THE UNITED NATIONS DEVELOPMENT PROGRAMME-RWANDA

Final evaluation of the "Strengthening Capacities of the Environment and Natural Resources Sector (SCENR) for Green Economy Transformation Program

FINAL REPORT

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Acknowledgements

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Project Title & Project Number	Country, Locality(s), Priority Area(s) / Strategic Results
• Strengthening Capacities of the Environment and Natural resources (ENR) Sector for Green Economy Transformation • Project Number: SCENR: 00113507	Rwanda*:* Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi, Gisagara,Gatsibo,Burera and Musanze *Priority area/ strategic results* **Output 1:** ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources **Output 2:** Green Growth and Climate Resilience Strategy implemented in selected sectors **Output 3:** National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms
Participating Organization(s)	**Implementing Partners**
United Nations Development Programme (UNDP)	Ministry of Environment (MoE), the Rwanda Green Fund (FONERWA), Rwanda Housing Authority (RHA), Rwanda Investigations Bureau (RIB), Rwanda National Police (RNP), the National Industrial Research and Development Agency (NIRDA), and the Cleaner Production and Climate Innovation Center (CPCIC).
Programme/Project Cost (US$)	**Programme Duration**
Total approved budget as per project document: USD 4,650,000 UNDP TRAC: USD 4,400,000 In-kind: USD 250,000 **Total: USD 4,650,000**	Overall Duration *(months) 62* Start Date: *October 2018* Original End Date: *June 2023* Current End date[1] *December 2024*

[1] The original end date was changed to December 2024 in order to better align with NST1.

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List of acronyms

AFOLU	Agriculture, Forestry and Land Use
CPCIC	Cleaner Production and Climate Innovation Center
CSO	Civil Society Organization
DAC	Development Assistance Committee
ENR	Environment and Natural Resources
FGD	Focus Group Discussion
FONERWA	Fund for Environment and Natural Resources of Rwanda
GCF	Green Climate Fund
GGCRS	Green Growth and Climate Resilience Strategy
GGGI	Global Green Growth Institute
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ITAP	Independent technical Advisory Panel
KII	Key Informant Interview
KPI	Key Performance Indicators
M&E	Monitoring and Evaluation
MINALOC	Ministry of Local Government
MIS	Management Information System
MoE	Ministry of Environment
NDCs	Nationally Determined Contributions
NIRDA	National Industrial Research and Development Agency
NST	National Strategy for Transformation
OECD	Organization for Economic Cooperation and Development
PDF	Portable Document Format
RBM&E	Results-Based Monitoring and Evaluation
REMA	Rwanda Environment Management Authority
RHA	Rwanda Housing Authority
RIB	Rwanda Investigations Bureau
RNP	Rwanda National Police
SCENR	Strengthening Capacities for the Environment and Natural Resources Sector
SME	Small and Medium Enterprise
SNV	Stichting Nederlandse Vrijwilligers
SSP	Sector Strategic Plan
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNSDCF	United Nations Sustainable Development Cooperation Framework

Executive summary

Environmental protection, sustainable management of natural resources and the fight against climate change are integral components of Rwanda's sustainable development agenda, as the country aspires to achieve green and inclusive growth. Guided by the Green Growth and Climate Resilience Strategy (GGCRS) and other national and sector-level strategies, various interventions have been established by the Government of Rwanda and development partners to promote green growth in the country. Between 2018 and 2024, UNDP implemented the Strengthening Capacities for the Environment and Natural Resources sector – the SCENR Project – with an overarching objective to strengthen the technical and institutional capacity of national and decentralized institutions in the ENR sector as catalyst for green economy transformation that is resilient to climate variability. This was meant to be achieved through three main outputs:

- *Output 1: ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources*
- *Output 2: Green Growth and Climate Resilience Strategy implemented in selected sectors*
- *Output 3: National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms*

This final evaluation report highlights the performance of the project and highlights areas for improvement.

Methodology

The final evaluation of the SCENR Project was conducted with emphasis on the OECD-DAC evaluation criteria: relevance, coherence, effectiveness, efficiency, sustainability and impact. A mixed-methods approach was used to evaluate the project's performance, entailing analysis of secondary quantitative data and primary data collected through key informant interviews and focus group discussions with stakeholder institutions and beneficiaries. A comprehensive review of relevant documents was done to contextualize the evaluation. Spot checks were also conducted in selected project sites where project interventions were implemented.

Findings

The summarized main findings from the SCENR Project evaluation are presented as per the five evaluation criteria – relevance, coherence, effectiveness, efficiency, sustainability and impact.

Relevance

The project was found to be quite relevant to Rwanda's green growth and sustainable development agenda, especially by strengthening the capacity of public, private, and civil society organizations to implement the Green Growth and Climate Resilience Strategy. The project is also synergetic to other national and sector-level policies like Priority Area 7 of the National Strategy for Transformation, the updated Nationally Determined Contributions, the National Environment and Climate Change Policy, the Strategic Plan for the Environment and Natural Resources Sector 2018-2024, among others. The project also contributes to United Nations Sustainable Development Cooperation Framework for Rwanda (UNSDCF 1, 2018-2024), particularly Outcome 2: "By 2024, Rwandan institutions and communities are more equitably, productively,

and sustainably managing natural resources and addressing climate change and natural disasters"; and Outcome 3: "By 2024, people in Rwanda, particularly the most vulnerable, have increased resilience to both natural and man-made shocks and live a life free from all forms of violence and discrimination". Overall, the project is vital for addressing vulnerabilities faced by the community related to climate change and environmental degradation, contributing to overall resilience and green growth.

Coherence

The SCENR project was largely successful in creating synergies with existing and future interventions by government and non-governmental institutions, some of which are: (i) developing a circular economy policy that led to interventions funded by GIZ, guiding and supporting districts in recycling of mining sector residues; (ii) complementing the mandate of Rwanda Housing Authority to relocate environmentally displaced people, by conducting a feasibility study and advising on green components to be added to the villages, such as rainwater harvesting, compost peat making, and livelihood support through provision of cows and pigs and construction of sheds; (iii) Supporting monitoring and strategic planning activities at FONERWA, including a 10-year impact evaluation and strategic plan as well as monitoring of funded projects through data collection, research and knowledge sharing; (iv) Complementing community policing mandate of Rwanda National Police (RNP) by using police officers to distribute solar photovoltaic (PV) for beneficiaries and passing on security messages during installation exercises.

Effectiveness

The SCENR project achieved a considerable level of success in implementing the planned interventions under all three outputs. Out of the 15 output-level indicators, 12 either performed very satisfactorily as they either fully achieved or surpassed their respective targets. One indicator performed unsatisfactorily, achieving 89% of its planned target. The mechanism of delivering interventions was quite strong, with effective stakeholder coordination mechanisms characterized by regular follow-ups and monitoring of interventions by UNDP and proactive implementation by all implementing partners to achieve a common goal.

Efficiency

The project's efficiency was enhanced by the use of quality-cost analysis principles stipulated in the Rwanda Public Procurement Law to select the most qualified and relatively low-cost service providers. Additionally, the community-based approach used by the project especially in implementing green components in IDP model villages ensured low-cost implementation compared to when private companies would be hired. The provision of solar-powered water tanks to private companies was a cost-effective way to stimulate their adoption of clean production technologies and practices, as it triggered a shift from biomass usage, delivering dual benefits of environmental protection and reduced production costs. Regarding timeliness of implementation, most interventions were implemented according to the roadmap agreed upon by the project steering committee, except for some cases where delays where experienced particularly for interventions that required public tenders. Regarding implementation efficiency, a competent team of staff from implementing partners was used, with considerable experience in the ENR sector. Implementation efficiency was further ensured through strong coordination and communication mechanisms between UNDP and the implementing partners. The SCENR project was also

successful in leveraging partnerships including joint field monitoring missions and relying on district officials to track and report on progress of specific interventions.

As far as budget utilization is concerned, the SCENR project performed very satisfactorily as most interventions utilized over 95% of the allocated budget. This indicates that the project interventions were set after careful consideration of implementation modalities and requirements, and that interventions were implemented according to the expected/planned scale.

Sustainability

Under Output 1, capacity building interventions enhanced skills and capacities that will continue to enhance the implementation of the ENR sector strategic plan and make further updates to and monitoring of ENR indicators under the enhanced RBM&E system.

Under Output 2, interventions to support decentralized implementation of GGCRS will continue as part of mandates of ministries and districts, while sectors like energy, infrastructure and agriculture have already mainstreamed green growth principles of GGCRS in their respective sector strategic plans that will be implemented beyond the SCENR project completion. The private companies that were provided with solar-powered water tanks are so far maintaining them, with some having full-time technicians responsible for undertaking regular maintenance. For the residents of Mudende and Kivugiza IDP model villages, the establishment of saving schemes in SACCOs from which funds are utilized to maintain and clean cow and water sheds without necessarily relying on the project support to undertake regular maintenance of the sheds. The saved money is also used to invest in other income-generating ventures meant to improve the livelihoods of the people. Additionally, the training provided to beneficiaries regarding business development and management enhanced capacity to undertake sustainable investments that will last beyond the life span of the project.

Under Output 3, a resource mobilization strategy and diversified funding sources coupled with capacity building will continue to boost resource mobilization by the Rwanda Green Fund.

Impact

At the individual level, capacities of staff from public institutions were strengthened which enhanced their effective implementation of ENR sector and GGCRS interventions, updating the RBM&E system, as well as mobilization of resources for environmental protection, natural resource management and climate change adaptation and mitigation. Beneficiaries of green components in IDP model villages also enhanced their capacity to sustainably manage natural resources and increase income generation from livelihood support interventions, while SME beneficiaries of solar PVs increased their adoption of clean production technologies and practices. At the organizational level, the mandates of implementing partners were strengthened to effectively implement the GGCRS as well as ENR sector interventions at national and local levels. The Ministry of Environment and its affiliated institutions increased its capacity to coordinate GGCRS and ENR sector strategic plan implementation and the general public in sustainable natural resource management through green components in IDP model villages; the CPCIC was more capable of supporting private companies to adopt clean production practices and technologies;

the Rwanda National Police became more capable of monitoring environmental crimes using drones especially in hard-to-reach mining sites; and the Rwanda Green Fund used the resource mobilization strategy to increase and diversify funding sources, increasing the cumulative amount of funds from $99 million in 2018 to $311.5 million in 2024. At the national level, the SCENR project strengthened multi-stakeholder coordination for join implementation of green growth initiatives, improved monitoring of ENR sector indicators, and increased the amount and diversity of funds available for implementing environmental protection, natural resource management and climate change mitigation and adaptation initiatives.

Summary of recommendations

1. *Enhance visibility of project reports and evaluations to facilitate learning, including publishing them on websites of all implementing partners whenever possible.*
2. *Allocate ample time for interventions especially those that require complex activities such as feasibility studies, public tenders and construction of physical infrastructures.*
3. *Consider refresher training for example for the results-based M&E system for the ENR sector to facilitate continuous learning and address high staff turnover at national and district levels.*
4. *Strengthen project monitoring and evaluation and reporting mechanisms by providing regular training and guidance to implementing partners to improve reporting effectiveness and avoid missing data on project indicators during evaluation exercise.*
5. *Consider some flexibility and thorough due diligence to ensure interventions suit realities of all target beneficiaries, for example offering alternative animals to potential beneficiaries who cannot rear pigs.*
6. *Continued multi-stakeholder and multi-sectoral coordination to realize the ENR sector objectives.*

Lessons learned

1. *A community-based approach is a cost-effective means of implementing interventions, provided prior community mobilization is done.*
2. *Granular planning to breakdown interventions into annual milestones can enhance realistic implementation of longer-term interventions.*
3. *A sustainability and exit strategy are essential at project design stage to ensure continuity of intervention after project funding ceases.*
4. *Flexibility is crucial including budget reallocations to cater for most pressing priorities amidst funding constraints.*
5. *Engagement of national and local-level stakeholders enhances ownership and accountability of interventions.*

1. Introduction

Green growth is a key development aspiration in Rwanda as the country strives to achieve sustainable transformation amidst the impending global threat of climate change. Environmental protection, sustainable and efficient use of natural resources, and the fight against climate change, are highly prioritized in national development policies, plans and sectoral strategies. The ultimate policy goal is to ensure that environmental, social and economic sustainability principles are appropriately observed along the country's development path. The Green Growth and Climate Resilience Strategy (GGCRS) sets an elaborate sustainable development agenda built on four thematic programme areas: Green Industrialization and Trade; Green Urban Transition and Integration; Sustainable Land Use and Natural Resource Management; and Vibrant, Resilient, Green Rural Livelihoods. These work programmes are meant to contribute to the realization of GGCRS's strategic objectives of: i) achieving efficiency, productivity and prosperity through economic growth and poverty reduction; ii) increasing the quality of life for all Rwandans through and inclusion and people focus; iii) protecting the country's natural heritage through sustainability of the Environment and Natural Resources (ENR) sector; and iv) connectivity and cooperation through good regional and global collaboration.

Rwanda submitted its updated NDCs in 2020, highlighting 27 adaptation interventions cutting across eight priority sectors: water, agriculture, land and forestry, human settlement, health, transport, mining and cross-cutting issues. The updated NDCs reiterate Rwanda's commitment to sustainable growth by ensuring effective climate change mitigation and adaptation across sectors. The National Strategy for Transformation (NST1, 2017-2024) also has a specific pillar – Priority Area 7 – devoted to environmental protection and natural resources management, with climate action indicated among strategic interventions. Similarly, Vision 2050 emphasizes the need for economic growth in Rwanda to follow a sustainable path in terms of use and management of natural resources and enhancing resilience against climate change (Republic of Rwanda, 2020).

Cognizant of the funding constraints that limit the scale and scope of adaptation and mitigation projects, a national climate fund, FONERWA, was established to fund environmental protection and climate adaptation interventions in the country. The government efforts to promote sustainable and green growth in the country are complemented by commendable efforts of development

partners. As part of its contributory role towards environmental protection in Rwanda, UNDP implemented the Strengthening Capacities for Environment and Natural Resources Sector (SCENR) project between 2018 and 2024, emphasizing capacity building for the Ministry of Environment and the National Green Fund (FONERWA) to drive the green growth agenda. This was meant to be achieved through three key result areas built around capacity building for sustainable and climate-resilient management of natural resources; effective implementation of the GGCRS across selected sectors; and enhancing the technical capacities of national and local public institutions as well as civil society organizations, the private sector to contribute to sustainable growth. Understanding the achievements made by the SCENR project and identifying shortfalls and lessons learned for future improvements requires a comprehensive final evaluation focusing on the project's relevance, coherence, effectiveness, efficiency, sustainability and impact.

2. Detailed description of the SCENR project

The Strengthening Capacities of the Environment and Natural Resources (ENR) Sector for Green Economy Transformation – SCENR project was designed with an intermediate objective to strengthen the technical and institutional capacity of national and decentralized institutions in the ENR sector as catalyst for green economy transformation that is resilient to climate variability. The project was funded by UNDP and implemented between 2018 and 2024 in collaboration with various organizations including the Ministry of Environment (MoE), the Rwanda Green Fund (FONERWA), Rwanda Housing Authority (RHA), Rwanda Investigations Bureau (RIB), Rwanda National Police (RNP), the National Industrial Research and Development Agency (NIRDA), and the Cleaner Production and Climate Innovation Center (CPCIC). Project interventions were spread across nine districts: 1) Rwamagana, 2) Kayonza and 3) Nyagatare in the Eastern Province; 4) Rubavu and 5) Karongi in the Western Province; 6) Kamonyi and 7) Nyaruguru in the Southern Province; and 8) Gakenke and 9) Musanze in the Northern Province.

