority to implement the proposed project;
- (b) Signature of the funded activity agreement in a form and substance satisfactory to the GCF Secretariat within 180 days from the date the accredited entity has provided a certificate or legal opinion confirming that it has obtained all final internal approvals; and
- (c) Completion of the legal due diligence to the satisfaction of the GCF Secretariat.

## Independent Technical Advisory Panel's assessment of FP245

Proposal name:	Green City Kigali: A new model for urban development in Rwanda
Accredited entity:	Ministry of Environment
Country:	Republic of Rwanda
Project size:	Small

### I. Assessment of the independent Technical Advisory Panel

#### 1.1 Overview

1. Rwanda is highly vulnerable to the impacts of climate change due to its geographic location, topography, and reliance on rain-fed agriculture. The country has seen significant climatic changes in recent decades, with rising temperatures and increasingly erratic rainfall patterns. According to the Rwanda Environment Management Authority, the average temperature has increased by approximately 1.4 °C since the 1970s, which has serious implications for agriculture, water resources, and public health. The Intergovernmental Panel on Climate Change projects that these trends will continue, leading to more frequent and severe extreme weather events, such as droughts and floods.

2. Agriculture, which forms a substantial part of Rwanda's gross domestic product (GDP) and employs about 70 per cent of the population, is particularly at risk. Droughts reduce agricultural productivity, increase food insecurity, and deepen poverty, especially among smallholder farmers dependent on rain-fed crops. In urban areas like Kigali, the capital city, drought exacerbates water scarcity, stressing the city's water supply, and combines with rising temperatures to increase the frequency of heat stress, particularly in informal communities. These challenges disproportionately affect low-income households, women and children.

3. Flooding, another major hazard exacerbated by climate change, is particularly severe in Rwanda due to the country's hilly terrain and insufficient drainage infrastructure. Floods destroy homes, infrastructure and agricultural land, causing displacement and economic losses. Kigali faces unique challenges related to flooding, with rapid urbanization leading to the expansion of informal settlements in flood-prone areas. The resulting floods cause significant damage and pose public health risks, such as outbreaks of diseases like cholera, especially in overcrowded informal settlements.

4. Climate change has also intensified the risk of landslides, particularly in Kigali, where deforestation and urban expansion into hilly areas have increased the threat. Landslides result in loss of life, property destruction, and displacement, with the most vulnerable populations residing in informal settlements on steep slopes. The compounded effects of drought, flooding and landslides disproportionately impact the most vulnerable populations, deepening poverty and making recovery challenging for affected communities.

5. Against this background, the Ministry of Environment (MOE) of the Government of Rwanda as accredited entity (AE) has submitted this funding proposal, requesting USD 27,995,786 in grant funding from GCF to co-finance the project entitled "Green City Kigali: a new model for urban development in Rwanda" (the "GCK Ngaruyinka Project").



6. The central objective of the project is to achieve a sustainable infrastructure enhancement of the Ngaruyinka informal settlement (located on Kinyinya Hill in Kigali) by implementing a practical, climate-resilient, and adaptive multi-sectoral action plan. The project is intended to serve as a prototype for future upgrading efforts in comparable communities across Kigali and secondary cities in Rwanda and possibly the wider East African region. In addition to the sustainable infrastructure improvements, the project encompasses technical assistance programmes aimed at supporting the broader application of these upgrading strategies in the future and fostering the development of new sustainable greenfield housing initiatives in Rwanda and beyond. The proposed project is part of the Green City Kigali (GCK) initiative which has been designed by Government of Rwanda with support from the Government of Germany through KFW, and seeks to develop a sustainable and climate-resilient urban community on a 600 hectare plot on Kinyinya Hill in Kigali, featuring eco-friendly housing, renewable energy, efficient waste management, and green infrastructure.

7. The project will be co-financed with USD 7,111,989 by the Government of Rwanda through its Ministry of Finance and Economic Planning. Under the terms of the funding proposal, the MOE acts as AE, while implementation of the project will be delegated to FONERWA (the Rwanda Green Fund) as executing entity (EE). FONERWA is the national financing mechanism established to support green and climate-resilient initiatives in Rwanda, and is overseen by the MOE.

8. The proposed project consists of two main components:

- (a) **Component 1:** Climate responsive investments to upgrade an informal settlement; and
- (b) **Component 2:** Increased awareness and capacity for inclusive climate responsive upgrades and enabling an environment for climate resilient, low emission investment.

9. The project is led by the MOE, which oversees overall management, with FONERWA executing the project through a project management unit (PMU). A Steering Committee, chaired by the MOE's Permanent Secretary and including senior representatives from various government agencies, is expected to provide coordination and decision-making support, while a Technical Advisory Committee and Sector Working Groups are intended to offer specialized guidance and facilitate stakeholder engagement. The project governance will also include a Community Upgrading Committee (already established) at village level in Ngaruyinka to facilitate information sharing and community participation.

## 1.2 Impact potential

*Scale: Medium-High*

10. The funding proposal highlights a range of anticipated impacts, most significantly in the adaptation result areas (ARAs) but also encompassing notable mitigation benefits. Specifically, the funding proposal defines the following two main project outcomes:

- (a) **Strengthened adaptive capacity, heat stress mitigation, and reduced exposure to climate risks.** The specific project activities aim to enhance infrastructure and services to better endure climate-related hazards, including flooding, landslides and heat stress in the project area (Ngaruyinka Village). This involves the modernization of public infrastructure and the application of nature-based solutions for effective stormwater management; and
- (b) **Strengthened institutional and regulatory systems for climate-responsive planning and development.** Specific project activities are designed to strengthen the ability of governmental and institutional entities to design, oversee and execute development strategies that are climate-responsive and promote low-emission growth, thus facilitating a scale-up of the proposed model project at Ngaruyinka Village.

11. These two outcomes map to the GCF results areas as follows:

- (a) **GCF Outcome Metric 1:** Total number of direct and indirect beneficiaries among vulnerable people and communities, with the overall target to be defined at project inception (ARA1) but currently estimated to be 30,252 direct and 1,132,686 indirect beneficiaries who will benefit from improved infrastructure, access to reliable water supply, renewable energy, and enhanced capacity to manage climate risks;
- (b) **GCF Outcome Metric 2:** 1,634 beneficiaries benefiting from improved living environments that are resilient to climate-related hazards and with access to climate-resilient water supply (50 per cent women) (ARA2, Core 2 and Supplementary 2.6 and Supplementary 2.3), including via the installation of rainwater harvesting tanks, the expansion of the central water supply system, as well as the increased climate resilience of 7.8 kilometres (km) of roads, 5.4 km of walking and cycling pathways, and 735 physical structures; and
- (c) **GCF Outcome Metric 3:** Value of assets that are more resilient to climate change increased by approximately USD 5.4 million (ARA3).
12. In terms of enhancing the enabling environment, the AE expects that the project will strengthen institutional and technical capacity for planning low-emission, climate-resilient investments by documenting best practices and providing guidance for the improvement of national building standards (Core Indicator 5). In addition, the AE posits that the dissemination of knowledge and best practices by the project will result in the widespread adoption of the approaches and solutions developed through the GCF-supported project (Core Indicator 8).
13. The project is also expected to support low-emission sustainable development by achieving significant mitigation co-benefits. This shall include reduction of emissions through the installation of solar streetlights (saving 76.2 tonnes of carbon dioxide equivalent per annum (t CO<sub>2</sub> eq/p.a.), as well as distribution of solar photovoltaic (PV) and water heater systems to community households (saving 0.9 tCO<sub>2</sub>/p.a. per household). Emissions are also expected to be cut by 2,019 t CO<sub>2</sub> eq per annum via a shift to low-emission transport and by 2,524 t CO<sub>2</sub> eq as a result of the use of green construction materials. Additionally, the project's Technical Vocational Education and Training (TVET) initiative will lower building energy intensity and operational emissions, demonstrating an efficient design with energy use under 2,100 kilowatt-hour/month.
14. The AE and EE expect to accomplish these outcomes via eight outputs across the two main outcome areas, namely:
15. Outcome 1: Strengthened adaptive capacity, heat stress mitigation and reduced exposure to climate risks.
- (a) Output 1: Strengthened adaptive capacity, heat stress mitigation and reduced exposure to climate risks;
- (b) Output 2: Implement resilient green transport/mobility networks;
- (c) Output 3: Implement resilient storm water management systems using nature-based solutions;
- (d) Output 4: Expand, install and ensure resilience of central water supply and rainwater harvesting systems; and
- (e) Output 5: Promotion and implementation of renewable energy and energy-efficient technologies.
16. Outcome 2: Strengthened institutional and regulatory systems for climate-responsive planning and development.
- (a) Output 6: Institutional capacity development for Government of Rwanda agencies/institutions;

- (b) Output 7: Blueprinting the Green City Kigali and developing planning codes for the Special Purpose Vehicle (SPV); and
- (c) Output 8: Awareness-raising and citizen engagement for climate action.

17. The logical framework presented in the funding proposal is comprehensive and straightforward. However, the independent Technical Advisory Panel (iTAP) considers there are various factors that may negatively impact the ability of the proposed project to generate the projected impact results, including the following considerations:

18. **Potential for land and property speculation.** The AE proposes to fully finance the Ngaruyinka Village upgrade project with grants to prevent passing the cost of infrastructure investments onto local taxpayers, which could lead to adverse socioeconomic impacts, including the displacement of residents unable to afford increased taxes. At the same time, the upgrade will very likely have a positive impact on land and property prices due to improved living conditions and better access to public services. This could result in a significant shift in ownership over time, as some community members may choose to sell their land or homes to take advantage of the higher property values. It may also trigger land and property speculation in and immediately around the target project area. As a result, the benefits of the project may only partially reach vulnerable communities (who might decide to capitalize on the increased property prices instead, for example). During the question and answer (Q+A) process, the AE clarified that they are aware of this potential challenge and noted that mechanisms such as community land trusts or long-term lease agreements are currently being explored to mitigate that risk. This is an issue that should be further explored in the early phase of project implementation, both to determine the potential scale of the problem as well as mitigants.

19. **Calculation of indirect beneficiaries.** The calculation of indirect beneficiaries in the funding proposal (annex 24) identifies all residents of Kigali as potential indirect beneficiaries of the project. In the view of the iTAP, extending the pool of indirect beneficiaries to residents of Kinyinya Hill – whose inhabitants are potentially able to benefit indirectly from infrastructure improvements and various service offerings provided by the project in Ngaruyinka Village – seems justifiable, whereas including all residents of Kigali entirely rests on the notion that (i) the technical assistance provided will eventually result in a replication of the project in other informal settlements across Kigali; and (ii) that Kigali residents will be able to enrol in the TVET school that will be developed as part of the project. GCF encourages conservative and realistic estimates to avoid over-claiming the number of beneficiaries. The iTAP recommends that the calculation methodology for indirect beneficiaries be reviewed prior to project commencement.

20. **Operation and maintenance (O&M) plan and long-term financing for maintenance.** The AE, in the funding proposal as well as during the Q+A process with the iTAP acknowledges the central importance of proper maintenance of the new infrastructure that is being put in place through the proposed project. The proposal, however, lacks a detailed strategy of how long-term maintenance will be ensured and by whom, and how the gradual process of handing over responsibility to local stakeholders while ensuring monitoring of compliance will work in practice. The development of this O&M plan, with a clear delineation of roles and responsibilities, should be a key priority during the early project execution phase. The City of Kigali will be responsible for shouldering the bulk of the maintenance costs in future, without being able to increase revenues correspondingly, as the target community is not expected to financially contribute (e.g. via increased taxes or user fees). For this proposed pilot project, these additional costs may be manageable. Any future scale-up of the project as envisioned by the AE will have to consider a sustainable strategy for financing O&M of new public infrastructure.

21. **Sustainability of solar PV systems, solar water heaters, improved cookstoves component and model for scale.** As part of the proposed project design, 224 households in the Ngaruyinka Village will receive solar PV systems, solar water heaters and improved cookstoves

free of charge; these installations are then supposed to drive some of the key mitigation co-benefits highlighted above. While the iTAP recognizes the limited ability of the target households to pay, experience with programmes in developing countries where such systems were provided free of charge to communities highlight some key challenges, including:

- (a) Sustainability of systems: Free provision has frequently resulted in lack of ownership, where communities may not invest their own resources in replacing the technology at the end of its life, and may not even maintain the systems properly, leading to degradation and failure of systems over time. Access to spare parts and technical support is often limited, exacerbating this issue;
- (b) Inadequate training and awareness: In some cases, insufficient training and awareness-raising among recipients have resulted in the improper use of the systems or a failure to maximize their potential benefits. Communities may lack the technical know-how to handle minor repairs or optimize system usage;
- (c) Funding and scalability: Programmes typically require substantial upfront investment, often supported by development partners, as is the case here. However, scaling up such initiatives to reach larger populations can be challenging, especially when concessional funding is limited or inconsistent; and
- (d) Social marketing: Supply-side subsidies, such as providing goods or services for free, can lead to the distribution of items that may not be wanted or needed by the recipients. In contrast, demand-side subsidies, when combined with 'social marketing' or awareness campaigns highlighting the benefits of the product or service, are more likely to be adopted and pose fewer risks of market distortion and saturation. For example, promoting the advantages of fuel-efficient cookstoves – both for household savings and forest conservation – can encourage households in the region to purchase and use these appliances. Through demand-side subsidies, households can receive financial support to buy a cookstove that meets their specific needs, potentially from a local producer, thereby fostering a market relationship.

22. In conjunction, the challenges identified above may mean that the expected mitigation co-benefits may not occur at the scale currently envisioned. When scaling the project beyond the initial pilot area, additional issues around dependency and market distortion would have to be considered. Providing systems or appliances free of charge can create dependency and undermine the development of a local market for these technologies. It can also distort the market by discouraging private sector investment and local entrepreneurship, as people may wait for free systems rather than purchasing them. This is especially so in the context of Kigali where multiple private sector service providers (including PAYGO providers) already operate and compete.

23. Finally, the funding proposal makes reference to the establishment of a mini-grid based on solar PV. It is not clear to the iTAP what the precise scope of the mini-grid project would entail, and the AE also did not provide more granular detail during the Q+A process. There is also no line item in the proposed project budget that would provide resources for establishment of a mini-grid. If such a mini-grid were to be developed to provide electricity to households beyond the immediate project area, it will be important to properly scope such a project, given the inherent complexities of developing, financing and operating mini-grids.

24. Overall, the iTAP rates the impact potential for the project as **medium-high**, with potential for improvement if the issues highlighted above are adequately clarified and addressed prior to the start of programme implementation.

### 1.3 Paradigm shift potential

*Scale: Medium*

25. Overall, the AE outlines a plausible approach for the project to catalyse a paradigm shift by fostering conditions for scaling and replication, essentially via the following “transmission belts”:

- (a) Establishing a Technical Vocational Education Training Centre that is focused on climate-resilient construction will enhance long-term knowledge-sharing and capacity-building, driving the scaling and replication of project activities;
- (b) Raising awareness and engaging citizens in climate-responsive regeneration, alongside a knowledge management system, will encourage broader adoption of project measures, such as rainwater harvesting, across Kigali and Rwanda;
- (c) Documenting and creating a design template for GCK will support replication, providing future developers with sustainable design tools to scale up affordable, climate-resilient housing projects; and
- (d) Enhancing the planning and regulatory framework will create an enabling environment, attracting investment for the green upgrade of informal settlements, and supporting broader implementation of the project’s initiatives.

26. Knowledge-sharing, awareness-raising, design templates and an enhanced enabling environment will be important contributors to replication of the project results but may not be sufficient to achieve these results at scale, for all informal settlements. The iTAP would like to highlight some aspects that may further improve the project’s potential to effect paradigm shift:

27. **Exploration of public-private collaboration models.** Scaling the project on Kinyinya Hill, in Kigali, and across the country (and for that matter, in the broader East African region) will require substantial financial investment. While the factors mentioned above may enhance the enabling environment and lower investment costs (e.g. through improved regulatory infrastructure), the funding proposal lacks a clear strategy for mobilizing future investment for replication. During the Q&A process, the AE acknowledged that the private sector will need to be involved, as public sector resources alone will not suffice. Although the AE indicated during the Q+A process that potential public-private collaboration models would be explored during the project, the proposal does not provide details on how this will be achieved. The iTAP recommends systematically exploring future financing models, particularly public-private collaborations, alongside project execution.

28. **Urban design and regulation.** For the purposes of regulation, the iTAP would also like to emphasise the importance of ‘Activity 2.1.3: Strengthening planning and regulatory frameworks to support an enabling environment’. This should be an area where the AE and the project Steering Committee should have significant insight and influence. Developing, disseminating and enforcing (predictable and realistic) regulations, standards and urban designs stands to be the most direct way for establishing pathways “to ensure replication and scale-up across the country” (as indicated in the theory of change statement).

29. **Area-based monitoring.** The project emphasizes a holistic approach, aiming for comprehensive changes across various levels and sectors rather than focusing on individual interventions. However, the monitoring plan, as reflected in the budget allocations presented in annex 4, focuses on monitoring of individual activities, which may not effectively capture the overall impact and potential synergies. The AE did consider an area-based monitoring approach (using satellite data combined with ground sensors) during project planning as clarified during the Q+A process. In the iTAP’s view, this method would align better with the “green city” concept and enable real-time monitoring of total impacts of the project. The AE chose a more traditional activity-based monitoring approach for this pilot phase, most likely due to budget constraints. However, the iTAP believes this may be a missed opportunity, as an area-based monitoring approach could provide more compelling data and evidence to demonstrate the project’s overall impact.



30. Overall, the iTAP rates the potential for the project to effect paradigm shift as **medium**.

#### 1.4 Sustainable development potential *Scale: High*

31. The funding proposal highlights a broad range of sustainable development benefits:

32. **Environmental co-benefits**, including (but not limited to):

(a) Stormwater management: Enhancement of groundwater recharge and wetland water quality;

(b) Rainwater harvesting: Reduction of pressure on surface water sources; and

(c) Green mobility: Promotion of walking and cycling, improving air quality.

33. **Social co-benefits**, including (but not limited to):

(a) Water access: Reduction of time and money women and children spend on collecting/purchasing water;

(b) Clean cooking: Improving health by reducing reliance on firewood; and

(c) Street lighting: Enhancing safety, especially for women.

34. **Economic co-benefits**, including (but not limited to):

(a) Urbanization: Driving economic growth and increasing productivity;

(b) Infrastructure investment: Raising land values and attracting private investment; and

(c) Job creation: TVET and composting initiatives create employment opportunities.

35. **Gender-sensitive development impact**, including (but not limited to):

(a) Energy access: Freeing up time for women to engage in economic activities;

(b) Safe spaces: Reduction of gender-based violence through women-friendly public spaces; and

(c) Empowerment: Increasing women's participation in community leadership.

36. The funding proposal does not provide a detailed exposition of how in practice these co-benefits will materialize. The Monitoring + Evaluation Plan (annex 11) does not provide sufficient detail to determine whether these potential co-benefits will be tracked during project implementation to facilitate a proper evidence-based review. During the Q+A process, the AE clarified that the project will leverage FONERWA's established M&E framework; it is unclear however whether that framework also allows tracking of these additional co-benefits or whether that framework will have to be amended. The iTAP recommends that this be clarified early on in project execution.

37. Overall, the iTAP rates the sustainable development impact potential of the project as **high**.

#### 1.5 Needs of the recipient *Scale: High*

38. Rwanda faces a high intensity of exposure to climate risks due to its mountainous terrain, reliance on rain-fed agriculture, and increasingly significant variations in rainfall patterns. As noted above, the country is particularly vulnerable to extreme weather events such as floods, landslides and droughts, which are becoming more frequent and severe due to climate change. Additionally, Rwanda is exposed to slow onset events like prolonged droughts and temperature increases, which threaten water resources, agricultural productivity and overall food security. The country's degree of vulnerability is exacerbated by its economic dependence



on agriculture, the high density of rural populations, and limited adaptive capacity, making it especially sensitive to the impacts of climate change.

39. Rwanda is classified by the World Bank as a low-income country, with a gross national income per capita of approximately USD 830 in 2022. Over the past two decades, Rwanda has achieved robust economic growth, averaging 7 to 8 per cent annually, although this momentum was significantly disrupted by the coronavirus disease 2019 (COVID-19) pandemic. In recent years, Rwanda's public debt has increased, driven by borrowing to finance development projects and address the economic challenges posed by the pandemic. As of 2023, public debt was estimated at about 73 per cent of GDP. While both the World Bank and International Monetary Fund consider this level of indebtedness sustainable, it underscores the need for prudent debt and financial management to sustain economic stability and growth.

40. Rwanda's climate finance needs are outlined in its nationally determined contributions (NDCs), where it estimates the total cost of implementing its climate action plans (both mitigation and adaptation) by 2030. According to Rwanda's updated NDC, submitted in 2020,<sup>1</sup> the country estimates that it will require approximately USD 11 billion by 2030 to fully implement its climate action plans. This would amount to 7 per cent of GDP each year during the ten-year period. The overall financing gap for the plan is estimated at USD 6.5 billion for the 2020-30 period.<sup>2</sup> This amounts to roughly 46 per cent of Rwanda's annual GDP (based on 2023 figures).

41. The Government of Rwanda has made a pledge to finance 40 per cent of the expected climate adaptation and mitigation investments from internal resources. The government is also implementing various initiatives to enhance domestic resource mobilization and to drive efficiency in public budgeting and execution. However, following the COVID-19 pandemic, the government had to lay out a fiscal consolidation path to stabilize the country's debt to GDP ratio. Pursuing Rwanda's ambitious climate agenda may pose risks to debt sustainability and could potentially limit the availability of resources for other developmental investments.

42. Rwanda's development partners, including GCF and the multilateral development banks, are playing an important role in supporting the country's climate adaptation and mitigation efforts. During the past decade, they have provided significant financial resources, technical assistance and policy advice to help Rwanda implement its climate agenda. These efforts include funding for climate-resilient infrastructure, sustainable agriculture, renewable energy projects, and capacity-building initiatives. Additionally, partners have supported the establishment and strengthening of Rwanda's national climate financing mechanisms, including FONERWA (Rwanda Green Fund), to ensure that climate investments are effectively managed and can be scaled up. The AE is receiving financial support from the German Government via KfW for other components of the broader GCK project which encompasses the development of a 600 hectare area at Kinyinya Hill. However, despite these efforts, there remains a significant climate finance gap that will have to be filled to ensure NDC commitments can be implemented.

43. Against that backdrop, while relatively modest in overall terms, the proposed GCF funding for the GCK Ngaruyinka Project can make an important contribution to promoting Rwanda's ambitious climate agenda. Overall, the iTAP rates the potential for the project to serve the needs of the recipients as **high**.

---

<sup>1</sup> Rwanda's Nationally Determined Contributions (NDC) Update 2020, Government of Rwanda, accessible at [https://unfccc.int/sites/default/files/NDC/2022-06/Rwanda\\_Updated\\_NDC\\_May\\_2020.pdf](https://unfccc.int/sites/default/files/NDC/2022-06/Rwanda_Updated_NDC_May_2020.pdf), downloaded 24 August 2024.

<sup>2</sup> International Monetary Fund (2023), 'Challenges and Policy Options to Financing Rwanda's Climate Agenda', accessible at [Challenges and Policy Options to Financing Rwanda's Climate Agenda in: IMF Staff Country Reports Volume 2023 Issue 423 \(2023\)](#), downloaded 24 August 2024.

## 1.6 Country ownership

*Scale: Medium-High*

44. **Coherence with existing policies.** The proposed project is well aligned with national climate change strategies of the Government of Rwanda, notably its NDC, and the Green Growth and Climate Resilience Strategy. The required no-objection letter has been submitted by the NDA.

