





Final Report

BASELINE STUDY FOR RWANDAN CSOS ENGAGE IN CLIMATE RESILIENT AGRICULTURE AND SUSTAINABLE ENERGY INITIATIVES.

Submitted to

"Conseil de Concertation des Organisations d'Appui aux Initiatives de Base" CCOAIB »

Prepared by a Consortium of:

- 1. Dr Charles Ruranga, Team Leader (email: cruranga@gmail.com)
 - 2. Mr. Willis Okul Odhiambo, Associate Consultant

July 2021



Funded by the European Union

LIST OF ABBREVIATIONS

CCR Climate Change Resilience

DDPs District Development Plans

DHS Demographic Health Survey

FGD Focus Group Discussion

FONERWA Rwanda Fund for Environment and Climate Change

GALS Gender action learning systems

GGCRS Green Growth and Climate Resilience Strategy

JDAF Joint District Action Forum

KAP Knowledge, Attitude and Practice

KGs Kilo Grams

KII Key Informant Interview

NDC National Determined Contributions (under Paris Agreement)

NGOs Non-Governmental Organizations

NISR National Institute of Statistics of Rwanda (2012)

PESTEL Policy, Political, Economic, Social, Technological and Legal

RAB Rwanda Agricultural Board

REMA Rwanda Environmental Management Authority

RW Rwanda

SPAT Strategic Plan for the Transformation of Agriculture

VC Value Chain

VUP Vision 2020 Umurenge Programme

Contents

LIST	Γ OF ABBREVIATIONS	I
LIST	Γ OF TABLES	
LIST	Γ OF FUGURES	IV
ACK	KNOWLEDGEMENTS	V
EXE	TOF TABLES. TOF FUGURES KNOWLEDGEMENTS. CUTIVE SUMMARY. INTRODUCTION. 1. PURPOSE OF THE BASELINE 2. SPECIFIC OBJECTIVES OF THE BASELINE 3. SCOPE OF WORK. 1. DATA COLLECTION APPROACHES. 2. STUDY AREA. 3. TARGET POPULATION AND SAMPLE SIZE. 4. DATA COLLECTION APPROACHES. 5. TRAINING AND FIELDWORK. 6. DATA ANALYSIS. 6. LIMITATIONS TO THE STUDY. 1. DEMOGRAPHICS OF RESPONDENTS. 1. J. J. Total number of respondents and gender. 1. J. J. Age of respondents of respondents. 1. J. J. Age of respondents. 1. J. J. Warield status of respondents. 1. J. J. Warield status of respondents. 1. J. J. Under Control of the Subject of the Noise Holling of the household. 2. BASELINE FINDINGS FOR INDICATORS OF THE PROJECT LOGICAL FRAMEWORK. 2. J. Impact (Overall objective): Contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors. 2. J. Longua (Overall objective): Contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors. 2. J. Impact in the status of the statu	VI
1.	INTRODUCTION	8
1.	1. Purpose of the Baseline	9
1.		
1.	3. Scope of work	10
2. M	ETHODS AND STUDY DESIGN	11
2.	1. Data collection approaches	11
3.		
	3.1.2. Age of respondents	16
	· ·	
	3.1.6. Head of the household	19
3	v	
J.	3.2.1. Impact (Overall objective): Contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sect	ors.
	3.2.2. Outcome 1: Rwanda's CSOs have secured relevant policies and plans on climate change and climate	_
	security	l
	, , ,	
4. CR	RA LOGFRAME BASELINE INDICATORS	44
5. CC	DNCLUSION AND RECOMMENDATIONS	50
5.	2. RECOMMENDATIONS	50
C A.	NNEVEC	E 1

LIST OF TABLES

Table 1: Age of respondents	16
Table 2: Education level of respondents	17
Table 3: Gender headed households	20
Table 4: Household annual income	20
Table 5: Household annual income per district	21
Table 6: Agriculture share in household annual income per district	23
Table 7: Household annual income and ubudehe category	24
Table 8: Household annual income and gender headed HH	26
Table 9: Main food consumption per district	29
Table 10: Household food sustainability per district	30
Table 11: Household ubudehe category and food sustainability	30
Table 12: Household ubudehe category and food sustainability per district	31
Table 13: Main causes of the low agriculture production	33
Table 14: CSOs involved in climate change per district	33
Table 15: CSOs participation in government climate change related sector working groups	35
Table 16: CSOs farmers' outreach to multiply climate resilient approaches per district	35
Table 17: Access to CC information per district	
Table 18: HH supported by CSOs to adopt climate resilient strategies	37
Table 19: Adhesion of respondents to SMEs or cooperatives per district	39
Table 20: Local SMEs or cooperatives involved in climate resilient agriculture per district	40
Table 21: Range of jobs in climate resilient agriculture created by SMEs or cooperatives	40
Table 22: Awareness level of respondents on climate change issue per district	42

LIST OF FUGURES

Figure 1: Total number of respondents per sex	 15
Figure 2: Education level of respondents	
Figure 3: Marital status of respondents	
Figure 4: Ubudehe category of respondents.	 19
Figure 5: Annual income per household per district	
Figure 6: Share of agriculture in the annual household income	 22
Figure 7: Household annual income and ubudehe category	 23
Figure 8: Household annual income and gender of the headed household	 25
Figure 9: Main food consumed by the household	
Figure 10: Household food sustainability	 29
Figure 11: Causes of low agricultural production	 32
Figure 12: Access to information of climate change	 36
Figure 13: Adhesion of respondents to SMEs or cooperatives	 38
Figure 14: Local SMEs or cooperatives involved in climate resilient agriculture	 39
Figure 15: Awareness level of respondents on climate change issue	 41

ACKNOWLEDGEMENTS

This baseline study involved individuals of different professional orientations presenting delicate balance in accomplishing the task. We thank the Targeted Direct Beneficiaries of the Project drawn from the four (4) Districts who accepted to participate in the study and provided the information without which completion of this report would have been impossible. We extend special thanks to the Key Informants who recognized the need to provide the essential information through interviews and one on one discussions. These included the Joint District Action Forum (JDAF) officers and Directors of Agriculture in Nyamagabe, Nyaruguru, Nyagatare and Kirehe Districts, and Sector Agronomists drawn from specific Sectors.

Thanks to the entire CCOAIB project staff for ensuring that all the logistics were available when and where needed. This was particularly useful in introducing the consultants to administration of concerned districts, the mobilization process, sampling process and providing of all documents necessary for desk review.

We finally hasten to acknowledge all those persons who contributed towards the success of the exercise in general, as we are not able to point out every individual in this report. It was, indeed awesome!

EXECUTIVE SUMMARY

Climate resilience and food security programmes encompass many different kinds of activities, but share the fundamental objective of enhancing capacity of vulnerable communities to identify, reduce and manage risk at local and national levels.

CCOAIB in partnership with OXFAM and DUTERIMBERE ONG has secured funding from the European Union for the implementation of a project titled 'Rwandan CSOs engage in Climate Resilient agriculture and sustainable energy initiatives (CRA project)". The overall objective of the project is to contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate-resilient, sustainable agriculture, and energy sectors.

To indicate the current level of the CRA project' indicators, CCOAIB commissioned a baseline study in four districts of project intervention (Nyamagabe, Nyaruguru, Kirehe and Nyagatare).

The study employed a cross-sectional design of both qualitative and quantitative methods. Household questionnaire, focus group discussion guides, key informant schedules and observation checklists were the main tools employed to collect data from the 400 respondents. The respondents were drawn from individual households' beneficiaries, cooperative members, cooperative officials and government officials.

The survey covered farmers whose livelihoods mostly depend on agriculture: for the majority of the respondents the share of the agricultural income is over 75% of the total household annual income.

The survey demonstrated that in every surveyed district, a great majority of respondents' appreciation of the climate change impact on the farming activities is high: 97.9% of the respondents in Kirche district, 100% of the respondents in Nyagatare, 79.2% of the respondents in Nyamagabe district and 95% of the respondents in Nyaruguru district. This is a good indicator of the relevance of the CRA project in terms of responding to the beneficiaries' real needs.

This survey found that very few number of CSOs are reaching out to farmers to multiply climate resilient approaches. Over the 27 identified CSOs operating in the surveyed districts, only 4, representing 14.8% are implementing activities related to climate resilient approaches within communities.

Among the three main causes of the low agricultural production which leads to shortage of food at household level as indicated by this survey; the first and most challenging one is the climate change with 66% of the total number of respondents. Another pertinent finding is that 80% of the respondents don't have access to the climate change information, and only 20% of the respondents do access it.

Finally, this report presents in detail findings to each project indicator.

1. INTRODUCTION

CCOAIB in partnership with OXFAM Germany, OXFAM UK/ Rwanda and DUTERIMBERE ONG have secured funds from the European Union to implement the project called "Rwandan CSOs engage in Climate Resilient agriculture and sustainable energy initiatives (CRA project)". This is a joint project implemented by a consortium of 3 organizations: CCOAIB, OXFAM and DUTERIMBERE ONG, whereas CCOAIB is the coordinator. The duration of the project is 30months (from 15th October 2020 to 14th April 2023).

The overall objective of the project is to contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors. The intervention logic is demonstrated by implementing two main outcomes.

Background

The CRA Project has to be implemented in four districts selected because of their vulnerability to effects of climate change, levels of poverty, consortium's pre-established collaboration with local leaders and knowledge of the terrain, and potential to raise smallholder farmers' income levels while strengthening their resilience to effects of climate change. The number of direct beneficiaries is expected to be 8,000 smallholder farmers and their households and communities, 40 CSOs, 100 decision makers at local levels, and 20 rural enterprises/SMEs. The number of indirect beneficiaries is expected to reach 32,000 people.

The project focuses on the following two sectors:

- (a) Agriculture: The sustained growth of the agricultural sector in Rwanda has been driven by important public investments in land use consolidation, irrigation, land improvement, soil and water conservation, facilitating access to inputs, increasing livestock herds and social capital-building through support to cooperative development.
- (b) Energy: In Rwanda, energy sector plays a vital role in supporting socio-economic development.

One of the long-term strategies of country is to reduce fuel wood consumption from 94% to 50% and one of the major contributing factors will be the installations of Biogas digesters in both

residential homes as well as the institutions with large population of citizens like, schools, hospitals, prisons etc.

The overall objective of the proposed action is to contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors. The intervention logic is demonstrated by implementing two main outcomes

Outcome 1: Rwanda's CSOs ensure that relevant policies and plans on climate change and climate resilience reflect small holder farmers' needs, thereby fostering sustainable rural development and food security.

Outcome 2: At least 8,000 smallholder farmers' households have improved their livelihoods and food security by using climate resilient and sustainable agriculture approaches and strategies.