The SCENR project set three outputs to contribute towards Rwanda's green transformation:

- Output 1: *ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources*
- *Output 2: Green Growth and Climate Resilience Strategy implemented in selected sectors*

- *Output 3: National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms*

Table 1: Summarized results framework: outputs, indicators, baseline values and targets

Indicator	Data source	Baseline (2018)	Targets (2024)
UNDAP Country Programme (CP) Outcome			
UNDAP CP Outcome Indicator 2.1 Percentage of public expenditure on environment, natural resources and climate change as a proportion of total public expenditure	National reports	6.2% (2015/16)	8%
Output 1: ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources			
1.1 Extent to which the environment and natural resources sector strategic plan implementation is coordinated[2]	Annual joint sector review report, minutes	1	3
1.2 Percentage (%) of ENR KPI and non-KPI monitored data available at a set frequency in the RBM&E system for improved decision making	RBM&E system, annual joint sector review report	*KPI 15% Non-KPI 80%*	*KPI100% Non-KPI* 80%
1.3 of ENR sector institution staff applying gender to develop and implement environmental policies and budget statements	Annual joint sector review, Training evaluation report	*0*	*350*
Output 2: Green Growth and Climate Resilience Strategy implemented in selected sectors			
2.1 Extent to which revised GGCRS PoA are reflected in SSPs[3]	Project Report, SSPs, Joint sector reviews	1	3
2.2 Percentage (%) of recommendations from Environmental policy gap analyses Implemented (By Gender disaggregation)[4]	Project report, minutes of sector meetings	0%	90%
2.3 Master plan for Wetlands Management in Kigali City developed, including categorization of wetlands, management plan of specific wetlands and resource mobilization plan and ready for further implementation	Project Report	No	Yes

[2] 1- , Coordination framework in place, RBM&E Established,), 2- Institution strengthened, Staff capacitated, Operationalization of the ENR-MIS/RBM&E), 3- Enhanced capacity of reporting and monitoring of environment and natural resources interventions)

[3] 1- Achievements evaluated, 2- Strategy reviewed with shared vision, 3- GGCRS indicators mainstreamed in SSPs of PoA sectors

[4] Recommended Policy Actions to be monitored are (mining Compatible with environmental standards, Utilization of renewable energy and energy efficiency technologies, implementation of water conservation practices, sustainable management of forest resources)

2.4 Extent to which the Cleaner Production and Climate Innovation Centre is strengthened on green technology transfer and operations[5]	Project Report	1	3
2.5 Number of SMEs that acquired climate change adaptation and mitigation (1) Practices and (2) Technology through CPCIC	Project Report	0	*30* (1) 25 (2) 5
2.6 Number of *households in IDP model villages newly benefiting from green components based on the GV toolkit, disaggregated by sex of the head of household*	Project Report	0[6]	*220* *F:99* *M:121*
2.7 *Extent (%) to which the GV toolkit is utilized in IDP model villages with disaggregation of existing IDP model villages*[7]	Project Report	0%	*150* *(80%)*
2.8 Number of project proposals developed by ENR sector and approved for fundings 1) GCF 2) Other funding institutions	Project Report	*1) 1* *2) 1*	*1)3* *2)3*
Output 3: National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms			
3.1 Cumulative volume of finance [US$ millions] mobilized through FONERWA for Environment and climate change interventions	Project Report	99	308
3.2 Percentage (%) of new quality proposals approved for funding 1) public sector 2) private sector 3) CSOs	Project Report	N/A	1) 35% 2) 25% 3) 30%
3.3 Percentage (%) of projects whose emerging lessons (both positive and negative) have been collated and disseminated by the FMT for knowledge sharing	Project Report Articles Documentary Booklets	80%	100%
3.4 Extent (%) to which the project reporting process is enhanced through FONERWA MIS (to be discussed)	Project Report	75%	100%

Source: Results framework for the SCENR project

[5] 0- Centre not yet established 1- , Centre established, 2- CPCIC and NIRDA staff capacity

[6] The programme will count the number of households anew from the start of the programme; however, it is worth noting that up to 2018 the MoE have provided greening components to 12 IDP model villages.

[7] Green village with the following toolkits: Water access toolkits (20%); Energy toolkits (20%); Settlement and Housing Design toolkits (20%); Value chain toolkits (20%); Agriculture, Sanitation and Hygiene, Solid waste management, Knowledge hub (5% each).

3. Objectives and scope

3.1. Evaluation objectives

The main objective of the SCENR program final evaluation is to assess the level of achievement of SCENR program implementation and document lessons learnt and good practices as well as challenges and recommendations to improve program design and implementation. Specific objectives of the assignment are to:

- Evaluate the achievements of the programme against its stated outputs and its contribution to the achievement of United Nations Sustainable Development Cooperation Framework (UNSDCF) Results.
- Assess the relevance, effectiveness, efficiency, sustainability, and impact of the interventions.
- Assess the programme's processes, including budgetary efficiency.
- Evaluate the main achievements and impacts of the programme's activities.
- Identify the underlying causes and issues of non-achievement of some targets and document lessons learnt.
- Inform the design of the next programme phase and assess how the project integrated cross-cutting issues of gender, disability, etc.

3.2. Evaluation scope

The SCENR program final evaluation covered the following elements.

i Assess whether the SCENR design is clear, logical, and commensurate with the time and resources available.

ii An evaluation of the programme's progress towards achievement of its overall objectives.

iii An evaluation of SCENR performance in relation to the indicators, assumptions and risks specified in the logical framework matrix and the Project Document

iv An assessment of the scope, quality and significance of the programme outputs produced during the implementation period in relation to expected results;

v Identification of any programmatic and financial variance and/or adjustments made during the implementation of the project and an assessment of their conformity with decisions of the PSC and their appropriateness in terms of the overall objectives of the programme.

vi An evaluation of the SCENR's contribution to the achievements of programme outputs and outcome.

vii An evaluation of programme coordination, management, and administration.

viii A prognosis of the degree to which the overall objectives and expected outcomes of the programme are likely to be met;

ix Progress towards sustainability and replication of programme activities;

x Assess the extent to which the design, implementation and results of the programme have incorporated a gender equality perspective and human rights- based approach

xi Assess the extent to which the design, implementation and results of the programme have incorporated the environmental sustainability concerns and make recommendation accordingly

xii Lessons learned during programme implementation.

xiii Evaluate the programme exit strategy in terms of quality and clarity.

4. Evaluation approach and methods

The evaluation was conducted using a mixed methods approach and a combination of activities that were both desk-based and field-based. The evaluation followed the Development Assistance Committee (DAC) criteria with five major aspects, namely; relevance, effectiveness, efficiency, sustainability and impact. These are elaborated in Table 2, along with the planned methods of verification for each criterion during the evaluation exercise.

Table 2: Evaluation criteria and planned means of verification

Criterion	Description	Means of verification
Relevance	Extent to which the SCENR program and its interventions are aligned with the interests of the intended beneficiaries and national development priorities	Desk review; benchmarking the SCENR program document with national development priorities (e.g. updated NDC of 2020, Vision 2050, NST1 and sectoral strategies.

Coherence	Compatibility of SCENR program with other interventions at national and/or sectoral levels.	Desk review of the SCENR program document and benchmarking with interventions implemented by public institutions, local and international organizations (based on project documents and periodic reports).
Effectiveness	Extent to which the program's planned activities were achieved and how they contribute towards the realization of the overall program goal.	Desk review of program reports and quantitative analysis of secondary M&E data to ascertain deviation between actual and planned achievements on each indicator; reasons for any deviation to be sought through stakeholder consultations (KIIs and FGDs).
Efficiency	Ascertaining value for money and the extent to which resources were utilized both as per original plan as well as in the most reasonable and appropriate manner.	Desk review of program budget performance and benchmarking with budgetary allocations for each respective intervention; reasons for any deviation to be sought through stakeholder consultations (KIIs).
Sustainability	❖ Environmental sustainability: Extent to which interventions considered environmental protection ❖ Financial sustainability: Extent to which interventions could be replicated and continued when program funding ceases.	Review of program document to ascertain adherence to environmental considerations including environmental impact assessments where necessary. Financial sustainability was ascertained through assessing the nature of interventions to ascertain how likely they are to be self-sustaining. KIIs and FGDs provided additional insights.
Impact	Changes in desired outcomes affected either positively or negatively by the program interventions, including indirect or unintended effects.	❖ Interviews with Ministry of Environment, UNDP and other stakeholders to ascertain the benefits so far attributable to the program. ❖ Discussion with selected beneficiaries to gather impact stories.

The detailed approach to evaluate the project based on the DAC evaluation criteria is elaborated in the evaluation matrix (Table 5).

4.1. Desk review of relevant literature

The SCENR program evaluation was approached first through a comprehensive desk review of all available relevant documents related to the program itself as well as national and sector-specific planning documents. The rationale for the desk review exercise was to create a thorough understanding of the context of the assignment, including giving comprehensive background to the SCENR project, its relevance, coherence within existing related interventions as well as progress made as per project reports. The desk review exercise sought to solicit information including but not limited to the overall goal of the program, its rationale, achievements and bottlenecks as ascertained from project reports. Through the desk review exercise, the modalities of project implementation were also elicited to assess their appropriateness while project milestones were ascertained and compared to planned indicators and targets. The desk review also looked out for plans to ensure sustainability (both environmental and financial) and integration of the gender lens and human rights-based approach in planned interventions.

The stakeholder engagement and M&E frameworks were also comprehensively assessed while several policy documents were reviewed to assess the extent to which the SCENR program and its associated interventions are aligned to the country's development agenda. Table 3 provides an indicative list of the documents that were reviewed prior to quantitative data analysis and field-based activities. The table further provides details the anticipated information to be gathered from the respective sources. The findings from the desk review were crucial in informing the planned data collection exercise, particularly determining information gaps to be filled through key informant interviews and random spot checks on selected project sites.

Table 3: Indicative list of potential documents for desk review

S/N	Document title	Anticipated information
1	Rwanda's updated NDC of 2020	Ascertaining alignment of SCENR program to Rwanda's climate change mitigation and adaptation agenda.
2	National Strategy for Transformation (NST1, 2017-2024)	Medium-term policy commitments, strategies and targets related to environmental protection and climate change mitigation and adaptation.
3	Green Growth and Climate Resilience Strategy (GGCRS) – 2011	Alignment between the SCENR project and the sustainability and green growth aspirations outlined in GGCRS.
4	Green Growth and Climate Resilience Strategy (GGCRS) – 2022	
5	National Environment and Climate Change Policy of 2019	Assessment of policy commitment and objectives to achieve environment protection, natural resources management as well as adapt to and mitigate the adverse effects of climate change.
6	National Policy for Water Resources Management	
7	Strategic Plan for the Environment and Natural Resources (ENR) Sector 2018-2024	Examination of sector-level short to medium-term initiatives and strategic orientation to protect the environment and natural resources, as well as strategies in place to mobilize funding for environmental protection, natural resource management and climate change mitigation and adaptation initiatives.
8	FONERWA Strategic Plan 2019-2024	
9	Rwanda Voluntary National Review of 2019	Environment-related policy achievements and plans and how these are complemented by the SCENR program.
10	SCENR program document and its M&E framework	Program indicators and targets and means of tracking their implementation against which progress was benchmarked.
11	❖ Monitoring reports (e.g. minutes of Steering Committee meetings), annual reports and quarterly progress reports. ❖ Other knowledge products such as management and action plans, publications and other material and reports	Progress achieved against planned milestones for the SCENR program to ascertain effectiveness and assess deviation from original plans (whose reasons would be sought through KIIs with relevant stakeholders).
12	Quarterly financial reports of the SCENR project	Cost-effectiveness, budget execution performance and value for money of SCENR interventions to ascertain project efficiency
13	Rwanda Vision 250	Ascertain the extent of alignment of the SCENR project with Rwanda's long-term development goals
14	United Nations Sustainable Development Cooperation Framework (UNSDCF II) for Rwanda	Assess the level of alignment between the SCENR project and UN Rwanda programming priorities and objectives
15	Relevant project documents and progress reports of other development partners	Assess coherence of the SCENR project with sustainable development programs of other development partners
16	Any other documents as identified during the inception phase.	Other relevant to the SCENR program and its evaluation to understand enablers and constraints to implementation, including benchmarking with regional and international best practices in climate change mitigation and adaptation and protection of environment and natural resources.

Additionally, as part of the desk review exercise, a stakeholder mapping was conducted to identify the key stakeholders (government, private sector, civil society organizations, academic and development partners/funders) that are instrumental and informative with regards to climate change mitigation and adaptation, paying particular emphasis on implementing partners of the SCENR program. This stakeholder mapping exercise helped in identifying potential respondents for the field-based activities (data collection) as well as guide apportioning responsibilities in implementing the suggested evidence-based recommendations.

4.2. Primary data collection

Based on the findings of the document review and secondary quantitative data analysis, any additional information gaps were bridged through key informant interviews targeted to UNDP, program implementing partners and other relevant. The information collected from this exercise helped to concretize the findings of the desk-based activities and seek stakeholders' insights on capacities for environmental protection, natural resource management, climate change adaptation and mitigation in Rwanda. The overall rationale of the stakeholder consultations was to fill in any information gaps from desk review, especially finding explanations for patterns of project-related information as well as gaps identified from the desk review exercise. Table 4 provides an indicative list of stakeholder/respondent category and required information to be gathered as well as the anticipated sampling techniques and data collection methods for each stakeholder category.

Table 4: Structure of the primary data collection exercise

S/N	Stakeholder category	Required information	Data collection method/tools	Sampling technique
1	**UNDP** Head of Sustainable Growth Unit; SCENR focal person, Management Support Unit (MSU), M&E staff, etc.	❖ SCENR program context and background ❖ Reasons for any deviation between planned and actual achievements ❖ Reasons for any deviation between budgetary allocations and actual spending per activity/intervention ❖ Enabling and constraining factors during program implementation.	Key informant interviews	Purposive sampling based on role and knowledge

2	**Government partners, including implementing partners of the SCENR program** MoE, FONERWA, NIRDA (particularly representatives of Cleaner Production and Climate Innovation Center – CPCIC), RIB, RNP, RHA, MINALOC, etc.	❖ Existing policies and strategies and their implementation progress in line with environmental protection and climate change adaptation and mitigation. ❖ Funding mechanisms and sources for various interventions related to environmental protection, natural resource management and climate change adaptation and mitigation. ❖ Confirmation of milestones of the SCENR program and their alignment with the priorities of NDCs and national development planning documents. ❖ Quality of stakeholder coordination in SCENR program implementation ❖ Enabling and constraining factors to SCENR program implementation. ❖ Recommendations to improve program implementation.	❖ Key informant interviews using semi-structured questionnaires, as well as examination of any relevant documents. ❖ Random sport checks on selected intervention sites.	Purposive sampling based on official's knowledge, experience and duties within the respective institution
3	**International organizations (development partners)** UNCDF, SNV, GIZ, Global Green Growth Institute (GGGI), etc.	❖ Funding instruments, past/ongoing/planned programs and strategies to promote environmental protection, climate change adaptation and mitigation and implementation of NDCs. ❖ Opportunities and challenges to further promote green growth.	Key informant interviews using semi-structured questionnaires, as well as examination of any relevant documents	Purposive sampling based on official's knowledge, experience and duties within the respective institution
4	**Private sector** PSF in general and specific chambers related to climate change	❖ Role of the private sector in implementing interventions under the SCENR program as well as overall environmental protection and natural resource management. ❖ Challenges of private sector engagement in implementation of environmental protection projects. ❖ Recommendations to improve the implementation of the SCENR program.	❖ Key informant interviews using semi-structured questionnaires, as well as examination of any relevant documents ❖ Focus group discussions (FGDs) for players in a similar category	Purposive sampling based on official's knowledge, experience and duties within the respective institution
5	**District offices** Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi,	❖ Nature of interventions implemented ❖ How the interventions enhanced the capacity of the district to deliver its mandate including	❖ Key informant interviews with district officials including SCENR focal persons, training participants	Purposive sampling depending on the officials' respective roles

	Musanze, and any other relevant districts	implementation of the GGCRS at local level ❖ Success / impact stories emerging from interventions ❖ Enabling factors to the realization of SCENR project milestones ❖ Challenges and recommendations to enhance project design and implementation	and other relevant officials	within the districts
6	**Other stakeholders** Civil society, academia, faith-based and other organizations	❖ General insights on the opportunities, challenges and recommendations to further promote green growth, environmental protection, natural resource management and climate change adaptation and mitigation.	Key informant interviews using semi-structured questionnaires, as well as examination of any relevant documents	Purposive sampling based on official's knowledge, experience and duties
7	**Direct beneficiaries of selected interventions** Members of the general public who benefitted from various interventions including individuals, SME owners, residents of IDP model villages, etc.	❖ Impact stories from implemented initiatives under the SCENR program. ❖ Challenges and recommendations improved program implementation.	❖ Key informant interview (KIIs) and/or Focus Group Discussions (FGDs) with direct beneficiaries of program interventions. ❖ Random spot checks at selected intervention sites.	Purposive sampling based on availability of learning and success points.