45. **Capacity of the EE.** FONERWA, the Rwanda Green Fund, has established itself as the key player in the country's climate finance landscape, with several accomplishments in driving climate resilience and sustainable development. For example, FONERWA has been successful in attracting significant international climate finance, securing funds from key development partners such as the UK's International Climate Fund and indeed the GCF (FP073, "Strengthening Climate Resilience of Rural Communities in Northern Rwanda"). This has enabled the financing of a wide range of climate-related projects across Rwanda. The iTAP is therefore confident that FONERWA will be an effective EE for the proposed project. In the context of the proposed project there are two areas in which FONERWA's capacity could be reviewed and potentially strengthened, early on during project implementation:

- (a) **Monitoring and evaluation.** The suitability of FONERWA's monitoring and evaluation processes should be reassessed and potentially enhanced. While FONERWA's Monitoring and Evaluation Manual is thorough,<sup>3</sup> the current system seems to prioritize capturing immediate project outputs rather than deeply assessing long-term outcomes and systemic changes. Considering the earlier discussion on the use of area-based monitoring techniques, it may be beneficial to update and improve FONERWA's monitoring and evaluation processes and tools for the proposed project; and
- (b) **Private sector engagement.** Although FONERWA has made strides in engaging the private sector (including in the renewable energy, agriculture and tourism sectors), the level of private sector investment appears to remain relatively low compared to the overall climate finance needs of the country. There is potential to further explore innovative financing mechanisms and incentivize greater private sector participation in climate action, including in the context of the proposed project, and FONERWA could potentially benefit from additional capacity development in that area, especially with a view to developing a credible and realistic strategy for scaling and replication of the proposed project.

46. **Environmental and social action plan (ESAP) and resettlement action plan (RAP).** An initial environmental and social impact assessment (ESIA) and RAP were concluded as part of project planning in 2021 and submitted as annexes to the funding proposal (annexes 6a and 6b). In addition, the AE and EE implemented a Strategic Environmental and Social Assessment (annex 6c), a High-level Environmental and Social Impact Assessment Report (annex 6d), a Resettlement Policy Framework (annex 6e), a Stakeholder Engagement Framework (annex 6f), and an Environmental and Social Management Framework (annex 6g), with annexes 6c to 6g covering not just the GCK Ngaruyinka Project but the broader GCK project.

47. The ESIA and RAP are now three years old. As part of the project, the ESIA will have to be updated, and an environmental and social action plan (ESAP) will have to be produced. In addition, the RAP will have to be updated (including communication of a new cut-off date); both the ESAP and RAP will have to be implemented. The project budget (annex 4) does not include a dedicated line item for these activities. The AE underscored in the Q+A process that the ESAP and RAP implementation are both critical to the project's success and explained that funding for these activities will be mobilized from the Project Management Component of the budget. In

---

<sup>3</sup> FONERWA (2021), Monitoring and Evaluation Manual, accessible at <http://www.fonerwa.org/sites/default/files/2021-12/FONERWA%20M%26E%20Manual.pdf>, downloaded 22 August 2024.

that context, the iTAP would like to stress that the development of the ESAP and the updating of the RAP are important opportunities for additional stakeholder consultations, including importantly with affected communities. The last structured engagements with stakeholders that are recorded in the funding proposal package date back to 2021 (annex 7).

48. The iTAP considers the alignment of the project with the priorities of the host country government to be high and assesses the track record of the EE as medium-high. Overall, the iTAP rates country ownership of the funding proposal as **medium-high**.

## 1.7 Efficiency and effectiveness

*Scale: Medium*

49. The economic analysis for this project focuses on evaluating its broader impacts at the household level, including household benefits, carbon savings, and the value of forestry preservation (through reduced charcoal use). Payback periods for the various components differ, ranging from about one year for water harvesting systems, 3.5 years for solar water heaters, and up to 30 years for solar PV installations. The CO<sub>2</sub> reduction cost for GCF is around USD 224 per tonne of CO<sub>2</sub> (calculated on the GCF financing amount and with an expected 125,032 t CO<sub>2</sub> eq reduced over the lifetime of the investments) which is very high. However, the core focus of the project is on the anticipated adaptation benefits such as improved infrastructure, better living conditions, and substantial positive environmental impacts, which are not quantified in the economic analysis.

50. In terms of financial performance, the project follows a subsidy-based model, where initial capital costs funded by grants (rather than user fees or taxes) are justified by long-term health and economic benefits for target households, reducing negative impacts on residents. Among the proposed interventions, only solar streetlighting offers monetizable benefits at the level of the community. As already pointed out, there are potentially negative consequences to this grant-based funding model that need to be carefully evaluated (see paragraph 21 above, “Potential for land and property speculation.”).

51. The feasibility study (attached as annex 2) does not contain detailed designs and associated bills of quantities which would have formed the basis for the project’s cost estimates and is also now three years old. The project budget (annex 4) does contain cost estimates, but these also appear to date back to 2021. Since then, price levels across all industries have significantly shifted upwards (due to supply chain disruptions, increased demand and inflationary pressures). During the Q+A process, the AE noted that the project team members are aware of the issue and that the project team is closely monitoring the situation, arguing that any potential cost increases will be addressed through budget revisions. Based on experience in other projects, the iTAP deems it likely that overall price levels for construction input materials may have likely increased between 15 and 25 per cent in recent years. Thus, the iTAP recommends that a detailed costing exercise should be conducted in the early stages of project implementation to consider the overall impact this may have on the project budget and potential need for recalibration of project activities.

52. The iTAP therefore considers the efficiency and effectiveness of the programme as **medium**.

## II. Overall remarks from the independent Technical Advisory Panel

53. Overall, the funding proposal is comprehensive, and although there are various risks and weaknesses (as highlighted above) it shows a credible pathway to achieving notable impacts.

54. The iTAP recommends that the AE:

- 
- (a) Assess the potential for land and property speculation in the early phase of project implementation, to determine the potential scale of the problem and, if necessary, establish mitigant mechanisms such as community land trusts or long-term lease agreements;
  - (b) Reviews the calculation methodology for indirect beneficiaries prior to project commencement and ensure a conservative methodology is applied;
  - (c) Develop the O&M plan for new infrastructure built, as well as for solar PV and solar water heater household systems distributed for free, with a clear delineation of roles and responsibilities, as a key priority during the early project execution phase;
  - (d) Give additional emphasis to the development of regulation, standards and urban designs as a key methodology for replication and scale-up of the initiative;
  - (e) Systematically explore future financing models for scaling up the project results, particularly public-private collaborations, alongside project execution; and
  - (f) Conduct a detailed costing exercise in the early stages of project implementation to consider the overall impact that increased construction costs may have on the project budget and potential need for recalibration of project activities.
55. The iTAP recommends that the Board approve this funding proposal.

## Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP245)

Proposal name:	Green City Kigali: A new model for urban development in Rwanda
Accredited entity:	Ministry of Environment
Country:	Republic of Rwanda
Project size:	Small

<b>Impact potential</b>
The iTAP assessment of the impact potential of the project as <b>medium-high</b> is well acknowledged and the AE will make sure that most of the challenges highlighted are clarified and address during the start of the project implementation.
<b>Paradigm shift potential</b>
The iTAP assessment of the Paradigm shift potential of the project as medium is well acknowledged and the AE has no further comments on this.
<b>Sustainable development potential</b>
The iTAP assessment of the Sustainability potential of the project as high is well acknowledged and the AE will make sure that the tracking mechanism of the project co-benefits is established and clarified project execution leveraging the FONERWA's existing M&E framework.
<b>Needs of the recipient</b>
The iTAP assessment of the Paradigm shift potential of the project as High is well acknowledged and the AE has no further comments on this.
<b>Country ownership</b>
The iTAP assessment of the Paradigm shift potential of the project as Medium-high is well acknowledged and the AE has no further comments on this.
<b>Efficiency and effectiveness</b>
The iTAP assessment of the Paradigm shift potential of the project as medium is well acknowledged and the AE has no further comments on this.

**Overall remarks from the independent Technical Advisory Panel:**

The AE acknowledges iTAP overall assessment and recommendation for the Board approval.





GREEN CITY KIGALI: A NEW MODEL FOR URBAN  
DEVELOPMENT IN RWANDA

ANNEX 8A: GENDER ASSESSMENT



© 2021 SWECO

All rights reserved

Produced by Sweco GmbH  
Hanauer Landstraße 135-137  
60314 Frankfurt am Main  
Germany  
Tel: +49 69 95921 0  
[www.sweco-gmbh.de](http://www.sweco-gmbh.de)

#### ACKNOWLEDGEMENTS

The consultant wishes to thank all the individuals and organizations for their contribution who completed surveys, participated in interviews and were consulted as part of the report.



# Table of Contents

<b>LIST OF ACRONYMS AND ABBREVIATIONS.....</b>	<b>1</b>
<b>LIST OF TABLES .....</b>	<b>2</b>
<b>1. INTRODUCTION &amp; CONTEXT.....</b>	<b>3</b>
<b>2. THE LINK BETWEEN GENDER AND CLIMATE CHANGE .....</b>	<b>4</b>
2.1 GENDER AND CLIMATE CHANGE IN RWANDA .....	6
<b>3. THE GENDER CONTEXT OF RWANDA .....</b>	<b>7</b>
3.1 OVERVIEW .....	7
3.2 KEY METRICS.....	8
<b>4. POLICY AND STRATEGY ENVIRONMENT .....</b>	<b>13</b>
4.1 INSTITUTIONAL FRAMEWORK FOR GENDER MAINSTREAMING IN RWANDA.....	13
4.2 THE GREEN CLIMATE FUND GENDER POLICY.....	15
<b>5. NGARUYINKA VILLAGE UPGRADE: OVERVIEW AND PROPOSED INTERVENTIONS.....</b>	<b>16</b>
5.1 VILLAGE OVERVIEW.....	16
5.2 PROPOSED INTERVENTIONS FOR THE NGARUYINKA VILLAGE UPGRADE.....	17
<b>6. METHODOLOGY OF THE GENDER ASSESSMENT FOR NGARUYINKA VILLAGE .....</b>	<b>18</b>
6.1 BASELINE DATA COLLECTION .....	18
6.2 FOCUS GROUP DISCUSSIONS.....	19
6.3 IN-DEPTH INTERVIEWS .....	19
6.4 SUMMARY OF COMPLETE FIELD DATA COLLECTION PROCESS .....	19
<b>7. KEY FINDINGS.....</b>	<b>20</b>
7.1 GENDER NORMS IN THE VILLAGE.....	20
7.2 GENDERED DIVISION OF LABOUR AND UNPAID CARE WORK.....	20
7.3 FINACIAL AGENCY AND DECISION MAKING.....	21
7.4 PERMISSION AND MOBILITY.....	23
7.5 GENDER-BASED VIOLENCE .....	24
7.6 WOMEN’S AND MEN’S DIFFERENT USES AND PERCEPTIONS OF VILLAGE SPACES IN DAILY LIFE .....	26
7.7 WOMEN’S AND MEN’S LEADERSHIP AND DECISION MAKING AT VILLAGE LEVEL.....	32
7.8 WOMEN’S PARTICIPATION IN THE VILLAGE UPGRADE COMMITTEE.....	33
7.9 WOMEN’S SAFETY IN THE COMMUNITY.....	34
<b>8. SEX-DISAGGREGATED FEEDBACK ON PROPOSED INTERVENTIONS.....</b>	<b>40</b>
<b>9. WOMEN’S PERSPECTIVES: SHAPING THE GENDER ACTION PLAN .....</b>	<b>44</b>
<b>10. CONCLUSION.....</b>	<b>44</b>
<b>LIST OF REFERENCES.....</b>	<b>46</b>
<b>ANNEX: DATA COLLECTION TOOLS .....</b>	<b>47</b>

# List of Acronyms and Abbreviations

DHS	Demographic and Health Survey
EDPRS	Economic Development and Poverty Reduction Strategy
EICV 5	Integrated Household Living Conditions Survey 5
FFRP	Rwanda Forum for Women Parliamentarians
FGDs	Focus group discussions
FHH	Female-headed Households
GBS	Gender Budget Statement
GBV	Gender-Based Violence
GCF	Green Climate Fund
GMO	Gender Monitoring Office
GRB	Gender Responsive Budgeting
KII	Key Informant Interview
MIGEPROF	Ministry of Gender and Family Promotion
NTS1	National Strategy for Transformation
NWC	National Women's Council
PV	Photovoltaic
REMA	Rwanda Environment Management Authority
SDGs	Sustainable Development Goals
TVET	Technical and Vocational Education and Training
UN	United Nations
WSA	Women's Safety Audit

List of Tables

Table 1: The links between gender and climate change .....4  
Table 2: Key metrics reflecting the current gender gap in Rwanda .....9  
Table 3: List of proposed Interventions for the Ngaruyinka Village Upgrade .....18  
Table 4: Summary of complete field data collection process .....19  
Table 5: Women’s and men’s different uses and perceptions of village spaces in daily life .....28  
Table 6: Sex-disaggregated feedback on proposed interventions .....40

# 1. Introduction & Context

Gender assessments and gender action plans are an integral part of proposals submitted to the Green Climate Fund (GCF). The purpose of a gender assessment is to ensure adequate and appropriate attention is given to gender issues and dynamics across and within projects. A gender assessment is meant to ensure the project proposal design is informed by a thorough understanding of gender roles, power relations and dynamics within the target community, as well as to ensure the disaggregation and nuanced understanding of women's and men's specific roles, responsibilities, knowledge, needs, interests, and priorities in order for women's rights and gender equality to be increasingly enhanced throughout the project lifecycle.

A gender assessment uses participatory methods of gender analysis to understand relationships between men and women, their access to resources, their daily activities, and the constraints they face relative to each other. A comprehensive gender analysis involves the examination of the different roles, rights, needs, and opportunities of women and men, boys and girls within the specific project or program context. In the context of climate change projects and/or programs, a robust gender analysis helps to identify multiple causes of climate vulnerability that are driven by gender inequality. The process of a gender analysis also helps to identify and build on the diverse knowledge and capacities within communities and households that can be used to make them more resilient to climate-related shocks and risks, and works to clearly identify gender gaps and opportunities where the effective and influential participation of women and girls must be proactively championed and secured in order for climate-responsive projects to support and benefit them in equal measure to men and boys.

The Gender Policy of the GCF (reviewed and updated in November 2019) explicitly recognizes that gender relations, roles and responsibilities exercise significant influence on women's and men's access to and control over decisions, assets and resources, information, and knowledge.<sup>1</sup> The Policy also recognizes that the impacts of climate change can exacerbate existing gender inequalities, and acknowledges that climate change initiatives are more sustainable, equitable and more likely to achieve their objectives when gender equality and women's empowerment considerations are integrated into the design and implementation of projects. The updated GCF Gender Policy also recognizes that women and vulnerable communities are part of the solution to climate change and should, therefore, be effectively engaged in all discussions and decisions that affect them.

In line with the principles and rationale of the GCF Gender Policy, this gender assessment has been conducted as part of the proposal submitted to GCF for the Ngaruyinka Village Upgrade project in Kigali, Rwanda. This report maps the gender dynamics within the project focus area of Ngaruyinka Village, draws links between these gender dynamics and climate vulnerabilities for women in the community, gathers men's and women's feedback on the proposed project intervention areas, and further identifies the specific gender gaps that are affecting the active participation of women in decision-making processes, as well as future project outcomes, related to the proposed village upgrade. The findings of this report inform the subsequent Gender Action Plan that accompanies this document, which seeks to directly address the gender barriers and gaps outlined in this assessment.

---

<sup>1</sup> *Updated Gender Policy and Gender Action Plan 2020-2023*; Green Climate Fund, November 6, 2019.



## 2. The Link Between Gender and Climate Change

There is a direct and well-documented link between gender equality, women’s empowerment and climate change. Research shows that women are disproportionately more vulnerable to the effects of climate change, which can result in existing gender disparities becoming even more pronounced and harmful over time.<sup>2</sup> Rapidly advancing climate change will amplify chronic environmental threats, such as water scarcity and land degradation, which hits the poorest communities the hardest. Due to gender bias and inequalities related to education, economic empowerment, violence and other forms of oppression and vulnerability, women are more likely to be poor than men. Among other disadvantaged groups who experience poverty, women are often the poorest of the poor, particularly if they face other challenges such as having a disability.

Poor women are especially vulnerable to climate change as their incomes are often highly dependent on natural resources that are sensitive to climate shocks and variability, and in general, women possess fewer assets. Women are predominantly involved in subsistence agriculture, through which they are negatively affected by climate change. They receive less education than their male counterparts, have less economic independence, and are not involved in political or household decision making processes to the same degree that men are. Where they are involved, as baseline data gathered for this report will reveal, they are often engaged in a tokenistic manner and their views and experiences are not considered as valuable or significant as those of men.

The global gender gap is vast and distinct. Nearly 70% of those who live on less than \$1 a day are women. Women also account for 75% of the world’s 876 million adults who are illiterate. While women work two-thirds of the world’s total working hours, they receive only 10% of the world’s income, and although women predominate in global food production (approximately 50% - 80%), women own less than 10% of the world’s land. In Africa, the proportion of women affected by climate-related crop changes could range from 48% in Burkina Faso to 73% in the Congo. Every year, there are 2 million deaths, mainly women and children, related to the burning of biomass fuel indoors.

A robust body of evidence clearly demonstrates that women and men do not experience climate change equally. The table below captures some of the key ways in which women are uniquely affected by climate change as a direct result of gender roles and inequality.<sup>3</sup>

**Table 1: The links between gender and climate change**

<b>Food production</b>	<ul style="list-style-type: none"> <li>• Weather patterns change, agricultural work becomes more labour intensive, with women increasingly carrying the burden of additional work while having the least access to necessary inputs</li> <li>• Climate change increases likelihood of crop failure, with women facing the most negative economic implications, having fewer assets to fall back on and limited access to alternative sources of income or other livelihoods</li> </ul>
------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<sup>2</sup> Overview of linkages between gender and climate change; UNDP, 2017.

<sup>3</sup> Gender and Climate Change Overview Report. Skinner, E.; BRIDGE, 2011.

<p><b>Food security</b></p>	<ul style="list-style-type: none"> <li>• Women’s lack of entitlement to and/or control over productive resources such as land, livestock, agricultural implements and financial credit makes them more vulnerable to food shortages</li> <li>• Women’s and girls’ lower status in society has a direct impact on their nutritional security and decisions made at the household level regarding the allocation of food, particularly when food is scarce</li> <li>• As fuel and water required for cooking and preparing food becomes more scarce, women and girls are forced to walk longer distances to find both, exposing them to ever greater risk of harassment and sexual assault</li> </ul>
<p><b>Energy poverty</b></p>	<ul style="list-style-type: none"> <li>• Cooking and food production are primarily managed by women in the home, making them the primary users of household energy</li> <li>• Women are most adversely affected by lack of electricity, as well as having to rely on other forms of fuel that have harmful health impacts, such as wood or charcoal</li> <li>• As public and private investment is increasingly funneled into renewable forms of energy, there is a risk of women being unable to afford the additional costs of these services, as they are typically poorer than men and have fewer economic opportunities</li> </ul>
<p><b>Water scarcity</b></p>	<ul style="list-style-type: none"> <li>• Women and girls spend a total of 40 billion hours annually collecting water, and with increasing variability and intensity of rainfall, women and girls will have to travel farther and farther to access water or be forced to cope with chronic water shortages</li> <li>• Crop production and food security will also be affected by water scarcity, and purchasing water is more difficult for women and girls due to their lack of access to and control over income in the household, as well as lack of economic opportunities</li> <li>• Lack of water and access to basic sanitation also impacts women and girls in unique ways, making it more difficult to maintain hygiene and comfort during monthly menstruation cycles</li> <li>• Women are also typically excluded from decision-making processes related to water and land use programs</li> </ul>
<p><b>Health impacts</b></p>	<ul style="list-style-type: none"> <li>• As climate change impacts the frequency and intensity of floods, freshwater supplies will likely become contaminated and water-borne diseases may become more prevalent (i.e. cholera, diarrhea, malnutrition, etc.)</li> <li>• Due to inequalities in access to education, information and healthcare, women and girls may be more exposed to disease and have less access to medical services, as well as restricted time and mobility to access care due to the heavy burden of domestic responsibilities</li> <li>• Women may also be more uniquely vulnerable to climate-related illnesses if/when they are pregnant or lactating</li> </ul>

<b>Climate-related disasters</b>	<ul style="list-style-type: none"> <li>• Research shows that women and children are up to 14 times more likely to die in natural disasters than men, due to their weaker asset base and the lack of resilience they experience as a result</li> <li>• Women’s degree of vulnerability in natural disasters is directly related to their economic and social rights; data on climate disasters in 141 countries shows that in countries with greater gender equality, this differential in vulnerability disappears</li> </ul>
<b>Poverty and vulnerability</b>	<ul style="list-style-type: none"> <li>• Social vulnerability in the context of climate change can be defined as “the characteristics of a person or group that influence their capacity to anticipate, cope with and recover from the impact of a natural hazard”</li> <li>• Poverty and vulnerability are directly linked to climate change; gendered patterns of poverty as well as women’s unique social vulnerability put them at a significant disadvantage, exacerbating their climate vulnerability</li> </ul>

While women and girls undeniably face unique vulnerabilities related to climate change, and these vulnerabilities are critical to consider and respond to, it is equally important to recognize their agency in adapting to and mitigating climate change. In practical terms, this means recognizing women and girls as equally valuable participants in decision making processes, as well as designing and implementing real world solutions for climate change adaptation or mitigation. There is already significant evidence of women playing a vital role in effectively mobilizing communities for risk management, responding to climate disasters and driving social movements to end harmful practices that significantly contribute to climate change.<sup>4</sup>

## 2.1 Gender and Climate Change in Rwanda

Climate variability due to global warming is already posing specific challenges for Rwanda, including more frequent and intense extreme weather events such as floods and droughts, which have a significant negative impact on natural resources, the economy, food security, and differentiated impacts on women and men.<sup>5</sup> Women and men are disproportionately affected by adverse environment risks. In general, women are more impacted by climate change and natural disaster impacts on land tenure and in settlements.<sup>6</sup> An individual’s access to assets and resources largely determines their climate vulnerability and capacity for resilience and adaptation. In Rwanda, women tend to have more limited access to resources compared to men, access which would enhance their capacity to adapt to climate change - including land, credit, agricultural inputs, access to markets, decision-making bodies, technology and training services. Having less access to assets and control over resources makes women in Rwanda more vulnerable and less resilient to the impacts of climate change.<sup>7</sup>

Women’s ability to cope with climate change remains limited due to higher poverty rates for women than for men, lower literacy rates among women, limited access to extension services and different

<sup>4</sup> Overview of linkages between gender and climate change; UNDP, 2017. Gender and Climate Change Overview Report. Skinner, E.; BRIDGE, 2011.

<sup>5</sup> Transforming Eastern Province through Adapatation, Rwanda. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>6</sup> Gap Analysis of Gender–Environment and Climate Change Mainstreaming in National Policies and Strategies; REMA, December 2019.

<sup>7</sup> Transforming Eastern Province through Adapatation, Rwanda. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

cultural norms, traditional roles, and power relations between men and women. When clean drinking water is not available, women and girls must walk longer and more often over rough terrain to find it. If food is scarce, a woman is the last in the family to eat. As a result, climate change exacerbates existing gender disparities and uniquely disadvantages women and girls in Rwanda, and over time will continue to adversely and disproportionately affect women, in particular women smallholder farmers and pastoralists. In response to this identified need, the Government of Rwanda has taken steps to integrate gender considerations within and across national environmental and climate change efforts, in particular the strategic framework for Rwanda's National Strategy on Climate Change and Low-Carbon Development, though REMA's recent analysis of gender gaps in the environment and climate change sector indicate that more needs to be done to ensure the enforcement of gender equality indicators in mainstreaming tools and guidelines, as well as improved collection of sex-disaggregated data, increased use of gender-sensitive indicators and the avoidance of relying on 'gender-neutral' indicators and approaches.<sup>8</sup>

### 3. The Gender Context of Rwanda

#### 3.1 Overview

Over the last two decades, the Government of Rwanda has made considerable efforts to mainstream gender equality and women's empowerment within and across national priorities of the country, including Vision 2020/2050, the Economic Development and Poverty Reduction Strategy (EDPRS) that later became the National Strategy for Transformation (NST1), and through the revised National Gender Policy (2021), among other Sector Strategies. These goals have been translated into implementable actions to enhance the equal participation of and benefits to both men and women within the country's development. The 2003 Constitution of the Republic of Rwanda (amended in 2015) emphasizes gender equality by conferring at least 30% of positions to women in decision-making organs, and other gender sensitive laws have been enacted including matrimonial regimes, donation and successions, and land access as well as the Law on the Prevention and Punishment of Gender-based Violence (GBV) .