1.1.Purpose of the Baseline

The main purpose of this baseline study is to allow the project's implementers to objectively monitor progressive achievements and changes and evaluate the real contribution of the project in terms of planned results and their respective targets. It is a collection of data about the starting situation in the targeted districts, community and target groups before undergoing an effective implementation of the project. The findings will be used to establish benchmarks against which future progress can be assessed or comparisons made. This baseline is the reference for further evaluations intended to measure the project's implementation progress and results.

This baseline report established reliable qualitative and quantitative baseline data for project M&E and identify factors that are likely to affect the achievement of the project purpose. The baseline assessment was designed to provide a foundation for monitoring progress of outcome and output indicators at different time intervals including the end-line evaluations.

1.2. Specific objectives of the Baseline

The specific objectives of the baseline assessment were as follows:

To determine quantitatively and qualitatively the current situation of the set indicators of the project (impact, outcome and outputs).

To map CSOs, SMEs, Women and youth cooperatives with a focus on the climate resilience agriculture, energy and green job creation in the four targeted districts. This will help to select the target groups' members to be supported during the project's implementation.

1.3. Scope of work

The consultants undertook the following as a minimum scope of work:

- a. Gather relevant benchmark data for the planned key project indicators to enable change tracking and measurement in the course of the project life. In this framework, the attached log frame should be filled in about the baseline data/information;
- b. Provide a detailed holistic mapping of the project's target groups (farmers organizations including women and youth organizations/groups, CSOs oriented in climate resilient agriculture and energy activities, SMEs involved in climate change, especially in energy sector, TVET and other private sector operators involved in climate resilient agriculture and energy sector, public institutions involved in agriculture and energy sectors at district level (authorities and technicians);
- c. Identify CSOs with strategic plan/action plan/project on the climate resilient agriculture and/or energy initiatives;
- d. Identify women and youth' groups/cooperatives involved in making energy saving stoves, gas cooking and bio-digesters' construction;
- e. Identify SMEs/private companies involved in mining & construction companies in the targeted districts;
- f. Assess the availability of Information, Education and Communication (IEC) materials on climate resilience for training purpose;
- g. Identify advocacy capacity of CSOs at district level in climate resilience, agro-ecological approaches that are relevant for smallholders (esp. women, youth, and vulnerable groups).

2. METHODS AND STUDY DESIGN

2.1. Data collection approaches

The consultants employed a cross sectional design of qualitative and quantitative methods and tools for primary and secondary data collection and analysis in the baseline assessment. The different tools complemented, triangulated and verified data to enhance quality of data collected.

Primary Data

Farmers' Questionnaire: The farmers' questionnaire comprised demographic and socio-economic questions, questions in line with project indicators on climate resilience agriculture. It was translated in Kinyarwanda.

Focus Group Discussions: 16 Focus Group Discussions (FGDs) were conducted with targeted cooperative beneficiaries to explore in-depth key issues relevant to understanding the baseline scenario. For each targeted sector sampled, two FGD (one for women, one for men/youth) of between 8 and 12 discussants) lasting between 1½ to 2 hours was conducted. A semi-structured interview guide was used to direct the FGDs.

Key Informant Interviews (KIIs): At the inception phase stakeholder mapping was conducted to identify suitable individuals and institutions from which expert views and data on indicators identified from the project Logical framework could be extracted. The consultants interviewed 4 CSO/ district, 2 district leaders/district, 2 technicians/district and 2 SMEs/district. At National level, we conducted interviews with representatives of MINAGRI and REMA. We also interviewed professional representing project implementers. A semi-structured interview guide was used to direct the KIIs.

Secondary Data

Review and Analysis of Relevant Documents: Relevant baseline statistics at project level, District Development Strategy (DDS), Demographic Health Survey (DHS) 2015 and other studies conducted at national and regional level were analyzed. Data collected included demographic, human development, agricultural productivity, climate data and other relevant project indicators. Key data was also obtained from vulnerability assessment reports, other baseline and evaluation studies and food supply assessment reports conducted in Rwanda. Multiple sources were used to extract this data. This included review of relevant literature.

2.2. Study area

The baseline study covered the following project implementation areas, that is:

- Nyagatare District: Rwimiyaga and Rukomo Sectors.
- Kirehe District: Kigarama and Nyamugali Sectors
- Nyamagabe District: Gasaka and Cyanika Sectors.
- Nyaruguru District: Rusenge and Muganza Sectors.

2.3. Target population and sample size

The respondents were drawn and sampled from the project's primary beneficiaries of be 8,000 smallholder farmers and their households and communities, 40 CSOs, 100 decision makers at local levels, and 20 rural enterprises/SMEs.

Study design

The study employed a mixed methods approach where both quantitative and qualitative data were collected concurrently.

Sample size

Sample size of 400 respondents was determined based on the project target beneficiaries, Government departments and private sector stakeholders providing support functions in Agriculture in the project. From the target population of the study (sample frame), the consultants used the Raosoft sample size calculator considering the margin error of 5%, the confidence level of 95% and the response distribution of 50%.

Population Sampling

Purposive sampling techniques were employed to identify targeted respondents who will participate in the study as key informants and FGD members

Random sampling: Was used to select respondents drawn from the sample size. the target population using the Raosoft sample size calculation formula, considering the margin error of 5%, the confidence level of 95% and the response distribution of 50% which gives the 400 respondents mentioned above.

2.4. Data Collection tools

Data was obtained through secondary data reviews. The subsequent phase of field exercise included use of Questionnaires, KIIs, FGDs, situational and stakeholder analysis and observation schedules. The data collection instruments that were used are explained below;

KIIs: used to document success stories on policy issues, impediments and lessons learned from the sector at local and National levels (drawn from Government departments, service providers and Private sector).

FGDs: ensured that cross cutting issues like gender, youth, environment, market components among others were identified.

Observations: while undertaking the survey, an Observation Record Sheet specifically for farms, in form of a note book with a check-list of items that could be observed without the need to ask questions was carried out by the data collection teams. Probe questions followed observations made and duly noted.

2.5. Training and Fieldwork

Three (3) Research assistants were selected per district and have been oriented on the scope of the project and trained on data collection to ensure consistency in the data collection process. Pretesting of the questionnaire was undertaken to ensure validity and reliability of the assessment instruments prior to setting out for the main field data collection. To control quality, individual questionnaires were checked daily by the consultant and any unclear details clarified.

Consent to conduct assessment

Permission to conduct fieldwork was sought from local leadership at the district and sector levels that included the Joint District Action Forum (JDAF) and district and sector administrators. Consent was also sought from the household respondents, the focus group discussants and key informants before proceeding with the discussions or taking photographs as applicable.

2.6. Data Analysis

The consultant undertook data coding, entry and cleaning. Analysis of household data collected was performed using Microsoft excel Package while qualitative data was analyzed through

constant comparative techniques to come up with major themes. The issues that came up repeatedly were highlighted as emerging issues.

2.6. Limitations to the study

In conducting this baseline study, a few limitations outlined below in bullet points were encountered.

- The survey was undertaken during the period of the Covid-19 pandemic. Contacts with respondents were limited in time.
- To avoid physical visits at household level due to the pandemic, respondents were gathered at Sector level and they need transport facilities. These facilities delayed to be issued, and consultants had to use their own funds and be reimbursed after field work.

3. FINDINGS OF THE BASELINE ASSESSMENT

3.1. Demographics of respondents

3.1.1. Total number of respondents and gender

As shown in the figure below, the total number of respondents is 400 people both female and male.

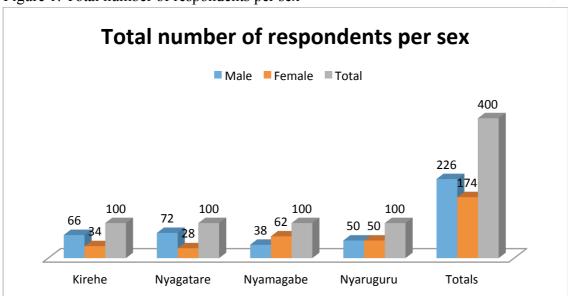


Figure 1: Total number of respondents per sex

Source: CRA baseline survey primary data, 2021

The figure above shows that females are less represented (174 females out 400 respondents representing 44%) than male who represent 56% of the total number of respondents (226 males out of 400 respondents). However, there is a high disparity of female proportion within the 4 districts of the project: Kirehe (34%), Nyagatare (22%), Nyaruguru (50%) and Nyamagabe (62%).

3.1.2. Age of respondents

Table 1: Age of respondents

Age	Frequency	Percentage
18-25yrs	22	5.5
26-30yrs	26	6.5
31-35yrs	56	14
36-40yrs	54	13.5
41-45yrs	56	14
46-50yrs	38	9.5
Above 50yrs	148	37
Total	400	100

Source: CRA baseline survey primary data, 2021

The table above shows that in the 4 districts covered by the project, 60.5% of the respondents are aged above 41 years, while only 12% are below 30 years. This means that the targeted farming population is mostly adult and the youth is not well involved in agriculture. This is almost the same across the districts as indicated below:

In kirche district, 58% of the total number of respondents is aged above 41 years, while only 8% % are below 30 years.

In Nyagatare district, 76% of the total number of respondents is aged above 41 years, while only 6% % are below 30 years.

In Nyamagabe district, 66% of the total number of respondents is aged above 41 years, while only 4% % are below 30 years.

In Nyaruguru district, 42% of the respondents are aged above 41 years, while 30% % are below 30 years.

3.1.3. Education of respondents

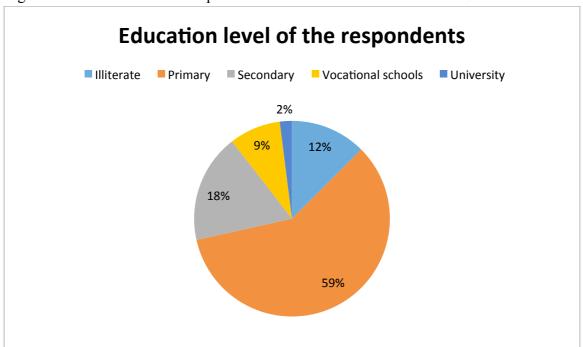
The situation of the education level for the 4 surveyed districts is indicated in the table below.

Table 2: Education level of respondents

Education level	Frequency	Percentage
Illiterate	50	12.5
Primary	236	59
Secondary	72	18
Vocational schools	34	8.5
University	8	2
Total	400	100

The figures of the table above are better illustrated by the graphic below using the percentages of each education level assessed among the respondents:

Figure 2: Education level of respondents



Source: CRA baseline survey primary data, 2021

The table and figure above highlight the fact that a great majority of the respondents have only the primary school level (59%) and 71.5% didn't go beyond the primary level. This low literacy is also seen across all the project's districts: Kirehe (72%), Nyagatare (64%), Nyaruguru (80%) and Nyamagabe (70%). This corroborates the following statement of the PSTA 4: "the skills gap of farmers in agriculture limits productivity and profitability", which confirms that the formal education levels among farmers are generally low.