4.3. Evaluation matrix

Table 5 provides a simple evaluation matrix summarizing the evaluation criteria, questions, data sources, data collection methods and tools, indicators and methods of data collection.

Table 5: Simple evaluation matrix and information gathering methods

Evaluation criteria	Evaluation questions	Data sources	Data collection methods	Indicators /success standards	Data analysis methods
Relevance	1. Where is this SCENR being implemented? How were the programme sites selected? What	SCENR program Document;	Desk review of SCENR program	Targets set considering prevailing	Triangulation of information

	has been the focus of the programme implementation so far? Who are the main beneficiaries? How were they selected? How was the programme aligned to the national development strategies or plans? 2. To what extent was the project in line with national development priorities, country programme outputs and outcomes, the UNDP Strategic Plan, and the SDGs? 3. To what extent does the project contribute to the theory of change for the relevant country programme outcome? 4. To what extent were lessons learned from other relevant projects considered in the design? 5. Are the activities and outputs of the project consistent with the overall goal and the attainment of its objectives? 6. Are the activities and outputs of the programme consistent with the intended impacts and effects? 7. To what extent were perspectives of men and women who could affect the outcomes, and those who could contribute information or other resources to the attainment of stated results, taken into account during project design processes? 8. To what extent does the project contribute to gender equality, the empowerment of women and the human rights-based approach?	national policies e.g. GGCRS, NST1, etc.; interviews with UNDP, implementing partners, government officials and other relevant stakeholders	Document and national policies; key informant interviews (KIIs) using semi-structured questionnaires targeting focal persons in UNDP, implementing partners (MoE, FONERWA, RHA, RIB, RNP, NIRDA, CPCIC) and other stakeholders; FGDs with selected beneficiaries in some of the project districts	baselines and context; synergies with national development priorities, Rwanda UNSDCF II, UNDP Country Programme, etc. Example: SCENR project or some of its interventions picking on a key result area or priority identified in national policies and/or sectoral strategic plans	from reviewed documents; transcription and thematic analysis of qualitative responses from KIIs
Coherence	1. How well does the SCENR align with the overall goals and objectives of the project? 2. Are there clear linkages between different components of the intervention?	SCENR program documents and project documents of other interventions implemented by	Desk review and benchmarking of SCENR program document and other projects implemented	Tangible synergies created between the SCENR program and interventions of	Triangulation of information from reviewed documents; transcription and thematic

	3. To what extent do the various activities within the intervention support each other? 4. Have potential conflicts or contradictions between different parts of the intervention been identified and addressed? 5. How well does the intervention align with national and international policies, strategies, and priorities? 6. What efforts have been made to ensure that the intervention complements other ongoing projects or initiatives in the country/sector/institution? 7. Have consultations with relevant stakeholders been conducted to assess alignment with external frameworks? 8. How does the intervention leverage existing resources, infrastructure, or initiatives within the country/sector/institution? 9. Have potential overlaps or gaps with other interventions been identified, and how have they been managed? 10. How does the intervention integrate with or build upon other interventions in the same sector or country? 11. To what extent does the intervention contribute to achieving broader sectoral, national development goals? 12. What synergies or complementarities exist between this intervention and others, and how are they being leveraged? 13. Have there been any efforts to coordinate activities and share learnings with other interventions in the same context? 14. How have lessons learned from other interventions been applied to enhance the coherence of this intervention? 15. How adaptable is the intervention to changes in the external environment or emerging needs?	other organizations and government institutions.	by other organizations. KIIs with SCENR program staff and/or focal persons of selected projects of other organizations.	other organizations. Example: Some SCENR interventions aligning with (in terms of duration, priority setting, etc.) with existing interventions of government and non-government organizations.	analysis of qualitative responses from KIIs

	16. Have mechanisms for adjusting the intervention based on lessons learned or changing circumstances been put in place? 17. To what extent does the intervention allow for flexibility in implementation without compromising coherence? 18. How has the intervention responded to feedback and input from stakeholders to improve its coherence over time?				
Effectiveness	1. To what extent did the SCENR project contribute to the country programme outcomes and outputs, the SDGs, the UNDP Strategic Plan, and national development priorities? 2. To what extent were the project outputs achieved, considering men, women, and vulnerable groups? 3. What factors have contributed to achieving, or not, intended country programme outputs and outcome 4. To what extent has the UNDP partnership strategy been appropriate and effective? 5. What factors contributed to effectiveness or ineffectiveness? 6. In which areas does the project have the greatest achievements? Why and what have been the supporting factors? How can the project build on or expand these achievements? 7. In which areas does the project have the fewest achievements? What have been the constraining factors and why? How can or could they be overcome? 8. What, if any, alternative strategies would have been more effective in achieving the project objectives? 9. Are the project objectives and outputs clear, practical and feasible within its frame? Do they	SCENR program Document; comparison of progress reports (quarterly and annual) and results framework; M&E data; interviews with beneficiaries and focal points in UNDP and implementing partners (MoE, FONERWA, RHA, RIB, RNP, NIRDA, CPCIC), plus additional KIIs with other relevant organizations; Spot checks on selected project sites in some of the project districts: Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi, and Musanze	Desk review of project document, quarterly and annual reports from UNDP and implementing partners; key informant interviews using semi-structured questionnaires administered to purposively sampled respondents in respective institutions; field observation based on spot checks/field visits to selected project sites in some intervention districts: Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi, and Musanze	Percentage of outcomes, outputs and targets achieved; progress made as a percentage of target Example: A quantitative indicator achieving or surpassing its target, such as training 50 national and local government officials when the target was 40 officials.	Triangulation of findings from desk review; transcription and thematic analysis of KII findings; score card rating approach (e.g. achieved (status >= target), satisfactory (status >80% of target), moderate performance (status between 50-80% of target) and poor (performance on an indicator being below 50% of its respective target

	clearly address women, men and vulnerable groups? 10. To what extent have different stakeholders been involved in project implementation? 11. To what extent were project management and implementation participatory, and did the participation of men, women and vulnerable groups contributing towards achievement of the project objectives? 12. To what extent has the project contributed to gender equality, the empowerment of women and the realization of human rights?				
Efficiency	1. To what extent was the SCENR project management structure as outlined in the project document efficient in generating the expected results? 2. To what extent were resources used to address inequalities in general, and gender issues in particular? 3. To what extent have the UNDP project implementation strategy and execution been efficient and cost-effective? 4. To what extent has there been an economical use of financial and human resources? Have resources (funds, staff, time, expertise, etc.) been allocated strategically to achieve outcomes? 5. To what extent have resources been used efficiently? Have activities supporting the strategy been cost-effective? 6. To what extent have project funds and activities been delivered in a timely manner? 7. To what extent do the M&E systems utilized by UNDP ensure effective and efficient project management?	SCENR program Document and budget allocations per activity; financial reports from UNDP and implementing partners	Desk review of programmatic and financial reports; budget analysis; KIIs with UNDP and implementing partners	Strict adherence to budget allocation; closeness between allocated and executed budgets per activity. Examples: (i) A training program that covers leverages creative training channels, covering a large number of participants at a cost that is much lower than any other modes of delivering the training; (ii) utilizing over 95% of allocated budget to implement at least 95% or more of planned activities	Budget analysis to identify financial deviation as a percentage of planned allocations; triangulation of information from partner financial reports

Sustainability	1. To what extent will target men, women and vulnerable people benefit from the project interventions in the long-term? 2. To what extent will financial and economic resources be available to sustain the benefits achieved by the project? 3. Are there any social or political risks that may jeopardize sustainability of project outputs and the project contributions to country programme outputs and outcomes? 4. Do the legal frameworks, policies and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? 5. To what extent did UNDP actions pose an environmental threat to the sustainability of project outputs, possibly affecting project beneficiaries (men and women) in a negative way? 6. What is the chance that the level of stakeholder ownership will be sufficient to allow for the project benefits to be sustained? 7. To what extent do mechanisms, procedures and policies exist to allow primary stakeholders to carry forward the results attained on gender equality, empowerment of women, human rights and human development 8. To what extent do stakeholders (men, women, vulnerable groups) support the project's long-term objectives? 9. To what extent are lessons learned documented by the project team on a continual basis and shared with appropriate parties who could learn from the project? 10. To what extent do UNDP interventions have well-designed and well-planned exit strategies	SCENR program Document; quarterly and annual reports; stakeholder consultations and field spot checks.	Checking sustainability (environmental and financial) plan and exit strategy in SCENR program document and comparing with progress reports; KIIs with UNDP and implementing partners; spot checks/field visits to selected project sites in some intervention districts/sectors	Measures in place so far to ensure continuation and replication of program benefits Example: National government entities e.g. ministries or local government entities e.g. districts taking up some of the SCENR interventions and incorporating them in their development plans and budget allocations	Triangulation of information form the SCENR program Document and progress reports; thematic analysis of qualitative data from KIIs

	which include a gender dimension? 11. What could be done to strengthen exit strategies and sustainability in order to support female and male project beneficiaries as well as marginalized groups?				
Impact	1. What are the stated goals of the programme? To what extent are these goals shared by stakeholders 2. What are the primary activities of the programme and expected outputs? To what extent have the activities progressed? How did the programme contribute to the achievement of SCENR outputs? 3. How have beneficiaries' behaviours or attitudes changed as a result of the intervention? 4. What unintended or unexpected impacts (positive or negative) has the project had on the target population or community 5. Has the SCENR contributed or is likely to contribute to long-term social, economic, technical, environmental changes for individuals, communities, and institutions related to the programme? 6. How many people have been affected? 7. What difference has the programme made to beneficiaries including institutions?	Quarterly and annual progress reports from UNDP and implementing partners; stakeholder consultations; spot checks or field visits to a cross-section of program sites in selected districts/sectors; FGDs with selected beneficiaries in some of the project districts: Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi, and Musanze	Desk review of progress reports; key informant interviews using semi-structured questionnaires administered to focal points in UNDP, implementing partners and other relevant stakeholders	Improvement in stakeholder coordination and overall implementation capacity of relevant institutions regarding environmental protection, natural resource management and climate change adaptation and mitigation interventions; number of people reporting enhanced planning, coordination and implementation capacity	Triangulation of information from progress reports and SCENR program Document; transcription and thematic analysis of responses from KIIs

4.4. Evaluation performance standards

The final evaluation of the SCENR Project followed the performance standards stipulated in the evaluation guidelines of the United Nations Evaluation Group (UNEG). The key applicable standard is Standard 3 concerning evaluation competencies, particularly the two sub-components on technical competency and ethics. Table 6 summarizes the two sub-components and how these were applied to ensure an effective final evaluation for the SCENR Project.

Table 6: Application of key evaluation performance standards as per UNEG guidelines

Standard indicator	Sub-component	Application to SCENR Project evaluation
Standard 3: Competencies		
3.1: Technical competency Individuals engaged in designing, conducting and managing evaluation activities should possess the core competencies required for their role in the evaluation process.	Technical skills, competency and experience to deliver an effective evaluation	The evaluation was led by Ggombe Kasim Munyegera (PhD) who has a PhD in Development Economics and over 13 years of experience in research, policy analysis and project evaluation. He is also knowledgeable of UN processes, having served as a consultant for UN agencies like UNDP, UNECA, ILO, UNCDF, ILO, FAO, and UNU-WIDER. He has also served government institutions and international organizations like GIZ, Ecorys, Japan Weather Association (JWA), International Growth Center (IGC), DT Global, among others. He has knowledge of climate change, ENR sector, NDCs and Rwanda country context.
3.2: Ethics: All those engaged in designing, conducting and managing evaluations should conform to agreed ethical standards in order to ensure overall credibility and the responsible use of power and resources	**Evaluation processes and products** Ensuring accuracy, completeness and reliability; inclusion and non-discrimination; transparency; and fair and balanced reporting that acknowledges different perspectives.	Various measures were put in place to ensure accurate reporting within the evaluation. This includes cross-checking information in documents with KIIs and double-checking unclear statistics with relevant focal persons for clarification. While collecting information from beneficiaries, no particular gender, age and other social categories were undermined or discriminated against.
	Interactions with participants Engaging appropriately and respectfully with participants in evaluation processes, upholding the principles of confidentiality and anonymity and their limitations; dignity and diversity; human rights;	Whenever it was possible to include female and male respondents as well as persons of various social categories in interviews and collection of impact stories from project beneficiaries, this was done. All respondents were contacted and interviewed with utmost adherence to dignity and respect.

	gender equality; and the avoidance of harm.	

UNEG (2016). Norms and Standards for Evaluation

4.5. Stakeholder engagement in and contribution to the evaluation

The success of the final evaluation for the SCENR project largely banked upon the joint effort of various categories of stakeholders. UNDP led the evaluation process and coordinated all activities conducted by the evaluation team / consultant, including providing necessary documents and mobilizing implementing partners to provide their inputs into the process. Implementing partners also actively participated in the evaluation exercise by providing necessary progress and financial reports and availing staff to respond to key informant interviews during the primary data collection phase of the evaluation. The implementing partners include the Ministry of Environment (MoE), the National Industrial Research and Development Agency (NIRDA), Rwanda Investigations Bureau (RIB), Rwanda National Police (RNP), Rwanda Green Fund (FONERWA), and the Cleaner Production and Climate Innovation Center (CPCIC).

Districts where project interventions were implemented were also proactive especially in as far as mobilizing beneficiaries during implementation and availing staff to answer key evaluation questions. These districts are: Rubavu, Nyaruguru, Karongi, Rwamagana, Kayonza, Nyagatare, Gakenke, Kamonyi, and Musanze. Finally, various categories of beneficiaries also participated in the entire process in two ways: (i) by facilitating the implementation of various interventions, and (ii) devoting time to share their experiences and impact stories. Overall, the participatory nature of the evaluation allowed for the inclusiveness of insights and stakeholder ownership of the evaluation process, as well as comprehensiveness and richness of the evaluation findings.

4.6. Methodological risks and their mitigation strategies

The major anticipated risk was related to availability and accuracy of statistics and records to ascertain project performance and status of interventions. Project reports were not readily available for some interventions, and the evaluation team devised an innovative approach of comprehensive discussions with implementing partners to ensure collection of accurate performance status information. This was complemented by random spot checks on selected intervention sites to

cross-validate information from project reports and key informant interviews with implementing partners.

5. Data analysis

5.2. Analysis of secondary quantitative data

Available and relevant secondary data was analyzed to understand patterns and trends of environment and climate-related indicators, based on data provided in M&E databases and periodic program narrative reports. The analysis was conducted using STATA software and results presented both tabularly and graphically to clearly highlight any deviations between the planned and realized milestones. In other words, a score card was used to indicate the level of achievement on each quantitative indicator as a percentage of its respective target. The levels of achievements were then categorized as being fully achieved (e.g. status >= target), satisfactory (e.g. status >80% of target), moderate performance (e.g. status between 50-80% of target) and poor (e.g. performance on an indicator being below 50% of its respective target). This exercise was instrumental in ascertaining the **effectiveness** aspect of the SCENR program evaluation.