To ensure Gender Responsive Budgeting (GRB) in public institutions, Gender Budget Statements (GBS) have been made a requirement for all budgeting institutions. This has been institutionalized through the promulgation of the Organic Law N° 12/2013/OL of 12/09/2013 on State Finances and Property. The law is implemented and spearheaded by the Ministry of Finance and Economic Planning, through planning and budgeting process. This has enabled actors specifically public institutions to use public resources to benefit both men and women and boys and girls. The institutional mechanisms for gender equality and empowerment of women are led by the Ministry of Gender and Family Promotion (MIGEPROF), Gender Monitoring Office (GMO), National Women's Council (NWC) and Rwandan Forum for Women Parliamentarians (FFRP), and play a major role as gender machinery institutions for coordinating policy implementation, monitoring gender mainstreaming and the fight against GBV as well as the empowerment of women and girls for their active participation in the national development process.

Despite these important legal reforms, patriarchal gender norms remain pervasive within Rwandan society, as this assessment will further illustrate. Rwanda, both historically and presently, is a deeply

---

<sup>8</sup> Gap Analysis of Gender–Environment and Climate Change Mainstreaming in National Policies and Strategies; REMA, December 2019.

patriarchal culture and society.<sup>9</sup> Despite the country being lauded for its progress in recent years in terms of legislation, women in government, and national narratives promoting gender equality and the empowerment of women and girls, patriarchal belief systems continue to dominate Rwandan society, particularly at the grassroots level (i.e. households and communities). Gender norms in the Rwandan context perpetuate the idea that men are superior to women in most facets of life, and support and reinforce the subjugation of women in various ways as well as men's dominance over them.<sup>10</sup> Women are generally expected to be submissive to men and prioritize becoming a wife and mother, as well as to be responsible for virtually all of the domestic and childcare duties, or what is otherwise known more broadly as 'unpaid care work'. Men are considered heads of households as well as primary decision makers and breadwinners, while women often have little time, energy or freedom to engage in paid work outside of the home, or other opportunities for personal growth and development. When women do make money, most of the decisions around how, when and why it is spent are made by the husband. Girls as well as boys are prepared from a young age to fulfill these gender roles as adults, perpetuating and further solidifying the validity of such gender norms, which are in fact reproducing deep and harmful inequalities over time.

Gender inequality has an impact on all aspects of society, from economic growth to the health and well-being of a country's population more broadly, as well as to climate change mitigation and adaptation.<sup>11</sup> Despite the importance of gender equality for development, discrimination against women and girls is pervasive around the world, and Rwanda is no exception. While Rwanda's prominent international image is as a champion of gender equality, especially in terms of women in parliament and leadership roles, men continue to outnumber and outrank women at almost every level of leadership across vital sectors such as health, education, the judiciary, local government, and national government.<sup>12</sup> Further, violence against women and girls is another serious concern that has severe negative consequences for their agency, health and well-being and remains widespread in Rwandan society, with 24% of adolescent girls aged 15-19 and 28% of young women aged 20-24 having experienced violence at least once since the age of 15.<sup>13</sup> In fact, the gendered normative attitudes that support and perpetuate violence against women and girls in Rwanda are still incredibly high; the 2014/15 Demographic and Health Survey (DHS), a nationally representative study conducted periodically by the National Institute of Statistics in Rwanda (NISR), reveals that 45% of girls aged 15-19 and 42% of young women aged 20-24 believe that a husband is justified in beating his wife for at least one or more of six common scenarios in the Rwandan context, including burning food, disagreeing with him or refusing to have sex with him (detailed findings from the most recent DHS 2019/20 survey are still pending).

### 3.2 Key Metrics

The table below outlines key metrics in Rwanda related to the current gender gap in different areas of social and economic life, with data drawn from recent gender assessments conducted for GCF

---

<sup>9</sup> *Time allocation, gender and norms: Evidence from post-genocide Rwanda*; Schindler, K., 2009. *Gender and development: Working with men for gender equality in Rwanda*; Carlson, K. and Randell, S., 2013. *Gender Inequality Prevents Abused Women from Seeking Care Despite Protection Given in Gender-Based Violence Legislation: A Qualitative Study from Rwanda*. Umubyeyi, A. et al., 2016.

<sup>10</sup> *Gender Inequality Prevents Abused Women from Seeking Care Despite Protection Given in Gender-Based Violence Legislation: A Qualitative Study from Rwanda*. Umubyeyi, A. et al., 2016.

<sup>11</sup> *HIV/AIDS and Gender Issues*. Interagency Coalition on AIDS and Development, July 2006.

<sup>12</sup> *The State of Gender Equality in Rwanda*. Gender Monitoring Office, March 2019; *Statistical Yearbook 2017*. NISR, 2017.

<sup>13</sup> *DHS 2014-2015*; NISR, 2015.

applications.<sup>14</sup> Many of these areas overlap significantly, as gender inequality is primarily a result of unequal power dynamics that cut across multiple facets of life.

**Table 2: Key metrics reflecting the current gender gap in Rwanda**

<p>Poverty</p>	<p>Despite supportive legislation, women continue to face considerable disadvantages in terms of poverty, particularly the very poor and women living in rural areas. Women are significantly less likely than men to be in decent paid employment, working mainly as dependent family labourers, and working significantly longer hours than men on a daily basis, particularly when unpaid care work is taken into account. Female-headed households (FHH) and households with many children face even greater challenges. According to EICV5, 39.5% of female headed households are poor compared to 37.6% of male headed households in Rwanda.<sup>15</sup></p>
<p>Agency and decision-making</p>	<p>Findings from this assessment as well as other similar studies specific to Rwanda indicate that patriarchal gender norms continue to dominate in terms of the agency and decision making power women are able to access within their homes and communities.<sup>16</sup> Women have limited agency in terms of making decisions independently without the need for a husband’s permission or approval, and their decision making power is typically relegated to areas where men consider women to have the most relevant interests, such as a childcare or domestic work.<sup>17</sup> Men remain primary decision makers when it comes to household finances and are able to make decisions and take action without the involvement of their wives at all, even in such cases as buying parcels of land or livestock without the wife’s knowledge and forging her signature if necessary.<sup>18</sup> Though Rwanda has a high number of women in parliament, women’s representation and leadership at the local level and other levels of government is significantly lower and relegated to lower levels of authority compared to men.<sup>19</sup> There has been some positive progress in private sector decision-making, in terms of women’s participation in economic decision-making bodies. In 2018, women represented 25% of board members, 31% of CEOs, 25% of senior management staff, and 36.5% of women employees in the private sector.<sup>20</sup></p>

<sup>14</sup> *Transforming Eastern Province through Adapatation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>15</sup> Integrated Household Living Conditions Survey 5 (EICV5); NISR, 2016/17.

<sup>16</sup> *Gender Assessment for the CD4 Program*; Land O’Lakes Venture37, March 2019; also reflected in key findings from this gender assessment.

<sup>17</sup> *Transforming Eastern Province through Adapatation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>18</sup> *Gender Analysis for USAID/Rwanda: Valuing Open and Inclusive Civic Engagement Project*; USAID, 2015; also reflected in key findings from this gender assessment.

<sup>19</sup> *The State of Gender Equality in Rwanda*; Gender Monitoring Office, March 2019. *Statistical Yearbook 2017*; NISR, 2017.

<sup>20</sup> *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.



Health care	The 2014/15 DHS indicates that only 23% of women reported being empowered to make decisions independently regarding their own health care, while 16% reported that decisions were mainly made by their husbands. Sexual and gender-based violence (SGBV) also poses serious health risks to women. Due to gender norms related to sex within the context of marriage, as well as religious influences, men tend to control decisions around sexual and reproductive health within marriage and both men and women feel that women cannot easily refuse to have sex if the husband demands it. <sup>21</sup>
Gender-Based Violence	In the DHS 2014/15 survey, 44% of women reported ever having experienced physical or sexual violence, and 36% reported having experienced injuries due to intimate partner violence in the past twelve months. Despite strong policies and legislation in Rwanda against gender-based violence (GBV), dominant gender norms that stress male authority and female submission significantly affect women's likelihood of reporting when they experience male partner violence.
Access to finance	Women's access to finance continues to lag behind men's and is hindered by power dynamics in the home and society that affect a woman's ability to access finance without relying on permission from husbands or having collateral to offer up for a loan. Targeted efforts in this regard have helped to increase women's financial inclusion from 39% in 2013 to 86% in 2016. Currently, women with savings accounts are estimated at 39.7% and the number of women who borrowed from the banking sector more than tripled from 10,254 in June 2011 to 38,282 in June 2016. <sup>22</sup> Men continue to access formal financial services at higher rates than women, while women rely on informal financial services (savings groups, etc.) at higher rates than men. Women's higher illiteracy rates, lack of access to collateral and limited time also affects their ability to access credit programs and services. <sup>23</sup>
Unpaid care work and division of labour	Women in Rwanda do vastly more unpaid care work than their male counterparts with 77.2% of women versus 22.8% of men contributing to unpaid care work in the home. <sup>24</sup> Women remain the primary providers of all care work in the home, while men are considered financial providers and breadwinners. Women manage all aspects of childcare, as well as domestic work including cleaning, cooking, fetching water and firewood, washing clothes, and taking family members and children to and from health centres and schools, as well as providing much of the agricultural labour for the family plot and caring for livestock. Men have significantly more rest and leisure time than women do, and except in rare cases, generally do not contribute to the domestic work load, even when they are unemployed or are only able to access temporary, part-time work.

<sup>21</sup> *Men, Faith and Masculinities: Rwanda*; Tear Fund, July 2016.

<sup>22</sup> *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.

<sup>23</sup> *Transforming Eastern Province through Adaptation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>24</sup> *National Gender Statistics Report*; NISR, 2019.

Education	<p>School attendance at the primary level is relatively high for both boys and girls in Rwanda in recent years, while men and women in the older generation have far fewer years of schooling than young people do today, with women having lower levels of schooling than men and higher rates of illiteracy. Strong governmental policies in the education sector related to school attendance for girls have helped to close the gender gaps in education, but barriers persist. Trades embraced by girls are still reflective of the traditionally patriarchal division of labour and gender stereotypes; for example, males dominate within transportation services (93.6% for males versus 6.4% for females), in manufacturing and mining services (females hold 14.4% compared to 85.6% of males), in construction and building services (females hold 16.4% compared to 83.6% of males), and in energy (females hold 20.6% compared to 79.4% held by males.)<sup>25</sup></p> <p>The drop out rate diverges significantly around age 16, with girls dropping out of school at higher rates than boys, particularly in rural areas, and their re-entry rates are much lower.<sup>26</sup> Girls also face unique challenges related to puberty, missing multiple days of school each month due to lack of access to menstrual hygiene products.</p>
Employment	<p>Women in Rwanda are generally concentrated in unpaid family work, due to gendered expectations related to their roles as wives and mothers. Even if employment is available, women's access to paid jobs is not equal to that of men's. Men's lack of involvement in unpaid care work creates an additional burden for women, and lack of affordable childcare further prevents women from being able to access paid employment. While women account for 44.8% of Rwanda's labour force, they remain concentrated in small, low-paying jobs, mainly as crop farm labourers, domestic cleaners, market salespeople, and small shopkeepers. Among employed individuals with managerial positions, only 32% are women. Unemployment rates are higher in rural areas than urban, and higher for women than men. These unemployment rates have worsened during COVID-19, where the overall unemployment rate increased by 9.1%; the impact was higher among women (25%) than men (19.6%) and much higher among young people (32.9% for girls between 16-24 years and 22.9% for boys in the same age category) than adults (17.7%) of 31 years old and higher.<sup>27</sup></p> <p>Women's livelihoods were significantly negatively affected by the COVID-19 pandemic. The majority of women in Rwanda are employed in informal sectors such as small businesses, tourism (accommodation and food services), in-country retail trade and cross-border trade, all of which have been severely impacted by the restriction of movement due to the spread of COVID-19 and the closure of borders. This has resulted in loss of business and a significant number of job losses for women, while others were compelled to divert capital toward basic needs of the household.</p>

<sup>25</sup> Education Statistical Yearbook; MINEDUC, 2019.

<sup>26</sup> *Assessment of repetition and drop out in basic education; Ministry of Education & UNICEF, 2017.*

<sup>27</sup> *Labour Force Survey; NISR, May 2020.*

Land	Recent data shows that reforms in the Land Law and Inheritance Law have enabled more women to own land and, to some degree, use land for collateral. Currently, 59.9% of registered land is owned by married couples, 24% is owned by women and 16% is owned by men. <sup>28</sup> About 39.9% of women have acquired loans and credit using their land as collateral and 25.5% women accessed agriculture loans using their land as collateral. <sup>29</sup> However, while women are legally entitled to own and inherit land, gender norms continue to play a role in hindering their access to and control over land for use as collateral and other means. In addition, their limited control over land affects how decisions are made related to which crops should be grown, where women’s interest in growing food crops for family subsistence competes with men’s interests in growing primarily cash crops. <sup>30</sup>
Agriculture	While the agriculture sector provides many of the employment opportunities for men and women in Rwanda, there is a significant gender gap; women make up just 39.5% of those employed in agriculture, and occupy mostly lower paid, informal jobs and far fewer professional or managerial positions than men. <sup>31</sup> 75% of women are self-employed in agriculture, compared with just 63% of men. <sup>32</sup> Due to women’s time and energy poverty driven by the heavy burden of unpaid care work, women also struggle to access training, resources and opportunities related to agricultural development, and have limited access to and control over financial resources to purchase inputs for improvements in crop production. There is also a distinct gender gap in women’s access to agricultural loans, with women representing just 25.5% and men representing 74.5% of those accessing loans for agriculture. <sup>33</sup>

<sup>28</sup> *State of Gender Equality in Rwanda*; Gender Monitoring Office, March 2019.

<sup>29</sup> *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.

<sup>30</sup> *Transforming Eastern Province through Adapatation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>31</sup> *State of Gender Equality in Rwanda*; Gender Monitoring Office, March 2019.

<sup>32</sup> *Transforming Eastern Province through Adapatation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021. Accessed at: <https://www.greenclimate.fund/document/gender-assessment-fp167-transforming-eastern-province-through-adaptation>

<sup>33</sup> *State of Gender Equality in Rwanda*; Gender Monitoring Office, March 2019.

Climate Vulnerability	<p>About 40% of Rwanda’s population lives below the poverty line, with women, disabled, widowed, and rural populations disproportionately affected. Adult women are more likely to be living in poverty (34.8%) than adult males (31.6%), and heavily involved in subsistence farming with limited access to improved agriculture inputs due to their low economic capacity.<sup>34</sup> Women’s often challenging situation in terms of land tenure security and access to options for climate change adaptation means they will likely be increasingly and disproportionately affected by climate change. Unequal gendered power dynamics between men and women cause women to bear most negative effects of (climate change-induced) disasters. Changes in rainfall and temperature with an increase in floods and droughts will impact food security and water availability in Rwanda. The fact that women are primarily responsible for households’ water availability and food security indicates that their burdens will increase disproportionately due to climate change.<sup>35</sup></p> <p>84.7% of women in Rwanda depend on firewood as their main source of cooking energy, largely due to limited accessibility and affordability to the high cost of alternative sources of energy (i.e. cooking gas and biogas).<sup>36</sup> As a result of social cultural beliefs and gender norms, women and children are mainly responsible for providing cooking fuel in their homes. Limited access to alternative energy sources increases their workload and limits their engagement in other productive activities, compounding their climate vulnerability.</p>
-----------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 4. Policy and Strategy Environment

### 4.1 Institutional Framework for Gender Mainstreaming in Rwanda

In addition to some of the key legal reforms noted above, Rwanda’s policy and strategy environment is in many ways considered favourable for promoting and mainstreaming gender equality and the participation and leadership of women and girls. There are a number of national policies and strategies that support gender equality and affirm the equal rights of women and girls, both as a targeted priority as well as a cross-cutting theme.

#### 4.1.1 Vision 2050

Vision 2050 serves as an extension and refocusing of the previous Vision 2020, with the aim of Rwanda achieving upper middle-income status by 2035 and high-income status by 2050. Some of the target goals of Vision 2050 include sustained food security and better nutrition status, universal, sustainable, and reliable household access to improved water and sanitation, and universal access to quality health care and services. Both Vision 2020 and Vision 2050 highlight gender equality and women’s empowerment as an area of critical and cross-cutting importance.

<sup>34</sup> *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.

<sup>35</sup> *Climate Change Profile Rwanda*; Ministry of Foreign Affairs, Government of the Netherlands, April 2018.

<sup>36</sup> *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.

#### 4.1.2 National Strategy for Transformation (NST1)

Rwanda's National Strategy for Transformation (2017-2024) provides overarching guidance and focal areas for the accelerated social, political and economic transformation of the country. The NST1 includes various different interventions to promote gender equality and foster women's empowerment, including mainstreaming gender in employment and job creation, improving women's access to finance and continuing to combat gender-based violence (GBV).

#### 4.1.3 Strategic Plan for Agriculture Transformation 2018 - 2024 (PSTA IV)

The Strategic Plan for Agriculture focuses on the intensification and commercialization of the agriculture sector in Rwanda, as a necessary precursor for poverty reduction and economic growth. The plan includes specific strategies to address gender inequality in the agriculture sector. It is further complemented by the Agriculture Gender and Youth Strategy (2019) which provides a gender analysis of the agriculture sector and mainstreaming guidance for greater gender equality and women's participation and empowerment across all government agricultural programs and projects.

#### 4.1.4 Revised National Gender Policy 2021

Rwanda's National Gender Policy, under the Ministry of Gender and Family Promotion (MIGEPROF), was recently revised and approved in February 2021. The new policy specifically addresses a number of key gender issues, including the burden of unpaid care work and its impact on women's health, well-being and economic independence, as well as the importance of women being involved in climate adaptation and mitigation strategies and solutions.

#### 4.1.5 National Land Policy (2019)

This policy ensures that equal land rights for all citizens (women and men) are in place and enforced. Since the completion of land registration in 2013, there has been some improvement in gender parity with respect to land ownership between men and women. Currently, 59.9% of registered land is owned by married couples, 24% is owned by women and 16% is owned by men.

#### 4.1.6 National Environment and Climate Change Policy 2019

One of the formal guiding principles of the National Environment and Climate Change Policy is 'inclusiveness', naming women and youth as essential actors in environmental management and climate change intervention decision-making, and promoting the targeted involvement of women and youth in developing green technologies and designing climate change adaptation and mitigation solutions.

#### 4.1.7 National Housing Policy 2015

This policy highlights the importance of including women and other marginalized groups in socio-economic development, as well as improving their access to resources and off-farm jobs. The policy also emphasizes the need to encourage female participation in the design of neighborhoods and settlements, and in the planning of social amenities and facilities.

#### 4.1.8 National Urbanization Policy 2015

Within the National Urbanization Policy, Guiding Principle #8 underscores the importance of gender-sensitive commitments in Rwanda's approach to urbanization. Gender equality and women's empowerment are further highlighted in the policy, including the importance of supporting women as part of the urban economic force, promoting women's and girls' participation in urban planning, design

and management at city and neighbourhood levels, and strengthening the prevention of gender-based violence in urban areas.

#### 4.1.9 Sectoral Policy on Water and Sanitation 2004

Sitting under the Ministry of Environment, this policy acknowledges the insufficient participation of women in water infrastructure, the need for women and men to equally participate in water resource protection and management, and the need for the integration of a gender perspective into all levels of water management.

While the overall policy and strategy framework for gender equality in Rwanda is generally supportive, there are notable exceptions, such as the National Informal Urban Settlement Upgrading Strategy of 2017, which does not acknowledge or analyze the unique situation of women and girls in urban settlements, or make any explicit mention of the importance of gender equality and the empowerment and equal participation of women and girls in all matters related to urban settlement upgrades.

## 4.2 The Green Climate Fund Gender Policy

The GCF Gender Policy outlines the Fund's clear commitments to ensuring effective gender mainstreaming across all of its work and funded projects. The GCF commits to consistently mainstreaming gender issues in its implementation arrangements as well as frameworks for its projects.<sup>37</sup>

The Gender Policy of the GCF (reviewed and updated in November 2019) explicitly recognizes that gender relations, roles and responsibilities exercise significant influence on women's and men's access to and control over decisions, assets and resources, information, and knowledge. The Policy also recognizes that the impacts of climate change can exacerbate existing gender inequalities, and acknowledges that climate change initiatives are more sustainable, equitable and more likely to achieve their objectives when gender equality and women's empowerment considerations are integrated into the design and implementation of projects. The updated GCF Gender Policy also recognizes that women and vulnerable communities are part of the solution to climate change and should, therefore, be effectively engaged in all discussions and decisions that affect them.<sup>38</sup>

The GCF Gender Policy is closely aligned with the UN Sustainable Development Goals (SDGs), which make explicit commitments to gender equality, both as a stand-alone goal on gender equality and women's empowerment (SDG5) and as a cross-cutting theme for all of the SDGs. The Gender Policy is also guided by the United Nations Framework Convention on Climate Change, which acknowledges that in the process of addressing climate change, principles of gender equality and the empowerment of women should be respected, promoted and considered. The Gender Policy is also guided by the Paris Agreement, which reflects the commitment by Parties that adaptation action should be "gender-responsive", and when taking action to address climate change, Parties must respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the

---

<sup>37</sup> *Updated Gender Policy and Gender Action Plan 2020-2023*; Green Climate Fund, November 6, 2019.

<sup>38</sup> *Updated Gender Policy and Gender Action Plan 2020-2023*; Green Climate Fund, November 6, 2019.



right to development, as well as gender equality, the empowerment of women and intergenerational equity.

## 5. Ngaruyinka Village Upgrade: Overview and Proposed Interventions

### 5.1 Village overview

Two pilot projects have been identified to be taken forward in the first phase of the implementation process for Green City Kigali. They are located close to each other in the north-western corner of Kinyinya Hill, creating opportunities for shared infrastructure and enabling works. Both pilot projects are founded on the four pillars of sustainable development and will deliver on the overall objectives of the GCK project. One of these two pilot projects is an 18 ha urban upgrade of an existing informal settlement in Ngaruyinka village.

The Ngaruyinka village pilot has been selected to provide a model for climate responsive upgrading of an informal settlement. The objective is to create a model approach which can be upscaled and applied to multiple situations across Rwanda to maximize positive climate impacts on both men and women in line with the GCK approach.

Ngaruyinka village lies on a steep north-facing slope. For the most part the land falls to the north at a gradient of around 15%. The slope gets shallower at the southern and northern ends and is steepest in the central area. Building foundations, roads and pathways have been manually levelled. Most buildings have poured concrete foundations, and some have concrete retaining walls. Roads and pathways are often shored up with sandbags as makeshift retaining structures.

The resident population of the Ngaruyinka Village study area has been calculated at 1,634 persons. This has been calculated through a house-by-house count undertaken by a local survey team with assistance from local community leaders and representatives. The average household size is 4-5 persons. The oldest living person in Ngaruyinka is 90 years old. The built footprint of the village consists mainly of single family and multi-family homes. Together they total 321. In addition to this there is one primary commercial area at the foot of the hill along the main access road and a secondary commercial area within the village itself.