According to the PSTA 4, the 2016 SAS (Season B) notes that in Rwanda, 66 per cent of agricultural operators had attended primary level education, 26 per cent had no education, 6.6 per

cent attended secondary level education and only 1.4 per cent had attended tertiary level education, noting a gender difference (71.5 per cent of male farmers versus 53.8 per cent of female farmers received only primary education). The ambition of the agriculture sector to transform to a modern, green, and high value-added sector can only be achieved if farmers are equipped with the right skills to upgrade their production systems.

3.1.4. Marital status of respondents

The baseline survey has assessed if the respondents were either single, married, widow, separate and or divorced. The following figure shows the general situation in the project districts:

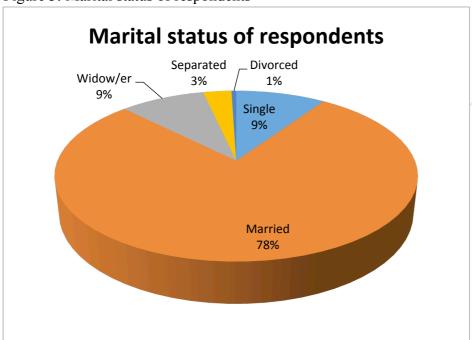


Figure 3: Marital status of respondents

Source: CRA baseline survey primary data, 2021

The figure above shows that a great majority of respondents are married (78%) but it is important to note that widows and separated count for 12% of the total number of respondents. This situation reflects the likelihood of the existence of households that are women headed and therefore the prominence of gender equity during the project's implementation. The proportion of married is almost the same across the 4 project's districts as follows: Kirehe (84%), Nyagatare (84%), Nyamagabe (82%) and Nyaruguru (62%). The proportion of single among respondents is respectively 8%, 4%, 4% and 22% for these districts. The high proportion of single can be linked to the increased number of youth in the agriculture sector (especially in tea industry) in Nyaruguru compared to the three remaining districts.

3.1.5. Ubudehe category of respondents

As demonstrated in the figure below, all ubudehe categories were represented among the respondents, except the category 4 of rich people. This falls under the CRA project purpose of reaching out smallholder farmers including vulnerable women and youth groups.

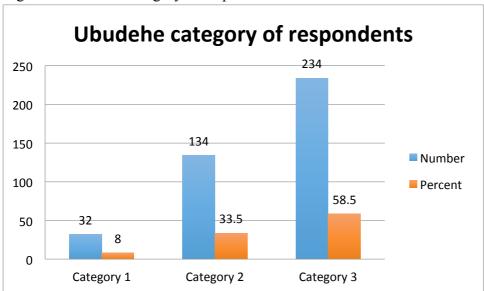


Figure 4: Ubudehe category of respondents.

Source: CRA baseline survey primary data, 2021

From the above figure, it is clear that the vulnerable ubudehe categories 1 and 2 constitute 41.5 % of the total number of respondents. But there are some disparities within the 4 districts of the project: Kirehe (26%), Nyagatare (62%), Nyaruguru (44%) and Nyamagabe (34%). The high percentage of vulnerable people among the respondents in Nyagatare is explained by the existence of a higher labor force in agriculture sector coming from other districts across the country, with very small plots of land.

3.1.6. Head of the household

The baseline survey focused also on knowing who is heading the respondent's household. The following table highlights the situation at both national and district level.

Table 3: Gender headed households

Head of	Т		Kirehe		Nyagatare		Nyamagabe		Nyaruguru	
Household	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Female headed HH	78	19.5	16	16	12	12	20	20	30	30
Male headed HH	322	80.5	84	84	88	88	80	80	70	70
Total	400	100	100	100	100	100	100	100	100	100

The table above shows that the national average of female headed households is 19.5%. This percentage is almost the same across the 4 districts except in Nyaruguru district with 30% of female headed households. The great majority of households surveyed are male headed (between 70% in Nyaruguru district and 88% in Nyagatare district).

1.4. Baseline findings for indicators of the project logical framework

3.2.1. Impact (Overall objective): Contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors.

3.2.1.1. Impact indicator 1: Increased income of targeted smallholder farmers

Towards measuring the current situation of this impact's indicator, the baseline survey has analyzed both the household annual income and the agriculture share of this income. This will help the end line evaluation of the project to effectively and objectively evaluate the contribution of the project which focuses mainly on smallholder farmers' livelihood through adopting resilient solutions to the climate change effects. The table below shows the household annual income at national level.

Table 4: Household annual income

Total of 4 districts		
Average income per year	Frequency	Percentage
Less than 100,000 Rwf	178	44.5
100-300,000 Rwf	148	37
300-500,000 Rwf	38	9.5
500,00-1,000,000 Rwf	24	6

1,000,000-3,000,000Rwf	8	2
3,000,000-5,000,000Rwf	4	1
Total	400	100

Based on the table above, 44.5% of the total number of respondents earns less than Rwf 100,000 per year, 81.5% earn up to Rwf 300,000 per year, 91.0% earn up to Rwf 500,000 per year, while 97.0% earn up to Rwf 1,000,000 per year. Only 3% of the respondents earn between Rwf 1,000,000 and 5,000,000 per year. However, the situation across the 4 project's districts highlights some variations as demonstrated by the table below:

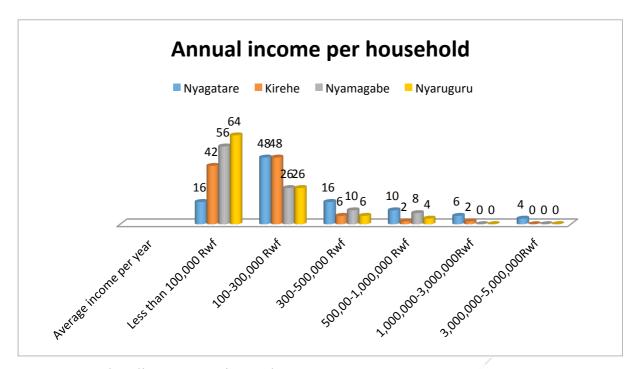
 Table 5: Household annual income per district

Household annual income	Nyagatare	Kirehe	Nyamagabe	Nyaruguru
Less than 100,000 Rwf	16	42	56	64
100-300,000 Rwf	48	48	26	26
300-500,000 Rwf	16	6	10	6
500,00-1,000,000 Rwf	10	2	8	4
1,000,000-3,000,000Rwf	6	2	0	0
3,000,000-5,000,000Rwf	4	0	0	0
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

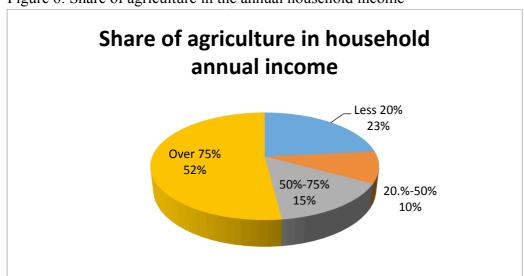
These variations of household annual incomes are better illustrated by the following figure which uses the percentages of respondents for each range of income.

Figure 5: Annual income per household per district



The above figure shows that the most surveyed households earn up to Rwf 300,000 per year (64% in Nyagatare district, 90% in Kirehe district, 82% in Nyamagabe district, and 90% in Nyaruguru district). For upper incomes ranges, there is no household earning between Rwf 1,000,000 and 3,000,000 in Nyamagabe and Nyaruguru districts, while there is no household earning between Rwf 3,000,000 and 5,000,000 per year in all the project's districts except in Nyagatare district (4% of the respondents earn between Rwf 3,000,000 and 5,000,000 per year).

Figure 6: Share of agriculture in the annual household income



Source: CRA baseline survey primary data, 2021

According to the figure above, for the majority of the respondents the share of the agricultural income is over 75% of the total household annual income. This is a good indicator that the sample

population is composed of farmers. The situation of each one of the 4 project's districts is indicated in the following table.

Table 6: Agriculture share in household annual income per district

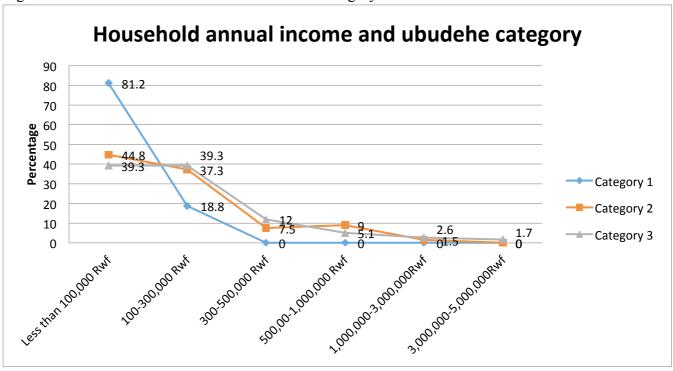
Agriculture share	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
Less 20%	10	6	40	38
20.%-50%	2	2	28	6
50%-75%	20	14	14	12
Over 75%	68	78	18	44
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

In Nyagatare and Kirehe districts, the respondents' annual income is mostly coming from agricultural activities with respectively 78% and 68% of the respondents saying that the agriculture share of their annual income is more than 75%.

This is not the case in Nyaruguru and Nyamagabe districts, whereas respectively 44% and 68% of the respondents said that the agriculture share of their annual income is less than 50%.

Figure 7: Household annual income and ubudehe category



Source: CRA baseline survey primary data, 2021

The figure above shows that the higher the Household income range is, the higher is the ubudehe category number. It means that the highest surveyed ubudehe category 3 of respondents has the highest range of household annual income (Rwf 3,000,000 to 5,000,000), and the lowest ubudehe category 1 has the lowest range of household annual income (less than Rwf 100,000).