Another aspect of the secondary data analysis involved reviewing budgetary allocations for each planned interventions and comparing them with the actual budget execution as reported in periodic financial reports. Like in the case of activity performance, budgetary performance was rated based on the amount spent on each activity as a percentage of the originally allocated budget for the same activity. Any financial deviations were highlighted, for which the justifications were sought during the stakeholder consultations (qualitative data collection) phase. This budgetary analysis exercise was instrumental in ascertaining the **efficiency** of the project interventions.

5.2. Analysis of primary qualitative data

The thematic approach was used to analyze qualitative data collected through key informant interviews and focus group discussions. Upon completion of the data collection exercise, responses were transcribed and examined in detail in order to identify similarities and differences, code responses, develop themes along which to characterize the subject matter and finally tabulate and/or visualize the responses according to the established themes. The information was presented according to the five evaluation criteria stipulated by the Development Assistance Committee

(DAC). In order to ensure systematic representation of a large volume of qualitative data, NVIVO software was used and the overall qualitative analysis plan followed the method of Braun and Clarke (2006) which is a simple six-step procedure. The choice of this analytical approach is motivated by its strength in systematically compressing and summarizing huge volumes of qualitative data to come with highly informative and summarized insights.

Step 1: Familiarization: The text responses were thoroughly read, and any audio recordings transcribed in order to familiarize with the stakeholder responses (data).

Step 2: Coding: Sections of the data/responses were highlighted to come up with shorthand labels or codes that describe the content of the data.

Step 3: Generating themes: The established codes were examined to identify patterns from which themes were generated. The themes were more broadly grouped or categorized codes that carry similar or closely related information.

Step 4: Reviewing the themes: The themes were scrutinized to ascertain how accurately they represent the data/responses. Where necessary, modifications were made to improve data representation.

Step 5: Defining and naming themes: This entailed clearly indicating what each theme in the final list of themes represents and exactly how it helps to understand the underlying data/responses.

Step 6: Representation and writing: The data was then be tabulated or visualized based on the established themes to better illustrate and summarize the responses. The final task in the assignment was to write the findings, clearly making sense of the responses in line with the topic.

6. Findings as per evaluation criteria

This section provides an overview of the evaluation findings from both desk-based and field-based activities. It focuses on performance of the SCENR Project as per the six OCED/DAC evaluation criteria: relevance, coherence, effectiveness, efficiency, sustainability, and impact.

6.1. Relevance

This subsection assesses how relevant the SCENR Project was to the country context, including addressing Rwanda's sustainable development concerns and aligning with the aspirations of the

Government of Rwanda, UNDP, implementing partners, the general population and other levels of relevant stakeholders. Findings are presented with emphasis on three main dimensions of relevance: suitability of the SCENR Project to Rwanda's country context and alignment with national development strategies; alignment with priorities of the target group and donor; and consistence of activities with the overall goal, objectives and intended impacts.

6.1.1. Alignment with national development priorities

The SCENR Project is well aligned with Rwanda's green growth and sustainable development agenda reflected in various national policies and sector-level strategies. Table 7 summarizes they key policies and strategies focusing on environmental protection, sustainable natural resource management, and climate change adaptation and mitigation. The SCENR Project has synergies with several of the policies and strategies described in the table. For example, Output 2 is fully devoted to supporting the implementation of the GGCRS while Output 1 recognizes the need to build capacities of to optimize and scale-up sustainable and climate resilient management of natural capital resources, linking well with the GGCRS aspiration of building cross-cutting areas (training, capacity building and inclusion) as one of the drivers for enhanced green growth and climate resilience. Overall, the discussions with stakeholders revealed that the SCENR project was well positioned to address institutional capacities constraints and enhance fulfillment of institutional mandate. For example, the Ministry of Environment had many priority interventions including mapping of wetlands but with limited resources, such priorities could not easily be materialized. Therefore, the development of a resource mobilization strategy was crucial and timely.

Table 7: Key environment and climate change policies and strategies in Rwanda

S/N	Enactment Year	Policy/Strategy	Emphasis
1	2011	National Policy for Water Resources Management	Integrated and sustainable management of water resources and ensure quality access for all
2	2011	Green Growth and Climate resilience Strategy (GGCRS)	Low-carbon development – mitigation – through geothermal power generation, integrated soil fertility management, and high-density walkable cities. Climate resilience – adaptation – through irrigation infrastructure, robust road network, and a center for climate knowledge for development.

3	2015	Intended Nationally determined Contributions (NDCs) of Rwanda	Climate change adaptation focusing on six priority sectors: Agriculture, Forestry, Tourism, Water; and Land use. Adaptation Programmes of action: Sustainable intensification of agriculture and diversification of agricultural export markets; sustainable forestry, agroforestry and bioenergy; ecotourism conservation and payment for ecosystem services promotion in protected areas; integrated water resource management and planning; and integrated approach for sustainable land use planning and management. Climate change mitigation focusing on priority sectors: Energy, Transport, Industry, Waste, and Forestry. Mitigation programmes of action: Low-carbon energy mix; sustainable, small-scale energy installation; energy efficiency and demand-side management; efficient and resilient transport system; green industry and private sector development; implementation of low-carbon urban systems; and sustainable forestry, agroforestry and biomass energy.
4	2017	Priority Area 7 of the National Strategy for Transformation (NST1, 2017-2024)	Sustainable management of environment and natural resources to transform Rwanda towards a green economy
5	2017	Strategic Plan for the Environment and Natural Resources Sector 2018-2024	Optimize and scale-up sustainable and climate resilient management of natural capital resources to anchor and accelerate achievement of Rwandan prosperity
6	2019	National Environment and Climate Change Policy	Green and resource-efficient production technologies at primary, secondary and tertiary levels, emphasizing sustainable land and natural resource use, food security, biodiversity preservation, social protection, improved health and disaster risk reduction
7	2019	FONERWA Strategic Plan (2019-2024)	Resource mobilization to support Rwanda's sustainable economic development Fund management to achieve national environment and climate change priority goals
8	2020	Rwanda Vision 2050	Growth and development path backed upon the sustainable use and management of natural resources while building resilience to cope with climate change impacts

9	2020	Updated Nationally Determined Contributions (NDCs)	Reduce emissions by 38% by 2030 relative to BAU levels, focusing on three priority sectors for mitigation: Energy, AFOLU (currently focusing on Agriculture), Industrial Processes and Product Use (IPPU), and Waste. A set of 27 adaptation measures focusing on eight priority sectors for adaptation: Water, Agriculture, Land use and Forestry, Human settlement, Health, Transport, Mining, and Cross-cutting issues
10	2022	Green Growth and Climate resilience Strategy (GGCRS) – Revised/Phase 2	Green Industrialization and Trade; Green Urban Transition and Integration; Sustainable Land Use and Natural Resource Management; and Vibrant, Resilient, Green Rural Livelihoods
11	2022	Rwanda Environment Management Authority (REMA) Strategic Plan 2022-2026	Ecosystem rehabilitation/restoration and biodiversity conservation; climate change resilience; compliance and enforcement; and education, awareness and mainstreaming.

6.1.2. Alignment with UN programming priorities

Besides alignment with national policies and sectoral strategies, the SCENR project also contributes to United Nations Sustainable Development Cooperation Framework for Rwanda (UNSDCF 1, 2018-2024), particularly Outcome 2: "By 2024, Rwandan institutions and communities are more equitably, productively, and sustainably managing natural resources and addressing climate change and natural disasters"; and Outcome 3: "By 2024, people in Rwanda, particularly the most vulnerable, have increased resilience to both natural and man-made shocks and live a life free from all forms of violence and discrimination". Additionally, the project builds synergies with the UNDP Country Programme, particularly Output 1: "Low emission and climate-resilient objectives addressed in national, sub-national and sectoral development plans and policies to promote economic diversification and green growth".

6.1.3. Consistency of activities with overall goal, objectives and intended impacts

The SCENR Project was successful in achieving its overall objective of not only facilitating environmental protection and natural resource management but also strengthening capacities at the individual and institutional levels. By facilitating the implementation of the GGCRS across sectors, conducting capacity building sessions, guiding policy and strategy development and supporting implementation of environmental protection initiatives, the project was able to address technical

and institutional capacity gaps that hitherto had limited the effective implementation and coordination of environmental protection, natural resource management and climate action initiatives. Overall, the project proved vital for enabling partner institutions to fulfill their mandate and addressing vulnerabilities faced by the public related to climate change and environmental degradation, ultimately contributing to overall resilience and green growth.

6.2. Coherence

Based on desk review findings and discussions with stakeholders, it was apparently clear that the SCENR project created synergies with other existing and/or later on planned interventions implemented by government and non-government institutions. To be precise, UNDP funding for the SCENR project was a catalyst for bigger interventions that were implemented by implementing partners with funding from other development partners. For example, the implementation plan developed by the SCENR project resulted in some interventions that were developed by the Ministry of Environment as project proposals. The circular economy project developed under the SCENR project led to interventions that were later implemented in three districts with funding from GIZ, including guiding mining sector actors in recycling of mining residues. Similarly, the SCENR project supported Rwanda Green Fund to develop the Climate Adaptation Fund (CAF) including call for proposals and ultimate selection of 25 projects, some of which have been supported by other development partners such as the World Bank.

Another interesting story of the project's coherence is the synergies created with the existing interventions of Rwanda Housing Authority (RHA). RHA had a plan to construct IDP model villages to relocate people from environmentally vulnerable areas across the country. The SCENR project seized this opportunity to conduct a feasibility study and advised on green components to include in the villages, ideally "giving life" to the villages. Such green components include rainwater harvesting tanks/systems, solid waste management infrastructure, compost peat making, livelihood/financial support including construction of cow and pig sheds, provision of start-up funds for small-scale businesses and distribution of cows and pigs to residents Mudende and Nyaruguru IDP villages in Rubavu and Nyaruguru districts, respectively.

The Rwanda Green Fund was planning to evaluate its performance since inception, and the SCENR project supported this aspiration by funding the 10-year impact evaluation as well as

development of a five-year strategic plan that will continue guiding resource mobilization for climate change adaptation and mitigation projects. Additionally, the SCENR Project supported in FONERWA in monitoring and evaluating funded projects through ongoing data collection, research, and knowledge-sharing efforts to track climate change impacts and resilience, creating great synergies with the mandated activities of the institution.

The SCENR project also created synergies with the community policing mandate of the Rwanda National Police (RNP) by using police officers to distribute and install solar PVs to beneficiary households and during installation, police officers passed on security messages to the public for enhanced awareness. Similarly, the Clean Production and Climate Innovation Center (CPCIC) has a mandate of supporting private companies to improve their resource efficiency. The SCENR project built onto this mandate by supporting with the provision of solar-powered water tanks to enable private companies transition from firewood and charcoal in the process of boiling water used in production processes.

6.3. Effectiveness

This subsection evaluates the performance of the SCENR Project in terms of extent to which it achieved its objectives and outputs, and assesses the enabling and constraining factors to the realization of project objectives. Whenever programmatic deviations between planned and achieved milestones were identified, justification was sought from the project team, including UNDP and implementing partners. The subsection further discusses consideration of gender equality and human rights-based approaches in the design and implementation of the SCENR Project as well as strength and quality of stakeholder coordination mechanisms employed throughout its implementation.

6.3.1. Achievement of objectives, outputs and targets

The success of the SCENR project is reflected in the capacities it built at national and local government levels with regards to environmental protection, natural resource management and coordination of climate change adaptation and mitigation initiatives. The implementation of the GGCRS and mainstreaming of its priorities across various sectors such as agriculture, energy, among others, greatly fostered multi-sectoral coordination for green growth transformation.

Finally, developing a resource mobilization strategy and diversifying funding types and sources was a boost to Rwanda Green Fund and generation of innovative climate finance. There are however some planned interventions that were not implemented either due to insufficient funding or limited time, and these are elaborated on in subsequent subsections.

Achievements under Output 1

Indicator 1.1: Implementation of the environment and natural resource strategic plan was coordinated, with enhanced capacity of reporting and monitoring of environment and natural resource management interventions. Rwanda Investigations Bureau (RIB) was supported with capacity building in the use of technology to prevent, investigate, inspect and prosecute environmental crimes. This was followed by provision of 34 computers in 2020, one drone in 2022 and two additional drones in 2024 to enhance the institution's capacity for environmental crime watch even in the most remote sites which had been hard to reach physically by RIB staff. Using the knowledge acquired from the training sessions and drones, RIB staff conducted regular inspection to detect environmental crimes and offences especially related to illegal mining, buffer zone encroachment, among others.

Indicator 1.2: The results-based monitoring and evaluation (RBM&E) system for the ENR sector was updated to add more environment, natural resources and climate change related indicators. The percentage of ENR key performing indicators monitored and whose data is available for improved decision making increased from 15% at baseline (2018) to 100% and endline (2024). There was also training of sector stakeholders at district and national levels on how to use the RBM&E system including how to collect and input data into the system for better tracking of ENS performance indicators.

Indicator 1.3: The SCENR project targeted to achieve 300 ENR sector institution staff applying gender to develop and implement environmental policies and budget statements. This target was surpassed, reaching 350 staff by 2024, indicating the project's success in ensuring gender mainstreaming of environment and natural resources management interventions.

Achievements under Output 2

The project supported the updating and decentralized implementation of the Green Growth and Climate Resilience Strategy (GGCRS). A mainstreaming exercise was undertaken where several sectors such as agriculture, energy, infrastructure, among others, were encouraged to incorporate green growth principles in the planning processes. As part of efforts to promote green growth and sustainable transformation, the SCENR project brought on board the private sector. This was done in form of solar water heaters provided to small and medium enterprises to help them transition from biomass as a source of energy especially for boiling water used in the production process. According to CPCIC which implemented this intervention, the reached out to 108 women and youth-owned companies to support them as part of COVID-19 recovery plans and later on to enhance their resource efficiency in sectors like tourism and hand craft, manufacturing, and agriculture. CPCIC provided a three-day training to the companies from Kigali on clean production technologies and practices, followed by continuous coaching on the same, with emphasis on using solar for water heating. This was then followed by distribution of solar water heaters/tanks to 13 companies involved in food processing (mainly bakery) and agriculture to facilitate the transition from biomass usage. Additionally, the SCENR provided solar panels to 1,200 households in remote areas to address their reliance on paraffin and other polluting options as sources of lighting. The installation of solar panels was done by Rwanda National Police staff, during which exercise community policing was strengthened when security messages were passed onto the beneficiaries in particular and the community in general. Several policies were also updated or mainstreamed to include green growth priorities stipulated in the GGCRS. The project also contributed towards green growth transformation through the development and implementation of the circular economy action plan and roadmap.

Under Indicator 2.7, the SCENR project supported the development of four project proposals which were approved for funding by GCF and other funding agencies. The proposals are:

i. Rwanda Subnational Adaptation Fund EDA project, funded by the Adaptation Fund. Implementation started in September 2023.
ii. Building resilience of vulnerable communities to climate variability in Rwanda's Congo Nile Divide Region project, funded by GCF. Implementation started in January 2024.
iii. Scaling up the integration of updated Nationally Determined Contributions (NDCs) into District plans and budgets project, Funded by GIZ. Implementation started in 2022.

iv. Institutional support to the Ministry of Environment through Human Capacity Building and Development project, funded by African Development Bank (AfDB). Implementation started in January 2024.