There is a nursery school located halfway up the slope on the western boundary of the village, adjacent to the Ministry of Health site. Primary and Secondary schools are located in Kinyinya centre. Murama sector has recently procured an ambulance that will service four villages in Kinyinya, including Ngaruyinka. There are three community health workers in the village. The closest Primary Health Clinic is Kinyinya Health Centre about a 40-minute walk away, and there is a health post in Rwankuba around a 20-minute walk away. The commercial area is supplied every morning by truck from Kinyinya center and consists of the following local shops and services:

- 2 x small restaurants serving local food, milk and tea
- A small market square selling locally harvested vegetables and charcoal
- A small canteen serving tea and bread
- A men's hair salon (there is no salon for women)
- Several small shops and kiosks selling vegetables, milk, grains
- Butcher shop (opening soon)

Local community meetings and events are often held under trees in a clearing in the middle of the village which is also used as a market place. The New Life in Jesus church lies about 35min walk away from Ngaruyinka. Other religious buildings are located up the hill about 25 minutes walk away, toward Kinyinya Centre. Virtually the entire 18ha study area is within a 200m catchment of either a commercial area or the nursery school. The remainder of the area is a mix of grassland, formal farms and informal, domestic level farming. Further development in the village has been halted until infrastructure can be improved.

Most of the buildings in the village are single story homes and/or commercial premises constructed of mud/clay bricks, typically with corrugated steel roofs and steel framed doors and windows. Many buildings have concrete foundations and facing render. There are occasional concrete brick buildings. Many buildings are in a poor state of repair on facades and around foundations, particularly in high erosion risk spots. For the most part, many streets and pathways in the village are rarely trafficked and in effect they act as pedestrian controlled public space and play areas. There are a few specific places that are currently used formally as 'public spaces', the most significant of which is the market area. Every house located along the streets and pathways in the village is required to have a light facing the street to act as public lighting, though coverage is very limited. There is no evidence of formal street furniture or public waste bins in the village.

Approximately 60% of the population of the village rent their homes. It is typical that the landowners are also residents and that they might receive rent from around 10 households on their land. According to interviews with local residents at Ngaruyinka Village, most crimes in the area are petty thefts of phones, bags, etc. There is a community patrol in the village that is organised by a community member responsible for security within the local leadership structure.

There are significant existing environmental and social risks in Ngaruyinka village. The increase in informal neighbourhoods, a direct consequence of urbanization, is largely due to market forces in the inner cities. Low-income earners are continually being pushed out of Kigali's city centre due to the high cost of living. It has been estimated that more than 340,000 housing units will be needed by 2022 to supply the growing number of city dwellers. Meanwhile, the desire to reside in Kigali at all costs has driven the development of many informal enclaves where housing structures are of poor quality. In Ngaruyinka village, this informal development is characterised by a lack of adequate waste and sanitation facilities and a lack of stormwater drainage. These gaps lead to environmental degradation and social risks, such as poorer health and vulnerability to climate events. The High-Level Environmental and Social Impact Assessment Report prepared for the Green City Kigali Project contains additional information regarding environmental and social risks.

## 5.2 Proposed Interventions for the Ngaruyinka Village Upgrade

The table below briefly outlines the different interventions proposed for the village upgrade. Discussions with men and women in Ngaruyinka village explored the perceptions of different community members related to the proposed interventions detailed below.

**Table 3: List of proposed Interventions for the Ngaruyinka Village Upgrade**

Sector	Activity
Transport / Mobility	Construction of green rights of way
	Green road construction methods
Stormwater Management	Blue/Green improved stormwater management systems
Water Supply	Expansion of central water supply (100% connection rate)
	Rainwater harvesting (as supplement to central supply)
	Education about filters for household water treatment
Sanitation	Biogas system at the market
	Latrine improvements / education
Solid Waste Management	Community composting
	Neighbourhood waste collection point
	Recycling collection stations
Energy	Solar street lighting
	Education about solar PV
	Education about improved cook stoves
	Education about energy efficient lighting and appliances
Community Facilities	Establishment of a technical and vocational education and training (TVET) Centre
	Market upgrades, including new public latrines at the market
	Additional community focal points, improved football pitch, new children's playground

## 6. Methodology of the Gender Assessment for Ngaruyinka Village

### 6.1 Baseline Data Collection

The gender assessment conducted in Ngaruyinka village adopted an interactive and participatory approach, engaging both women and men of different ages and backgrounds to gather qualitative data on the gender dynamics of the village, as well as the ways in which men and women use village spaces and infrastructure differently. Data was collected from a diverse range of women and men, including married women and men, single women and men, young women and men, elderly women and men, adolescent girls, widows, women-headed households, male and female local leaders, community health workers, and those from different *ubudehe* categories. Names of participants have been removed and any identifying details have been otherwise made ambiguous or generalized in order to protect the anonymity of research participants.

Baseline data collection began on September 6<sup>th</sup>, 2021 and was completed on September 27<sup>th</sup>, 2021. A total of seven site visits were conducted that captured detailed feedback from community members, involving focus group discussions and in-depth individual interviews. Informed, written consent was collected from all participants before data collection proceeded.

Focus group discussions and interviews gathered data across the following thematic:

- How women and men spend their time on a daily basis
- How women and men use village spaces, infrastructure and utilities differently
- Gender dynamics within the village, at the community level
- Gender dynamics within the village, at the household level
- Women’s participation in leadership and decision making in the home and community
- Women’s participation in leadership and decision making related to the village upgrade consultations and planning process
- Women’s and men’s perceptions of the proposed upgrade interventions
- Women’s public safety in the village

### 6.2 Focus group discussions

Focus group discussions (FGDs) were conducted with both men and women to assess their different experiences, roles and perceptions. Four focus groups were conducted with women, and two with men; each FGD focused on different thematic and utilized a variety of approaches for gathering data related to gender dynamics in the village as well as different perceptions of the proposed upgrade interventions. Focus groups brought together men and women of different ages and backgrounds to gather a diverse range of perspectives. Focus groups aimed to have 8-10 participants at most, but some groups ended up with higher numbers due to the discussion participants inviting others they knew, as well as local leaders adding additional people to groups at the last minute without informing the field team.

### 6.3 In-depth interviews

Three additional in-depth interviews were conducted with women and girls of different ages and backgrounds, including adolescent girls, community health workers and widows/women-headed households, to dig deeper into key gender issues from their unique perspectives and gather individual feedback on the proposed interventions for the upgrade.

### 6.4 Summary of complete field data collection process

**Table 4: Summary of complete field data collection process**

<b>Data collection method</b>	<b>Target group</b>	<b>Thematic focus</b>	<b>Number of participants</b>
FGD	Men	Daily itinerary mapping	14
FGD	Men	Deep dive into norms, behaviours and gaps	8
FGD	Women	Daily itinerary mapping	9
FGD	Women	Gender community mapping	10
FGD	Women	Deep dive into norms, behaviours and gaps	13
FGD	Women	Women’s safety audit	6
KII	Women	Deep dive into norms, behaviours and gaps	1
KII	Women	Deep dive into norms, behaviours and gaps	1
KII	Adolescent girls	Deep dive into norms, behaviours and gaps	1

## 7. Key Findings

Under this title, the consultant need to explain the scenarios by using statistics/ data from the findings to clarify the issue or the best practices that can be documented. This comment is applied in all sub titles of this part.

### 7.1 Gender norms in the village

Gender norms in Ngaruyinka village broadly reflect the typical patriarchal roles and gender expectations that are commonly seen across the rest of Rwanda. Men are considered to be providers and leaders, and women's primary role is to remain in the domestic sphere and prioritize being a wife and a mother. Men lead when it comes to decision making in both the household and community, and women often feel uncomfortable speaking up, giving their opinions or disagreeing with others; when they do speak up, they do not feel their voices are valued or respected the way men's are. Details on these norms and roles across different areas of daily life at the home and community level are outlined below.

### 7.2 Gendered division of labour and unpaid care work

Feedback from focus groups and interviews with women and men clearly indicate a significant and unbalanced division of roles and labour within households and communities that runs along distinct gender lines. Both men and women report that women spend the majority of their time in the domestic sphere on unpaid care work, including cooking, cleaning, childcare (bathing, feeding, managing), washing laundry, fetching water and firewood/fuel, accompanying children to schools and health centres and running domestic errands. Men are expected to work outside of the home to earn money, but often struggle to find full-time employment, and most work in part-time or temporary roles for other companies or as individual contractors/entrepreneurs, such as carpenters or masons. Most women who earn some money on their own do so by selling agricultural produce in the market or along the roadside, and are expected to spend this money on household needs first and foremost, whereas men have much greater discretion over spending, and can choose to spend their income on themselves before considering the family's needs.

Younger women and adolescent girls also face barriers in this regard, reporting that small jobs available to young people are mostly dominated by young men, such as local construction jobs. If girls are able to access a paid job in such a role, they often face harassment and discrimination, including the heightened risk of sexual harassment and violence on the road to and from the work site. Jobs that girls and young women are expected to fill instead, such as nannies or housekeepers / cleaners for other homes, put girls even more at risk due to sexual violence from employers. Young women's lack of access to safe, paid work also contributes to their further victimization in the community from older men who exploit their poverty and economic vulnerability through transactional sex and sexual violence. The quote below best illustrates in vivid detail the complex, interconnected nature of the norms and circumstances that make women's and girls' lived experience in the home and at work uniquely disempowering.

*"Girls don't have access to money; we always have to ask our parents, even for anything small, like a candy, etc. We don't have access to small jobs to even get some small money for ourselves; girls are doing the vast majority of chores and taking care of siblings, or elder family members. The problem with small jobs is that you have to walk far to access them, and they often pay so little that it's not even worth the time. One of those could be working as a cleaner in someone's home, or a nanny, but that's also the place of biggest risk, because you get pregnant there; the men in the home will rape you and there's nothing you can do."*

*Many girls got pregnant in this village because of Covid; they were at home and had few opportunities, and men would take advantage of them, ask them to come to their homes, and sometimes rape them or coerce them. Some girls would be removed from school by their families, in order to go work and make money, because Covid was so hard financially. Young boys usually get construction work, carrying heavy loads, etc. but for girls there are often consequences; if you join a construction site, it's risky. If there are only one or two other girls there then the men are always making fun of you, harassing you, saying girls shouldn't be doing this. And that money is never yours, you have to hand it over to the family. Also, it happens a lot that men expect you to give them sex if they give you a job, especially with young girls who have become mothers, they are alone, abandoned by their families, and the men know this and exploit them because they fear they can't feed their kids if they don't get that job – this happens on construction sites as well as on the farms.”*

- young woman, research participant

Men rarely contribute to domestic work in the home even if they are not currently employed or working, and tend to have significantly more leisure or rest time than women do, due to the heavy burden of domestic responsibilities women are expected to manage. Both women and men report that men consider their parenting role to be primarily financial, and are not actively involved in the day to day activities of parenting or childcare in the home. Women report that the extremely heavy burden of unpaid care work has very serious consequences for women's physical, mental and emotional health and well-being.

*“It's very painful, it makes you sad... you're dirty all the time, you don't even have time to bathe, even if you had soap, you still feel dirty and sweaty.”*

- woman, FGD participant

*“It also makes us unhappy, we don't have time for friends, emotional support, etc. People lose weight, they're constantly stressed, depressed.”*

- woman, FGD participant

### 7.3 Financial agency and decision making

Households have to engage in a range of different activities in order to earn enough income for the family, including small side jobs for cash, part-time or temporary work, selling crops from their local plots, or engaging in small business such as running a local shop / kiosk or specific trades such as welding, carpentry, etc. Of those interviewed, all of the men reported having some kind of paid work, while only 3 women reported having access to paid work; when asked, all women responded enthusiastically that they would like to have access to paid work. Overall, women have very limited access and agency when it comes to finances and decision making, both in terms of being able to secure paid work or start a business, but also in terms of having control or influence over the money in their own households. Most women do not know the amount of money their husbands are earning; out of 12 women in a focus group, only 1 of the women knew the amount of money her husband was bringing into the home. In contrast, all of the men in the focus groups knew whether or not their wives had paid work, and the exact amount she was earning every month.

In terms of being able to control or influence where and how household money is spent, women have very little agency. Women report that men make decisions about money in virtually all cases, as this is



the general expectation based on the gender norms of Rwandan culture; in some rare cases, husbands will inform their wives of their plans for spending, but at the end of the day, the husband has the final say in how, where and why household income will be spent, saved or otherwise. In some instances, women can spend money on small things for the household, such as soap or small food items, but this typically involves women relying on whatever small cash they may earn selling vegetables or other goods on the road or at the market to cover those costs themselves. If women don't have any cash, which is often the case, they will ask their husbands. Women's overwhelming response is that, even when men do have cash in hand, they can often choose not to give some to the wife for household spending, making women and children in the home even more vulnerable. Quotes from participants below help to illustrate these circumstances in more detail.

*"Rarely, the husband will inform the wife he has money and ask her advice. Most times, the husbands will do what they want, buy things they want, even if it's not useful to the family. And if the wife says she disagrees, it doesn't matter – if the husband wants to spend it, he will do it, even if the wife does not want that."*

- woman, FGD participant

*"It's better to stay quiet; if you insist and ask too many questions it can lead to conflict. And then he can even get mad and withhold cash from you that he would normally give you for buying food. Men can withhold cash as a way of punishing you if they are mad at you. This happens a lot."*

- woman, FGD participant

Male participants tended to present a more favourable picture when discussing how financial decisions are made. Some men reported that husbands and wives have to discuss things together first, especially for major purchases such as livestock, land or other significant household investments. However, women reported that because men earn most of the income outside of the household and control how it is spent, they often make major household purchases on their own, without ever informing their wives.

*"If there is any conversation about it, the husband will tell the wife about it, they can discuss, but in the end he will make the decision. Otherwise, what is more common is that husbands will buy something and tell their wives afterward, or sometimes they won't tell them at all. It's not everyone, but it happens in many families here. It happens a lot where men buy land or other things, even get loans from banks, and the wife is not even involved; then there are legal issues and women get involved afterward, when it becomes a problem."*

- woman, FGD participant

*"When land is purchased, a lot of times, women are not involved; we don't even know about it, and sometimes the husbands can forge the wife's signature. Husbands can take our ID cards and do the whole transaction without us; the husband will tell the authorities that the wife agrees, and unless it's absolutely necessary for the wife to physically be there in person, the husbands can do whatever they want."*

- woman, FGD participant

When it comes to women being able to start their own businesses or work outside of the home to earn income, additional challenges arise. The heavy load of unpaid care work is a major barrier for women in this regard, as reported by both men and women in the village. Women also cite limited access to

opportunities, lack of self-confidence and a general lack of skills and experience as additional barriers to their economic independence. In addition, due to gender norms around money and business being the domain of men, women report that husbands create additional barriers for women and in general are not supportive.

*“Women are taking care of the home; even if they were offered jobs, maybe outside of the village or the region, they can’t take those jobs because they have to take care of the home. There is also the problem of a lack of start up capital to start that business. Some initiatives try to help women with start up capital but they don’t reach all women.”*

- man, FGD participant

*“We can’t easily use land for collateral to get loans to start businesses, unless the husband approves. There is maybe a 30% chance the husband would ever agree.”*

- woman, FGD participant

*“Depending on the husband, if he trusts his wife, then he might allow it; but otherwise they are very suspicious.”*

- woman, FGD participant

Women’s distinct, but not uncommon, lack of financial agency and decision making only serves to exacerbate their climate vulnerability.

#### 7.4 Permission and Mobility

Due to the gendered power dynamics between men and women in the home, women typically have to ask for permission from husbands to be able to go out or do other activities they want or need to undertake. Women have to move about during the day for various reasons, to fetch water, visit the market or accompany children, and must inform their husbands of where they are going each time they go out. For smaller tasks related to domestic work and childcare, women can move about more easily, but if the husband has alternate plans and wants them to stay home, they will have to rearrange their day in order to accommodate his wishes and plans. At the very least, women must always inform husbands of their plans to go out, and in many cases, they must also seek his formal permission to do so.

If women want to travel farther out to visit friends or family, or to leave the village for another purpose, they must plan this well in advance and ensure the husband gives his approval, especially since childcare plans must be put in place and men are generally not the ones to manage these responsibilities. If the husband says no, the wife cannot go ahead with her plans; if she were to do this, it would create conflict, and could even lead to violence. Husbands also consider that women will need money for traveling if she has to go beyond the village, and so everything must be planned well in advance so that they can arrange to provide her with cash, a situation that further highlights how little control women have over household income.

*“If he says no, then we don’t go. If we went, it would create conflict. Also, culturally we are expected to ‘respect’ our husbands and do what they say.”*

- woman, FGD participant

*“If they need to go far, it has to be well planned in advance; planning for the spending, transportation, giving gifts to those you will be visiting, etc. She can’t just wake up and go, men also have to give money to their wives for them to travel.”*

- man, FGD participant

Both men and women report that husbands use their financial power in the home to keep wives from going out or doing things the husband doesn’t agree with or want them to do. Men will refuse to give their wives money for transport if they don’t want her to go out, and women report having to be careful not to upset or offend their husbands in advance of a trip or a request to go out, so that he will not refuse them access to household income to make the trip.

*“Sometimes a woman may want to go somewhere, but you don’t feel comfortable with it; you will have to talk to her and convince her otherwise, so she might stay or she might go, but if she goes, there will be consequences after. It will create conflict.”*

- man, FGD participant

*“If I don’t want her to go there, I will definitely not give her the money for transport to go.”*

- man, FGD participant

*“If you have a trip planned, you have to be on your best behaviour so that he doesn’t get mad and refuse to give you transport.”*

- woman, FGD participant

Alternatively, both men and women report that husbands never have to ask for permission to go out or engage in activities of their choosing, and they never have to rely on their wives for income to access transport or risk having their plans cancelled.

*“We never ask permission, we just inform them. If the wife does not want us to go somewhere or do something, then she will say, “in future you can’t refuse me to go somewhere I want”; she will bargain with him. But she can never stop him. She might say she doesn’t have any money, to try to keep me there, but me as a man I will go find that money from somewhere else; that’s the difference, women can’t get that money somewhere else to go if they want, but men can.”*

- man, FGD participant

*“Men never ask for permission. It’s only men informing us, not asking for permission, and even then that is rare.”*

- woman, FGD participant

Women also report that men have much more freedom and control to spend household income on personal things, such as going to bars with friends to drink and socialize. All women reported that many men spend a lot of time drinking in their community, and will often become aggressive and violent towards those in their households, further damaging the family’s development.

## 7.5 Gender-Based Violence

Violence takes many forms, including physical, sexual, emotional and economic. Both women and men participants reported high levels of violence in the village, ranging from verbal abuse, domestic conflicts,

and street harassment to sexual coercion, marital rape and extreme intimate partner violence resulting in the deaths of women. In addition, economic violence is widespread, as demonstrated in the detailed feedback from men and women around financial control, decision making and paid work among men and women and between spouses. Women reported that in just the first nine months of 2021 alone (up to the time of the focus group), two women had already been killed by their husbands in Ngaruyinka village, beaten to death. Women shared additional stories of different women in the village also being attacked by husbands wielding machetes and hammers.

Reporting of violence is very low, which is not unusual in general or in the Rwandan context, even in extreme cases. The woman who had been attacked by her husband and hit in the head with a hammer asked other community members not to report what had happened. Women tend not to report for a variety of reasons, including being blamed for the violence, shamed or ostracized by others, and struggling to financially provide for their children in the husband's absence if he is arrested.

*"A husband attacked his wife and hit her in the head with a hammer; she asked them not to report him, but if she had, he would have been arrested."*

- woman, FGD participant

*"If it was less severe, like the husband slaps her, she might report it or not, but women fear that they will have no money if he gets arrested; men are the breadwinners, and if they are in prison then the wife has no money and has to bring him food every day while he is in jail."*

- woman, FGD participant

Due to women's significant economic dependence on their husbands, they are uniquely vulnerable in both scenarios; if women report violence, they risk not being able to feed their children, and if they do not report violence, they remain in abusive situations where they experience significant physical and psychological trauma, suffer serious and even debilitating permanent injury, or lose their lives entirely. Even for women who are widowed or single mothers and not living with a male partner, violence is an ever-present reality.

*"Violence affects the children, and the families. Women die, they are killed by their husbands. It destroys the family. This year, two women have died in this village from being beaten to death by their husbands. Last year, another man murdered his wife and abandoned her body in the home, and even abandoned the children, one who was even breastfeeding; he just left the kids behind with her dead body."*

- woman, FGD participant

*"It makes women so depressed, they can't work even if they did have a job. Overall, it destroys women's well-being. We haven't yet seen women committing suicide, but a lot of women are very depressed and not able to cope."*

- woman, FGD participant

*I think there is a lot of violence here, My house is close to a main road and I can hear women being beaten, yelled at, women screaming nearby in the night; I want to say this happens every day, but on average, it's at least about 5 nights a week. It's not safe to walk at night, because there are so many men here drinking all the time, day and night, so it's risky for women to be out at night, and even in the day. Compared to where I lived before, I have never seen or experienced this much chronic violence; the crazy things that*

*happen in people's households, women being killed, the harassment on the streets, it's very high risk here. I have thought about moving, but am still considering where to go next, and the potential safety risks of other places."*

- single mother, research participant

Girls and young women are also targets of men's violence in the village; adolescent girls are at a unique disadvantage due to their age, limited independence and agency, and economic vulnerability.

*"In general, there is very little safety in this village. Even before you got here today, there was a fight on the road in front of the bar there; many people came and it was a huge mess. There are a lot of drunken men around here. There is a term that men use here to refer to boarding school girls – they call them 'grasshoppers', because they go to and from boarding school, so when they come back to the community, the men say 'it's grasshopper season', and they try to have sex with them. Right now it's holiday time, we have a break from school, we should be able to go somewhere and see friends and play, but there is no safe space in the community, there is nowhere for us to go; we are secluded in the home, and this is also why there is a high pregnancy rate. Men invite girls to their homes because there is nothing else for those girls to do, so the men see this as an opportunity to take advantage of them. It's most often older men, even those who are married. Sometimes young men who have small jobs and make some small money also do this, or unemployed men who are sitting around the street usually catcalling women and girls; it is even those men who seem respectable but don't have work, so they ask girls to come home and 'have tea with them' and that's how it starts."*

- girl/young woman, research participant

#### 7.6 Women's and men's different uses and perceptions of village spaces in daily life

In order to understand how women and men spend their time on a daily basis and use village spaces and resources differently, community members mapped their daily itineraries as part of the baseline data collection process, and gave feedback on the positive and negative aspects of different activities in and around different village spaces. Their feedback reveals that men and women use many of the same spaces in Ngaruyinka village, but in different ways and to different degrees.

Men work outside of the home wherever possible, and have the option of moving around by moto, bicycle, car, bus or foot, whereas women stay closer to home and primarily travel by foot. If women need to travel farther distances, they rely more on bicycles (i.e., they pay a fee to ride on the back of a bicycle), whereas men tend to rely more on motos or cars. Women's reliance on getting around on foot presents unique vulnerabilities for them in terms of their safety in the village, particularly in light of the lack of street lighting in the village and reported high rates of violence. Due to the constraints on their time in any given day, women often choose to take the shortest routes to get to their destination, even if it means it may come with higher risk than other routes.

Women access the local market every day, and often multiple times per day, whereas men spend much less time at the market. Similarly, women are spending significantly more time per day fetching water and firewood or fuel for the home compared with men. Women spend significantly more hours in the home per day than men, managing domestic work and childcare, and while both men and women perform agricultural work, overall women spend more time on this task on a daily basis, as well.

Men's and women's perceptions of the positive and negative aspects of their daily activities in and around different village spaces are captured in the table below in their own words. While men and women have much of the same feedback on key problem areas (such as bad roads or the need for market improvements), issues that affect women and men differently in distinctly gendered ways are highlighted in **bold**. In addition, concerns directly related to the village upgrade intervention areas and/or climate change and resilience are highlighted in **green**.