In fact, the findings show that 81.3% of the respondents of this ubudehe category 1 have less than Rwf 100,000, and 18.7% have between Rwf 100,000 and 300,000, meaning that 100% of the category 1 of ubudehe earns less than Rwf 300,000 per year. There is no HH of the Ubudehe category 2 earning more than Rwf 1,000,000 per year.13.3% of Ubudehe category 3 earn between Rwf 1,000,000 and 5,000,000 per year. There are some differences across the surveyed districts as shown by thee table below:

Table 7: Household annual income and ubudehe category

Nyagatare							
Ubudehe	Less	100,000	300,000	500,000-	1,000,000-	3,000,000-	Total
category:	than	-	-	1,000,00	3,000,000Rw	5,000,000Rw	
	100,00	300,000	500,000	0 Rwf	f	f	
	0 Rwf	Rwf	Rwf				
Category 1	50.00	50.00	-	-	-	-	100
Category 2	20.69	44.83	17.24	13.79	3.45	-	100
Category 3	5.26	52.63	15.79	5.26	10.53	10.53	100
Kirehe	1	1					L
Ubudehe	Less	100,000	300,000	500,000-	1,000,000-	3,000,000-	Total
category:	than	-	-	1,000,00	3,000,000Rw	5,000,000Rw	
	100,00	300,000	500,000	0 Rwf	f	f	
	0 Rwf	Rwf	Rwf				
Category 1	100.00	-	-	-	-		100
Category 2	55.56	44.44	-	-	-		100
Category 3	32.43	54.05	8.11	2.70	2.70		100
Nyamagabe	1		<u> </u>		L	L	1
Ubudehe	Less	100,000	300,000	500,000-	1,000,000-	3,000,000-	Total
category:	than	-	-	1,000,00	3,000,000Rw	5,000,000Rw	

	100,00	300,000	500,000	0 Rwf	f	f	
	0 Rwf	Rwf	Rwf				
Category 1	66.67	33.33	-	-			100
Category 2	57.14	28.57	-	14.29			100
Category 3	54.55	24.24	15.15	6.06			100
Nyaruguru							l .
Ubudehe	Less	100,000	300,000	500,000-	1,000,000-	3,000,000-	Total
category:	than	-	-	1,000,00	3,000,000Rw	5,000,000Rw	
	100,00	300,000	500,000	0 Rwf	f	f	
	0 Rwf	Rwf	Rwf				
Category 1	85.71	14.29	-	-			100
Category 2	73.33	26.67	-	-			100
Category 3	53.57	28.57	10.71	7.14			100

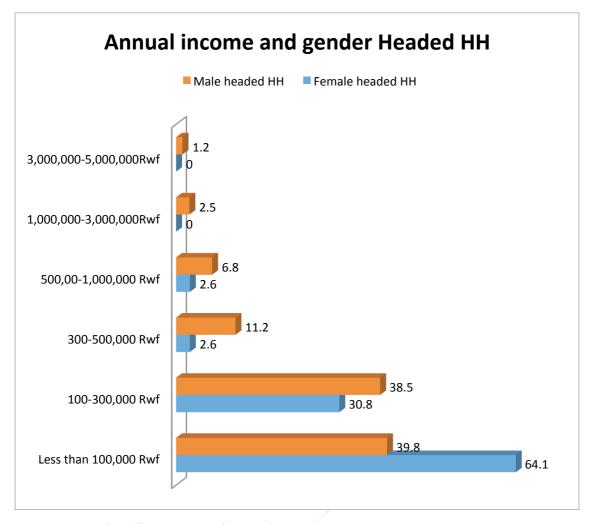
The table above shows that in Nyagatare, Nyamagabe and Nyaruguru districts, the people in ubudehe category 1 can earn up to Rwf 300,000 per year, while in Kirehe district all these people earn less than Rwf 100,000 per year. However, upper ubudehe categories are disparate across the project's districts. In fact findings show that for the range of HH annual income between Rwf 500,000 and 1,000,000 per year, the percentage of the respondents of Ubudehe category 2 are as follows:

Nyamagabe district: 14.2%, Nyagatare district: 13.7%, Nyaruguru district: 0%, and Kirehe district: 0%;

For the range of income between Rwf 1,000,000 and 3,000,000 the percentage of the respondents of Ubudehe category 2 is 3.4% in Nyagatare district and 0% in in thre three rmaining districts, while those of category 3 are 10.5in Nyagatare district, 2.7% in and 0% in Nyamagabe and Nyaruguru districts;

For the range of income between Rwf 3,000,000 and 5,000,000 the percentage of the respondents of Ubudehe category 3 is 10.5% in Nyagatare district and 0% in the three remaining districts.

Figure 8: Household annual income and gender of the headed household



The figure above shows that for the same range of household annual income, the percentage of female headed households is higher in the lowest income range (less than Rwf 100,000 per year), while this proportion goes decreasing as the incomes ranges increase. For the income range of Rwf 100,000 per year, male are 38.5% and female are 30.8%, for the range of annual income of 300,000 and 500,000 per year, male are 11.2% of the respondents and female are 2.6% of the respondents, and from the ranges between 1,000,000 and 3,000, 000 per year and up to 5,000,000, male are respectively 2.5% and 1.2% while female are 0% for the two ranges of incomes. The situation across the project's districts is indicated in the table below.

Table 8: Household annual income and gender headed HH

Kirehe district			
Average income per year	Female headed HH	Male headed HH	Total
Less than 100,000 Rwf	8	34	42
100-300,000 Rwf	6	42	48

300-500,000 Rwf	2	4	6
500,00-1,000,000 Rwf	0	2	2
1,000,000-3,000,000Rwf	0	2	2
Total	16	84	100
Nyagatare district		1	
Average income per year	Female headed HH	Male headed HH	Total
Less than 100,000 Rwf	4	12	16
100-300,000 Rwf	6	42	48
300-500,000 Rwf	0	16	16
500,00-1,000,000 Rwf	2	8	10
1,000,000-3,000,000Rwf	0	6	6
3,000,000-5,000,000Rwf	0	4	4
Total	12	88	100
Nyamagabe district			
Average income per year	Female headed HH	Male headed HH	Total
Less than 100,000 Rwf	12	44	56
100-300,000 Rwf	8	18	26
300-500,000 Rwf	0	10	10
500,00-1,000,000 Rwf	0	8	8
Total	20	80	100
Nyaruguru district		•	
Average income per year	Female headed HH	Male headed HH	Total
Average income per year	Female headed HH	Male headed HH	Total
Less than 100,000 Rwf	26	38	64
100-300,000 Rwf	4	22	26
300-500,000 Rwf	0	6	6
500,00-1,000,000 Rwf	0	4	4
Total	30	70	100

3.2.1.2. Impact indicator 2: Number of households that have achieved food security because of climate resilient strategies in agriculture and energy sectors

According to World Food Summit (1996), "Food Security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their

dietary needs and food preferences for an active and healthy life". All people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life through ensuring:

- Food Availability: sufficient food is available, (production and imports);
- Food Access: social and economic access to food;
- Food Utilization: safe and nutritious food can be utilized;
- Food Stability: all people at all times.

In order to measure this indicator of food security, the following proxy-indicators were developed and assed:

- a) Main food consumed by the household (availability, accessibility and utilization),
- b) Durability of food at household level (sustainability).

Towards well responding to this matter of food security, the main types of food and the timeline were scoped as follows: Legumes, cereals, tubers and vegetables were considered as main food, and the last week before the baseline survey was delimited to track the food consumption at household level.

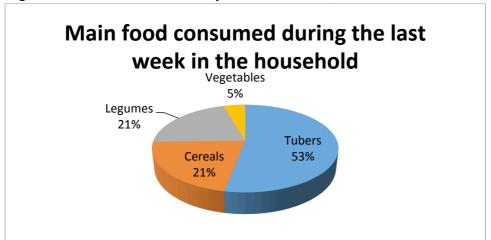


Figure 9: Main food consumed by the household

Source: CRA baseline survey primary data, 2021

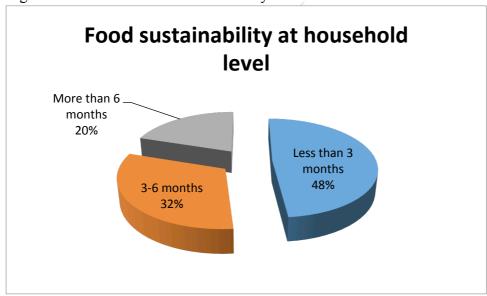
The above figure shows that in a decreasing order, the respondents consume tubers (53%), followed by cereals (21%) and legumes (21%). The percentage of the households who consume vegetables is only 5% of the respondents. However, there is a disparity among the project's districts as shown below:

Table 9: Main food consumption per district

Main food	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
	Percentage	Percentage	Percentage	Percentage
Tubers	42	40	60	70
Cereals	24	40	8	14
Legumes	32	18	18	16
Vegetables	2	2	14	0
Total	100	100	100	100

The table above indicates that while in Kirehe, Nyagatare and Nyamagabe districts, the respondents said that during the last week they consumed tubers, cereals, legumes and vegetables, in Nyaruguru there is no respondent who consumed vegetables during the last week. It doesn't mean that in Nyaruguru people don't consume vegetables, but the frequency is so low that in the last week before the survey there are no vegetables consumed by the respondents. Tubers are most consumed in Nyaruguru and Nyamagabe with respectively 70% and 60% of respondents, while vegetables are most consumed in Nyamagabe (14% of respondents).

Figure 10: Household food sustainability



Source: CRA baseline survey primary data, 2021

From the above figure, there is an issue of food sustainability at household level. In fact only 20% of the respondents can ensure keeping food during more than 6 months. It is important to note that about the half of the respondents (48% of the total number of respondents) have foods during a

period of less than 3 months. This is a serious issue of food security at household level. Looking at the situation for each surveyed district, the situation is highlighted in the table below.

Table 10: Household food sustainability per district

Duration of Household food	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
stock	Percentage	Percentage	Percentage	Percentage
Less than 3 months	46	28	60	60
3-6 months	36	32	28	30
More than 6 months	18	40	12	10
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

The table above shows that in Nyaruguru and Nyamagabe districts, the majority (60%) of respondents affirmed to keep food for a period of less than 3 months per year, and a few proportion of the respondents in these 2 districts can keep food more than 6 months with 10% and 12% of respondents respectively. However, in Nyagatare district, 40% of the respondents said that they can keep food during more than 6 months per year. In Kirehe also the situation is not good, only 18% of the respondents can keep food more than 6 months per year.

The baseline survey has also assessed the relationship between ubudehe category and food sustainability at household level and the findings are mentioned in the table below.

Table 11: Household ubudehe category and food sustainability

Ubudehe category:	Ubudehe category			
	Less than 3 months	3-6 months	More than 6 months	Total
Category 1	26	4	2	32
Category 2	56	54	24	134
Category 3	112	68	54	234
Total	194	126	80	400

Source: CRA baseline survey primary data, 2021

The above table shows that the higher is the household ubudehe category, the higher is the household food sustainability. In fact over 80 respondents who can keep food for more than 6 months, only 2 (2.5%) are in ubudehe category 1, 24 (30%) are in ubudehe category 2 while 54 (67.5%0 are in ubudehe category 3. The situation is similar for the respondents who can keep

food between 3 and 6 months whereas only 4 (3.2% of the respondents) are in are in ubudehe category 54 (42.8%) are in ubudehe category 2 while 68 (54 %) are in ubudehe category 3.

The situation across the project's districts is shown in the table below.