Achievements under Output 3

The SCENR project achieved several milestones regarding fundraising for environmental protection, natural resources management and climate change adaptation through public, private and civil society organizations. Under Output Indicator 1, a resource mobilization strategy was developed for Rwanda Gren Fund and funds from the SCENR project were used to attend Conferences of Parties (COP) and other international conferences. Through COP attendance, RGF has managed to mobilize funds and conclude both bilateral and multilateral commitments and engagements with different partners. As a result of rigorous resource mobilization efforts, the Rwanda Green Fund increased the cumulative amount of funding raised from its baseline value of US $99 million at the start of the SCENR project to US $311.5 million by October 2024, surpassing the target of US $308 million by 101.1%.

As part of the resource mobilization efforts by the SCENR Project, two investment plans were endorsed by the Climate Investment Fund (CIF) amounting to $61 million, meant to harness nature-based solutions to climate change. The funds were particularly meant to support the piloting of pioneer solutions to improve land use management, bridge climate change adaptation and mitigation gaps, and develop sources of livelihoods for rural communities and indigenous peoples in Rwanda and the Dominican Republic. For Rwanda, emphasis was placed on supporting poorest rural areas through a wildlife conservation bond and conserving key chimpanzee habitats.

Under the CIF's Dedicated Grant Mechanism (DGM), Rwanda is yet to receive $31 million in financing to address challenges faced by vulnerable populations in the Kaduha-Gitwe corridor. The same mechanism will further support the launch of the Rwanda wildlife conservation bond meant to support the conservation of biodiversity, including chimpanzees. These initiatives are being implemented by the World Bank and are anticipated to receive further funding worth $283 million mainly for the restoration of degraded land and supporting sustainable management of forests and wetlands. The SCENR Project also supported the establishment of a Biodiversity Finance Facility (BFF) to further strengthen biodiversity conservation. An internation company

was identified and jointly vetted by UNDP, REMA and Rwanda Green Fund to lead the establishment of the facility.

Under Indicator 3.2, the Rwanda green Fund was supported by the SCENR Project to engage in continuous fundraising initiatives that resulted in negotiations and subsequent signing of framework agreements. Several project proposals were developed and presented to potential funders. These include but are not limited to:

- Carbon market initiatives including ongoing negotiations with Singapore's Ministry of Trade and Industry (MTI) meant to lead to signing of a binding implementation framework agreement.
- A collaboration agreement signed between GenZero, Rwanda and Gold Standard in September 2024, which will be followed by a review and discussion of potential pipeline projects from Rwanda green fund and other sources.
- *Ngaruyinka* proposal project developed, targeting potential funding from the Green Climate Fund (GCF) worth $37 million. The proposal has progressed well, clearing independent technical advisory panel (ITAP) stage to GCF Board consideration in August 2024. An appraisal mission took place in September 2024with the Ministry of Environment (MoE), Rwanda Green Fund (RGF), Rwanda Environment Management Authority (REMA), the Ministry of Finance and Economic Planning (MINECOFIN), the Green City Kigali, the City of Kigali, and KfW, anticipated to lead to the GCF Board's decision in October.
- Several calls for proposals issued by the Rwanda Green Fund that attracted proposals from various organizations. For example, in September 2024, nine project proposals from the EDA-ADAPTATION call for proposals were approved by the Rwanda Green Fund Board to proceed to the next steps of refining and finalization of project documents, leading to agreement signing by November 2024.
- Under the solar mini grids project funded by UNDP, two out of the 10 companies that were invited to apply for funding were selected for subsequent approval.

Besides fundraising, the SCENR project also supported continuous monitoring and evaluation activities, including a 10-year impact evaluation of FONERWA and spot checks on several

projects funded by the Rwanda Green Fund. To be precise, out of the 35 projects evaluated by Rwanda Green Fund, 11 evaluations were supported by funds from the SCENR project.

Table 8: Achievement of the SCENR Project by output and quantitative indicator

Indicator	Data source	Baseline (2018)	Targets (2024)	Current status (2024)	Status as % of target	Comment
Output 1: ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources						
1.1 Extent to which the environment and natural resources sector strategic plan implementation is coordinated[8]	Annual joint sector review report, minutes	1	3	3	100%	Very satisfactory performance
1.2 Percentage (%) of ENR KPI and non-KPI monitored data available at a set frequency in the RBM&E system for improved decision making	RBM&E system, annual joint sector review report	*KPI 15%* *Non-KPI 80%*	*KPI100%* *Non-KPI* 80%	*KPI100%* *Non-KPI* 80%	100%	Very satisfactory performance
1.3 Number of ENR sector institution staff applying gender to develop and implement environmental policies and budget statements	Annual joint sector review, Training evaluation report	*0*	*300*	*350*	117%	Very satisfactory performance
Output 2: Green Growth and Climate Resilience Strategy implemented in selected sectors						
2.1 Extent to which revised GGCRS PoA are reflected in SSPs[9]	Project Report, SSPs, Joint sector reviews	1	3	3	100%	Very satisfactory performance
2.2 Percentage (%) of recommendations from Environmental policy gap analyses Implemented (By Gender disaggregation)[10]	Project report, minutes of sector meetings	0%	90%	80%	88.9%	Satisfactory performance
2.3 Master plan for Wetlands Management in Kigali City developed, including categorization of wetlands, management plan of specific wetlands and resource mobilization plan and ready for further implementation	Project Report	No	Yes	Yes [Completed]	100%	Very satisfactory performance

[8] 1- , Coordination framework in place, RBM&E Established,), 2- Institution strengthened, Staff capacitated, Operationalization of the ENR-MIS/RBM&E), 3- Enhanced capacity of reporting and monitoring of environment and natural resources interventions)

[9] 1- Achievements evaluated, 2- Strategy reviewed with shared vision, 3- GGCRS indicators mainstreamed in SSPs of PoA sectors

[10] Recommended Policy Actions to be monitored are (mining Compatible with environmental standards, Utilization of renewable energy and energy efficiency technologies, implementation of water conservation practices, sustainable management of forest resources)

2.4 Extent to which the Cleaner Production and Climate Innovation Centre is strengthened on green technology transfer and operations[11]	Project Report	1	3	3	100%	Very satisfactory performance
2.5 Number of SMEs that acquired climate change adaptation and mitigation (1) Practices and (2) Technology through CPCIC	Project Report	0	30 (1) 25 (2) 5	30	100%	Very satisfactory performance
2.6 Number of *households in IDP model villages newly benefiting from green components based on the GV toolkit, disaggregated by sex of the head of household*	Project Report	0[12]	220 F:99 M:121	220	100%	Very satisfactory performance
2.7 *Extent (%) to which the GV toolkit is utilized in IDP model villages with disaggregation of existing IDP model villages[13]*	Project Report	0%	80 (80%)	80	100%	Very satisfactory performance
2.8 Number of project proposals developed by ENR sector and approved for fundings 1) GCF 2) Other funding institutions	Project Report	*1) 1* *2) 1*	*1)1* *2)3*	*1)1* *2)3*	100%	Very satisfactory performance
Output 3: National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms						
3.1 Cumulative volume of finance [US$ millions] mobilized through FONERWA for Environment and climate change interventions	Project Report	99	308	311.5	101.1%	Very satisfactory performance
3.2 Percentage (%) of new quality proposals approved for funding 1) public sector 2) private sector 3) CSOs	Project Report	N/A	1) 35% 2) 25% 3) 30%	1) 35% 2) 25% 3) 30%	1) 100% 2) 100% 3) 100%	Very satisfactory performance
3.3 Percentage (%) of projects whose emerging lessons (both positive and negative) have been collated and disseminated by the FMT for knowledge sharing	Project Report Articles Documentary Booklets	80%	100%	100%	100%	Very satisfactory performance

[11] 0- Centre not yet established 1- , Centre established, 2- CPCIC and NIRDA staff capacity

[12] The programme will count the number of households anew from the start of the programme; however, it is worth noting that up to 2018 the MoE have provided greening components to 12 IDP model villages.

[13] Green village with the following toolkits: Water access toolkits (20%); Energy toolkits (20%); Settlement and Housing Design toolkits (20%); Value chain toolkits (20%); Agriculture, Sanitation and Hygiene, Solid waste management, Knowledge hub (5% each).

3.4 Extent (%) to which the project reporting process is enhanced through FONERWA MIS (to be discussed)	Project Report	75%	100%	100%	100%	Very satisfactory performance

Coordination and M&E mechanisms

The SCENR project performed quite well in terms of establishing strong multi-stakeholder coordination mechanisms, ranging from regular follow-ups from the project team at UNDP to regular meetings of the project steering committee. This strong coordination ensured that any shortfalls in implementation progress were quickly identified and promptly addressed, aligning implementation modalities to intended project objectives. As far as monitoring and evaluation was concerned, several measures were put in place including field visits by the project team and implementing partners as well as quarterly and annual narrative and financial reports prepared by implementing partners. However, the project evaluation revealed two critical gaps in the reporting system. Firstly, some project activities were not adequately reported on as planned in the project document, which made it difficult to evaluate their current status. Secondly, most narrative reports from implementing partners were mostly descriptive in nature, reporting on a selection of activities and largely failed to indicate performance on each of the quantitative indicators as stipulated in the results framework of the SCENR project.

6.4. Efficiency

The Rwanda Public Procurement Law was applied in procuring services and goods under the SCENR project, ensuring an effective balance between technical and financial offers of bidders and resulting in the most cost-effective implementation of interventions following the quality-cost analysis principle. Additionally, the project leveraged a community-based approach to ensure timely and cost-effective implementation. For example, rather than relying on hired private companies to construct cow and pig sheds as part of green village components in Mudende IDP villages, households were organized in cooperatives to undertake the construction themselves. This reduced time and financial costs associated with cow shed construction which took only two weeks to complete instead of approximately one year if a private company was to be involved. The cooperatives also helped with identification of suitable land for cultivation, and the district supported them in obtaining a land valuer. This made the overall work faster and ensured

community participation and ownership, leading to a high level of cost efficiency of interventions. There were several budget reallocations following budget constraints. Whenever the reallocations were below 20% of the original budget allocated to activities implemented by partners, the project focal person would approve the changes while re-allocations worth more than 20% were always approved by the project steering committee.

The project was quite successful in utilizing minimal resources to achieve tangible benefits. For example, the support rendered to private companies was also done in a cost-effective way, delivering great impact at beneficiary level and beyond. According to CPCIC, the 13 companies that received solar water tanks managed to save about 38 million RWF in a period of only three months and reduce greenhouse gas emissions by about 1,560 tons of carbon dioxide annually.

The capacity building and technological support to RIB in form of computers and drones in a bid to prevent environmental crimes were a cost-effective approach to achieve the goal and strengthen the institution's capacity to deliver upon its mandate. According to the respondent from RIB, "*Our work became more efficient because we the drones reduced the logistical requirements in terms of cars, fuel and staff to physically go to the field to investigate environmental crimes in remote areas*".

Timeliness of implementation: Overall, project interventions were implemented in a timely manner following the roadmap agreed upon by the project steering committee. However, some delays occurred in some interventions, especially those that required public tender processes and feasibility studies particularly for interventions in IDP model villages. There were some necessary adjustments in implementation timelines which were meant to better align with the timelines of the National Strategy for Transformation (NST1, 2017-2024).

Implementation efficiency: The SCENR Project was implemented by a competent team of individuals from implementing partners, having considerable experience in the ENR sector in general and the specific interventions in particular. The effective coordination and communication mechanisms between UNDP and the implementing partners further ensured efficient implementation of interventions and realization of milestones. Regular meetings by the project steering committee and monitoring of progress ensured early detection of issues to be addressed.

Use of partnerships: The project was quite successful in leveraging partnerships for the efficient implementation of interventions. Examples include joint field missions by UNDP and implementing partners to minimize the cost of monitoring progress, and utilization of district officials to report on progress of specific interventions during routine field/mandated field visits by the respective districts. Additionally, through the resource mobilization strategy developed under FONERWA, a cost-sharing approach was adopted for funds provided to recipients in their efforts to implement various interventions related to environmental protection and climate action.

Utilization of allocated budget: Table 9 presents the budget utilization rate for the SCENR project between 2019 and 2024. The table reveals that across all the implementation years, each of the main interventions exhibited very satisfactory performance by utilizing between 96-100% of the allocated budget. This reflects two elements of the SCENR project's efficiency. Firstly, it indicates that the budget was often allocated to respective interventions after appropriate consideration of the implementation modalities and financial requirements. Secondly, it reveals that most interventions were indeed implemented to the expected/planned scale.

Table 9: Summary of budget utilization by the SCENR project: 2019-2024

Output code	Description	2019	2020	2021	2022	2023	2024	TOTAL	Delivery rate %
Output 1: ***ENR sector capacities enhanced to optimize and scale-up sustainable and climate resilient management of natural capital resources***									
113504	Budget	9,700	24,060	74,400	55,700	82,262.36	9,948	**256,070.4**	99
	Expenditure	9,195	23,841	73,717	55,265	82,022.14	9,946.21	**253,986.4**	
	Balance	505	219	683	435	240.22	1.79	**2,084.01**	
Output 2: ***Green Growth and Climate Resilience Strategy implemented in selected sectors***									
113505	Budget	554,300	452,373	451,000	374,800	170,000	564,250	**2,566,723**	100
	Expenditure	551,110	449,955	444,857	379,910	169,153.55	564,210.76	**2,559,196**	
	Balance	3,190	2,418	6,143	-5,110	846.45	39.24	**7,526.69**	
Output 3: ***National and local public institutions, CSOs, private sector technical capacities are strengthened to effectively and efficiently manage green growth financing mechanisms***									
113506	Budget	260,800	196,200	160,000	512,000	238,900.18	794158.31	**2,162,058**	99
	Expenditure	260,026	195,367	159,327	493,104	233,080.88	794,124.85	**2,135,030**	
	Balance	774	833	673	18,896	5,819	33	**27,029**	
Project management by the Ministry of Environment (MoE)									
113507	Budget	131,187	104,620	86,006	81,652	60,394.73	86,818.75	**550,678.5**	97
	Expenditure	129,885	104,129	83,786	71,497	59,260.4	86,591.36	**535,148.8**	
	Balance	1,302	491	2,220	10,155	1,134.33	227.39	**15,529.72**	
Project management by Rwanda Green Fund (FONERWA)									
114045	Budget	6,000	6,400	6,000	8,000	3,500	0	**29,900**	96
	Expenditure	6,000	6,107	5,885	7,501	3,271.29	0	**28,764.29**	
	Balance	0	293	115	499	228.71	0	**1,135.71**	

6.5. Sustainability

The sustainability of the SCENR project varies from one intervention to another. Under Output 1, the coordinated implementation of the environment and natural resources sector strategic plan is likely to continue as this is an ongoing mandate of the ENR sector stakeholders led by the Ministry of Environment which the SCENR project interventions built upon. Additionally, the updated indicators of the RBM&E system will continue to be monitored as part of routine mandate of MoE, other government institutions and districts. Additionally, the capacity building interventions

associated with the system created skills and knowledge used by sector experts, some of whom have managed to make further necessary updates. The capacity of duty bearers to fight against environmental crimes was augmented and institutions such as RIB are willing to continue budgeting for the use of technology in the prevention, investigation and prosecution of environmental violations. Under Output 2, sustainability is assured by the fact that the GGCRS is part of the Ministry of Environment's mandate that will continue to be implemented with national and district budget allocations. The coordination and decentralized implementation capacity enhanced by the project will continue to drive effective implementation of the strategy at all levels. Additionally, some sectors like energy, agriculture, infrastructure, among others, have been supported to mainstream green growth priorities of GGCRS in their respective sector strategic plans which will continue to be implemented beyond the SCENR project completion. The provision of solar water tanks to private companies also shows elements of sustainability as some companies have managed to install pipes to distribute warm water into their premises while others have technicians who undertake regular maintenance of the tanks and associated systems. Under Output 3, a resource mobilization strategy and diversified funding sources coupled with capacity building will continue to boost resource mobilization by the Rwanda Green Fund.