**Table 5: Women’s and men’s different uses and perceptions of village spaces in daily life**

Village spaces / activities	Men’s perceptions	Women’s perceptions
<b>Market, food shopping</b>	<p><b>Positive:</b> We like that the market is close to our homes.</p> <p><b>Negative:</b> <b>The space is not renovated</b>, so we don’t have enough sellers there, because it’s not a nice / well equipped space; the supply chain is very low because of <b>the access road</b>; most of the products get to the market by bikes – <b>cars can’t access the market via road when the roads are especially bad</b> – so we have to rely on bikes; food preservation is an issue, food goes bad quickly because there are no areas for refrigeration, <b>this affects food security</b></p>	<p><b>Positive:</b> We like that it’s close to us, but it doesn’t have much to offer.</p> <p><b>Negative:</b> Not built for purpose; not enough to offer; <b>because it’s poorly constructed, people can’t use it easily and so it doesn’t attract many merchants</b>; it’s not a modern market – it’s dirty, the roof leaks, no walls, it’s not appealing for so many reasons; because it’s dirty – people don’t want to sell or buy there; <b>when there are heavy rains, they close the market, merchants leave</b> and people have to wait for them to come back; also the floor is muddy and unsafe; <b>the roads to and from are bad, so it’s difficult to get access</b> – and there’s not a huge consumer base here, so that, combined with the terrible market infrastructure, doesn’t give people an incentive to come here and bring more and better and different goods to sell</p>
<b>Schools</b>	<p><b>Positive:</b> None.</p> <p><b>Negative:</b> Most schools are outside of the village. The nursery school here is not in good condition; <b>we’re concerned about the school collapsing on the kids, especially during rainy season</b>. We need better schools and schools that are closer to us. <b>Roads to get to and from other schools in Kinyinya are also bad.</b></p>	<p><b>Positive:</b> It’s good that we have some access, and it’s not very far away, but the roads are the main issue.</p> <p><b>Negative:</b> <b>The roads are terrible, if it’s raining and we don’t have moto access we have to walk, or if you have small children you have to carry them, and it’s very difficult</b>; we don’t have access to school buses, <b>the bus leaves at 6:15 am from the bus station in Kinyinya, so that means we have to get up extremely early and escort the kids</b>; capacity of the school is too small, overcrowded, some kids sit on the floor, not enough chairs, if it rains you can’t hear anything with the tin roofs, and when it’s hot it’s so hot kids can’t focus; there are not enough school materials for all kids (pens, notebooks, etc.); nursery schools don’t have the right toys or tools for kids that age.</p>
<b>Health centres / hospitals</b>	<p><b>Positive:</b> The health centre (the Kinyinya health centre) is in good condition, we don’t mind it, the problem is getting there.</p> <p><b>Negative:</b> <b>Getting to and from the health centre, the roads are bad and dusty.</b></p>	<p><b>Positive:</b> It’s not very far away, it’s good to have at least some access.</p> <p><b>Negative:</b> <b>The roads here are bad and motos don’t want to use them, especially at night; traveling time is long on foot, especially for pregnant women</b>; you end up in worse condition than when you started, walking there and <b>the roads are exhausting</b>; <b>we put off going there if we can, because it’s difficult with the roads</b></p>

<p><b>Football pitch / community spaces</b></p>	<p><b>Positive:</b> None.</p> <p><b>Negative:</b> <b>In general it's not a good space, it's dusty</b>, there is lots of debris around there from the market, it's dangerous for kids.</p>	<p><b>Positive:</b> None.</p> <p><b>Negative:</b> The football pitch we have now is used as a community space, <b>it's not very useful as it is now though.</b></p>
<p><b>Agricultural work / kitchen gardens</b></p>	<p><b>Positive:</b> <b>It helps with malnutrition, to have a garden close to home</b>, and eating fresh produce that hasn't traveled miles to get here or wilted in the market.</p> <p><b>Negative:</b> We can only grow small items, like spinach, cabbage, green eggplants, carrots, etc.; but things that are actually nutritional, we can't plant those; <b>there is a lack of fertilizers, lack of nutritious soil, and lack of space; also lack of easy access to water, especially in dry season;</b> we have small plots, there is a lack of space</p>	<p><b>Positive:</b> <b>We have easy access to some food, it's convenient;</b> for some of us who rent, it's not our land, so it's like investing in something that is not your own, but we do have free and full access to that food we grow; sometimes we can rent land from others down in the marsh to grow some of our own food; but then you have to pay them in cash or harvest; depends on your agreement with the land owner</p> <p><b>Negative:</b> <b>Water is the main challenge; unless it's rainy season you have to buy water to water the garden and it gets expensive, and requires a lot, especially in dry season;</b> access to fertilizer is difficult; no cattle nearby so difficult to get manure, other things we would get are commercial fertilizers that we have to buy; not everything grows here because of the soil quality – we can only grow beans, casava, sorghum, cabbage, etc. - everything else we have to buy</p>
<p><b>Collecting water</b></p>	<p><b>Positive:</b> Nothing positive about the current system.</p> <p><b>Negative:</b> <b>Sometimes even the public pump does not have water at all, so we have to collect it downstream; sometimes we have don't have water for even 3 days,</b> maybe 10 in 100 people have access to piped water here, so if we want to drink the stream water we have to boil it, otherwise it's used for other chores; <b>people get sick from drinking that water even if it's boiled, and kids also get sick, worms, etc.; rainwater harvesting will help but we also need piped water.</b></p>	<p><b>Positive:</b> We're happy we have natural streams nearby, because it's always reliable; <b>the water kiosk is useful for those who don't have water in their homes;</b> it's closer than the natural streams.</p> <p><b>Negative:</b> Kiosk always has super long lines and you have to pay; <b>streams are only reliable source; most households don't boil the water, we just drink it as it is;</b> there are some cultural beliefs that stream water is cleaner than pipe water – because it 'comes from the land'; also charcoal is expensive, and it takes time to boil that water; <b>people do get sick, but they refuse to believe that it's from that water.</b></p>

<p><b>Fetching firewood/fuel</b></p>	<p><b>Positive:</b> Nothing really positive here, we all want to move to the use of gas.</p> <p><b>Negative:</b> <b>We all mostly use charcoal</b>, but trucks can't access the market, so sellers have to go the market in Batsinda by bicycle and bring it here, which then makes it more expensive for us to buy locally; so instead <b>we end up collecting firewood from the marsh, sticks from bushes, etc.</b>; sometimes we can also buy firewood in the market; <b>up the hill there is also a lot of debris we can use for fuel if we need</b>; 5% population here uses firewood, 75% uses charcoal, and the other 20% uses gas stoves</p>	<p><b>Positive:</b> Only positive thing here is that the market is closer, there is easier access than going all the way up to the top of the hill.</p> <p><b>Negative:</b> <b>For people who use gas, you have to go all the way to Kinyinya to get it;</b> for charcoal, we also have to go up to the top to get charcoal because the trucks don't bring them down; it's much cheaper to buy it from up top from the wholesaler, buying it from those few in the village who sell it is much more expensive and you have to buy in smaller amounts; <b>Firewood is scarce, difficult to find, not easy to use, we have to go far to find it.</b></p>
<p><b>Business / employment</b></p>	<p><b>Positive:</b> Nothing really positive here.</p> <p><b>Negative:</b> <b>Transport is difficult, the roads to and from where we work are a problem</b>; people who use computers for work, there isn't reliable electricity in our shops / homes; security issues – thieves, getting mugged, etc. - <b>this is most prominent at night because of lack of lighting; lack of lighting at night also makes it difficult to move around the village after dark, especially with bad roads; when it rains, we have flooding, which isolates certain areas; homes collapse, there's no proper space for people to shelter; water is not well channeled which damages roads even more and make it dangerous to walk, very slippery</b></p>	<p><b>Positive:</b> No positive feedback.</p> <p><b>Negative:</b> <b>Difficult finding startup capital to begin work; access to finance is an issue; finishing school is a challenge</b>, if you don't finish it's difficult to go back and get more education, but more education can help you get a better job, so it's a vicious cycle; <b>we all want to work but there's not a lot of incentive for people to do business in this area</b> so even starting something is a challenge; it would be good to have access to any kind of work, <b>even if you can escape the domestic work load, the opportunities are few</b></p>
<p><b>Meeting friends / leisure time</b></p>	<p><b>Positive:</b> <b>We leave the village for this and go into Kinyinya</b>; there are gardens, bars, restaurants, food and drink, etc.</p> <p><b>Negative:</b> It's too far away – we usually have to walk, or sometimes take a moto; <b>we would prefer if we had more community spaces here</b></p>	<p><b>Positive:</b> Usually we just meet at church or other worship places, or we'd visit them in their homes or ours.</p> <p><b>Negative:</b> <b>There are no spaces where we can meet in the community and socialize.</b> We can only meet at the market or go to the market together, but otherwise there is nothing. Sometimes we can leave the village to meet friends in Kinyinya, but not often, maybe once or twice a month at most.</p>

<p><b>Latrines, public and private</b></p>	<p><b>Positive:</b> Right now there is nothing positive.</p> <p><b>Negative:</b> <b>Not hygienic, either in the home or the public ones</b>, we want to be modern in this way, to have modern bathrooms. <b>When it floods, sometimes they collapse</b>, but others are okay.</p>	<p><b>Positive:</b> We don't have any proper public latrines at the moment.</p> <p><b>Negative:</b> <b>People who live near the market don't like having others always using their latrines, because if they fill up, that person can't easily build another one; seated toilets are harder to maintain, squat toilets would be better; paying someone to clean it must be there, someone to manage it, taking payments, etc.; we need changing tables for babies there, many merchants sell stuff and spend all day there, and they bring their children; most merchants at the market are women, because men can bicycle to other places and sell their things</b></p>
--------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 7.7 Women's and men's leadership and decision making at village level

When it comes to taking on leadership roles and participating in decision making processes at the village level, the gender divide here is significant. Feedback from focus group discussions as well as in-depth interviews with individual community members reveal that men continue to dominate and set the agenda in terms of leadership roles and community decision making processes, while women participate to a much lesser degree, and are overall less influential than men. Women and men reported that it is difficult for women to even attend community meetings in most cases, because they are always busy with domestic work and taking care of children; men reported that it is more the exception than the norm that women are present at such meetings. The main meeting women can attend is the Evening Forum of Families, which is intended to gather all community members together once a month at village level, to discuss community issues; this is a result of the expectation that women should be the primary caretakers and main parental figure for children in daily life, which unfortunately only serves to reinforce the status quo around men's lack of involvement in childcare and domestic issues.

*"The majority of these meetings are attended by men because women are busy; it's more the exception that women are there. Most decisions get made by men. And women are often attending the parents' meetings, they don't have much free time, so men end up making most of the decisions."*

- man, FGD participant

*"Men do most of the talking and deciding. The majority are men attending those committee meetings or community meetings. For the parents' evening meetings, these are mostly attended by women; they have now changed the name to 'household evening meeting' to try to pressure men to attend more."*

- woman, FGD participant

*"In most cases, women will talk to one another while sitting in the crowd, but not very often do they raise their hands and speak up, unless someone who is leading singles them out and asks their opinion; this typically only happens when they want to ask something about the domestic sphere."*

- woman-headed household, research participant

Even when women are present and participate, they generally only speak up if they are asked a direct question, and many of these questions or conversation points that are put to women tend to revolve primarily around domestic responsibilities, an area where men consider women to be able to have more relevant input. Due to gender norms around men being de facto leaders and women being discouraged from speaking in public, women are also more shy and less confident than men, so they do not speak up freely or share their opinions to the same degree. Women report that even when they do speak up, men will make the final decisions about what will be done regardless of women's input, in the vast majority of cases.

Men also tend to interrupt women quite often when they are speaking (a common phenomenon in patriarchal contexts that was also observed and directly experienced by the research team itself during the data collection process), and often ignore what women have to say. Throughout the baseline data collection, multiple women community members repeatedly expressed that they were extremely grateful and happy that a gender assessment was being conducted, where women were separated from men in such discussions and thus were able to speak more freely and share their opinions and ideas without feeling ignored, dismissed or uncomfortable with men in the room.

*"I am really thankful that you're doing these discussions and separating women and men in these discussions, because this allows women to speak more freely and be honest about what we experience and how the situation is; when we are mixed, everyone wants to make everything seem fine and great, and men interrupt women when we are talking, or they ignore us. It's not equal and we can't speak freely in that space."*

- woman, research participant

*"Since you are doing this gender assessment, then I feel that women's voices will be included, because you made a space for that to happen freely. Without the gender assessment, women's voices wouldn't really be involved at all, and more importantly, now that we have been really engaged, we feel more comfortable with the project and more at ease with speaking up."*

- woman, research participant

Interviews and discussions with adolescent girls and young women further echo these experiences and women's lack of meaningful involvement in key decisions and leadership spaces.

*"First of all, women don't attend most of these meetings. In my experience, men are making the decisions; women can sometimes give their opinions, but men are the one making the decisions. Women give opinions mostly when it comes to 'women's work' (water issues, childcare, etc.), and then maybe men might listen. But in terms of women being leaders or anything really major, men are the ones making the decisions."*

- girl/woman, research participant

Some men's perceptions of this situation illustrate their limited awareness of women's lived realities in this regard, with men reporting that there are some women leaders in other sectors nearby, and so women feel more confident to become leaders and to participate as community members in their own community, which is not the case reported by women. Men also indicated in different sessions that women are always included to some degree because of the government mandates around gender equality and the 30% minimum participation quota for women in decision making bodies, with the implication that this is sufficient to ensure women's presence and equal involvement. In Ngaruyinka village, of five local village leaders, two are women.

#### 7.8 Women's participation in the village upgrade committee

The evident imbalance in women's leadership and participation at village level is also at play in the village upgrade committee. Of the ten community members on the village upgrade committee, four are women. Men report that the committee was selected based on who was most capable, those with education and 'street smarts' (life experience), which by default would lead to men making up the majority of the committee, in light of existing gender biases related to men being natural leaders and their greater access to education and life opportunities overall compared with women. In a meeting with the Green City Kigali team and the village upgrade committee, when asked why there was not a 50/50 split of men and women on the committee, a male committee member spoke up and said that there is more than 30% women on the committee, thus the mandatory quota has been met and the situation is fine as it is. It is also worth noting that in this meeting, of all members present, men vastly dominated the conversation; only two women spoke up for the entirety of the meeting, and each of them spoke only once.

This perception of involving women in a tokenistic way to meet a government mandated quota was echoed in other discussions with men, and acts as a key barrier for women's voices and contributions to be seen as equally valuable, important and useful in all aspects of village life. One of the research participants who is involved in the village upgrade committee directly addressed this issue in an interview, sharing that after this meeting in particular, women on the committee had discussed amongst themselves how they had not spoken up and raised important issues with the Green City Kigali team in this meeting, because men in the room (particularly those in positions of local leadership) dominate the conversation, consistently interrupt women and only want to discuss issues on a surface level, rather than having conversations about deeper problems in the community, particularly if there are village outsiders involved in such meetings. This situation is a distinct red flag in terms of the village upgrade process moving ahead without reflecting the needs, views and experiences of women and girls in a meaningful way.

When asked about how the committee was formed, women reported that, like most other committees in the village, women were considered and informed only at the last minute, as an afterthought. Women also report that, though there are women on the committee, they do not have much influence, even if they do speak up, and men tend to be the final decision makers.

*"The information about the creation of the committee wasn't shared to women as extensively as it was to men; I didn't even know when I joined the meeting that it was a committee creation process. Most of these committees have few women, and women have low self-esteem, so they don't feel they can partake, and they are always involved at the last minute, without much information."*

- woman, FGD participant

*"I can't say that we haven't been allowed to participate at all, but most of the concerns, questions, changes, etc. have primarily been raised by men and the upgrade plans then changed to reflect that – even if some of these are things we also wanted, we didn't have a voice there. If we had a disagreement about a certain issue, sometimes the men would call us and try to persuade us of their views. Women's opinions mostly don't matter in these things; for example, if women didn't want something to happen, and the men did, it would go the men's way, and they can out vote us because they are more in the community leadership and on the upgrade committee."*

- woman, interview participant

## 7.9 Women's safety in the community

In addition to FGDs and interviews, a Women's Safety Audit (WSA) was conducted with women community members of different ages and backgrounds in Ngaruyinka village. This process involves women community members identifying different routes through the village and assessing the safety of each different neighbourhood area based on six different safety criteria: lighting, sightlines, movement predictors, neighbourhood risks, maintenance and overall design. This assessment considers women's safety in terms of violence in its various forms (physical, sexual, emotional, harassment, etc.), as well as additional safety risks related to petty theft, etc. Each area is detailed below with the accompanying assessment of its overall safety based on these factors. Numbered areas correspond with those on the map to give a better idea of the surroundings and set up of the area in question; area names are nicknames or reference points provided by the community members.





**Area #1 – Nursery school and immediate surroundings**

**Lighting:** No public lighting, no visible or sufficient street lighting from homes.

**Sightlines:** There are many places where a potential attacker could hide and various structures blocking sightlines (narrow corridors and footpaths with blind corners, large gate structure in front of the school courtyard).

**Movement predictors:** There are different paths/routes someone could take to escape a potential attacker, but they are narrow and hazardous.

**Neighbourhood risks:** There is a bar nearby where many men go to drink, even from very early in the morning. It faces the school and the main street and increases the risk of this area, however, overall it is not considered to be a high risk area in the village.

**Maintenance:** The area is not well maintained, there is a lot of erosion and crumbling infrastructure, seating, etc.

**Overall design:** The area is complicated to navigate, there is no signage to inform someone where to find certain places/services and how to get there, if they are not familiar with the village.

**Area #2 – Rutobo, just down the hill from the nursery school**

**Lighting:** No public lighting; only 3 homes on this route have a lightbulb to offer as street lighting, which is dim and insufficient for the need. The main footpath here is extremely narrow, treacherous and uneven; in the dark it is even more difficult to navigate.

**Sightlines:** Limited visibility here, even in the daytime. The main footpath has a banana grove on one side and homes on the other. There are many dark corners and spaces where potential attackers could hide.

**Movement predictors:** There are no alternative routes to take in this area until you reach the end of the narrow path. It would be easy for an attacker to predict the movements of an intended victim.

**Neighbourhood risks:** The only structures nearby are a few homes and a banana grove. This path is considered a high risk area in the village due to its isolation, lack of lighting and spaces where potential attackers could easily hide.

**Maintenance:** The area is not well maintained, and the footpath is extremely treacherous; community members traversing these paths at night could easily injure themselves. The precariousness of the path also makes it more difficult for an individual to run to safety if they face a threat.

**Overall design:** The area is comprised primarily of a long, narrow footpath; there is really only one way to move about.

### Area #3 – Minani, near open field in village centre

**Lighting:** No public lighting; only one home at a distance has an exterior lightbulb, and there is a tree nearby that can block the light from this one bulb. There is an open field in the middle of the area which makes the area darker and riskier at night.

**Sightlines:** Limited visibility here, especially at night. There are numerous bushes, shrubs and trees in all directions that block sightlines; including fences made of brush that limit visibility.

**Movement predictors:** There are clear alternate routes here in 3 directions, but the uneven ground makes it difficult for someone to quickly and safely escape a dangerous situation.

**Neighbourhood risks:** There are homes nearby but they are far apart and the large empty field in the middle of the area creates an additional risk, particularly at night. There is almost no lighting, even from homes; this area is considered a high risk area.

**Maintenance:** The area is not well maintained, and there is a lot of erosion causing hazardous footpaths and streets.

**Overall design:** There is no signage or clear direction of pathways; it's not easy to find your way around.

### Area #4 – Salon

**Lighting:** No public lighting; there are a few homes here that have lightbulbs outside but community members report that they don't work.

**Sightlines:** Limited visibility here, winding footpaths and lots of trees in the area blocking sightlines. There are many places where someone could hide, and there are often people around this area.

**Movement predictors:** There are only two narrow corridors in this area where someone could escape a potential attack.

**Neighbourhood risks:** This area is not considered a high risk area compared to other parts of the village. Houses are closer in proximity here than in other areas.

**Maintenance:** The area is not well maintained, it is considered a 'dump site' for community garbage, there is a lot of plastic waste about.

**Overall design:** The design of this area is very confusing, and pathways out of the area are not easily visible. There is no public signage.

#### **Area #5 – Underneath HV lines**

**Lighting:** No public lighting; there is one bulb from a nearby home which provides insufficient lighting.

**Sightlines:** Limited visibility here, there are farming plots nearby and community members report that visibility is very poor and the area is high risk when crops are high. There are many other trees and shrubs that also limit visibility.

**Movement predictors:** There is only one pathway out to the main road, but it is not easily visible.

**Neighbourhood risks:** There are some homes nearby, and empty plots for farming. There are no bars in the area. This place is considered a high risk area when crops are high, allowing for more places for attackers to hide, very well camouflaged and close to the pathway.

**Maintenance:** The area is not well maintained, pathways are not clear and there is a lot of erosion.

**Overall design:** The design of this area is very confusing, and pathways out of the area are not easily visible. There is no public signage.

#### **Area #6 – JMV (neighbourhood bar)**

**Lighting:** No public lighting; there is one outdoor lightbulb over one of the bars (there are two bars side by side in this area). The lighting is dim and insufficient for the space.

**Sightlines:** There is limited visibility here, with lots of trees in the area blocking sightlines, and this becomes more of an issue when the crops have grown high. There are many places where someone could hide, and there are often people around this area due to the bars.

**Movement predictors:** There are some alternate routes here, but they are not clear; the main pathway is deeply eroded down the middle due to heavy rainfall and very difficult to navigate, even in the day time.

**Neighbourhood risks:** This area is considered a high risk area due to the two bars nearby.

**Maintenance:** The area is not well maintained, there is deep erosion on the main footpath, and community members report that these paths never get repaired; the main route/footpath in particular is reportedly used as a gutter to channel rain water.

**Overall design:** The layout of the area is confusing and community members report that it only makes sense to those who have lived in the village for some time. There is no public signage to indicate different pathways or services. Even the two bars here are not externally marked and could easily be mistaken for someone's household.

#### **Area #7 – Market section 1, along main access road**

**Lighting:** No public lighting; there are a few homes here that have lightbulbs outside but they are not sufficient for the need.

**Sightlines:** There are many places here (blind corners, narrow footpaths, various structures) where potential attackers could hide.

**Movement predictors:** There is only one main road that runs along the bottom of the village near the marshlands, community members report that someone would have to run up the hill on a narrow footpath to find help if you were at risk; the footpaths leading down to the market are deeply eroded and often packed with uneven sandbags, making movement difficult and prone to injury, particularly in the dark. It would be easy for the attacker to predict your movements.

**Neighbourhood risks:** This area is considered a very high risk area, due to the amount of bars nearby, as well as different shops selling alcohol and people congregating on the roads and near the local shops. There are four different bars in this area.

**Maintenance:** The area is not well maintained and does not feel cared for.

**Overall design:** There is no public signage here to guide people, and one main road going in and out of the village.

#### **Area #8 – Market section 2, along main access road (main vegetable market site)**

**Lighting:** There are two single lightbulbs along the top of the market stall structure; there is no other public street lighting and few shops nearby have any outdoor lighting.

**Sightlines:** There are many places here (blind corners, narrow footpaths, various structures) where potential attackers could hide.

**Movement predictors:** There are no clear and visible alternative routes aside from the main road, and the set up of the various shops and structures create many blind corners.

**Neighbourhood risks:** This area is considered a very high risk area in the village. There are many bars and shops selling alcohol nearby, and community members report that there are often groups of drunk people around, and many fights that break out as a regular occurrence.

**Maintenance:** The area is not well maintained and does not feel cared for; the road is quite eroded and creates a significant risk in terms of tripping and falling, injuring yourself, etc.

**Overall design:** There is no public signage here to guide people, and one main road going in and out of the village.

#### **Area #9 – The Corridor**

**Lighting:** There is no public lighting along this main corridor, which is narrow and dark. Only one home has an outdoor light for this entire area.

**Sightlines:** There are many places here (blind corners and narrow footpaths running perpendicular to the corridor) where potential attackers could hide, as well as various trees and shrubs that limit visibility.

**Movement predictors:** There are not many clear or visible alternative routes along this pathway, but community members report this area has more homes nearby where you could potentially seek help if you were at risk.

**Neighbourhood risks:** This area is considered the most high risk area in the village. There is one bar nearby (as well as those along the main market road) and the path is often used by village residents to access the market area.