Table 12: Household ubudehe category and food sustainability per district

Kirehe				
Ubudehe category:	Less than 3 months	3-6 months	More than 6 months	Total
Category 1	6	2	0	8
Category 2	8	10	0	18
Category 3	32	24	18	74
Total	46	36	18	100
Nyagatare	1			l
Ubudehe category:	Less than 3 months	3-6 months	More than 6 months	Total
Category 1	2	0	2	4
Category 2	10	24	24	58
Category 3	16	8	14	38
Total	28	32	40	100
Nyamagabe				<u>I</u>
Ubudehe category:	Less than 3 months	3-6 months	More than 6 months	Total
Category 1	6	0	0	6
Category 2	20	8	0	28
Category 3	34	20	12	66
Total	60	28	12	100
Nyaruguru				
Ubudehe category:	Less than 3 months	3-6 months	More than 6 months	Total
Category 1	12	2	0	14
Category 2	18	12	0	30
Category 3	30	16	10	56
Total	60	30	10	100

Source: CRA baseline survey primary data, 2021

Based on the above table, the food sustainability at household level is better in Nyagatare district whereas 40% of the respondents can keep food more than 6 months per year. In this district, it is interesting to see that 2 over 40 (5%) of respondents who can keep food more than 6 months are in ubudehe category 1, the poorest ubudehe category. The lowest proportion of respondents who confirmed keeping food more than 6 months is found in Nyaruguru district with 10% of the respondents.

The food security of rural households depends mainly on the agricultural production at household level. The figure below shows the main causes of low agricultural production according to the respondents.

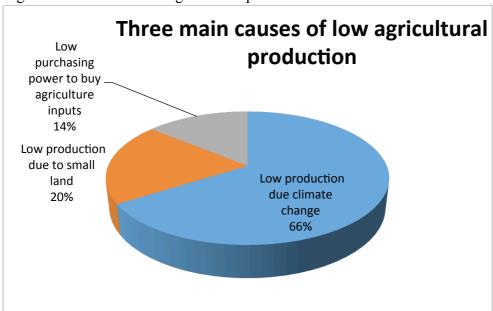


Figure 11: Causes of low agricultural production

Source: CRA baseline survey primary data, 2021

According to the figure above, among the three main causes of the low agricultural production which leads to shortage of food at household level, the first and most challenging one is the climate change with 66% of the total number of respondents. The second cause is the small size of the land with 20% of the respondents and the 3rd one is the high cost of agricultural inputs with 14% of respondents. Within the 4 districts of the project, the situation is as follows:

Table 13: Main causes of the low agriculture production

Three main causes of low agricultural	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
production	Percentage	Percentage	Percentage	Percentage
Low production due climate change	68	88	66	42
Low production due to small land	14	0	28	38
Low purchasing power to buy agriculture	18	12	6	20
inputs				
Total	100	100	100	100

The climate change issue is the first cause of the low agricultural production in all the project districts as expressed by the higher proportion of respondents in each district: Kirehe (68%), Nyagatare (88%), Nyamagabe (66%) and Nyaruguru (42%). The most climate change effect reported by the respondents is the drought, and this explains why the percentage of respondents saying that the climate change is the first cause of the low agricultural production is lower in Nyaruguru district rather than in other districts (42% of respondents). In fact Nyaruguru district is most rainfall and therefore floods are more important than drought as climate change effect for smallholder farmers

3.2.1.3. Impact indicator 3: Increased number of civil society's networks/coalitions involved in climate change policy engagement.

The baseline survey didn't found any civil society's networks/coalitions involved in climate change policy engagement at district level. However some CSOs are individually implementing activities related to the climate change mitigation and/or adaptation. These activities include the soil fertility management (terracing, agro-forestry, extension and advisory services...) small scale irrigation, mulching in horticulture, etc. The following table highlights the CSOs involved in climate change at district level.

Table 14: CSOs involved in climate change per district

DISTRICT	CSOS INVOLVED IN CLIMATE CHANGE			TOTAL	
KIREHE	RWARRI, RDO, DUTERIMBERE, INADES FORMATION			8	
	RWANDA,	RURAL	WOMEN	ECONOMIC	
	EMPOWERMENT, YOUNG WOMEN CHRISTIAN				
	ASSOCIATION, O	ASSOCIATION, CRS, ADRA			

NYGATARE	FOOD FOR THE HUNGRY-RWANDA, CARITAS	10
	BYUMBA, DUTERRIMBERE ONG, WORLD VISION, RDO,	
	TUBURA, HEIFFER RWANDA, CDI, IMBARAGA,	
	AGRITERRA	
NYAMAGABE	SDA-IRIBA, BIODIVERSITY CONSERVATION	5
	ORGANISATION(BIOCOOR), IPFG, ARDI, COCOF	
NYARUGURU	DUHAMIC-ADRI, ARDI, RWARRI, CARITAS	4
	GIKONGORO	
TOTAL		27

The table above shows that 27 CSOs are involved in climate change: 8 CSOs in Kirehe district, 10 CSOs in Nyagatare district, 5 CSOs in Nyamagabe district, and 4 CSOs in Nyaruguru district. Even though these CSOs are working individually at district level, some of them like RDO, RWARRI and DUHAMIC ADRI are members of a national climate change network called RCCN.

3.2.2. Outcome 1: Rwanda's CSOs have secured relevant policies and plans on climate change and climate resilience reflect small holder farmers' needs, thereby fostering sustainable rural development and food security.

3.2.2.1. Outcome indicator 1.1.: Number of districts effectively implementing integrated climate risk management and agro-ecological approaches in annual implementation plans and budgets

All the 4 districts covered by the project have developed their respective DDS (2018-2024) which highlight the issue of climate change under the environment sector. However, none of them didn't develop nor implement a clear integrated climate risk management and agro-ecological approaches.

3.2.2.2. Outcome indicator 1.2: Number of CSOs who are contributing to government's sector working groups' discussions with climate change as a component

In this framework of CSOs contribution to government's sector working groups' discussions with climate change as a component, the baseline survey has focused to two sector working groups: environment sector working group and agriculture sector working group. The table below highlights the current situation at district level.

Table 15: CSOs participation in government climate change related sector working groups

District	f CSOs	Participation in government's sector working		
intervention		groups' discussions with climate change as a		
		component		
		Environment sector	Agriculture sector	
		working group	working group	
Kirehe	RDO	X	х	
	INADES		X	
	FORMATION			
	RWANDA		/	
Nyagatare	RDO	X	x	
	TUBURA		x	
	IMBARAGA	1	X	
Nyaruguru	DUHAMIC ADRI		X	

Based on the table above, out of 27 CSOs operating in the project districts, only 5 (1 in environment representing 3.7%, and 4 in agriculture representing 14.8%) are active in government's sector working groups of agriculture and environment which are more likely taking climate change as a discussion component. In Nyamagabe district, there is no CSO active in the two concerned sector working groups.

3.2.2.3. Outcome indicator 2.3: Number of CSOs reaching out to farmers to multiply climate resilient approaches

The respondents have been asked to name which CSOs among those operating in their respective districts are supporting farmers to multiply climate resilient approaches or actions. The following table mentions these CSOs.

Table 16: CSOs farmers' outreach to multiply climate resilient approaches per district

District	CSOs
Kirehe	ADRA
Nyagatare	RDO
	HEIFFER Rwanda
Nyamagabe	Duterimbere ONG
Nyaruguru	-

Source: CRA baseline survey primary data, 2021

There is a very few number of CSOs reaching out to farmers to multiply climate resilient approaches. Over the 27 found CSOs operating in the surveyed districts, only 4, representing 14.8% are implementing activities related to climate resilient approaches within communities. These activities are limited to the agro-forestry tree planting and rain water harvesting and its use in agriculture. The baseline survey wanted to get further information on this outreach by asking the respondents if they have access to the climate change information such as climate resilient, low-carbon, agro-ecological methods and strategies by the CSOs operating in their respective districts. The findings are reflected in the figure below.

Access to CC information by the respondents

Yes
20%

Figure 12: Access to information of climate change

Source: CRA baseline survey primary data, 2021

The above figure shows that 80% of the respondents don't have access to the climate change information, and only 20% of the respondents do access it. There are some variations across the project's districts as demonstrated in the following table:

Table 17: Access to CC information per district

Have received information on	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
climate resilient, low-carbon,	Percent	Percent	Percent	Percent
agro-ecological methods and				
strategies from any CSOs				
Yes	12	24	30	14
No	88	76	70	86
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

The table above shows that a great majority of the respondents didn't receive information on climate resilient, low-carbon, agro-ecological methods and strategies from any CSOs as highlighted by the percentage of "No": Kirehe (88%) of respondents, Nyagatare (76% of respondents), Nyamagabe (70% of respondents), and Nyaruguru (86% of respondents).

The higher percentage of respondents confirming they received that information from CSOs is in Nyaryuguru and Nyagatare with respectively 30% and 24% of respondents. In these districts, DUTERIMBERE ONG has been supporting smallholders farmers to cope with climate change effects through improved farming techniques based on value chain approach.

3.2.2.4. Outcome indicator 1.4: Number of CSOs' beneficiaries adopting agro-ecological farming practices

There is not yet CSOs beneficiaries of the CRA project.

3.2.3. Outcome 2: At least 8,000 smallholder farmers' households have improved their livelihoods and food security by using climate resilient and sustainable agriculture approaches and strategies

3.2.3.1. Outcome indicator 2.1: Number of households supported by CSOs to adopt climate resilient strategies in agriculture

The table below highlights the number of respondents' households supported by CSOs to adopt climate resilient strategies in agriculture.

Table 18: HH supported by CSOs to adopt climate resilient strategies

District	CSOs	Frequency	Climate resilient strategies
		(HH reached)	
Kirehe	ADRA	2	Agro forestry and fruits tree distribution and
/			planting skills
Nyagatare	RDO	4	Environment protection + agro-forestry skills and
			planting materials
Nyamagabe	Duterimbere	24	Climate resilient agriculture training and rainfall
	ONG		water harvesting and its use in agriculture
Nyaruguru	-	-	-
Total		30	

Source: CRA baseline survey primary data, 2021

The above table shows that in the project's districts, 30 HHs have been supported by CSOs to adopt agriculture climate resilient strategies (2 in Kirche district, 4 in Nyagatare district, 24 in Nyamagabe district and 0 in Nyaruguru district).

3.2.3.2. Outcome indicator 2.2: Number of Rwandan CSOs' beneficiaries adopting clean energy technologies

The baseline survey didn't find out any CSO's beneficiary among respondents who is adopting clean energy technologies.