6.6. Impact

6.6.1. Individual, organizational and national-level impacts of interventions

The impact made by the SCENR project is reflected in the changes its interventions made in the lives and livelihoods of individual beneficiaries, adoption of sustainable production systems by small and medium enterprises, strengthened capacity of implementing partners to implement environment and natural resources management interventions, enhanced capacities for resource mobilization, and strengthened overall climate resilience and green growth at the national and local levels. Table 10 provides a summary of the impacts made by the project so far at the beneficiary, organizational and national levels, disaggregated by the three main outputs of the project.

Table 10: Different levels of SCENR Project impact disaggregated by project output

Impact level	Output 1	Output 2	Output 3
Beneficiary (individuals, households, SMEs)	Strengthened capacity of ENR sector experts at national and district levels to implement the ENR sector strategic plan and update ENR indicators in the RBM&E system. Some experts have gone ahead to develop new indicators for the system to better reflect realities of the ENR sector. Regarding environmental protection, the support to RIB raised the capacity of investigators, prosecutors and inspectors to adequately investigate and prosecute environmental crimes following the training and provision of computers and drones.	National and local level staff from MoE and other ENR-related institutions enhanced their capacity to fast-track the implementation of green growth initiatives stipulated in the updated GGCRS. Some of the 220 households that benefited from green components in IDP model villages started income-generating activities, increasing their incomes and improving their livelihoods that had once been threatened by environmental disaster. In addition, they increased their knowledge of and skills in sustainable management of the environment and natural resources including using organic compost in farming, rainwater harvesting, among others. About 30 SMEs were supported to adopt clean production technologies and practices including solar PVs for water heating as opposed to biomass. The households that received solar panels benefitted from reduced expenditure and exposure to smoke associated with paraffin and biomass as sources of energy for lighting.	Staff from RGF and partner institutions benefitted from enhanced resource mobilization skills including writing funding proposals. This was strengthened through training sessions, participation in international events such as COPs, and monitoring activities undertaken as part of the SCENR project implementation.
Organizational	Enhanced capacity of the Ministry of Environment and affiliated agencies to coordinate the implementation of the ENR sector strategic plan and track environment, natural resources and climate change indicators in the RBM&E system.	Capacity of CPCIC enhanced to better support implementation of clean production systems, contributing to its mandate of supporting private companies to indulge in clean production systems for overall green growth as stipulated in the updated GGCRS. This started with support to operationalize the center, including paying salaries for	The organizational mandate of the Rwanda Green Fund was strengthened for greater mobilization of finance for environmental protection, natural resource management and climate change adaptation and mitigation. The resource mobilization strategy developed for RGF was handy in increasing and diversifying funding sources. From the strategy, several project proposals were developed, some of which secured funding, for example the recently approved €10M

	The community policing mandate of Rwanda National Police was enhanced through installation of solar mini grids for beneficiaries, during which security messages were passed on to the public. Additionally, drones given to RNP enhanced their ability to monitor and prevent environmental crimes in hitherto hard-to-reach areas, especially in mining remote sites. For RIB, its capacity to implement its mandate of investigating, preventing and prosecuting environmental crimes increased due to provision of drones to reach remote areas and training to update staff knowledge especially in the use of technology to fight environmental crimes.	workers in the initial years of operation. Strengthened capacity of MoE to coordinate the implementation of GGCRS at national and local levels.	funding from GIZ. Overall, the cumulative amount of funds generated by RGF increased from $99 million in 2018 to $311.5 million in 2024. With funding from the SCENR project, FONERWA started provided funding to de-risk companies in using green technologies through cost-sharing approaches, leveraging their contribution towards green growth and sustainable economic transformation.
National	Increased availability of environment, natural resources and climate change information and data acting as evidence for informed decision making across the ENR sector. The RBM&E system continues to provide crucial information to track climate vulnerability and resilience/adaptation indicators, guiding interventions to boost resilience. Several policies and laws were revised to include environmental crimes. Examples given include the National Biodiversity Law updated in 2021, the Mining Law amended in	Strengthened mainstreaming of green growth principles of GGCRS, which have been adopted as cross-cutting issues in sector strategic plans of sectors such as energy, agriculture, infrastructure, etc. This has overall enhanced cross-sectoral coordination for joint implementation of the GGCRS to achieve green growth and sustainable transformation at national and local levels. The updated GGCRS was also aligned with priorities and targets of the second National Strategic Plan (NST2) as well as Vision 2050. Within the revised GGCRS, there are interventions for each sector which has greatly strengthened multi-sectoral coordination. The Ministry of Finance and Economic Planning (MINECOFIN) currently is proactively implementing the green growth score card which is	Increased availability of climate finance as well as funding for environmental protection, natural resource management and overall green growth and sustainable economic transformation. Rwanda's visibility and image also improved, with potential opportunities from COP participation. For example, during COP26, Rwanda was selected as a pioneer country for the Task Force on Climate Finance and has started benefiting from the £100 million committed by the UK Government to the initiative. Rwanda Green Fund was also showcased in different events like Sustainable Energy for All Forum, Commonwealth Business Forum held from 2Ist to 23rd June 2024 in Kigali, Stockholm+20, International Women's Day, development partners' retreat, and the fund was visited by Ministers from Germany and Sweden, thus strengthening relationships. In addition,

	2024, and the Forestry Law. Overall, the awareness campaigns and enhanced investigation and prosecution increased public awareness and sensitivity, ensuring proper environmental protection in their daily activities.	checked across sectors during planning sessions. The support rendered to CPCIC reduced the use of biomass, replacing charcoal stoves with solar water heaters. According to CPCIC, 13 companies managed to reduce 1,560 tons of carbon dioxide annually by transitioning from biomass to solar for water heating. This contributes to the national (NDC) target of reducing GHG emissions by 38% relative to business-as-usual levels by 2030.	the fund is visible on social media platforms (twitter, Facebook, YouTube, Flickr, Instagram and website) through media updates from FONERWA's communication consultant financed under UNDP-SCENR programme.

6.6.2. Impact stories from SCENR project beneficiaries

Impact story 1: MNB Limited, Rubabu District

Challenge

MNB Limited is a small and medium enterprise (SME) that grows mushrooms in Gisenyi, Rubavu District. The company uses water as an important part of the mushroom production process. Before the intervention, the company used to spend money on buying firewood used in heating water, and the process would also take long for Sector agronomist to approve harvesting trees to be used as firewood, which would often delay the mushroom production process. Water heating using firewood was also associated with long time needed for the water to warm up to the required degrees and staff would often be exposed to smoke.

Intervention

Through CPCIC, the UNDP-funded SCENR Project provided two solar water heating tanks of 600 liters each, which currently provide warm water of up to 85 degrees, making water available for timely production processes such as cleaning equipment and materials and making mycelium/spawn. The company was also given training on how to use and maintain solar water heaters for effective use.

Impact

The most immediate impact for the company was a reduction in the amount of firewood used by 90%, with the remaining 10% representing LPG gas used whenever solar radiation is weak during

rainy season. This reduction in firewood usage translated into reduced production cost. To be precise, before the intervention, MNB Limited would use 10 bundles of firewood, each equivalent to one cubic meter and costing 17,000 Rwandan Francs (RWF). After the intervention, this reduced to only one bundle, implying a saving of 153,000 RWF from 170,000 RWF to 17,000 RWF. Another cost saving was experienced when the company started using warm water in spawn production, which was always challenging as spawn would be contaminated with unpure water before the intervention. Spawn production using clean water from the solar water tanks saved the company money from buying spawn from RAB, reducing from 500K RWF to only 100K RWF, representing a 80% saving. Thirdly, the solar water heaters reduced the time needed to heat water used in critical production processes, which contributed to an increase in the number of gardens produced from 2,000 to 7,000 per week. The company also reduced the time required to deliver orders of gardens to clients, as expressed by the representative that, "*Delivering 5,000 gardens to our big customer in Goma would take about five months because of delayed production using firewood. Currently, we only need 28 days to deliver the same number of gardens which increased client satisfaction*". Overall, the MNB Limited company representative appreciated the intervention, saying that, "*We appreciate the support rendered to us because it not only created positive change for us but also made us realize that whatever we thought was impossible such as using warm water to produce mushroom spawn without contamination became possible. Also, no worker currently delays in their tasks because of wasting time in cooking mushroom gardens using firewood*".

Sustainability

MNB Limited made significant saving on firewood and the company claims that the saving set aside will be used to undertake any necessary maintenance services whenever necessary. Additionally, the company has put in place a knowledge transfer mechanism whereby technical repairs and maintenance are done in the presence of two female and two male staff who will continue maintaining the water heaters and tanks after the SCENR project support ceases. So far two female workers are familiar with routine maintenance processes.

Challenges and recommendations

The company did not face major challenges during implementation except for weak solar radiation during the rainy season which affects production. The company wishes to scale up the intervention

to four tanks to ensure steady and continuous production even during the rainy season. One recommendation given by the company was for the project scale up the intervention to many more companies and organizations where firewood is still largely used, including schools, and to provide training to more people on how to use solar in various processes to facilitate change from biomass.

Solar water tanks (left) and growing mushrooms (right) at MNB Limited in Rubavu District

Spawn production lab (left) and produced spawn (right) at MNB Limited in Rubavu District

Impact story 2: New Vision Bakery Limited, Kicukiro District

Challenge

New Vision Bakery Limited is an SME that is involved in the production of different varieties of bread in Kicukiro District. Water and fire are two important requirements in the company's production processes, as water is used in washing equipment, mixing dough and other processes while fire is needed in baking bread. Before the company received support from the SCENR Project, it used firewood in boiling water, which was quite expensive. The process of boiling water using firewood was not only expensive financially but also time consuming as workers used to

spend a considerable amount of time boiling and distributing water to different stages along the production line.

Intervention and impact

The company was supported with two solar water tanks which are capable of heating water up to 90 degrees Celsius, plus a water pump that pumps water to wherever it is needed. Currently, the company uses warm water that is quickly heated in the solar water tanks, readily available and promptly distributed to all production stages, dough mixing to washing equipment and utensils. The positive benefits realized so far include reduction in the amount of firewood used in boiling water, reduced risk of burning injuries to workers during boiling and distribution of water to different production stages, time saving from water boiling, reduced exposure from pollution from firewood, and overall reduction in production cost. The company keeps track of changes in production processes and associated expenses before and after receiving the solar water heaters, and these changes are summarized in Table 11.

Table 11: Changes brought about by solar water heaters at New Vision Bakery Limited

No	**ACTIVITY**	**FIREWOOD USED BEFORE SWH AND THE COSTS (FRW)**	**FIREWOOD USED AFTER SWH AND COST (FRW)**	**BENEFITS**
1	Warming water for Steam (Proofing of Breads)	THE COMPANY USED 1bundle, 1 bundle costs 30,000Frw	USED, 0.45bundle, = 0.45*30,000Frw =13,500Frw	Firewood usage reduced to 0.55 bundle= 0.55*30,000Frw = 16,500 Frw
2	Warm water for Cleaning Tools and Equipment	Firewood used 1bundle = 1 bundle costs 30,000Frw = 30,000Frw	Used 0.25bundles =0.25*30,000Frw = 7,500Frw	Firewood used reduced to 0.75 bundle= 0.75*30,000Frw = 22,500Frw
3	Warming water for Mixing Ingredients	Used firewood 0.75bundle=0.75*30,000 Frw= 22,500Frw	Firewood used 0.35bundle = 0.35*30,000frw = 10,500Frw	Firewood reduced to 0.4 bundle = 0.4*30,000 Frw = 12,000Frw
4	Baking bread and mandazi	Used 2.25bundle = 2.25*30,000Frw = 67,500Frw	Used 2.25bundles=2.25bundles30,000Frw =67,500Frw	Used 2.25 bundle =2.25 bundle 30,000Frw =67,500Frw
	Total firewood used and saved	A day: 5 bundles worth :5*30,000Frw= 150,000Frw Month :150 bundles,	A day bundles :3.3 worth: 3.3*30,000Frw =99,000Frw A month :99	

		worth :150*30,000Frw =**4,500,000Frw**	bundle: worth:99*30,000Fr w =**2,970,000Frw**	

In appreciation of the supported rendered to New Vision Bakery, the company representative said, "*We appreciate the support and advice you rendered to us, both of which have improved the work we do in general which reducing the level of pollution to the environment*".

Sustainability

As an indicator of sustainability of the intervention, the company made all necessary preparations to receive the solar water heaters, even prior to receiving them. This includes purchasing and installing water pipes suitable for warm/hot water to minimize the risk of bursting cold water pipes that existed in the premises before the intervention. The company also undertakes regular maintenance of the water tanks and pipe system using a full-time plumber.

Recommendations

i **Target the most polluting activities within companies**. In bakeries, for example, roasting bread requires more firewood and is associated with more smoke emitted to the environment than heating water. Therefore, supporting with clean technologies such as ovens would reduce firewood and emissions even much more compared to water heating activities.

ii **Scale-up interventions to cover more companies and institutions** which heavily rely on biomass in their operations, for example sauna services, schools, prisons, among others.

Solar-powered water heaters at New Vision Bakery, Kicukiro District

Impact story 3: Kivugiza IDP model village, Nyaruguru District

Challenge

Kivugiza IDP model village is dwelled by residents who were resettled from the Rwanda-Burundi border for security reasons. Upon occupation of the village, the residents had faced several livelihood challenges such as limited access to water for agriculture and home use associated with trekking long distances to fetch water, lack of arable land for farming, and overall high rates of poverty that inhibited their ability to pay school fees, public health insurance (*Mutuelle de Sante*) and buy household supplies. Many of the residents had so source of income while others had survived on rearing cows for others with little pay and no cows of their own. The challenges were emphasized by a female participant in a focus group discussion, mentioning that, "*Money was a big challenge before the intervention, as one could not easily afford to pay school fees, buy uniforms for children, paying health insurance*".

Intervention and impact

The residents of Kivugiza IDP model village received support from the SCENR project, meant to build their sustainable livelihoods, enhance their ability to manage natural resources sustainably and have a source of income. The interventions include construction of two water tanks of 100 cubic meters each, construction of 20 cow sheds and 40 pig sheds, provision of cows and pigs, construction of compost peats coupled with training in compost manure making. In total, out of the 136 residents in the village, 12 households received cows and 40 households received pigs. At

Both pigs and cows have so far multiplied and beneficiaries obtain milk for home consumption and manure to fertilize their farm fields. At the time of the field visit, eight cows had given birth while all pigs had given birth, including over 170 piglets that were sold in May 2024.

The water from the tanks is used to clean cow and pig sheds, increasing overall hygiene for the cows and pigs. This, coupled with usage of clean water within households, reduced children's vulnerability to stomach worms. The proximity to water sources reduced time spent – especially by children and women – in fetching water, while increased access to milk improved overall nutrition levels among children. Additionally, money from farming and other income-generating activities is used to improve the living conditions of beneficiaries, as one FGD participant mentioned, "*It is now easier to get money than before we received support. We can now sell pigs and milk to solve daily home needs, including paying for health insurance, uniforms and school fees for our children*". When asked to raise their hands if the SCENR project interventions improved their overall wellbeing, all FGD participants unanimously did so without hesitation. They further added that their capacity to sustainably manage natural resources and protect the environment improved, as one participant gave an example that, "*We now understand the importance of using organic manure to limit harm to the soil, and we are able to make the manure ourselves following the training given to us by the project*".

Sustainability of interventions

Several measures exist to ensure sustainability of interventions. These include plans by Nyaruguru District office to hire a veterinary officer who will continue to take care of cow and pig health after the SCENR project ceases, as well an officer in charge of the IDP village affairs and interventions. The district also intends to work with beneficiaries to jointly maintain cow and pig sheds, including replacing water taps and light bulbs whenever they are damaged. At the level of beneficiaries, they have opened a bank account at a Saving and Credit Cooperative Organization (SACCO to save money which will be used to cater for the pigs, cows and their sheds. For the water tanks, there is no clear measure of sustainability in place so far, but beneficiaries are ready and willing to mobilize funds from their savings to handle any necessary small-scale maintenance issues. Additionally, beneficiaries have managed to hire security guards to offer night watches for the security of cows and pigs. About six security guards are so far hired, each being paid about 20,000 Rwandan Francs.