**Maintenance:** The area is not well maintained and is difficult to navigate on foot.

**Overall design:** There is no public signage and many confusing smaller pathways that intersect with the main corridor.

#### **Area #10 – Area just above the Corridor**

**Lighting:** No public lighting; none of the nearby homes have outdoor lights.

**Sightlines:** There are many places here (blind corners around houses, bushes, trees) where potential attackers could hide. Sightlines are not clear.

**Movement predictors:** There are a few alternative routes in this area but they are not clear unless you are very familiar with the area.

**Neighbourhood risks:** This area is not considered a high risk area in general, but it is riskier than other areas due to its close proximity to the Corridor.

**Maintenance:** The area is not well maintained and there is quite a lot of plastic waste and garbage along the ground and pathways.

**Overall design:** There is no public signage here; it is not considered easy to find your way around the area unless you are well familiar with it already.

Women had additional commentary on the lack of public lighting in the village and surrounding areas. Women reported that the village at night is very unsafe, and isolating. Access to and from the village after dark is difficult and transportation is hard to find. Even though the community is expected to provide some outdoor lighting, especially for those homes on the roads and pathways, it is far from sufficient. After the sun goes down, most women do not leave their homes or walk about the village. At the top of the hill where housing is scarce, the landscape is dark and isolated; there are often robberies that happen in that area, after dark or early in the morning before there is daylight. Farmland areas are also dark and unsafe, there are no streetlights or houses nearby; women also report that the lower exit road is also unsafe, it is a large space with a lot of empty fields and no lighting.

In light of the safety insights gathered in the WSA as well as focus groups and interviews for the target community in Ngaruyinka village, it will be critical for the overall approach to the village upgrade to consider and meaningfully respond to women's and girls' unique vulnerabilities and experiences. In particular, the aspects of the village upgrade that relate to improvements in roads and footpaths, improved community spaces and street lighting in the village should take into account the high risk areas and specific factors of risk that have been highlighted by community members in this assessment.

In addition to engagement made for women in Ngaruyinga village, the project will also get support from NGOs that help men on masculinity and addressing SGVB which will include targeted outreach to mobilize their participation in household and parental responsibilities to ease women's responsibilities and sensitization on the importance of fair access and control of resources, including income. The engagement of community leaders and women and men community influencers to further promote equal and fair control of resources between men and women will further mitigate the risk of men taking over control of incomes earned and targeted for women. Non-governmental organizations (NGOs) and community-based organizations (CBOs) were engaged and committed to be sources of local knowledge, sounding boards for project design and mitigation, conduits for consulting with sensitive groups, and partners in planning, implementing, and monitoring various project-related programs. The Project will actively engage with Project Area, national, and provincial NGOs for potential collaboration on livelihood and vulnerable programs.

## 8. Sex-disaggregated feedback on proposed interventions

In separate groups, women and men in the target community were asked to provide detailed feedback on the proposed interventions for the village upgrade. The table below captures their diverse perceptions and concerns related to each intervention area and highlights areas in need of consideration for the village upgrade process; men’s and women’s perspectives are presented below side by side to help illuminate the areas where their views overlap as well as where they differ.

**Table 6: Sex-disaggregated feedback on proposed interventions**

Intervention area	Feedback from women	Feedback from men
<p><b>Transportation / mobility – improving roads and green rights of way</b></p>	<p><b>Perceived benefits:</b> Improved access to the village and from the village to Kinyinya, i.e. being able to use moto taxis, transportation will become easier; walking distance will shorten because the roads are better; costs for things will decrease, both in terms of transportation for the community, but also the costs for what women need to buy locally</p> <p><b>Concerns/drawbacks:</b> People having to move from their homes to make room for new / improved roads.</p> <p><b>Questions:</b> If people are moved, will there be compensation for those families?</p>	<p><b>Perceived benefits:</b> Better roads makes access easier, travel time decreases, motos will be cheaper because the roads won’t be as rough and take as much time; the public lighting will also help with security and robberies; there will be improved access to the market, which should bring new and better vendors; also an improved connection to the rest of the city. Things will also be cheaper for the community because access isn’t so difficult; vendors usually add more costs for transport, so everything costs more; this will help people to save money.</p> <p><b>Concerns/drawbacks:</b> There is a concern is about roads made from cheap materials that won’t last. Another drawback is that there are no roads within the village to be able to handle trucks with heavy loads, so if someone is building their home / other buildings, they can’t get a big truck close to the site, they have to come to the road down below and transport everything else by foot / bicycle, etc.</p> <p><b>Questions:</b> Will the roads be paved with long-lasting materials? For the bicycle lanes, can they be widened to bring cars in? Some people have to park their cars far from their homes, so it would be good to have an access road within the village, if at all possible.</p>
<p><b>Stormwater management – improved stormwater management systems / gutters</b></p>	<p><b>Perceived benefits:</b> It will help prevent erosion, walking paths will be safer and village will be cleaner; it can also reduce arguments between neighbours, which sometimes happen when someone throws their waste water in the street.</p> <p><b>Concerns/drawbacks:</b> None.</p>	<p><b>Perceived benefits:</b> Proper water management will be positive for the community; normally water is just running down the hill freely; it destroys property, floods garbage down the hill, creates chaos; it destroys existing roads and footpaths; most people in the community don’t have the personal resources to improve this situation.</p>

	<p><b>Questions:</b> None.</p>	<p><b>Concerns/drawbacks:</b> There is still a challenge around flooding in the marshlands, how could this be better mitigated?</p> <p><b>Questions:</b> What is the sustainability of the green approach? What are the gutters made of?</p>
<p><b>Water supply – expansion of WASAC water supply, rainwater harvesting, filters for households</b></p>	<p><b>Perceived benefits:</b> WASAC water access will help to reduce the physical strains of fetching water, and also help to reduce security risks by not having to go out on bad roads, or go out in the dark, etc. to fetch water.</p> <p>Rainwater harvesting will also be very helpful when WASAC water isn't reliable, without having to collect water at streams, or buying it from the kiosk. Women do the vast amount of fetching water.</p> <p>Education on household water treatment will help to save money from buying charcoal to boil water, reduces waterborne illness, and provides easier access to drinking water.</p> <p><b>Concerns/drawbacks:</b> None.</p> <p><b>Questions:</b> None.</p>	<p><b>Perceived benefits:</b> Having access to WASAC water is helpful. Rainwater harvesting is also good because it doesn't cost anything. It will improve hygiene in the household, save time from fetching water, improve people's health; household water treatment methods will also be helpful; if there is clean water in the home then people won't spend the time walking to the streams.</p> <p><b>Concerns/drawbacks:</b> It's good to have WASAC, but it costs money, so not everyone will be able to afford this.</p> <p><b>Questions:</b> Is there a way to improve stormwater capture and treat that water to be used in the home?</p>
<p><b>Sanitation – Biogas system at the market, education on household latrine improvements</b></p>	<p><b>Perceived benefits:</b> A biogas system could be useful but it's not very clear how it could work and whom exactly will benefit. Education on latrine improvements in the home is also valuable, so that households don't have to keep digging new pits, they will eventually run out of space.</p> <p><b>Concerns/drawbacks:</b> None.</p> <p><b>Questions:</b> More information about the proposed biogas system and its benefits, etc. would be useful.</p>	<p><b>Perceived benefits:</b> Improving latrines will help everyone. If the biogas approach is used, people will not be familiar with it, but they will learn with time, and it can be beneficial.</p> <p><b>Concerns/drawbacks:</b> Possible challenge is raising awareness and doing proper training, the community will need targeted support.</p> <p><b>Questions:</b> None.</p>



<p><b>Solid waste management – Community composting, neighbourhood waste collection point, recycling collection stations</b></p>	<p><b>Perceived benefits:</b> It will be good for cleanliness in the home and village; the compost will be useful for the farmers; not having trash on the crops or on the streets will be good.</p> <p><b>Concerns/drawbacks:</b> It might pose a problem for those who live farther away; there may also be challenges around separating items in the home, having enough bags to be able to separate properly; there is also a problem with having enough space for all the bags, and women will be the ones doing all this work in the home.</p> <p><i>Potential solution:</i> Households could have two bags only – one for organic matter, one for all other things (glass, plastic, etc.), and then separate the mixed waste bag at the site.</p> <p><b>Questions:</b> None.</p>	<p><b>Perceived benefits:</b> Waste management will improve the general cleanliness of the public spaces; at the moment people throw their garbage anywhere. Composting will help with the agricultural work and kitchen gardens for fertilizer, and the site is a good location, away from houses.</p> <p><b>Concerns/drawbacks:</b> Make sure it's mandatory by the local leaders for people to take their trash down to the collection site, so that they are not still throwing it on the road. Sorting garbage and recyclables are different; organic matter is usually used for farming, but people throw plastics, bottles, etc. on the ground. Some people already know about sorting and recycling, and other places with garbage collection require sorting, so it's not entirely new; the local government can help in sensitizing people to do so and to understand how to do it.</p> <p><b>Questions:</b> None.</p>
<p><b>Energy and lighting – Solar PV, improved cook stoves, education around energy efficient lighting and appliances</b></p>	<p><b>Perceived benefits:</b> For solar street lighting, this will be very good for security and it is much needed. Regarding improved cook stoves and energy efficient lighting – women feel biogas/biofuel is better than gas because gas can be more hazardous in the home; biofuel pellets will be useful and help women save time with cooking, as they don't need to wait for charcoal to light; biofuel stoves could also improve health issues from charcoal smoke, which affects women and children the most.</p> <p><b>Concerns/drawbacks:</b> The problem with solar street lighting is that it's solar, it's often dim and unreliable, and it will turn off at some point when the energy runs out.</p> <p><b>Questions:</b> What can be done about the significant drawbacks of relying on street lighting that is solar powered only? Can mainline power be factored in as a back-up system?</p>	<p><b>Perceived benefits:</b> Street lighting will be very positive, especially within the community on the footpaths, not just on the main roads. Regarding improved cook stoves and energy efficient lighting, education around the use of these will also be beneficial, as long as they are cost efficient.</p> <p><b>Concerns/drawbacks:</b> Consideration of solar power – will there be back up electrical access? If the sunlight is not strong, then the light will burn out quickly and for half the night the lights will be off.</p> <p><b>Questions:</b> Can the streetlights be powered by REG if the solar finishes?</p>
<p><b>Community facilities – TVET centre, improved football pitch, playground for</b></p>	<p><b>Perceived benefits:</b> The <b>market upgrade</b> will make a big difference for women; the market itself will improve as a result of the roads being improved, it will attract better and more vendors, resulting in improved food access and nutrition; also for</p>	<p><b>Perceived benefits:</b> It will be very positive to have <b>recreational space; sports fields</b> are almost always only in schools, so they're not accessible to the community. Having a proper <b>playground</b> will be good, too, right now children spend a lot of time at home because there isn't much for them to do here.</p>

<p><b>children, market improvements, new latrines at market</b></p>	<p>vendors, it will provide more jobs, and there may be a reduced need to travel far to other markets like Kimironko.</p> <p><b>TVET</b> – The proximity is very positive, it will help create jobs and push people to get better educations; women want to also learn tailoring, aesthetics, etc. and women will be able to be sensitized to the value of higher paying jobs, too, (such as welding, carpentry, masonry, etc.), since they live so close to the TVET centre; there could be community advocacy for promoting women to do those jobs that men only do now.</p> <p><b>Playground</b> – This will be very good for women because they end up looking after children a lot; a playground would give women more time off from childcare, especially if the playground is safe.</p> <p><b>Football pitch</b> – Women are keen on sports, despite stereotypes about this, they also play sports. If women had more access to spaces for sports, they would play sports more.</p> <p><b>Latrines at the market</b> will be very useful. They will create jobs for the people who will be hired to clean them, and then other community members can stop using the latrines at private homes near the market, which creates a burden for those homes; proper latrines are also important for women’s hygiene, during menstruation, etc. so that women don’t have to go back to their homes to change pads, etc.</p> <p><b>Concerns/drawbacks:</b> Women really want a <b>community garden</b>, a space for people to relax in a nice place, with grass and trees, etc. Women need resting space, not just spaces that are mostly designed for children or for shopping; women would also like anti-harassment campaigns so men don’t harass them in those spaces.</p> <p><b>For market latrines</b>, they need to be well managed, properly maintained, and people should pay a small fee to use them so they can be kept clean and tidy. They should also have changing tables for women who have babies, since most of the merchants at the market are women.</p> <p><b>Questions:</b> How will they be managed?</p>	<p><b>TVET</b> – having the TVET close by will be good, the closest one to the village is very far away, this will help improve youth employment and young people starting trades, etc.; they would like to see trainings in construction, welding, electrical, mechanics, etc.</p> <p><b>Market improvements</b> are much needed, especially for merchants to lock their stuff up when they go home, this will also improve the number and quality of vendors, which will help improve the local economy.</p> <p><b>Concerns/drawbacks:</b> Even though the school is not included, it would be good to consider how it could be improved.</p> <p><b>Questions:</b> None.</p>
---------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 9. Summary of Gender Issues and proposed solutions

There are three key gender-based themes that influenced the design of the Gender Action Plan

**a. Change negative gender and social norms.** The most profound barrier for this project is norms about the roles of men and women. Whilst the Government of Rwanda has made many advances and has implemented many policies to achieve gender equality, particularly in national-level representation and inclusion, patriarchal privilege and decision-making remains embedded in both rural and urban society (IUCN, 2021). The consequences of this for this project is far-reaching. Men are generally seen as the head of household with the decision-making powers over all assets, resulting in male appropriation of household and farm or property-based assets (IUCN, 2021; Kiyani et al., 2017). Though female headed households face the same issues and challenges as male headed households, they are disproportionately impacted because of prevalent gender inequality issues (GMO 2017). Men in the Ngaruyinka village are positioned to be significantly more involved in programs that result in monetary benefits, such as fern clearing, casual labor, and construction projects. Although under Rwanda law, sons and daughters receive equal inheritance rights (Law/nº 22/99 of 12/11/1999) the focus groups highlighted that due to cultural practices, parents favor sons in land inheritance, leaving young women in a position where they depend on marrying a man to gain access to farmland; without a formal marriage, these women have no land or asset tenure. Broadly, these gender and social norms leave most women with little decision-making power and no real control over assets. The threat of sexual and gender based violence (SGBV) at the household level where women try to assert independence and achievement is high.

As a result, this program will focus heavily on social and behavior change communications (SBCC) as a means to positively change perceptions towards gender equity. Community members, including community leaders and women and men community influencers specifically will be targeted for sensitization on gender equity in order to shift their attitudes and to build a conducive environment for women to be able to participate in project activities. Women have been engaged in the development of this project to ensure time constraints, work burden and reproductive responsibilities do not impede their ability to engage in the various activities designed by the project. Women will be regularly consulted throughout project implementation to ensure they are able to actively participate in project activities and activities take place at times which are convenient for them and at locations that are safe and contextually appropriate. Furthermore, a fair remuneration will be offered to enable women to cover household expenses and save for future investments.

Lastly, the project will clearly explain participant selection, intended benefits and how participants can help monitor benefits and risks and reduce risks if necessary, including reducing the risk of men taking over control of incomes targeted for women. The project will have a safe, accessible Grievance Redress Mechanism (GRM) for all project stakeholders, particularly women, to access to pursue redress as needed. The project will also collaborate with existing Isange One Stop Centers in the project area in GBV prevention and immediate assistance to victims. All project staff will be trained and project beneficiaries informed on the purpose and use of the GRM, including reporting gender-based violence. The project will ensure confidentiality of the information and identity of the complainant. The grievance process will include options for victims to remain anonymous which will add a layer of protection for individuals who may be subject to gender-based violence. Throughout project implementation, project staff will disseminate information to beneficiaries on how they can use the GRM and solicit feedback on how the mechanism can be improved if needed

**a. Provide access to skills building, leadership and programmatic inclusion.** Because of existing gender norms, there is much to do to build technical skills of women in the project area to be able to participate in

the project. In addition to that, finding women leaders and building their leadership skills to be at the forefront of urban gender equity is crucial for addressing the root causes of women's exclusion in land and asset use planning and decision-making. This project will also ensuring that women play a strong role at all levels of climate programming in the country is important. Thus developing professional networks and internships to provide opportunities to strengthen leadership and technical skills will be incorporated into the program.

**b. Facilitate women's financial autonomy.** In order to support women in Ngaruyinka village to capture financial benefits of this project, this project will incorporate three activities: financial skills building, support in joining cooperatives; and facilitating access to entrepreneurship through financial/entrepreneurship training, access to village savings/loans and small grants, and mentoring. The project will ensure all trainings are gender-responsive and inclusive. Gender considerations will be integrated into training curriculum, content and delivery methods. Flexible training schedules and convenient venues will be selected to accommodate women's needs. Staff in charge of gender aspects will ensure gender mainstreaming and ensure the project addresses barriers to women's participation. Training will also use participatory approaches to create an inclusive learning environment and incorporate components on women's empowerment and leadership development, promoting gender equality and active participation. By facilitating independent access to financial services, women's income can be managed independently until shifting norms and household situations reach gender equity for households in adapting to climate change. Within the project, microenterprise, access to finance, urban agriculture, and poultry farming, carpentry, trading in the new constructed market were chosen as key activities because they are feasible livelihoods within the target households and help strengthen resiliency of the rural economy.

## 10. Youth Analysis and Key Issues

According to the Fifth Rwanda Population and Housing Census there are 3,595,670 persons aged between 16 and 30 years living in Rwanda, out of a total resident population of 13,246,394 which constitutes 27.1% of the total resident population of the Country. The youth population consists of 1,767,063 males and 1,828,607 females who are slightly more than males.. The pattern is similar in other population groups, whereby the youth population in Rwanda remains predominantly rural, with 2,431,776 living in rural areas, compared to 1,163,894 in urban areas (Table 3. 1). The majority of the youth reside in the Eastern Province (942,370), followed by the Western Province (757,749), Southern Province (746,908), and Kigali City (584,290).

The Youth Assessment for this project highlighted key priority areas that youth identified for achieving their goals:

- Livelihoods and skills development for productive self-employment activities
- Education and skills for entering into the formal work sector
- Reproductive autonomy and health to avoid early pregnancy which is a key hurdle towards economic self-sufficiency

As a result, 2 key topics influenced the action plan:

- a. Access to skills building.** Many youth attend schools, but training in practical financial management and entrepreneurship. This program intends to target youth for diversifying their skill sets and strengthening their resilience to adapt to climate change.
- b. Youth leadership and Programmatic Inclusion.** Many youths voiced their concerns over not being included in decision-making processes and programming, resulting in key stakeholders not being

engaged in civil society. In order to engage the new generation of urban entrepreneur and consumers, this project will identify and work with youth leaders in the Ngaruyinka village to use Social and Behavior Change Communications (SBCC) to engage youth to benefit and support long-term financial initiatives. With youth involved in decision-making processes, innovative ideas to involve youth with best practice on government lands and to get youth to appropriate long-term thinking through off-farm initiatives as future investments.

## 11. Internal program considerations

In addition to programmatic activities with women and youth, this project will also have an internal focus to ensure best practices. These include:

- a. **Build partnerships.** This GCF project provides a unique opportunity to engage civil society at national and local levels. The team will work with men's, women's, and youth organizations to build their capacity and facilitate their engagement with project beneficiaries and local government actors.
- b. **Gender and Diversity training.** Training will be an important component of this project. Building online training modules that can be viewed across Ngaruyinka village, and using new platforms like WhatsApp to communicate with project staff will ensure that static, one-off training is avoided.
- c. **Staffing.** Diversity and inclusion are important for the project, and hiring practices at all levels of the program will be reflected in hiring policies. The program management unit will hire a full-time dedicated gender expert and associated costs are included in the project budget. This staff will participate in all management meetings to support inclusion goals across the project, and will lead and oversee the implementation of the Gender, Youth, and Social Inclusion Action Plan. Another key role of this position will be to engage civil society partners, particularly women's, men's, and youth groups to build capacity and increase the sustainability of achievements during the entire project timeline. Furthermore, this staff responsibilities include reviewing site specific barriers faced by women to participate in project activities, ensuring these barriers are addressed in order to support full participation of women, ensuring gender equity in all project activities and where needed help women access the Grievance Redress Mechanisms to pursue redress and connect women with Isange One Stop Centers in the project area to prevent gender-based violence and provide immediate assistance to victims.
- d. **M&E.** Many stakeholder meetings highlighted the lack of community engagement as a key reason for project failures in the past. This project will incorporate suggestions from our stakeholder engagement meetings to ensure best practice is followed. This includes not only deeper local government engagement but also using a rights-based approach to ensure that communities are at the heart of planning our interventions. Targets for youth and gender are incorporated into the Gender and Youth Action Plan and are set to ensure women and youth are equally targeted where possible and encouraged to actively participate. Exceptions include situations where group composition, such as government agents or community leaders, are outside the project's control or the activity solely targets men, such as masculinity sessions held with men to improve gender equity in program participation and benefits will take male participants several weeks away from their homes.
- e. Continuous gender assessment and case study development

Based on the experience and lessons learned from implementing the \$32 million, six-year GCF project "Strengthening Climate Resilience of Rural Communities in Northern Rwanda," we will employ key strategies to monitor the implementation of gender aspects, particularly the Gender and Youth Action Plan. An annual

Gender and Youth Assessment will be conducted to capture the implementation status each year, document key gaps to address in the following year, and highlight success stories or case studies from each implemented project. This assessment will specifically involve:

- Assess gender considerations in all project activities against planned targets outlined in the Gender and youth Action Plan.
- Create detailed case studies showcasing best practices and lessons learned in integrating gender considerations across diverse project activities.
- Integrate insights from case studies into broader project recommendations and propose adjustments to activities based on gender and youth-related findings.
- Facilitate stakeholder discussions with project beneficiaries to assess the adoption of gender-responsive approaches in project implementation.
- Assess the impact of the project on women and youth empowerment through case studies highlighting key activities.
- Review the implementation of the project Gender Action Plan and recommend improvements for future project phases.

Our experience with the Green Gicumbi project has allowed us to effectively implement the Gender Action Plan and identify gender gaps that can be promptly addressed in subsequent project activities. We believe this approach will ensure that this upgrade project is carried out in the most gender-sensitive manner.

## 12. Women's Perspectives: Shaping the Gender Action Plan

In light of the tremendous gender barriers that women and girls face in Ngaruyinka village, ensuring their full and equal participation and influence in the village upgrade process is paramount for the success and sustainability of the project and the well-being of the community overall. When asked about the kinds of support that would help them to equally access, participate in and benefit from the village upgrade, women and girls offered the following ideas and suggestions, which have further informed the design of the gender action plan and shaped the distinct thematic areas for intervention. Concrete activities put forth in the Gender Action Plan are further informed by best practice in the sector and tried-and-tested successful approaches to gender equality and women's empowerment, participation and leadership in the Rwandan context.

- Ensure that women have a safe space to voice their opinions and influence decision making processes
- Ensure that women are more equally involved in the village upgrade committee and that their contributions are meaningfully included in the decision making process
- Provide coaching and training for women in the village, to be able to claim their rights and engage in leadership roles and activities
- Sensitize the community to gender equality and violence, and the rights of women and girls; this is considered crucial for women's participation and involvement in leadership
- Ensure that jobs made available in the process of the village upgrade are as equally available to women as they are to men, and that women do not end up occupying the lowest level jobs at the lowest pay grade
- Invest in community sensitization around TVET education, to engage and empower women to take on trades that are higher paying but typically male-dominated, such as carpentry, welding, mechanics and masonry
- Don't assume that women will jump at available opportunities without additional support and

capacity building; women reported that high levels of trauma and emotional distress and low self-esteem among women in the village will prevent them from stepping forward if they don't receive additional support or capacity building

### 13. Conclusion

It is clear there are significant and harmful gender inequalities in Ngaruyinka village, and many of them can be tied directly to the degree of climate vulnerability women and girls face. Women's lack of free time, limited agency and their extremely constrained ability to be economically independent puts them at greater risk, as they overwhelmingly lack the social and financial capacities and resources to be able to cope effectively with the impacts of climate change, such as poor crop yields or houses being washed away by floods. Their significant lack of financial control and decision making power in the household leaves them and their children economically and socially vulnerable to the priorities, perspectives and decisions of others, particularly husbands and male leaders. The significant violence and discrimination they experience as part of daily life further diminishes their self-esteem and overall health and well being, inhibiting their already limited capacity to be able to earn their own income and respond to the various challenges that climate change presents across different areas of life, including food security, poverty, healthcare and climate-related disasters. Further, their considerable lack of influence and limited participation at the community level means that effective responses to climate change impacts are very likely to be designed and implemented without the needs, perspectives or positive contributions of women and girls ever being factored in.