3.2.3.3. Outcome indicator 2.3: Number of rural enterprises/SMEs with increased job opportunities because of adopting climate resilient technologies

In order to measure this indicator, first of all the baseline survey has assessed if the respondents adhere to a SME or cooperative. The situation is highlighted in the following figure:

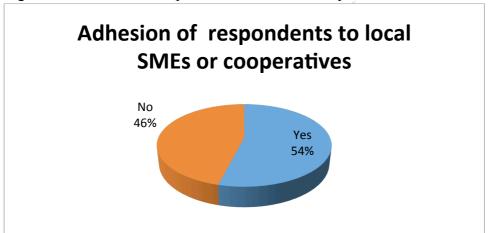


Figure 13: Adhesion of respondents to SMEs or cooperatives

Source: CRA baseline survey primary data, 2021

The figure above shows that almost fifty percent of the respondents (46%) don't adhere to any SME or Cooperative, and 54% of the respondents are members of a SME or cooperative. The situation across the 4 districts covered by the project is as follows. However, across the project's districts there are some variations as reported in the table below.

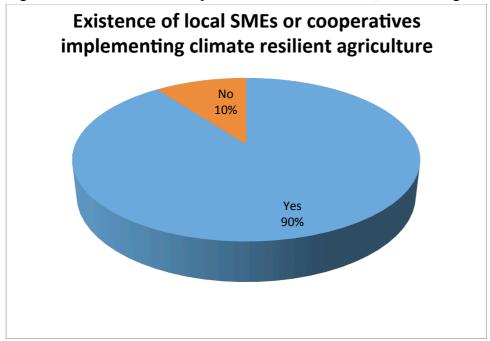
Table 19: Adhesion of respondents to SMEs or cooperatives per district

Adhesion to	a SME	or	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
cooperative						
Yes			46	52	40	78
No			54	48	60	22
Total			100	100	100	100

Source: CRA baseline survey primary data, 2021

Based on the table above, the high proportion of respondents adhering to a SME or cooperative is in Nyaruguru district with 78% of the total number of respondents, while the lowest proportion of respondents adhering to a SME or cooperative is in Nyamagabe district with 40% of the total number of respondents. The second step towards measuring Number of rural enterprises/SMEs with increased job opportunities because of adopting climate resilient technologies, the baseline survey assessed the existence of SMEs or cooperatives implementing climate resilient agriculture, because as mentioned above, there was no CSO involved in clean energy approaches in the project's districts according to the respondents. The findings are mentioned in the figure below.

Figure 14: Local SMEs or cooperatives involved in climate resilient agriculture



Source: CRA baseline survey primary data, 2021

The figure above shows that almost all SMEs or cooperatives to which the respondents adhere (90% of respondents) are implementing activities related to climate resilient agriculture. The situation is almost the same in the 4 surveyed districts as mentioned in the table below:

Table 20: Local SMEs or cooperatives involved in climate resilient agriculture per district

SME/cooperative implementing	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
activities related to Climate	Percentage	Percentage	Percentage	Percentage
resilient agriculture				
Yes	91.3	96.2	90	84.6
No	8.7	3.8	10	15.4
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

According to the table above, more than 90% of the respondents' SMEs or cooperatives are implementing activities related to climate resilient agriculture, except in Nyaruguru district, where the percentage is slightly low (84.6% of the respondents). There is no SME/cooperative implementing activities related to energy sector found among the respondents. The final step was to effectively measure the number of jobs created by local SMEs or cooperatives implementing climate resilient agriculture. The baseline survey has proposed to the respondents 7 ranges of jobs created:

- Between 1-3 jobs created
- Between 3-5 jobs created
- Between 5-10 jobs created
- Between 10-20 jobs created
- Between 20-50 jobs created
- Between 50-100 jobs created
- Over 100 jobs created

The table below shows the ranges of jobs created confirmed by the respondents both at national and district level.

Table 21: Range of jobs in climate resilient agriculture created by SMEs or cooperatives

	•					•	
Range	of	the	Total	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
number	of	jobs	Frequency	Frequency	Frequency	Frequency	Frequency
created	in cl	imate					
resilient	agricı	ılture					
3-5			10	0	2	2	6
Total			10	0	2	2	6

Source: CRA baseline survey primary data, 2021

The above table shows that 10 respondents have confirmed that their respective 10 SMEs or cooperatives involved in climate resilient agriculture in the 4 surveyed districts have created between 3 and 5 jobs. The 6 SMEs/cooperatives are in Nyaruguru district, while 2 are in Nyagatare district, 2 in Nyamagabe district and 0 in Kirehe district.

3.2.4. Output indicators baseline findings

3.2.4.1. Output 1.1: Strengthened advocacy capacity for climate resilience, agro-ecological approaches that are relevant for smallholders (esp. women, youth, and vulnerable groups) in Rwanda.

3.2.4.1.1. Output indicator 1.1.1: % of target population, whose awareness on relevant needs to improve their livelihood resilience in light of climate change has been increased

The baseline survey has assessed the awareness of the respondents in terms of their appreciation of the issue of climate change. The figure below shows the findings.

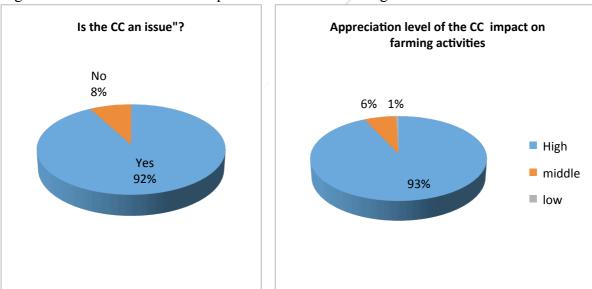


Figure 15: Awareness level of respondents on climate change issue

Source: CRA baseline survey primary data, 2021

The figures above show that at national level, 92% of the total number of respondents does consider climate change as an issue and 93% say that its impact on the farming activities is at high level. There is no respondent who ignores the climate change issue in the project's districts, and only 1% of the respondents say that the CC impact is low on the farming activities. The situation in each one of the surveyed districts is as indicated in the table below.

Table 22: Awareness level of respondents on climate change issue per district

Appreciation of CC impact	Kirehe	Nyagatare	Nyamagabe	Nyaruguru
on the farming activities	Percent	Percent	Percent	Percent
High	97.9	100	79.2	95
Middle	2.1	0	18.8	5
Low	0	0	2.1	0
Total	100	100	100	100

Source: CRA baseline survey primary data, 2021

From the table above, it is demonstrated that in every surveyed district, a great majority of respondents' appreciation of the climate change impact on the farming activities is high: 97.9% of the respondents in Kirehe district, 100% of the respondents in Nyagatare, 79.2% of the respondents in Nyamagabe district and 95% of the respondents in Nyaruguru district. This is a good indicator of the relevance of the CRA project in terms of responding to the beneficiaries' real needs.

3.2.4.2. Output 1.2: Rwandan CSOs engage with decision makers for climate resilient policies and programmes

3.2.4.2.1. Output indicator 1.2.1: Number of policy papers produced reflecting needs of small holder farmers

So far, there is no paper reflecting needs of smallholder farmers for engagement with decision makers for climate resilient policies and programmes produced by any CSO in the project's districts.

3.2.4.3. Output 2.1: Rwandan CSOs have informed 8,000 small holder farmers on climate resilient, low-carbon, agro-ecological methods and strategies in four districts for improved and sustainable agricultural productivity and livelihoods

3.2.4.3.1 Output indicator 2.1.1. Number of smallholder farmers who are benefitting from multiplier trainings

There is no training activity for smallholder farmers undertaken by any CSO in the project's districts.

3.2.4.4. Output 2.2: Public awareness campaigns on climate change and its impacts on Rwanda's agriculture and energy sectors.

2.4.4.1. Output indicator 2.2.1. Number of people reached by the community campaigns on climate resilience

Community campaigns are not yet implemented in the project's districts.

3.2.4.5. Output 2.3: 20 local initiatives or SMEs that focus on low carbon, green-economy business ideas have been supported for job creation

3.2.4.5.1. Output indicator 2.3.1. Number of local groups supported

There is no support yet provided to local groups focusing on low carbon, green-economy business ideas for job creation

4. CRA LOGFRAME BASELINE INDICATORS

	Results chain	Indicator	Baseline	Current	Target	Source
			(value & reference year)	value*	(value &	and
				(reference	reference	mean
			2020	year)	year)	of
						verific
						ation
	Contribute to	Increased income of	44.5% earn less than Rwf		Year 1:	
	strengthening	targeted smallholder	100,000 per year;		Year 2:	Annua
	Rwandan	farmers	81.5% earn up to Rwf		Year 3:	l
	CSOs to		300,000 per year;	/		Incom
	perform their		91.0% earn up to Rwf	/		e
	roles as		500,000 per year;			Assess
	independent		97.0% earn up to Rwf			ments
	development		1,000,000 per year;	/		House
	actors		3% of the respondents			hold
	working		earn between Rwf			survey
	towards		1,000,000 and 5,000,000			S
	climate		per year.			
	resilient,	Number of households			Year 1:	
	sustainable	that have achieved food	20% keep food during		Year 2:	
	agriculture	security because of	more than 6 months;		Year 3:	
	and energy	climate resilient	32% keep food between 3-			
	sectors.	strategies in agriculture	6 monts;			
		and energy sectors	48% keep food during a			
_			period of less than 3			
ive,		/	months.			
ecti		/				
bjq		Increased number of civil			Year 1: 2	
II c		society's	0 network at district level;		Year 2: 3	
era		networks/coalitions	1 network at national level		Year 3: 4	
9		involved in climate	(RCCN).			
:t (1		change policy				
Impact (Overall objective)		engagement				
lm						

ne (s) (Specific object tive(s))

Distric
t Plans
Distric
t
report
s
Sector
Worki
ng
group
report
Progre
ss
report
s

House hold Survey s Progre ss report

Strengthened advocacy capacity for climate resilience, agroecological approaches that are relevant for smallholders (esp. women, youth, vulnerable groups) in Rwanda.	whose awareness on relevant needs to improve their livelihood resilience in light of climate change has been increased Number of research papers published	of respondents consider climate change as an issue and 93% say that its impact on the farming activities is at high level: Kirehe:97.9% Nyagatare:100% Nyamagabe:79.2% Nyaruguru:95% 0 research paper	above) Year 1: 1 Year 2: 1	above)	as above)
1.1.1 Research study and dissemination on (i) climate resilient and (ii) selective	Number of info packages on climate resilience for smallholder farmers produced	0 info package produced	Year 1: 200 Year 2: 400 Year 3: 500		
agro- ecological practices	Number of participants to exposure visits	0 participants	Year 1:40 Year 2:80 Year 3: 90		
1.1.2 Production of Information, Education and Communicati on (IEC) materials on climate resilience	Number of participants in needs assessment sessions	0 participants	Year 1: 400 Year 2: 800 Year 3: 1200		
1.1.3 National and regional exposure visits to agroecological best practices' models	Number of guides produced on climate change and agro- ecological approach	0 guides produced	Year 1: 5 Year 2: 10 Year 3: 12		
1.1.4 Capacity needs assessments of CSOs and production of elementary guides on climate					
change and agro-ecological practices		Page 46 of 65			