Challenges in project participation

The beneficiaries mentioned some key challenges faced during participation in the project interventions. Firstly, they were trained on modern methods of fodder production but no way forward in terms of support to start making the fodder within the IDP village. Most cow owners still go back to where they were relocated from, in search of grass for their animals. The limited land available also constrains the ability to grow fodder within the village. Secondly, there was a mindset challenge at the beginning, where beneficiaries were not used to rearing cows and pigs in what they termed as "cemented houses". However, with time, there was a mindset shift and currently beneficiaries are comfortable with the practice, using water from the tanks for effectively clean cow and pig sheds.

Recommendations

i. Increase scale of interventions, for example to cover the remaining 104 households which have no access to water tanks.
ii. Ensure inclusivity and flexibility of interventions, for example giving alternatives to those who cannot rear pigs by virtue of their religion, culture or other considerations. Also, the elderly who have no physical energy to rear cows and pigs can be considered for other types of interventions that suit them.

From left to right: outer and inner view of pig shed at Kivugiza IDP village, Nyaruguru District


From left to right: outer and inner view of cow shed at Kivugiza IDP village, Nyaruguru District


From left to right: water tank and compost pit at Kivugiza IDP village, Nyaruguru District

Impact story 4: Mudende IDP model village, Rubavu District

Challenge

Residents of Mudende IDP village were resettled from environmentally risky places in various parts of Rubavu District. Upon settlement in the IDP village, there are several challenges they encountered, which necessitated interventions from the SCENR project to address them and improve the livelihoods of the residents. Among the challenges are lack of access to clean water for drinking and general household use, limited land ownership, and generally high poverty levels as most residents had no income source while others worked as casual laborers and received meagre wages. As a result of poverty, many children would not attend school and buying household supplies was quite difficult.

Intervention

Various interventions were implemented to address some of the challenges faced by residents of Mudende IDP village. Firstly, financial support in terms of start-up capital for income-generating activities was provided in two phases; 57 million Rwandan Francs in the first phase and 38 million Rwandan Francs in the second phase. The money was used by the residents to buy land jointly as members of cooperatives, in addition to farming equipment such as wheelbarrows, water pumps, milk cans, hoes, pangas, slashers, watering cans, among others. These are used in livestock farming and growing of crops such as maize, Irish potatoes, beans and peas for both home consumption and market. Various varieties of grass are also grown on the acquired land, which is used to feed cows. Secondly, Mudende IDP village residents received cow sheds which were constructed as part of the SCENR project, as well as cows distributed to the residents. Thirdly, the issue of lack of water was addressed by construction of two communal-use water tanks and distribution of 12 privately used plastic tanks to 12 households. Thirdly, a composite peat was constructed from which residents gather cow dung and household waste for decomposition into manure used in fertilizing crop fields, coupled with training on how to make compost manure. Finally, the residents were trained in financial management to ensure sustainable management of their agriculture and agribusiness enterprises.

Impact

There are notable positive impacts of the intervention, including acquisition of about 3.5-4 hectares of land, changing from no land owned by the cooperative named Ishema Mudende prior to the intervention. The land was used to grow various crops, which raised harvests by the cooperative. The cooperative representative expressed gratitude mentioning that, "*We used not to own land but now we have about four hectares. In the previous season, we harvested seven tons of Irish potatoes; one ton was consumed by cooperative members, one ton was reserved as seeds for the next season, and the balance of five tons was sold to the market which increased income for all cooperative members*". Additionally, the cooperative planted maize on 1.4 hectares, which was sold fresh while still in the garden, raising approximately 700,000 Rwandan Francs while the balance worth 300,000 Rwandan Francs was consumed by 52 households that make up Ishema Mudende Cooperative. At the household level, the support improved hygiene practices due to availability of clean water from the tanks, reduced time wastage in fetching water especially by children who used to be late for school before the intervention, increased access to milk for home consumption

and income for general household usage and payment of school fees and public health insurance *Mutelle de Sante*.

Sustainability

The residents of Mudende IDP village continue to sustainably cultivate their land, growing crops for both home consumption and market. Field visits confirmed that beneficiaries still maintain compost peats and use manure in their farming activities, minimizing the use of chemical fertilizers and their harm to the environment. One member of the cooperative reiterated the willingness to sustain the interventions, mentioning that, "*We already started using the land productively and profitably and we still take care of the cows for our wellbeing. When a cow gets sick, we pay a veterinary doctor to treat it and the money from selling milk is saved for future use*". Another respondent added a statement of assurance for sustainability of intervention, saying that, "*a person who can not help himself is not worth being helped by someone else. We are ready to continue with the benefits we received from the project for our own good*".

Recommendations

i. Rather than providing land to cooperatives for joint use, giving each individual a separate plot to use independently would increase ownership and motivate hard work.
ii. For start-up capital, it would be better to determine the amount that is commensurate with the size of the beneficiary households.
iii. Rather than channel money through the district and then to the sector offices before reaching the beneficiaries, respondents proposed reducing bureaucracy by either receiving the money directly or at least channeling it through the sector office only. This is meant to ensure easy access to the funds for timely investment in farming operations by the beneficiaries. One FGD participant emphasized the cost of bureaucracy, mentioning that, "*We had wanted to buy a good plot of land but since the process of getting funds from the project is long, we lost the land to another buyer. We therefore recommend that the money be given to cooperatives directly*".


Water tank of 100m^3 (left) cow shed (right) in Mudende IDP village, Rubavu District


Compost peat (left) and elephant grass field (right) in Mudende IDP village, Rubavu District


Focus group discussion (left) and peas garden (right) in Mudende IDP village, Rubavu District

Impact story 5: Buganza Good Wine Company, Kayonza District

Challenges

Buganza Good Wine is an SME that produces wine in Kayonza District. As part of the production process, the company used to buy firewood to be used in heating banana juice. On average, the company would use 3-4 bundles of firewood, each costing 20,000 Rwandan Francs, spending a total of about 80,000 RWF per boiling round. In a month, eight boiling rounds would be required, implying a total cost of about 640,000 RWF. Additionally, the process of boiling water would take long, estimated in the range of 35-40 minutes during which workers would be exposed to smoke.

Intervention and impacts

Aa part of the SCENR project, the company received two solar-powered water heaters in March 2024, plus one year of free maintenance service. After receiving the water heaters, the company reduced the amount of firewood used from 4 bundles per day costing 80,000 RWF (640,000 RWF a month) to only one bundle per day each costing 20,000 RWF (160,000 RWF a month after boiling water 8 times). In total therefore, the company experienced a cost saving of 75% from 640,000 RWF to 160,000 RWF. The time spend boiling water also reduced substantially by about 75-85%

From 35-40 minutes to 8-10 minutes since warm water of about 90 degrees Celsius is instantly available. This was also associated with an indirect benefit of reducing exposure to indoor air pollution among workers. In appreciation of the project, the company representative mentioned, "The project was well implemented because the project staff first visited us then they brought the solar water heater and tanks".

Sustainability

The sustainability plan for the company is the availability of a full time technician whose specialization is civil engineering, water supply and sanitation. The engineer will handle all maintenance works once the one-year maintenance period offered by the SCENR project ceases.

Recommendations

No recommendation was given, instead the company appreciated the support and the benefits created by the intervention.

Solar water tanks (left) and bottle washing (right) at Buganza Good Wine, Kayonza District

Impact story 6: Binya Bakery Limited, Gasabo District

Challenges

Binya Bakery Limited is an SME that produces bread and other types of products from wheat flour in Gasabo District. Although mixing ingredients to make dough required cold water, cleaning materials required warm water especially to remove oils, which required using gas, electricity, charcoal and diesel heaters to boil water. The company used to incur heavy expenses on diesel, electricity and gas which had inflated operational costs prior to the intervention.

Intervention and impact

Officials from the Clean Production and Climate Innovation Center (CPCIC) used to visit Binya Bakery to teach them about clean production practices and technologies, which was later on followed by a needs assessment during which the company suggested to be supported with solar-powered water tanks to address the challenge of using expensive alternatives to boiling water. The company then received two solar-powered water tanks from which it obtains warm water for washing oily utensils more thoroughly than before the intervention. The amount of money spent on gas, charcoal and electricity used in the water boiling process reduced and the company was able to save between 100,000 and 150,000 RWF per month. This was associated with further benefits such as reduced greenhouse gas emission in the production process as well as time saving associated with the water boiling process. According to the company representative, "*We used to boil about 100-140 liters of water per day using 1-2 kilograms of gas, for about 45 minutes. After*

receiving solar water tanks, it currently takes a few minutes to obtain hot water for use especially in washing oily utensils. The time saved is used by workers to undertake other activities in the production process".

Another benefit was in form of reduced reliance on WASAC water and associated reduction in expenditure on water since the company currently pumps rain water harvested from the roof into the solar water tanks. The company representative appreciated the benefits created by the intervention, mentioning that, "*On behalf of my company, we greatly treasure the support we received because it was important and beneficial in our operations. The water tanks enabled us to save money by reducing expenditure on boiling water*".

Sustainability

Since the benefits and cost savings associated with the solar water tanks were visible, the company is quite willing to continue them. For example, when the one-year maintenance warranty ends, the company plans to hire private technicians to do the maintenance.

Recommendations

i. Instead of focusing interventions on one type of production, for example food processing, considering other sectors for example agriculture would create greater impact.
ii. More training is needed to raise capacity, especially on how to use and maintain solar water heaters so that beneficiaries can do the maintenance on their own.
iii. Follow up is needed to ascertain whether the equipment given to the beneficiaries are being used and maintained well by the beneficiaries to achieve the planned objective.

Solar-powered water heaters at Binya Bakery Limited, Gasabo District

Impact story 7: Alegria Inn, Kamonyi District

Challenges

Alegria Inn is a hospitality SME providing accommodation and related services in Kamonyi district. The nature of services offered by the company implies great need for warm water especially with guest rooms. To meet this demand by clients, Alegria Inn used to incur huge costs on firewood and gas to boil water and distribute it to guest rooms through a network of pipes.

Intervention and impact

The SCENR project provided two solar water tanks and one pump to Alegria Inn which greatly eased the process of warming water for guest rooms. According to the company representative, "*As a result of the solar water tanks, we were able to save up to 80% on the costs we used to incur on firewood and gas used to boil water*".

Sustainability

The company is willing and eager to sustain the intervention. For example, whereas the intervention offered one pump to work on two water tanks, Alegria Inn managed to buy another pump so that one tank-pump pair is used in one building and another pair works in another building.

Recommendations

One recommendation was given to make adequate prior visits and assessments before delivering support to beneficiaries to ensure the support matches the realities on ground. An example of potential issues that require flexibility was given that, "*We were given two solar water tanks and the project required that both be installed on one building to use one pump. However, we have two buildings where warm water is required and we preferred to install one tank per building plus a water pump for each. We therefore had to incur the cost of an additional pump which was not planned for. We therefore recommend some flexibility in project interventions to suit realities of different beneficiaries*".

Solar water heater (left) and water tank system (right) at Alegria Inn, Kamonyi District

Impact story 8: Madam Gatalina, Kayonza District

Challenges

Madam Gatalina's household is located in a remote village in Murama Sector, Kayonza District. The main source of energy for lighting purposes prior to the intervention was paraffin used to fuel a small lamp and the household used to spend about 1,000 Rwandan Francs per month on paraffin. The paraffin would spell terribly for the household members and to get a break from this inconvenience, sometimes a torch would be used, requiring five dry cells of 500 RWF per month to lighten the house.

Intervention and benefits

A solar panel was provided to Madam Gatalina's household, which replaced paraffin and battery cells used in a small lamp and torch, respectively. The benefits created by this intervention so far include reduced expenditure on paraffin and dry cells for lighting purposes, reduced exposure to smoke and smell from the paraffin, and increased availability of light at night for household chores. The respondent appreciated the support which created numerous benefits at household and community levels, mentioning that, "*Light is available even during the rainy season, we no longer buy battery cells and paraffin and the money is instead saved in a saving group – ikimina. Neighbors also charge their mobile phones using the solar system and we no longer breathe air polluted by paraffin smoke like we used to do before the support*". The respondent added, "*We are*

grateful for the support as we no longer breathe polluted air and we have enough power which we even share with our neighbors".

Recommendations

One recommendation was given for project staff to always monitor the interventions and ensure a technician is available to install the solar panels for the beneficiaries as well as train them on how to use them. The respondent emphasized this, highlighting that, "*We were given the solar panel away from home and no technician came to install it for us. Luckily, my son had some knowledge and installed it for us and had to figure out how to locate the switch. By the time the technician came, we were already using the power*".

Impact story 9: Hakuzimana Olivier, Kayonza District

Challenges

Located in a remote village in Murama Sector of Kayonza District, the household of Hakuzimana Olivier had no access to electricity and hence had resorted to using a small paraffin lamp before as a source of lighting. On a monthly basis, the household would spend about 3,000 RWF on paraffin, which was also associated with severe pollution of the air breathed by household members.

Intervention

A solar panel was provided and installed by a technician as part of the SCENR project. The solar panel has provided power to replace the paraffin lamp which was used before the intervention, saving the household the 3,000 RWF that was used on paraffin on a monthly basis. The solar power also reduced exposure to smoke, which is a great benefit considering that the beneficiary is epileptic and smoke exposure is quite risky for his condition.

Sustainability

Due to the positive benefits realized by the beneficiary, his household is willing to sustain them after the project support ceases. To illustrate this commitment, the respondent mentioned that, "*There is a time the solar power stopped working and we called the project technician to fix it. However, it took about three months before he arrived. During this period, we could not go back*

to paraffin and instead we bought a new solar panel which we used until the technician arrived. Currently, we have two solar panels which are working well".

Recommendations

The beneficiary recommended prompt and continuous supervision and monitoring to ensure interventions and identify any upcoming issues to be resolved in a timely manner. He added that, "*With continuous monitoring, the project team would easily identify breakdowns in the solar power system and fix them promptly such that beneficiaries don't spend three months without power*".

Solar panels for Madam Gatalina (left) and Hakuzimana Olivier (right) in Kayonza District

7. Enabling factors, challenges and lessons learnt

7.1. Enabling factors to the realization of objectives and targets

The desk review and stakeholder consultation exercises identified key factors were identified as having greatly enabled the realization of planned objectives and targets.

1. Effective leadership at the ministry which ensures effective direction, accountability and ownership.
2. Designing interventions and setting targets that were aligned with the priorities of implementing partners created synergies that enhanced effective implementation.
3. Strong stakeholder engagement involving national and local government institutions ensured ownership and joint implementation of interventions.

4. Routine monitoring, quarterly reporting, spot checks and constant engagement of districts was ensured streamlined implementation and any misalignment between actual and intended results were identified and addressed in a timely manner.
5. Strong and effective coordination between UNDP and implementing partners as well as among the partners themselves. For example, MoE often supported CPCIC with logistics related to filed visits to the private companies while UNDP ensured regular follow-ups to ensure smooth running of interventions.