In light of the key findings of this assessment, it is critical that women's meaningful participation in the village upgrade is prioritized, and that the proposed interventions intentionally consider the unique needs and circumstances of women and girls and proactively involve them in every step of implementation, in order for them to benefit fully and equally from the village upgrade on par with their male counterparts.



## List of References

1. *Beijing +25 Country Report*; Gender Monitoring Office, May 2019.
2. *Climate Change Profile Rwanda*; Ministry of Foreign Affairs, Government of the Netherlands, April 2018.
3. *DHS 2014-2015*; NISR, 2015.
4. *Gap Analysis of Gender–Environment and Climate Change Mainstreaming in National Policies and Strategies*; REMA, December 2019.
5. *Gender Analysis for USAID/Rwanda: Valuing Open and Inclusive Civic Engagement Project*; USAID, 2015.
6. *Gender and Climate Change Overview Report*. Skinner, E.; BRIDGE, 2011.
7. *Gender and development: Working with men for gender equality in Rwanda*; Carlson, K. and Randell, S., 2013
8. *Gender Assessment for the CD4 Program*; Land O'Lakes Venture37, March 2019.fministry
9. *Gender Inequality Prevents Abused Women from Seeking Care Despite Protection Given in Gender-Based Violence Legislation: A Qualitative Study from Rwanda*. Umubyeyi, A. et al., 2016.
10. *HIV/AIDS and Gender Issues*. Interagency Coalition on AIDS and Development, July 2006.
11. *Integrated Household Living Conditions Survey 5 (EICV5)*; NISR, 2016/17.
12. *Men, Faith and Masculinities: Rwanda report*; Tear Fund, July 2016.
13. *National Gender Statistics Report*; NISR, 2019.
14. *Overview of linkages between gender and climate change*; UNDP, 2017.
15. *Statistical Yearbook 2017*; NISR, 2017.
16. *The State of Gender Equality in Rwanda*; Gender Monitoring Office, March 2019
17. *Time allocation, gender and norms: Evidence from post-genocide Rwanda*; Schindler, K., 2009.
18. *Transforming Eastern Province through Adapation, Rwanda*. Gender Assessment for the Green Climate Fund; June 2021.
19. *Updated Gender Policy and Gender Action Plan 2020-2023*; Green Climate Fund, November 6, 2019.

## Annex: Data Collection Tools

### **Session #1 for men: Daily Itinerary Mapping**

**Time: Approx. 2 hours**

**Location: In the village, meeting room with tables and chairs**

1. Recruit a group of 8-10 men of different backgrounds who live in different parts of the village (vulnerable/ubudehe categories, PWD, fathers, young men, adolescent boys)
2. Gather the group together in a safe space and set ground rules for engagement.
3. Ask them to consider what they do in an average 24 hour period, both inside and outside of the home.
4. Ask them to individually list the tasks they accomplish **INSIDE** and **OUTSIDE** their houses on a daily basis, using the forms provided for this exercise:

#### **INSIDE:**

- Cooking
- Cleaning
- Taking care of children
- Washing clothes
- Other domestic work

#### **OUTSIDE:**

- Food shopping / going to the market
  - Accompanying children
  - Visits to schools or health centres
  - Agricultural work (unpaid, for the home)
  - Fetching water
  - Fetching firewood/fuel
  - Running errands
  - Business / employment, can include (anything earning cash, etc.)
  - Meeting friends, leisure time
5. For each of the tasks, ask them to consider and write down:
    - the time needed to complete each of these tasks
    - the people with whom they carry out activities (alone, with children, with spouse, or with friends)
    - the mode of transport they use to travel (prompt – by foot, moto, car; do they ever use bicycles?), and;
    - the space where these activities take place (such as market, square or a street corner)

6. After completing the list, ask some participants to share their forms and describe the favourable aspects (such as a tree that offers shade or a calm and pedestrian-friendly street) or unfavourable aspects (such as the lack of public transport or the lack of lighting of a public space) of the public environment that affects his daily routine.

**Market / food shopping**

- Like:
- Don't like:

**Accompanying children (mostly school, clinic/hospital, football pitch):**

- Like:
- Don't like:

**Agricultural work (unpaid, for the home):**

- Like:
- Don't like:

**Collecting water:**

- Like:
- Don't like:

**Fetching firewood/fuel:**

- Like:
- Don't like:

**Business / employment, anything earning cash, etc.**

**Work activities:**

- Like:
- Don't like:

**Meeting friends, leisure time:**

- Like:
- Don't like:

**Latrines:**

- Like:
- Don't like:

**Bicycles:**

- Like:
- Don't like:

**Session #2 for men: Deep dive into gender dynamics (focus group discussion)**

**Time: 2-3 hours, with breaks**

**Location: In the village, meeting room with tables and chairs**

Date of interview:	
Interview Start and End Time:	
Total duration:	
Location:	
Number of participants:	
Age range:	
Other notes:	

**Part A: Gender and leadership in the village:**

Explain the objective of the visit and tell the group that you are going to have a conversation for about 2 hours, with a short break halfway through. Let them know that they are welcome to speak freely and that there is no right or wrong answer. Respectful disagreement among members is welcome. Everything shared is strictly confidential and anonymous. Remind them that the FGD is a 'safe space' where everyone's voice matters equally and everyone's opinion counts. Explain to them the concepts of anonymity and confidentiality, and ask them not to share what is said in the group discussion with other community members.

1. Tell us a bit about what men and women do in leadership roles in your village.
  - i. Who makes decisions in the village, what is the process like? Number of women / men involved?
  - ii. Who leads? Who speaks most? Do you think men and women fully and equally participate in every activity? Why or why not?
  - iii. Are some people's opinions more valued than others? If so, who are they, and why?
  - iv. Number of local leaders, how many are women / men?
  - v. What about women as regular community members? How often are they involved in making decisions about the village? How often do they speak up? How are their contributions valued?
  - vi. How was the village upgrade committee selected? Why are there not 50/50 men and women?
  - vii. Do you think men are natural leaders? Is this why there are more men than women in leadership roles?

- viii. Do you think it's very important for women to be actively involved in the village upgrade? For example, through making decisions about the upgrade but also by directly benefitting from jobs that may become available in the process of the upgrade? Why or why not? Please share your thoughts on this.

## **Part B: Gender at the household / individual level**

2. Division of responsibilities and work loads (paid work and unpaid care work)
  - i. How many of you work outside of the home? How many of you bring money into the home?
  - ii. What is the situation like with household work? Who does most of the household work? (cooking, cleaning, fetching water, fetching firewood, washing clothes, etc.) On average, how much of this work are women doing per day (hours)?
  - iii. Who does most of the childcare (feeding, bathing, taking kids to school, to the doctor etc.)? On average, how much childcare are women doing per day (hours)?
  - iv. How much free time do you have in a day? i.e. resting, visiting friends, going to a bar, etc.
  - v. Why do you think women are not more involved in community leadership? Or paid employment, starting a small business, etc.?
  
3. Decision making and finances
  - i. What are the main activities through which your households generate income?
  - ii. If your wife also works outside of the home, are you aware of all the sources of income of your wife and their average amount? Why or why not?
  - iii. Who makes decisions about finances in the home, and why?
  - iv. If there is a disagreement between husband and wife, who has the final say on what will be done?
  - v. When spending in general, who (husband or wife) do you feel makes decisions about:
    1. Major household expenditures (cow, bicycle, animals, school fees...)
    2. Minor household expenditures (food, clothing, soap, etc....)
  - vi. If the husband and wife have a fight, will the husband ever refuse to give her money?
  - vii. Who owns land or assets (other property, livestock, etc.) in your households? Whose name are they in? Can women use them freely (i.e. land for collateral, purchasing livestock without husband's permission)? Why or why not?
  
4. Permission and mobility
  - i. Do you have to travel to do things you need to get done in a day? If so, which things and how far (in minutes, i.e. 30 mins, an hour)?
  - ii. If a woman wants to go out of the home, does she have to ask her husband first?
  - iii. If a woman wants to travel to visit friends, does she have to ask her husband first?
  - iv. If the husband doesn't agree, will the woman do what she wants anyway, without his permission?
    - i. If the husband and wife have a fight, will the husband ever refuse to allow her to go out? Or refuse to give her money for transport?

- v. Do men ever have to ask their wives for permission to do anything? If so, what things, and why? If not, why not?

## 5. Gender-based Violence

- i. Let's talk a bit about violence in the village. *EXPLAIN: this can mean different forms of violence. These include physical violence (beating, slapping, etc.); emotional violence (verbal abuse, calling someone bad names, threatening someone, treating them badly); sexual violence (rape, sexual assault, harassment, touching/groping); and economic violence (not having control over money in the home, not being allowed to make decisions about spending or saving, earning income that their husbands then take, husbands not allowing wives to work, etc.)*
- ii. From your own observations / experience, do many women in this village experience violence? Please explain.
  - i. What kind of violence? How often?
  - ii. What about violence outside of the home? Street harassment, abusive men in the village, etc. How often does this happen?
  - iii. What happens when someone faces violence in the village – do most women report it? If they do report, what is done about it?

**- 10 MINUTE BREAK -**

## **Part C: Proposed project interventions with a gender lens**

One by one, discuss each individual intervention, describing where and how it will be implemented, and gather the men's feedback on them:

### ➤ **Transportation / mobility – improving roads and green rights of way**

- a) What do you like about this idea?
- b) What could maybe be done better?
- c) What do you think is missing / what additional aspects should be considered or incorporated?
- d) How will this intervention benefit men / affect your lives?
- e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
- f) Do you see any possible drawbacks or problems?

### ➤ **Stormwater management – improved stormwater management systems / gutters**

- a) What do you like about this idea?
- b) What could maybe be done better?
- c) What do you think is missing / what additional aspects should be considered or incorporated?
- d) How will this intervention benefit men / affect your lives?
- e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?

- f) Do you see any possible drawbacks or problems?
- **Water supply – expansion of WASAC water supply, rainwater harvesting, filters for households**
  - a) What do you like about this idea?
  - b) What could maybe be done better?
  - c) What do you think is missing / what additional aspects should be considered or incorporated?
  - d) How will this intervention benefit men / affect your lives?
  - e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - f) Do you see any possible drawbacks or problems?
- **Sanitation – Biogas system at the market, latrine improvements at the market / TVET education about biogas, etc.?**
  - a) What do you like about this idea?
  - b) What could maybe be done better?
  - c) What do you think is missing / what additional aspects should be considered or incorporated?
  - d) How will this intervention benefit men / affect your lives?
  - e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - f) Do you see any possible drawbacks or problems?
- **Solid waste management – Community composting, neighbourhood waste collection point, recycling collection stations**
  - a) What do you like about this idea?
  - b) What could maybe be done better?
  - c) What do you think is missing / what additional aspects should be considered or incorporated?
  - d) How will this intervention benefit men / affect your lives?
  - e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - f) Do you see any possible drawbacks or problems?
- **Energy and lighting – Solar PV, improved cook stoves, energy efficient lighting and appliances**
  - a) What do you like about this idea?
  - b) What could maybe be done better?
  - c) What do you think is missing / what additional aspects should be considered or incorporated?
  - d) How will this intervention benefit men / affect your lives?



- e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - f) Do you see any possible drawbacks or problems?
- **Community facilities – TVET centre, additional community focal points and market squares**
- a) What do you like about this idea?
  - b) What could maybe be done better?
  - c) What do you think is missing / what additional aspects should be considered or incorporated?
  - d) How will this intervention benefit men / affect your lives?
  - e) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - f) Do you see any possible drawbacks or problems?

## **Session #1 for women: Gender-based Community Mapping**

**Time: Approx. 2 hours, with breaks**

**Location: In the village, meeting room with tables and chairs**

1. Introductions and explanation of visit
2. Establish a safe space and set ground rules for engagement.
3. Present a large map of the village and pin it to the wall.
4. Ask the group the following questions, record their responses in English, and draw them on the map as you go:

- What neighbourhood spaces do you use most / least?

**MOST:**

**LEAST:**

- Why do you choose certain streets to walk?
- Where do you meet friends?
- Where do you choose to rest?
- Where do you go shopping?
- Is there a certain space that you do not use because you do not like it? Why or why not?
- Where do you feel unsafe? Why? Where do you feel safe (if any) and why?
- Do you feel more or less safe at different times of the day (such as morning, afternoon, evening, or night), or on different days of the week (such as weekdays versus weekends)?
- Where do you go with your children?
- What places have a special meaning to you (such as a good memory or a historical place, a place of cultural or community significance, etc.)?
- Where are the closest facilities and services, and how do you get there - including:
  - health services
  - churches or mosques, other religious places
  - public transport
  - sport facilities
  - schools / educational facilities

- What are some of the barriers to accessing these places (permission, mobility, transportation)? What would you like to see instead / what would you want to be done differently?
5. Discuss their feedback with a focus on the 'gaps' or undesirable aspects of the village space, and ask the group what they would recommend for improvements; refer to some of the specific project interventions to gather insights on the usefulness of these interventions for women and any additional considerations that should be taken into account.

## **Session #2 for women: Daily Itinerary Mapping**

**Time: Approx. 2 hours, with breaks**

**Location: In the village, meeting room with tables and chairs**

1. Recruit a group of 8-10 men of different backgrounds who live in different parts of the village (vulnerable/ubudehe categories, PWD, fathers, young men, adolescent boys)
2. Gather the group together in a safe space and set ground rules for engagement.
3. Ask them to consider what they do in an average 24 hour period, both inside and outside of the home.
4. Ask them to individually list the tasks they accomplish INSIDE and OUTSIDE their houses on a daily basis, using the forms provided for this exercise:

### **INSIDE:**

- Cooking
- Cleaning
- Taking care of children
- Washing clothes
- Other domestic work

### **OUTSIDE:**

- Food shopping / going to the market
  - Accompanying children
  - Visits to schools or health centres
  - Agricultural work (unpaid, for the home)
  - Fetching water
  - Fetching firewood/fuel
  - Running errands
  - Business / employment, can include (anything earning cash, etc.)
  - Meeting friends, leisure time
5. For each of the tasks, ask them to consider and write down:
    - the time needed to complete each of these tasks
    - the people with whom they carry out activities (alone, with children, with spouse, or with friends)
    - the mode of transport they use to travel (prompt – by foot, moto, car; do they ever use bicycles?), and;
    - the space where these activities take place (such as market, square or a street corner)
  6. After completing the list, ask some participants to share their forms and describe the favourable aspects (such as a tree that offers shade or a calm and pedestrian-friendly street) or

unfavourable aspects (such as the lack of public transport or the lack of lighting of a public space) of the public environment that affects his daily routine.

**Market / food shopping**

- Like:
- Don't like:

**Accompanying children (mostly school, clinic/hospital, football pitch):**

- Like:
- Don't like:

**Agricultural work (unpaid, for the home):**

- Like:
- Don't like:

**Collecting water:**

- Like:
- Don't like:

**Fetching firewood/fuel:**

- Like:
- Don't like:

**Business / employment, anything earning cash, etc.**

**Work activities:**

- Like:
- Don't like:

**Meeting friends, leisure time:**

- Like:
- Don't like:

**Latrines:**

- Like:
- Don't like:

**Bicycles:**

- Like:
- Don't like:

**Session #3 for women: Deep dive into gender dynamics (focus group discussion)**

**Time: 2-3 hours, with breaks**

**Location: In the village, meeting room with tables and chairs**

Date of interview:	
Interview Start and End Time:	
Total duration:	
Location:	
Number of participants:	
Age range:	
Other notes:	

Explain the objective of the visit and tell the group that you are going to have a conversation for about 2 hours, with a short break halfway through. Let them know that they are welcome to speak freely and that there is no right or wrong answer. Respectful disagreement among members is welcome. Everything shared is strictly confidential and anonymous. Remind them that the FGD is a 'safe space' where everyone's voice matters equally and everyone's opinion counts. Explain to them the concepts of anonymity and confidentiality, and ask them not to share what is said in the group discussion with other community members.

**Part A: Gender and leadership in the village:**

6. Tell us a bit about what men and women do in leadership roles in your village.
  - i. Who makes decisions in the village, what is the process like? Number of women / men involved?
  - ii. Who leads? Who speaks most? Do you think men and women fully equally participate in every activity? Why or why not?
  - iii. Are some people's opinions more valued than others? If so, who are they, and why?
  - iv. What about women as regular community members? How often are they involved in making decisions about the village? How often do they speak up? How are their contributions valued?

- v. How was the village upgrade committee selected? Why are there not 50/50 men and women?
- vi. Do you think it's very important for women to be actively involved in the village upgrade? For example, through making decisions about the upgrade but also by directly benefitting from jobs that may become available in the process of the upgrade? Why or why not? Please share your thoughts on this.

**Part B: Gender at the household / individual level**

7. Division of responsibilities and work loads (paid work and unpaid care work)

- i. How many of you work outside of the home? How many of you bring money into the home? If not already doing so, whom among you would like to have a paid job / small business?
- ii. What is the situation like with household work? Who does most of the household work? (cooking, cleaning, fetching water, fetching firewood, washing clothes, etc.) On average, how much of this work are men/women doing per day (hours)?
- iii. Who does most of the childcare (feeding, bathing, taking kids to school, to the doctor etc.)? On average, how much childcare are men doing per day (hours)?
- iv. Women seem like they are always busy. Do women struggle to get everything done in a day? Why or why not?
- v. Do women often have free time to rest, visit friends, etc.? Why or why not? What do you think about this?
- vi. Would you consider childcare and/or domestic work as one of the main factors that holds women back from equally participating in community leadership roles or finding paid work / running a business, etc.? Why or why not?
- vii. What else holds women back from earning their own income or being a leader in the village? Probe here around gender discrimination, lack of free time, low self confidence, etc.

8. Decision making and finances

- i. What are the main activities through which your households generate income? Are you aware of all the sources of income of your husband and their average amount? Why or why not?
- ii. Who makes decisions about finances in the home? Do women have a voice, and if so, on which topics? Do men listen to women's views?



- iii. If there is a disagreement between husband and wife, who has the final say on what will be done?
- iv. When spending in general, how are decisions made / who (husband or wife) do you feel makes decisions about:
  - 1. Major household expenditures (cow, bicycle, animals, school fees...)
  - 2. Minor household expenditures (food, clothing, soap, etc....)
- v. If the husband and wife have a fight, will the husband ever refuse to give her money?
- vi. Who owns land or assets (other property, livestock, etc.) in your households? Whose name are they in? Can women use them freely (i.e. land for collateral, purchasing livestock without husband's permission)? Why or why not?

#### 9. Permission and mobility

- i. Do you have to travel to do things you need to get done in a day? If so, which things and how far (in minutes, i.e. 30 mins, an hour)?
- ii. Do women need to ask for permission from their husbands for certain things? What kinds of things? (spending money, going out, traveling somewhere, buying livestock or other household expenses, etc.)
- iii. If a woman wants to go out of the home, does she have to ask her husband first?
- iv. If a woman wants to travel to visit friends, does she have to ask her husband first?
- v. If the husband doesn't agree, will the woman do what she wants anyway, without his permission?
- i. If the husband and wife have a fight, will the husband ever refuse to allow her to go out? Or refuse to give her money for transport?
- vi. Do men ever have to ask their wives for permission to do anything? If so, what things, and why?

#### 10. Gender-based Violence

- i. Let's talk a bit about violence in the village. *EXPLAIN: this can mean different forms of violence. These include physical violence (beating, slapping, etc.); emotional violence (verbal abuse, calling someone bad names, threatening someone, treating them badly); sexual violence (rape, sexual assault, harassment, touching/groping); and economic violence (not having control over money in the home, not being allowed to make decisions about spending or saving, earning income that their husbands then take, husbands not allowing wives to work, etc.)*

- ii. From your own observations / experience, do many women in this village experience violence? Please explain.
  - i. What kind of violence? How often?
  - ii. What about violence outside of the home? Street harassment, abusive men in the village, etc. How often does this happen?
  - iii. What happens when someone faces violence in the village – do most women report it? If they do report, what is done about it?
  - iv. How do you feel about this situation? How does this affect women’s quality of life?

**- 10 MINUTE BREAK -**

**Part C: Proposed project interventions with a gender lens**

One by one, discuss each individual intervention, describing where and how it will be implemented, and gather the women’s feedback on them:

➤ **Transportation / mobility – improving roads and green rights of way**

- g) What do you like about this idea?
- h) What could maybe be done better?
- i) What do you think is missing / what additional aspects should be considered or incorporated?
- j) How will this intervention benefit men / affect your lives?
- k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
- l) Do you see any possible drawbacks or problems?

➤ **Stormwater management – improved stormwater management systems / gutters**

- g) What do you like about this idea?
- h) What could maybe be done better?
- i) What do you think is missing / what additional aspects should be considered or incorporated?
- j) How will this intervention benefit men / affect your lives?
- k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
- l) Do you see any possible drawbacks or problems?

➤ **Water supply – expansion of WASAC water supply, rainwater harvesting, filters for households**

- g) What do you like about this idea?
  - h) What could maybe be done better?
  - i) What do you think is missing / what additional aspects should be considered or incorporated?
  - j) How will this intervention benefit men / affect your lives?
  - k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - l) Do you see any possible drawbacks or problems?
- **Sanitation – Biogas system at the market, latrine improvements at the market / TVET education about biogas, etc.?**
- g) What do you like about this idea?
  - h) What could maybe be done better?
  - i) What do you think is missing / what additional aspects should be considered or incorporated?
  - j) How will this intervention benefit men / affect your lives?
  - k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - l) Do you see any possible drawbacks or problems?
- **Solid waste management – Community composting, neighbourhood waste collection point, recycling collection stations**
- g) What do you like about this idea?
  - h) What could maybe be done better?
  - i) What do you think is missing / what additional aspects should be considered or incorporated?
  - j) How will this intervention benefit men / affect your lives?
  - k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - l) Do you see any possible drawbacks or problems?
- **Energy and lighting – Solar PV, improved cook stoves, energy efficient lighting and appliances**
- g) What do you like about this idea?
  - h) What could maybe be done better?
  - i) What do you think is missing / what additional aspects should be considered or incorporated?
  - j) How will this intervention benefit men / affect your lives?
  - k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
  - l) Do you see any possible drawbacks or problems?

➤ **Community facilities – TVET centre, additional community focal points and market squares**

- g) What do you like about this idea?
- h) What could maybe be done better?
- i) What do you think is missing / what additional aspects should be considered or incorporated?
- j) How will this intervention benefit men / affect your lives?
- k) How might it benefit women, or other people in the village (consider vulnerable groups, PWD, children, etc.)?
- l) Do you see any possible drawbacks or problems?

## **Session #4 for women: Women's Safety Audit**

**Time: Half day, approx. 4 hours**

**Location: Meet at a central location, consult a village map and decide the route together**

1. Explain the purpose of the safety audit and briefly explain the 5 different areas we want to consider when looking at safety, listed below.
  - **LIGHTING**
    - Is there any nighttime lighting?
    - If so, is the lighting bright enough, even and in good repair?
    - Are walkways, directional signs or maps sufficiently illuminated?
    - Do trees or bushes obscure the lighting?
  - **SIGHTLINES**
    - Are there places someone could hide in?
    - Does the design of the space, corner, and residual areas prevent the visibility of the complete spaces?
  - **MOVEMENT PREDICTORS**
    - Are there clear and visible alternative routes?
    - How easy would it be for an attacker to predict your movements?
    - How easy would it be to get away if you were threatened?
  - **MAINTENANCE**
    - What is the level of maintenance in the area?
    - Does the area feel cared for?
  - **OVERALL DESIGN**
    - Is it easy to find your way around the area?
    - What are your general impressions?
2. Consult a large map of the village and determine the route together – designate 2 community members to lead the walk. The route should be reasonable for all participants to walk.
3. Decide amongst the group how many areas of the village will be assessed along the walk. Each area will be labeled with a unique name and number on the map and assigned it's own checklist form with corresponding name and number.
4. As the group proceeds along the route, review each area according to the checklist, consulting with the group as you go.
5. Return to the central meeting point and discuss any additional feedback or insights, summarize the key findings and sense check with the group.