Rwandan CSOs engage	produced reflecting needs of small holder		Year 2: 2 Year 3: 3
with decision	farmers		Tear 5. 5
makers for climate resilient policies and programmes 1.2.1 Capacity building of	Number of CSO staff trained	0 staffs trained	Year 1: 5 Year 2: 20 Year 3: 40
CSOs' on advocacy for climate change approach, field-based)	Number of field based training undertaken	0 field based training	Year 1:40 Year 2:80 Year 3: 100
1.2.2 Capacity building of CSOs on	Number of completed districts' assessment	0 district assessment	Year 1: 4 Year 2: 0 Year 3: 0
agro- ecological best practices	Number of engagements with decision makers	0 engagement	Year 1: Year 2: Year 3:
(including practical training 1.2.3 Conduct	Number of advocacy activities by CSO coalitions	0 advocacy activity	Year 1:1 Year 2:2 Year 3:3
gap assessments of districts'	Coantions		Year 1: 1 Year 2: 2 Year 3: 3
disaster risk reduction capacity, environmental protection	Number of advocacy meetings with relevant political stakeholders	0 advocacy meetings	Year 1: 1 Year 2: 2 Year 3: 3
coordinated responses and prioritisation of climate resilient	Number of coordination meetings	0 coordination meeting	Year 1: 40 Year 2: 80 Year 3: 100
activities.	Number of local leaders and technicians trained	0 leader and 0 technician trained	Year 1: 2 Year 2: 2 Year 3:0
Engagements with decision makers based on research findings (eg. planning for climate change activities at district level, budgeting for	Number of districts' guiding principles produced	0 guiding principles produced	
climate change activities)		Page 47 of 65	

outcome 2 Output 2.1: Rwandan CSOs have informed 8,000 small	farmers who are benefitting from multiplier trainings		Year 2: 80 Year 3: 100
holder farmers on climate resilient, low- carbon, agro- ecological	Number of CSOs' initiatives implementing agro-ecological practices in targeted communities	0 initiatives of CSO	Year 1: 1 Year 2: 2 Year 3: 4 Year 1: 15
methods and strategies in four districts for improved	Number of farmers'	0 farmers equipped	Year 2: 30 Year 3:45 Year 1: 15
and sustainable agricultural productivity	households equipped with a renewable energy technology		Year 2: 30 Year 3:45 Year 1: 1
and livelihoods 2.1.1 CSOs undertake multiplier	Number of households with access to community rain water tanks/ponds	0 farmers equipped	Year 2: 2 Year 3: 3
training to smallholder farmers on climate	Number of advocacy sessions with financial	0 advocacy session	
resilience and agro- ecological approaches	and microfinance institutions		Year 1: 1000 Year 2:2000 Year 3: 2800
2.1.2 Support to CSOs to implement climate	Number of people reached by the community campaigns	0 people reached	Year 1: 2000
resilient and selected agro- ecological approaches	on climate resilience Number of farmers receiving early warnings	0 farmers receiving meteo info	Year 2: 5500 Year 3: 8000
2.1.3 Scaling up the use of pigs' waste for manure and energy production	meteorology related information		
2.1.4 Scaling up the			
initiative of construction of community and			
households rain water tanks/ponds		Page 48 of 65	

and TV programmes on climate resilient quick	shows	0 radio and TV shows	Year 2: 6 Year 3: 10 Year 1: 5
wins in rural areas			Year 2: 25 Year 3: 40
2.2.4 Support CSOs to develop climate change communicatio n plans	Number of CSOs with communication plans	0 CSO with communication plan	Year 1: 20 Year 2: 100 Year 3: 200
2.2.5 Support districts to include climate change	Number of dialogues with citizens	0 structured dialogue with citizens on climate change	Year 1: 2 Year 2: 9 Year 3: 20
topics/discussi ons in dialogue platforms with citizens (IEC materials,	Number of local groups supported	0 local groups supported	Year 1: 2 Year 2: 9 Year 3: 20
Climate change community adaptation plans as a			Year 1: 1 Year 2: 2 Year 3: 3
self- sustainable process due to communities' involvement)			
Output 2.3: 20 local initiatives or SMEs that focus on low carbon, greeneconomy business ideas have been	Number of SMEs supported	0 SME supported	
supported for job creation 2.3.1 Support women and youth' groups/cooper atives to	Number of PPPs engagements supported	0 PPP engagement supported	
venture into making energy saving stove-making		Page 49 of 65	

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

This baseline study has availed important information and data not only on the planned CRA project's indicators, but also on other stuffs that are needed to mastering the project's implementation environment and stakeholders. Based on the methodology used and the respect of required research ethics, figures provided in this report indicate the actual situation in the 4 project's district, and thus they shall serve to measure the contribution and impact on the target groups of the project during the end line evaluation. Even though the CRA project doesn't expressly highlight the actions linked to the Rwanda NDC, the achievement of the planned indicators will contribute to achieving number of GGCRS programs of actions and NDC actions such as: POA 1: Sustainable intensification of agriculture (mainstreaming agro ecology), POA 8: Climate Compatible Mining private sector by awareness raising of mining and construction industries' actors), POA 10: Low Carbon Urban Systems (sustainable use of biomass fuels), and POA 13: Disaster and Disease Prevention (support districts to employ community-based disaster risk reduction),

5.2. Recommendations

At the end of this baseline study, the research team would like to provide to the client the following recommendations:

- -To define achievable targets based on the baseline data highlighted by this report;
- -To continuously track and document the baseline indicators' change towards achieving the targets;
- -To involve as much as possible the project's stakeholders in the monitoring and evaluation process of the established indicators in order to own and sustain (through scaling up agroecological and climate resilient agricultural best practices) the project's achievements.

6. ANNEXES

ANNEX 1: Terms of reference

1. Background of the consultancy

CCOAIB in partnership with OXFAM Germany, OXFAM UK/ Rwanda and DUTERIMBERE ONG have secured funds from the European Union to implement the project called "Rwandan CSOs engage in Climate Resilient agriculture and sustainable energy initiatives (CRA project)". This is a joint project implemented by a consortium of 3 organizations: CCOAIB, OXFAM and DUTERIMBERE ONG, whereas CCOAIB is the coordinator. The duration of the project is 30months (from 15th October 2020 to 14th April 2023).

In order to ensure a strong monitoring, evaluation and learning process while putting in place an objective basis to measure the project's contribution in climate resilience policies and implementation process, the project's Coordinator seeks to commend a baseline study to set baseline indicators from which planned targets and contribution of the projects will be measured.

1.1. About the project

Title of the project:	Rwandan CSOs engage in Climate Resilient
	agriculture and sustainable energy initiatives
	(CRA project)
Location(s) of the project:	Rwanda (Nyagatare, Kirehe, Nyamagabe and
	Nyaruguru districts)
Duration of the project:	30 months
1	

1.2.1.: Sectors of interventions

The project focuses on the following two sectors:

Agriculture: The sustained growth of the agricultural sector in Rwanda has been driven by important public investments in land use consolidation, irrigation, land improvement, soil and water conservation, facilitating access to inputs, increasing livestock herds and social capital-building through support to cooperative development.

Energy: In Rwanda, energy sector plays a vital role in supporting socio-economic development. One of the long-term strategies of country is to reduce fuel wood consumption from 94% to 50% and one of the major contributing factors will be the installations of Biogas digesters in both residential homes as well as the institutions with large population of citizens like, schools, hospitals, prisons etc.

1.22. Objectives of the project

The objectives of the project are as follows:

The overall objective of the project is to contribute to strengthening Rwandan CSOs to perform their roles as independent development actors working towards climate resilient, sustainable agriculture and energy sectors. The intervention logic is demonstrated by implementing two main outcomes

Outcome 1: Rwanda's CSOs ensure that relevant policies and plans on climate change and climate resilience reflect small holder farmers' needs, thereby fostering sustainable rural development and food security. The two outputs to achieve the outcome I are:

Output 1.1: Strengthening advocacy capacity for climate resilience, agro-ecological approaches that are relevant for smallholders (esp. women, youth, vulnerable groups) in Rwanda.

Output 1.2: Rwandan CSOs engage with decision makers for climate resilient policies and programmes.

Outcome 2: At least 8,000 smallholder farmers' households have improved their livelihoods and food security by using climate resilient and sustainable agriculture approaches and strategies. This outcome has the following three outputs:

Output 2.1: Rwandan CSOs spread implementation of climate resilient, low-carbon, agroecological methods and strategies to 8,000 small holder farmers in four districts for improved and sustainable agricultural productivity and livelihoods.

Output 2.2: Public awareness campaigns on climate change and its impacts on Rwanda's agriculture and energy sectors.

Output 2.3: 20 local initiatives or SMEs that focus on low carbon, green-economy business ideas have been supported for job creation.

Target groups and beneficiaries

The number of direct beneficiaries is expected to be 8,000 smallholder farmers and their households and communities, 40 CSOs, 100 decision makers at local levels, and 20 rural enterprises/SMEs. The number of indirect beneficiaries is expected to reach 32,000 people.

Taraet Group 1: Local CSOs. A total of 40 CSOs will be the main taraet of the oroiect.

Target Group 2: Local leaders and decision makers

Target Group 3: Women, men, youth smallholder farmers and other vulnerable groups affected by negative effects of CC in targeted communities figure as a specific target group. A total of 8,000 smallholder farmers will be reached out.

Target Group 4: The business community needs to be our partner as we build resilience against and adapt to climate change. The project will target 20 rural enterprises/SMEs that have the capacity and the potential to limit their contribution to effects of CC while also contributing to create climate smart jobs for young people and women.

2. PURPOSE AND OBJECTIVES OF THE CONSULTANCY

2.1. Purpose

The consultancy work is to conduct a baseline survey of all the project's indicators. This baseline will allow the project's implementers to objectively monitor progressive achievements and changes and evaluate the real contribution of the project in terms of planned results and their resepctive targets. It is a collection of data about the starting situation in the targeted districts, community and target groups before undergoing an effective implementation of the project. The findings will be used to establish benchmarks against which future progress can be assessed or comparisons made. This baseline is the reference for further evaluations intended to measure the project's implementation progress and results. Therefore on behalf of the consortium implementing the project, CCOAIB is looking for a qualified consultant team/firm to conduct this baseline study.

2.1. Objectives

2.2.1. Overall objective

The overall objective of this baseline study is to update the initial context in the project's targeted areas and groups before the bigining of its effective implementation

22.2. Specific objectives

The baseline study will have the following specific objectives:

To determine quantitatively and qualitatively the current situation of the set indicators of the project (impact, outcome and outputs).

To map CSOs, SMEs, Women and youth cooperatives with a focus on the climate resilience agriculture, energy and green job creation in the four targeted districts. This will help to select the target groups' members to be supported during the project's implementation.