7.2. Constraining factors and challenges

Several challenges were identified during desk review and primary data collection exercises as having constrained the implementation of the SCENR project and realization of some of its milestones. The key challenges were:

1. Funding constraints which often led to budget reallocation and re-prioritization of interventions originally set in the semi-annual work plans.
2. Procurement delays which mostly affected feasibility studies whereby tenders would often get re-advertised whenever suitable candidates were not found, which in turn delayed implementation of associated interventions.
3. It was tricky and complicated for the project interventions to be implemented within districts without a dedicated staff funded by the project. Asking for routine updates from district officials with existing mandated tasks was overburdening the officials and, to some extent, compromised the effectiveness of reporting mechanisms.
4. Although output indicators are outlined in the results framework, the lack of accompanying metadata to clarify on concepts and measurement approaches creates ambiguity and compromises the quality of reporting. This is evidenced by quarterly reports where updates are provided in generic narrative format and not per output indicators.
5. Limited time allocated to the implementation of some interventions. For example, green village components in IDP model villages required feasibility studies, land acquisition after long negotiations, etc., all of which required ample preparatory time prior to implementation.
6. Limited time and financial resources constrained the scale of some interventions, for example training of private companies in clean production technologies and practices.

Indeed, due to funding constraints, only 13 SMEs received solar water tanks, whereas 108 companies were trained. According to some stakeholders consulted, the limited time allocation for some interventions reflects that at the planning stage, some critical details of activities to be undertaken during implementation were missed.

7.3. Lessons learnt

Based on experiences from the SCENR Project implementation, stakeholders learnt several lessons that would indeed improve effectiveness and impact during future phases or similar projects.

1. For interventions that require more time for planning and implementation, such as green village components in IDP model villages, granular planning is always necessary to break down interventions into yearly milestones and ensure appropriate time is allocated to each phase or activity, for example feasibility study in the first year, construction of water tanks in the second year, etc. Setting ambitious targets could delay implementation especially when tenders and construction formalities are involved.
2. A community-based approach is both effective and efficient as seen in the timelier construction of cowsheds by community members compared to hired private companies. However, since operatizing households in cooperatives and securing approval of the formed cooperatives takes long, planning in advance is always required.
3. A clear sustainability plan is always needed within the project design to ensure continuity of interventions after project funding ceases.
4. Flexibility in project implementation is crucial, including budget reallocation to address the most pressing priorities amidst funding limitations.
5. The involvement of stakeholders at the national and local levels from ministries to districts and other relevant institutions is a powerful tool that induces ownership and strengthens joint implementation of interventions.
6. Private companies are eager and willing to adopt clean production practices and technologies as long as they receive the necessary technical guidance and financial support.
7. Collaboration is crucial for effective project delivery. To illustrate this, the CPCIC representative emphasized that, “if SCENR hadn’t supported us, we would not have managed to reach the 108 and 13 companies”.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1. Conclusions

The SCENR project implemented between 2018 and 2024 adopted a comprehensive, participatory and inclusive approach to strengthening national, local government and community capacities to indulge in environmental protection, sustainable natural resource management and climate change adaptation and mitigation for overall green growth transformation. A unique application of complementary software (capacity building) and hardware (investments) components ensured the project addressed critical constraints that hitherto hampered effective application of environmental protection principles and overall green growth envisioned in national and sectoral policies and strategies. One of the key successes of the project was to bring together all levels of stakeholders, from private sector to communities and public institutions at national and local government levels in the joint fight against climate change and sustainable management of natural resources. This success signifies the salience of participatory and holistic approaches to project implementation to maximize the intended benefits from interventions.

8.2. Recommendations

The following recommendations are provided to improve the design and implementation of future phases of the SCENR or similar projects, based on evaluation findings and stakeholder insights.

1. **Enhance visibility of project reports and evaluations to facilitate learning**. To facilitate learning and improvement, some stakeholders recommend publishing technical project reports on websites of funders and implementing partners, collating lessons learned and gaps to inform priorities for future project interventions.
2. **Allocate ample time for interventions** especially those that require complex activities such as feasibility studies, land acquisition, tender processes, and construction of infrastructures and other physical structures.
3. **Consider refresher training to facilitate continuous learning** and address the high rates of staff turnover in national and local government (district) offices. For example, some stakeholders proposed quarterly training for the results-based monitoring and evaluation

system for the ENR sector. According to discussions with implementing partners, a proactive approach to address staff turnover and address the resultant gaps would augment indeed augment the capacity of implementing partners to effectively implement project interventions and achieve the intended objectives. For institutions in charge of investigation and prosecution of environmental crimes, continuous training is crucial to update knowledge with emerging issues during changing climate and weather, such as new crimes comping up during droughts.

4. **Strengthen project monitoring and evaluation and reporting mechanisms.** Reporting standards and templates were developed to guide in routine tracking of progress of project interventions. However, some implementing partners suggested that these standards and templates be accompanied by regular training and continuous guidance to implementing partners as this would improve reporting effectiveness and avoid missing data on indicators.
5. **Consider some flexibility and thorough due diligence to ensure interventions suit realities of all target beneficiaries**. Examples given include consideration of IDP village residents who cannot rear pigs and would be provided with goats or poultry.
6. **Continued multi-stakeholder and multi-sectoral coordination to realize the ENR sector objectives.** This includes for example issuance of construction permits by Rwanda Housing Authority after consultation with RIB, RNP and other enforcement agencies to ensure coherence and common understanding regarding any environmental violations that could result from the respective construction projects.

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Annexes

Annex 1: Guiding questions for KIIs with UNDP

Nate of institution…….

Respondent's name……..Position……..

Email…….Phone number……...

Evaluation criteria #1: Relevance and #2: Coherence	
Q1	How is the SCENR Project relevant to the national development agenda, UN Rwanda and general country context?
Q2	To what extent was the SCENR Project aligned [in priority setting and/or timing] with UN, Government and other plans?
Evaluation criteria #3: Effectiveness	
Q3	Overall, how successful was the project in realizing its intended objectives and achieving the planned outputs?
Q4	How did the project's design and implementation consider a gender and human rights-based approach?
Q5	Did the project generate any additional outputs or realize outcomes that were not mentioned in the results framework?
Q6	What were the key factors that enabled the realization of project objectives and achievement of planned outputs?
Q7	Highlight the main challenges to project implementation and how these were mitigated
Q8	What key lessons have been learnt throughout the project's implementation (based on success and/or failure scenarios)
Q9	If the SCENR Project were to be extended, what remaining key issues would you suggest to be prioritized?
Q10	What are your main recommendations to improve the design and implementation of similar agriculture-resilience projects?
Evaluation criterion #3: Efficiency	
Q11	How did the project ensure value for money and implementation of project activities more efficiently compared to alternatives?
Q12	Highlight examples of interventions with major deviations in planned and actual expenditures. Were these approved by PSC?
Evaluation criterion #4: Sustainability	
Q13	Financial sustainability: What plans are in place to ensure continuation of the project's key activities after its completion?
Q14	Financial sustainability: How strong is the exit strategy set by the SCENR Project?
Q15	Environmental sustainability: What measures were taken to protect the environment during implementation of interventions?
Evaluation criterion #5: Impact	
Q16	What key changes has the SCENR Project created at individual, community, institutional and national levels?

Annex 2: Guiding questions for KIIs with implementing partner institutions

Nate of institution……..

Respondent's name……..Position……..……..

Email…….Phone number…….

Evaluation criterion #1: Relevance	
Q1	Prior to the project, what were the key institutional challenges in implementing environmental protection initiatives?
Evaluation criterion #2: Coherence	
Q2	How well does the SCENR Project fit into past, ongoing and/or planned interventions in your organization?
Evaluation criterion #2: Effectiveness	
Q3	In your own opinion, to what extent was the SCENR Project successful in implementing the planned interventions
Q3	What were the key factors that enabled the realization of project objectives and achievement of planned outputs?
Q4	Highlight the main challenges to project implementation and how these were mitigated
Q6	Please highlight any loopholes in the design and/or implementation of the SCENR Project
Q7	How effective were the coordination and stakeholder engagement mechanisms during project implementation?
Q8	How did your institution consider gender equity in the during implementation of interventions? Examples please.
Q9	What key lessons have been learnt throughout the project's implementation (based on success and/or failure scenarios)
Q10	If the SCENR Project were to be extended, what key issues would you suggest to be prioritized during the next phase?
Q11	What recommendations would you make to improve the design and implementation of future phases of the SCENR Project?
Evaluation criterion #3: Efficiency	
Q12	How did the activities implemented by your institution consider value for money compared to alternative approaches?
Q13	Please highlight some instances where spending on activities differed substantially from the planned budget. Was justification given and approval secured from the project steering committee (PSC)?
Evaluation criterion #4: Sustainability	
Q14	What measures have been put in place to ensure the sustainability of benefits created by the SCENR Project after its completion?
Evaluation criterion #5: Impact	
Q15	In which ways has the SCENR Project changed the capacity of your institution to fulfil its mandate?
Q16	Beyond your institution, what other impacts has the SCENR Project created at individual, community or national levels?

Annex 3: Guiding questions for KIIs with other organizations

Nate of institution……..

Respondent's name……..Position……..……..

Email…….Phone number…….

Evaluation criterion #1: Relevance	
Q1	What are some of the key capacity constraints that could have justified interventions like the SCENR Project in 2018?
Evaluation criterion #2: Coherence	
Q2	If had past or ongoing environment-related projects during 2018-2024, how synergetic were they with the SCENR Project?
Evaluation criterion #3: Effectiveness	
Q3	If you are aware of the SCENR Project, how successful was it in realizing the intended objectives and achieving set targets?
Q4	If the SCENR Project were to be extended, what key issues would you suggest to be prioritized during the next phase?
Q5	What are your recommendations to improve the design and/or implementation of the SCENR Project?

Annex 4: Guiding questions for KIIs with primary beneficiaries – SMEs

District…….……Sector……..Cell……..Village……

Company name……Name of representative…….Phone number of representative……

Evaluation criteria #2: Relevance	
Q1	Before receiving solar water heaters, training or any other intervention from UNDP and its partners, what challenges did you face related to adoption of clean production practices and technologies?
Evaluation criteria #2: Effectiveness	
Q2	Could you please describe the support you received from UNDP and its partners e.g. the Clean Production and Climate Innovation Center (CPCIC)?
Q3	What challenges did you face during your participation in the SCENR project intervention(s)?
Evaluation criteria #3: Sustainability	
Q4	What measures have you put in place or intend to put in place to ensure continuity of the benefits received after the support from the SCENR project ends?
Evaluation criteria #5: Impact	
Q5	How has the support changed your company's capacity to adopt clean production practices and technologies?
Q6	What positive impacts has your company experienced as a result of the support from the project?
Q7	What challenges did you face during participation in the project as a beneficiary?
Q8	What recommendations do you have to improve the design and/or implementation of SCENR project interventions?

Annex 5: Guiding questions for FGDs with primary beneficiaries – IDP villages

District…….……Sector……..Cell……..Village……

Phone number of group leader……

Evaluation criteria #2: Relevance	
Q1	Could you highlight some of the challenges you were facing before the project? Hint: for examples issues related to vulnerability to environmental disasters in the areas where the households used to live before relocating to IDP villages, or the lack of income-generating opportunities for sustainable livelihoods.
Evaluation criteria #2: Effectiveness	
Q2	Could you describe in detail the kind of interventions you received from the project? Hint: Interviewer should highlight some of the interventions of the SCENR Project for IDP model village residents e.g. training in compost making, provision of rainwater harvesting tanks, and livelihood support through provision of cows and pigs and construction of cow sheds.
Q3	What challenges did you face during your participation in the SCENR project intervention(s)?
Evaluation criteria #3: Sustainability	
Q4	Are you able to sustain the project's interventions when the project ends? 1=Yes; 2=No; 3=Not sure
Q5	Are you willing to seek your own means of sustaining the intervention without support? 1=Yes; 2=No; 3=Not sure Hint: If respondents answer YES, probe to give some examples of any existing measures they have put in place or intend to put in place to ensure the interventions continue even after the project ends (e.g. mobilizing community members to rehabilitate cow sheds, etc.).
Evaluation criteria #5: Impact	
Q6	How has the support affected your overall wellbeing? 1=Improved; 2=Unchanged / Not sure; 3=Unchanged Hint: Interviewer / facilitator record the number of FGD participants who gave each responses as follows 1: 2: 3:
Q7	How has the support affected your resilience to climate shocks? 1=Improved; 2=Unchanged / Not sure; 3=Unchanged Hint: Interviewer / facilitator record the number of FGD participants who gave each responses as follows 1: 2: 3:

Q8	How has the project affected your environmental awareness & management? 1=Increased; 2=Unchanged; 3=Reduced Hint: Interviewer / facilitator record the number of FGD participants who gave each responses as follows 1: 2: 3:
Q9	Can you describe the key positive impacts or benefits you have acquired from the intervention, giving some specific numbers where possible, e.g., clearly illustrating the change before and after the intervention.
Q10	Did you experience any negative consequences as a result of participating in the SCENR project intervention(s)? If YES, please elaborate with some examples.
Q11	What recommendations do you have to improve the design and/or implementation of SCENR project interventions?

Annex 6: Guiding questions for FGDs with primary beneficiaries – household solar power

District……..……Sector……..Cell……..Village……

Phone number of household head……

Evaluation criteria #2: Relevance	
Q1	What challenges did your household face related to lack of electricity before you were given solar?
Evaluation criteria #2: Effectiveness	
Q2	Could you describe in detail the kind of interventions you received from the project?
Evaluation criteria #3: Sustainability	
Q3	What measures have you (or are you planning to) put in place to sustain/maintain the solar power after project ends?
Evaluation criteria #5: Impact	
Q4	Can you describe the key positive impacts or benefits you have experienced as a result of receiving solar power?
Q5	Did you experience any negative consequences as a result of receiving the solar power? If YES, please elaborate with some examples.
Q6	What recommendations do you have to improve the way the support was provided?

Annex 7: List of stakeholders consulted during field work

S/N	Institution/ Beneficiary	Category	Target respondents	Contact person	Phone number	E-mail
1	UNDP	Development partner	SCENR Project focal person	Immaculee Uwimana	0788871527	immaculee.uwimana@undp.org
2	MoE	Central Government	SCENR Project focal person	Diana Bucyana	0788887939	diannabucyana@environment.gov.rw info@environment.gov.rw
3	FONERWA	Central Government	SCENR Project focal person	Nzirwanabake Fidele	0788529701	f.nzirwanabake@greenfund.rw info@greenfund.rw
4			M&E Analyst	Florian Mugabo	0788768817	f.mugabo@fonerwa.org
5	CPCIC	Central Government	SCENR Project focal person	Germaine HIRWA	0783373144	info@cpcic.rw germaine.hirwa_cpcic@nirda.gov.rw
6	CPCIC	Central Government	Resource person	Niyirema Jonas	0783210412	
7	RIB	Central Government	SCENR Project focal person	David BWIMBA	0788506010	info@rib.gov.rw dec@rib.gov.rw
8	Nyaruguru District	Local Government	SCENR Project focal person	Mukwiye	0788635205	
9		Beneficiary	Group of beneficiaries from Kivugiza IDP village			
10	Rubavu District	Local Government	SCENR Project focal person	Epimaque	0788550289	
11		Beneficiary	Group of beneficiaries from Mudende IDP village			
12		Beneficiary SME	MNB Ltd	Florent	0788452379 / 0788646569	nyzilipa@yahoo.fr
13	Kayonza District	Beneficiaries	Buganza Good Wine Ltd	Ernestine Tuyishimire	0787967441	ernestinetuyishimire37@gmail.com
14		Beneficiaries	Madam Gatalina	Madam Gatalina		
15		Beneficiaries	Hakuzimana Olivier	Hakuzimana Olivier		
16	Kamonyi District	Beneficiaries	Alegria Inn Ltd		0788353242	alegriainnruyenzi@gmail.com kalisatheogene22@gmail.com

						uwimanaredempta@gmail.com
17	Gasabo District	Beneficiaries	Binya Limited	Shamsa Josephine	0786766202 / 0788803624	Ishingiro.naphtal@gmail.com
18	Kicukiro District	Beneficiaries	New Vision Bakery Bread Limited	Byiringiro Domonique, Director of Administration and Finance	0788814505	newvision205@gmail.com