## Key informant interview template

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: \_\_\_\_\_

Children (#): \_\_\_\_\_

Married / Widowed / Single: \_\_\_\_\_

Other distinctions? \_\_\_\_\_ (disability, vulnerability, etc.)

Explain the objective of your visit and tell the interviewee that you are going to have a conversation for about 45-60 minutes. Let him/her know that they are welcome to speak freely and that there is no right or wrong answer. Let him/her know that his/her opinions will remain completely anonymous, and will appear in the report as the opinions of 'a stakeholder' or 'a community member/leader'.

1. Please tell us more about yourself and your role in the community (especially for those with official leadership roles or community influencers, like CHWs).
2. How long have you lived in the village, and how long have you been in this position (for those with a formal position)?
3. What do you know so far about the proposed upgrades to the village? (If needed, brief the interviewee on the proposed interventions in greater detail.)
4. How many women leaders are in your village? How many men? Who is more active? Does one or the other voice have more influence?
5. What about women community members – how active are they in making decisions about the village? Are they as active as men, and why/why not?
6. What role have women played so far in participating in conversations about these village upgrade interventions, as far as you know? What roles have women played in raising issues or making decisions related to the village development?
7. What are the gender inequality issues in your village? What do you see / hear / experience as a community member in this village, when it comes to gender inequality? (probe: GBV, street harassment, discrimination, low value placed on women and girls, being confined to the domestic realm, lack of financial control, lack of control over their SRH, etc.)
8. Are there specific groups of women / girls that face even more barriers? (i.e. PWD, very poor households, widows / WHH, young girls, etc.)
9. Based on your perspective within the community, what do you think should be done so that women and girls are more involved in leadership and governance in the village, in general but also related to this village upgrade project?

10. Any additional feedback on the project interventions from your perspective?



## Green City Kigali: a new model for urban development in Rwanda

### Annex 8b - Gender and Social Inclusion Action Plan

**Project impact statement:** Increased resilience of vulnerable households, including women and girls, and enhanced efficient and low emission household energy use. Resilient and low-carbon technologies and infrastructure for improved access to water and electricity of residents, *resulting in reduced time and labour required by women and girls for household tasks; women-friendly and safe public spaces resulting in reduced gender-based violence; gender-sensitive community center creating space for recreation and economic activities of women; gender-sensitive public space and facilities; women’s social and political empowerment through increased participation and leadership in the community centre and community activities.*

**Project outcome statement:** Increased resilience to climate change events for women and girls within the project area.

#### **Project outputs:**

**Output 1:** Public infrastructure is upgraded to increase resilience to flooding, landslides and pro-longed dry spells and household energy use is efficient and low emission, *including stormwater management, solid waste management, water supply, sanitation, transport and mobility, energy, community buildings, and project management and technical supervision of works.*

**Output 2:** Increased awareness and capacity for inclusive climate responsive upgrades, *including community ownership and sustainability, TVET operationalised to serve as a learning and innovation centre for climate responsive upgrades, capacity building for construction sector workers and professionals, institutional capacity development of GoR agencies, awareness raising and citizen engagement in climate responsive regeneration, blueprinting the GCK and Planning code for SPV, development of recycling value chains, and market facilitation to catalyse increased uptake of low emission, climate resilient approaches and technologies.*

**Output 3:** Enabling environment for climate resilient, low emission investment, *including mainstreaming green city development standards and approaches into regulatory and planning frameworks, and knowledge management system developed on climate responsive regeneration.*

#### **Purpose of the Gender Action Plan (GAP)**

Guidance documentation provided by Green Climate Fund regarding the purpose and preparation of a Gender Action Plan outlines the following key elements to be included in a GAP. The Gender Action Plan for the Ngaruyinka village upgrade strives to address each of these important aspects.

- Preparatory work undertaken to address gender issues in the project/program;
- Quotas, targets, design features, included in the project/program to address gender inclusion and facilitate women’s involvement and/or ensure tangible benefits to women;
- Mechanisms to ensure implementation of the gender design elements;
- Gender monitoring and evaluation indicators.

**Gender dimensions of outputs:** Based on the broader project outputs and the key findings of the gender assessment in Ngaruyinka village, the following gender dimensions have been developed to ensure women’s full and equal participation in, and benefit from, all aspects of the village upgrade outputs, in both the short and long term. These dimensions cut across all three outputs to varying degrees, though they are primarily relevant to Outputs 1 and 2. They have been organized in the action plan to reflect the cross-cutting nature of gender inequities and the need for taking a holistic approach to gender equality efforts, in order to ensure sustainability of outcomes and long-term community ownership that equally involves women and girls in all aspects of climate resilience related to the upgrade.

### **Dimension 1: Participation and Leadership**

This dimension addresses specific gaps and inequalities in the current context that inhibit women from effectively participating in decision making processes and leadership roles related to the village upgrade, as well as village governance more broadly and its impact on future responses to climate change events and community ownership of the social and environmental gains made during the upgrade process. This dimension prioritizes capacity building and awareness raising among both men and women, as well as specific community-led accountability mechanisms, to ensure women will have a meaningful voice throughout the entire lifecycle of the village upgrade in planning and decision making processes that will directly influence the success and positive, inclusive impact of the upgrade.

### **Dimension 2: Safety and Rights**

This dimension addresses the gender barriers women and girls currently face at the home and community level that directly and substantially constrain their ability to benefit from many aspects of the village upgrade, as well as to have the free time and agency to be able to participate in decision making processes related to the upgrade, whether in a specific leadership role or as a community stakeholder. Unpaid care work and gender-based violence, as well as community attitudes and beliefs about women’s roles and capabilities, directly affect the degree to which women are able to participate (if at all), to have their needs and views be respected and included, and to fully and equally benefit from key aspects of the upgrade such as (although not limited to) TVET education, job creation, street lighting, bicycle lanes, and community management roles. The underlying drivers of women’s exclusion and the unique gender barriers they face are thus addressed through targeted efforts in this dimension, and include community-led sustainability mechanisms to ensure women are effectively included and able to equally benefit from upgrade interventions consistently over time.

### **Dimension 3: Wrap-around Stakeholder Engagement for Women’s Equal Access and Benefit**

This dimension addresses gender issues across some of the larger surrounding structures, systems and key stakeholders that will directly influence women’s access to, participation in, and ability to safely and equally benefit from specific upgrade interventions. This includes women’s ability to benefit from intervention such as TVET as well as employment opportunities; even if women are enabled to have the free time to engage in such activities, gender norms around what is expected and appropriate for them will influence whether or not they pursue opportunities or access resources to the degree that men do. In addition, gender-based violence and discrimination in workplace settings and community management roles will create additional burdens for women and prevent them from participating and benefitting equally. This dimension targets these areas in a multi-layered manner to ensure women’s safe and meaningful inclusion from end to end.

*\*Note: Budget amounts include all estimated costs for design and development of activities / materials, implementation of activities, and logistical costs related to implementation, i.e. venue rentals, etc. In the Annex 4 Budget, these costs are covered by certain consolidated line items.*

Activities	Indicators and Targets	Responsibilities	Timeline	Costs/Approx. budget* (US\$)
<p><b>1. DIMENSION: Participation and Leadership</b></p> <p>Women’s ability to participate in decision making processes and to occupy leadership roles on par with men, as well as to be respected and influential when they do engage, is extremely constrained in the current gender context of Ngaruyinka village. Intentional measures must be put in place to ensure women have a meaningful voice within the village upgrade committee in the immediate term and for the project lifecycle, and in village governance processes more broadly in the long-term, to ensure sustainability and impact of the upgrade intervention areas.</p>				
<p><b>1.1 Gender and leadership capacity building support</b></p>				
<p><b>1.1.1</b> Participatory training with women on women’s leadership, rights and self-confidence</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 3) <b>Number of women trained</b> (Baseline: 0, Target: 60)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$2,400.00</p>
<p><b>1.1.2</b> Gender equality and rights training with local leaders and the village upgrade committee in separate groups (men and women in separate sessions), with an emphasis on the importance of women’s experiences being incorporated into project intervention areas, particularly in relation to those areas where women are heavily involved or affected (i.e. water access and management, waste management / sorting)</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 2 sessions with men, 2 sessions with women) <b>Number of men trained</b> (Baseline: 0, Target: 10-15; dependent on number of men in village leadership roles and on the upgrade committee) <b>Number of women trained</b> (Baseline: 0, Target: 10-15; dependent on number of women in village leadership roles and on the upgrade committee)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$3,000.00</p>
<p><b>1.1.3</b> Conduct climate literacy seminars for local government and civil society organizations, aimed at increasing women and youth participation</p>	<p>number of CSOs and government agencies trained to build capacity of urban people, specifically women and youth, to participate in climate change mitigation and adaptation processes  (baseline: 0, target: (50 people from local government and civil society organizations trained-50% male, 50% female)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid- year approx.</p>	<p>\$4,000</p>
<p>1.1.3. Provide organizational/technical/financial capacity building to women, youth, and CSOs (such as cooperatives or VSLA) with focus on financial literacy and provide long-term coaching to beneficiaries</p>	<p>Number of CSOs/VSLAs members trained (baseline:0, target: 100 members of CSO/VSLs members trained:60% are women and youth)</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA</p>	<p>Y1,2 &amp;3</p>	<p>\$5,000</p>
<p><b>1.2 Establish a gender mainstreaming committee within the village for ongoing oversight</b></p>				

<p><b>1.2.1</b> Establish a community-led committee to ensure oversight and accountability at the village-level for women’s effective participation and gender equality; committee will be co-designed with the community, with the support of the gender technical team for the upgrade; committee members will be those whom have received capacity building on gender equality, women’s rights and equal leadership</p>	<p><b>Number of co-design sessions conducted</b> (Baseline: 0, Target: 2) <b>Number of committees established</b> (Baseline: 0, Target: 1) <b>Number of women and men on the committee</b> (Baseline: 0, Target: 5 women, 3 men)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$1,800.00</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------	-------------------------------------------	-------------------

<p><b>1.2.2</b> Liaise with the gender mainstreaming committee on a quarterly basis to monitor progress and address any problems or sticking points effectively and efficiently as they arise; document results and feedback to project team</p>	<p><b>Number of check-in sessions conducted</b> (Baseline: 0, Target: 1 per quarter)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; quarterly from launch of committee, beginning mid-year approx.</p>	<p>\$1,800.00 / quarter</p>
<p><b>1.3 Ensure women’s full and equal participation on the village upgrade committee</b></p>				
<p><b>1.3.1</b> Ensure active women’s participation on the village upgrade committee, to combat tokenistic approaches to women’s involvement and leadership</p>	<p><b>Number of community engagement sessions hosted to discuss quota system:</b> (Baseline: 0, Target: 1) <b>Number of quota systems established</b> (Baseline: 0, Target: 1) <b>Number of women and men on the village upgrade committee</b> (Baseline: 6 men, 4 women, Target: 5 men, 5 women, or 6 men, 6 women)4</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$1,800.00</p>
<p><b>1.4 Build the capacity of key decision makers and stakeholders involved in the village upgrade to ensure wrap-around support for women’s greater engagement</b></p>				
<p><b>1.4.1</b> Participatory gender and women’s rights training sessions for village upgrade implementing team and key actors within FONERWA to ensure understanding of key concepts and targets in the gender action plan for greater compliance, accountability and support for women’s engagement</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 2 sessions with men, 2 sessions with women) <b>Number of people trained</b> (Baseline: 0, Target: at least 60% of trained people are women)</p>	<p>Gender Specialist + Community Engagement Specialist, Village upgrade project staff, FONERWA</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$2,700.00</p>
<p><b>1.5 Establish a formal complaint mechanism regarding women’s participation and gender equality in the village upgrade process</b></p>				
<p><b>1.5.1</b> Establish a formal complaint mechanism and chain of reporting to ensure accountability at all levels for the gender action plan targets and goals; system will be co-designed with community, with the support of the gender technical team for the upgrade</p>	<p><b>Number of co-design sessions conducted</b> (Baseline: 0, Target: 2 sessions per year) <b>Number of complaint mechanisms established and operational</b> (Baseline: 0, Target: 1 complaint mechanisms established and operational )</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$3,600.00</p>

## 2. DIMENSION: Safety and Rights

The findings of the gender assessment in Ngaruyinka village revealed alarmingly high rates of violence in the home and community (physical, emotional, sexual and economic violence), which has a tremendous impact on women’s mental and physical health, women’s sense of self-esteem and self-efficacy, and women’s ability to engage in leadership roles, access paid work or control household income; these factors contribute significantly to women’s climate vulnerability in various ways, as well as their ability to influence, participate in and benefit from the village upgrade process, and thus must be intentionally addressed in the gender mainstreaming and accountability efforts of the project. Women’s right to paid work, participation in leadership meetings, access to TVET education and other benefits of the upgrade also cannot be achieved if women don’t have the free time to engage in such activities, thus gender barriers at the household level must be addressed.

### 2.1 Community sensitization and engagement around gender-based violence and women’s rights

<p><b>2.1.1</b> Participatory training with men and women around gender equality and gender-based violence, in separate groups</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 4 sessions with men, 4 sessions with women; 20 individuals per cohort, 2 cohorts that receive both sessions) <b>Number of men trained</b> (Baseline: 0, Target: 40) <b>Number of women trained</b> (Baseline: 0, Target: 40)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$7,200.00</p>
<p><b>2.1.2</b> Participatory training with married / domestic couples to address household dynamics that limit women’s free time for participation and leadership activities and increase their climate vulnerability; address power sharing and decision making in the home, financial control and agency, unpaid care work, etc. (engaging women and men who have already received baseline training in gender and GBV)</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 2 sessions with men and women together; 3 cohorts, for a total of 6 session)) <b>Number of men trained</b> (Baseline: 0, Target: 20) <b>Number of women trained</b> (Baseline: 0, Target: 20)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$6,000.00</p>
<p><b>2.1.3</b> Community education campaign to raise awareness around women’s rights and prevent gender-based violence</p>	<p><b>Number of public communications tools/materials developed and disseminated (community banners, posters, etc.)</b> (Baseline: 0, Target: 15-20) <b>Number of community village meetings that highlight the campaign and discuss GBV</b> (Baseline: 0, Target: 10) <b>Number of weeks where active campaigning is ongoing</b> (Baseline: 0, Target: 8)</p>	<p>Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership</p>	<p>Year 1; beginning mid-year approx.</p>	<p>\$1,500.00</p>

<b>2.2 Address specific safety concerns related to infrastructure upgrades that were raised by women as well as men</b>				
<b>2.2.1</b> Implement an adequate, village-wide street lighting system that ensures sufficient, consistent lighting	<p><b>Percentage of main roads that have sufficient and consistently reliable street lighting</b> (Baseline: 0, Target: 100%)</p> <p><b>Percentage of footpaths and small streets that have sufficient and consistently reliable street lighting</b> (Baseline: 0, Target: 100%)</p>	Gender Specialist + Community Engagement Specialist, FONERWA	Year 2	
<b>2.3 Establish a Women’s Safe Space (WSS) and Gender Champions Group (GCG) at village level to ensure sustainability of gains made</b>				
<b>2.3.1</b> Establish a women’s safe space (WSS) in the village to support women to report violence, speak out about violence, educate other women about their rights, and combat a culture of impunity related to all forms of violence women face in Ngaruyinka village (physical, sexual, emotional and economic violence); founding members of the WSS will have received baseline capacity building in gender, GBV and gender equality in the home	<p><b>Number of sessions conducted to support women to report violence</b> (Baseline: 0, Target: at least 3 sessions organized every year )</p> <p><b>Number of safe spaces established and operational</b> (Baseline: 0, Target: 1)</p> <p><b>Number of women engaged as founding members of the WSS</b> (Baseline: 0, Target: at least 60% of founding members for WSS are women)</p> <p><b>Number of women engaged as community members of the WSS</b> (Baseline: 0, Target: At least 60% of community members of WSS are women)</p>	Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership	Year 1; beginning mid-year approx.	\$1,800.00
<b>2.3.2</b> Establish a gender champions group (GCG) in the village to promote gender equality, engage and educate other men and women, speak out against gender-based violence and champion women’s participation and leadership; founding members of the GCG will have received baseline capacity building in gender, GBV and gender equality in the home	<p><b>Number of co-design sessions conducted</b> (Baseline: 0, Target: at least 3 sessions are organized)</p> <p><b>Number of gender champions groups established</b> (Baseline: 0, Target: 1)</p> <p><b>Number of women and men as founding members</b> (Baseline: 0, Target: at least 5 women, 5 men)</p> <p><b>Number of women and men engaged as community members of the GCG</b> (Baseline: 0, Target: at least 60% of engaged community members of GCG are women)</p>	Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership	Year 1; beginning mid-year approx.	\$2,400.00
<b>3. DIMENSION: Wrap-around Stakeholder Engagement for Women’s Equal Access and Benefit</b>				
In order for women to access and benefit from the different village upgrade interventions in equal measure with men, systems must be put in place to address community-level gendered attitudes and beliefs about women’s value and capabilities, particularly those related directly to the village upgrade intervention areas.				
<b>3.1 Community sensitization to promote women in higher-paying trades that are currently male-dominated</b>				

<p><b>3.1.1</b> Community education campaign to normalize and promote women taking on higher-paying male-dominated trades in TVET</p>	<p><b>Number of women that participate in the community village meetings that highlight the campaign and promote women in unconventional TVET trades</b> (Baseline: 0, Target: at least 60% of the participants are women) <b>Number of women that are taken in higher- paying male-dominated trades in TVET</b> (Baseline: 0, Target: at least 40% of considered workers in higher- paying male-dominated trades in TVET are women)</p>	<p>Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership</p>	<p>Year 2; 6 months before the launch of the TVET centre</p>	<p>\$1,500.00</p>
<p><b>3.1.2</b> Participatory sensitization sessions with women of all ages to encourage and promote them to take on higher-paying trades in TVET, which women typically avoid as they are considered masculine trades and are male-dominated</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 3) <b>Number of women engaged</b> (Baseline: 0, Target: 90)</p>	<p>Gender Specialist + Community Engagement Specialist</p>	<p>Year 2; 3-6 months before the launch of the TVET centre</p>	<p>\$3,600.00</p>
<p><b>3.2 Ensure women's equal access to and benefit from village upgrade interventions</b></p>				
<p><b>3.2.1</b> Ensure active participation of women for paid positions within the upgrade intervention areas, working directly with suppliers/partner companies</p>	<p><b>Percentage of companies who have been sensitized on the importance of gender equality in hiring</b> (Baseline: 0, Target: 100%) <b>Percentage of companies with with consideration of at least 40% of women in the hired personnel</b> (Baseline: 0, Target: 100%)</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA</p>	<p>Year 2; before supplier procurement begins</p>	<p>N/A</p>
<p><b>3.2.2</b> Ensure that companies involved in the village upgrade interventions have in place policies related to sexual harassment and gender discrimination in the workplace and a formal Code of Conduct; technical support to develop policies and Codes of Conduct for those companies without them</p>	<p><b>Percentage of companies with relevant policies in place</b> (Baseline: 0/unknown, Target: 100% of hired companies have relevant code of conduct on GBV and sexual harassment) <b>Percentage of staff who have been briefed on such policies and signed off on the Code of Conduct</b> (Baseline: 0/unknown, Target: 100% of staff are briefed on GBV and sexual harassment )</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA</p>	<p>Year 2; before suppliers / partner companies begin work at village-level</p>	<p>\$4,200.00</p>
<p>3.2.3. Ensure access and enrollment of women and youth in the technical and vocational education and training</p>	<p>Percentage of women enrolled in the technical and vocational education and training center  (Baseline: 0/unknown, Target: At least 50% of women will be enrolled in the TVET that will be constructed)</p>	<p>Gender Specialist + Community Engagement Specialist, FONERWA and Local authority</p>		<p>N/A</p>



3.2.4. Develop and implement strategies to ensure that women, youth, and other marginalized groups benefit from rural livelihoods and financial services	% Women beneficiaries and % Youth beneficiaries (baseline:0, target 50% of beneficiaries are women 50% of beneficiaries are youth)	Gender Specialist + Community Engagement Specialist, FONERWA	Y1 & Y2	\$10,000
3.2.5. Ensure access of women and women headed households on benefit form energy facilities like PV and solar hot water heaters	% Women beneficiaries and % women headed households beneficiaries (Baseline: 0, target: At least 60% of beneficiaries are women and out of those women 50% are women headed households)	Gender Specialist + Community Engagement Specialist, FONERWA	Year 2	Include in the project costs
3.2.6. Ensure equal access of men, women and youth on the recreational areas (sport fields, green spaces etc.)	% of women, youth, and men using sports and recreation facilities (baseline: 0, Targets: 50%quota share for men, women and youth)	Gender Specialist + Community Engagement Specialist, FONERWA and local authorities	Continuous even after the project completion	Include in the project costs
<b>3.2.7</b> Conduct sexual abuse and exploitation prevention training (SEA) for all companies engaged in implementation of upgrade activities in the village (approx. 20 companies)	<b>Number of sessions provided</b> (Baseline: 0, Target: Minimum of 1 session for each company implementing upgrade activities) <b>Percentage of companies trained</b> (Baseline: 0, Target: 100% of contracted companies are trained on SEA)	Gender Specialist + Community Engagement Specialist	Year 2: before suppliers / partner companies begin work at village-level	\$12,900.00

<p><b>3.2.8</b> Set up a community-led training program to teach women and girls how to ride bicycles and encourage men and boys to support them, so they can equally use and benefit from bike lanes in the village; program can be led by women and men community members who have received baseline education in gender equality, GBV-prevention and women’s rights, and co-designed with the gender technical support team</p>	<p><b>Number of co-design sessions conducted</b> (Baseline: 0, Target: 2 sessions with men/boys and women/girls together) <b>Number of community members engaged to run the program</b> (Baseline: 0, Target: 5 men, 5 women) <b>Number of women / girls trained to ride bicycles</b> (Baseline: 0, Target: at least 50% of the women who participated in the sessions are trained to ride bicycles )</p>	<p>Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership</p>	<p>Year 4 or 5; in advance of completion of bike lanes</p>	<p>\$2,400.00</p>
<p><b>3.2.9</b> Community sensitization to ensure women and men are equally involved in managing ongoing intervention areas, such as community composting; this is also necessary to avoid women becoming entirely responsible for key aspects of labour (i.e. sorting and carrying waste), while men are primarily occupying leadership / management roles in the same area.</p>	<p><b>Number of sessions conducted</b> (Baseline: 0, Target: 4) <b>Number of women and men engaged</b> (Baseline: 0, Target: 40 women, 40 men)</p>	<p>Gender Specialist + Community Engagement Specialist, Ngaruyinka village leadership</p>	<p>Year 2 or 3; before implementation activities begin at community level</p>	<p>\$4,800.00</p>
<p><b>3.2.10</b> Host community feedback discussions on a periodic basis to ensure gender action plan goals are being met and gather community feedback on the positive impact on women and girls; this also helps to ensure the gender mainstreaming committee is accurately representing the needs, concerns and voices of the wider community and that any problems are being addressed in a timely and productive manner; document results and feedback to project team</p>	<p><b>Number of community discussions conducted</b> (Baseline: 0, Target: At least 1 community discussion per quarter)</p>	<p>Gender Specialist + Community Engagement Specialist?</p>	<p>Year 2; quarterly from completion of Year 1 gender activities</p>	<p>\$1,800.00 / quarter</p>