3- MAIN TASKS OF THE CONSULTANT

The desired consultant is expected to conduct the following tasks:

- ✓ Gather relevant benchmark data for the planned key project indicators to enable change tracking and measurement in the course of the project life. In this framework, the attached log frame should be filled in about the baseline data/information;
- ✓ Provide a detailed holistic mapping of the project's target groups (farmers organizations including women and youth organizations/groups,CSOs oriented in climate resilient agriculture and energy activities, SMEs involved in climate change, especially in energy sector, TVET and other private sector operators involved in climate resilient agriculture and energy sector, public institutions involved in agriculture and energy sectors at district level (authorities and technicians);

- ✓ Identify CSOs with strategic plan/action plan/project on the climate resilient agriculture and/or energy initiatives;
- ✓ Identify women and youth' groups/cooperatives involved in making energy saving stoves, gas cooking and bio-digesters' construction;
- ✓Identify SMEs/private companies involved in mining & construction companies in the targeted districts:
- ✓ Assess the availability of Information, Education and Communication (IEC) materials on climate resilience for training purpose;
- ✓ Identify advocacy capacity of CSOs at district level in climate resilience, agro-ecological approaches that are relevant for smallholders (esp. women, youth, and vulnerable groups).

4. EXPECTED DELIVERABLES

- -Inception report with clear and detailed research methodology, organization and tools to be used, and required workplan;
- -Draft baseline report (format to be agreed during inception phase);

Presentation of results for validation by the consortium led by CCOAIB and other stakeholders; Final baseline report incorporating feedback received.

5. METHODOLOGY

The methodology proposed by the consultant will be discussed and validated by the project team and partners before the data collection begins. The consultant is expected to propose the study population and required sample size with required sampling and respondents' selection methods. He/She will use a variety of methods for the data collection. The data processing methods should be also highlighted for quality assurance purpose. Thus, in responding to this request of consultancy services, the consultant will propose a comprehensive technical proposal including:

- ▶ Detailed Methods, and Techniques
- > Sampling Framework
- ▶Data collection tools
- ➤ Baseline study workplan
- > Key questions the consultant will use to ensure the suwey meets the key project outcomes
- > Description of how data will be collected, cleaned, analysed and used/disseminated with the project team

Timeframe: Twenty six (26) working days between end of April and early May 2021.

6. CONSULTANT PROFILE

The consultant will have:

- ✓A Post Graduate degree in agroecology, environmental studies, development studies, Project management, agriculture, statistics and other related fields; ✓ Proven experience in climate change effects management;
- ✓ Experience in similar works;
- ✓ Extensive experience in conducting quantitative and qualitative data, using digital tools is an added value;
- ✓ Good knowledge and experience of designing surveys and sampling methodologies;
- ✓ Proven publication record, studies or evaluation reports (Attached at least two or three research samples);
- ✓ Solid methodological and research skills;
- ✓ Knowledge on ethical research principles and experience applying them in practice;
- ✓ Excellent ability to write clearly and concisely in English;
- ✓Fluency in the local language (Kinyarwanda);
- ✓ Knowledge of French in addition to above languages could be an advantage; ✓Organizational and team engagement skills; ✓ Excellent facilitation skills.

7. APPLICATION

Interested applicants who fulfill the requirements set here-in should present a technical and financial offers addressed to the Executive Secretary of CCOAIB. While submitting, the applicant shall, in particular, ensure to attach the following:

- I . A profile of the consultant explaining why he/she is the most suitable for the work demonstrating their relevant experience;
- 2. A technical proposal including a detailed methodology and conceptual framework, a work plan, description of the team composition;

Recent CVs for the suggested work team members;

The financial proposal specifying the total costs and including a detailed breakdown of costs including fees, travel costs and number of working days.

Applications should be submitted electronically with the subject title "Consultancy to conduct a a baseline survey of the CRA project" [insert name of the consulting firm/team leader]" to CCOAIB at ccoaibr@gmail.com, not later than 12th April 2021 at 3:00 PM Kigali Time (GMT+2)

Applications that fail to meet the above application process requirements will be disqualified. A more comprehensive methodology and plan will be required and negotiated upon selection. Only shortlisted applicants will be contacted. After the final selection, successful consultant/team will be required to participate in a preliminary meeting with the Consortium team before starting the work.

Done at Kigali, on 19th March 2021

NGENDANDUMWE Jean Claude Executive Secretary of CCOAIB

Annex 2: QUANTITATIVE QUESTIONNAIRE (TO FARMERS)

Introduction
I am from CCOAIB. We are conducting a baseline study for the project: <i>Rwandan CSOs engage in climate resilient agriculture and sustainable energy initiatives</i> and we identified you as potential respondents to some of baseline questions. All answers will be anonymously and will be utilized only for the purpose of this study.
Will you participate in this interview? 1. Yes 2. No
Part "A": Characteristics and identification of the respondent
A.1. Respondent' Location:
Nyaruguru
Sector 1
Sector 2
Nyanagabe
Sector 1
Sector 2
Kirehe
Sector 1
Sector 2
Nyagatare
Sector 1
Sector 2

A.2 Sex of respondent

- 1. Male
- 2. Female

A.3 Age of respondent:

1. 18-25yrs 2. 26-30yrs 3.31-35yrs 4. 36-40yrs 5.41-45yrs 6.46-50yrs 7. Above 50yrs

A.4 Marital status

- 1.Single
- 2. Married
- 3. Widow/er
- 4. Separated
- 5. Divorced

A.5 Education level:

- 1. Illiterate
- 2. Primary
- 3. Secondary
- 4. Vocational schools
- 5. University

A.6 *Ubudehe* category:

1. Category 1 2. Category 2 3. Category 3 4. Category 4

A.7 Head of Household:

- 1. Female headed HH
- 2. Male headed HH

B.1. What is the average income per year?

Less than 100,000 Rwf

100-300,000 Rwf

300-500,000 Rwf

500,00-1,000,000 Rwf

1,000,000-3,000,000Rwf

3,000,000-5,000,000Rwf

B.2 What is the percentage of agricultural activities' income?
Less 20%
20.%-50%
50%-75%
Over 75%
B.3 What are the main food consumed during the last week in your household
1. Tubers,
2. Cereals,
3. Legumes,
4. Vegetables,
5. Fruits,
B.4. What is the duration of Household food stock?
1. Less than 3 months,
2. 3-6 months,
3. More than 6 months
B.4. From your view what are the main reason of low production at your location
1. Low production due climate change,
2. Low production due to small land,
3. Low production due to lack of investment capacity,
4. Low purchasing power
B.5. What is the main source of cooking energy at your household?
1. Biomass (wood)
2. Biogass
3. Gaz
4. Electricity
5. Other (specify)
B.6. What are the main agriculture related shocks have you experienced in the last 12 months?
1. Floods
2. Land slide
3. Wind

4. Heavy rains	
5. Urubura	
5. Other (specify)	
B.7. Are you a member of SME or o	cooperative?
1. Yes	
2. No	
B.8. If YES, is your SME/coope	erative implementing activities related to Climate resilient
agriculture?	
1. Yes	
2. No	
B.9 If YES, how many jobs create	ed by your SME/cooperative in activities related to Climate
resilient agriculture?	
1. 1-3	
2. 3-5	
3. 5-10	
4. 10-20	
5. 20-50	
6. 50-100	
Over 100	
B.10. Do you cooperative/SME acti	vities linked to sustainable energy?
B.11 If YES, how many jobs create	ed by your SME/cooperative in activities related to sustainable
energy?	
B.12 Do you think climate change is	s an issue to farmers?
1. Yes	
2. No	
B.13. If yes, provide your appreciati	ion of its consequences on your livelihood
1. High,	
2. middle,	

٦.	11 1 1 1 1 1 1 1 1 1 1

B.14. Did you receive information on climate resilient, low-carbon, agro-ecological methods and strategies from any CSOs?

Yes

Not

B.14. If yes, provide the name of the CSO and the topic informed on?

Annex 3: GUIDE FOR FOCUS GROUP DISCUSSIONS

What are the most pressing issues related to resilient agriculture and sustainable energy in your area?

Tell us about availability of Information, Education and Communication (IEC) materials on climate resilience for training purpose in your district

What are key best practices you may share which are done by you in regards to climate resilient agriculture and energy activities

Tell us about availability of Information, Education and Communication (IEC) materials on climate resilience for training purpose in your district

Where do you think you most need interventions or support to improve on your activities related to resilient agriculture and sustainable energy in your area?

Annex 4: KEY INFORMANTS INTERVIEW TO DISTRICT LEADERS AND TECHNICIANS

Name of respondent:
Position:
District:
How Does the DDS highlight Climate change and agro-ecological approaches?
Do Imihigo of the district include Climate change risks management and agroecological
approaches? Budget?
What are specific CC issues in your district?
Who are the key players/partners of your district in addressing those CC issues?
Where do you see weaknesses where by the District still needs support?
How many mining and construction companies do you have in your district?
Do you have TVETs, Enterprises, specialized in climate change adaptation technologies? If
yes, name them?
Are there women cooperatives specialized in sustainable energy activities? If yes, name them and
their respective domains of activities.
Did you implement (as district/Government or in partnership with donors/DPs) any CC project,
program to implement? What are successes and challenges faced? Any lesson learnt to share?
Do you have in this district CSO or SME or Women/Youth Cooperative involved in climate
resilience agriculture, energy, and green job creation? (if yes, give location, contacts details, and
tell us how you work with them, how you appreciate their intervention and where for you think
they need support)
Tell us about availability of Information, Education and Communication (IEC) materials on
climate resilience for training purpose in your district

Annex 5: KEY INFORMANTS INTERVIEW WITH CSOs/SMEs

Name of respondent:
Position:
Name of CSO:
Is your CSO/SME involved in Climate change policy advocacy?
Is it member of any network/coalition? At what level?
Explain some policy issues advocated for so far if any?
Do you know any network /coalition advocating on Climate change?
What are the key Climate change issues raised by this coalition/network?"
How many CSOs are participating in JADF with CC component orientation
How many CSOs are participating in environment/ Climate change sector working group?
Is your CSO implementing activities related to agriculture and/or sustainable energy activities?
How many beneficiaries are reached so far?
If yes, how many farmers have adopted agro-ecological farming practices over your
beneficiaries?
Is your CSO implementing activities related to climate resilient agriculture? If yes, how many
beneficiaries? How many of them have adopted climate resilient farming practices on their
respective farms?
Is your CSO implementing activities related to sustainable energy technologies? If yes, how many
beneficiaries? How many of them have adopted sustainable energy technologies?

How can you appreciate the advocacy capacity of your CSO in climate resilience, agro-ecological

approaches that are relevant for smallholders (esp. women, youth, and vulnerable groups)?