**FINAL REPORT – FIELD WORK**

**PROJECT FOR RURAL INCOME THROUGH EXPORTS - PRICE**

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## Contenido

## ABBREVIATIONS AND ACRONYMS

- **4P**: Public-private-producer-partnerships
- **AFR**: Access to finance Rwanda
- **AMIS**: Portal del sector agrícola
- **AWPB**: Annual Work Plan and Budget
- **BDD:** Bureau Diocésain de Développement. Diocesan Bureau of Development
- **CICA**: Agricultural Information and Communication Centre
- **CWS**: Coffee washing stations in Rwanda
- **FFS:** Farmer Field School
- **GALS**: Gender Action Learning System
- **IFAD**: International Fund for Agricultural Development
- **ICO**: International coffee organization
- **ISM**: Implementation Support Mission
- **KMP:** Knowledge Management Products.
- **LCR:** Local Community Radios
- **MINAGRI**: Ministry of Agriculture and Animal Resources
- **MINECOFIN:** Ministry of Economy and Finance
- **NAEB: National** Agricultural Export Development Board**.**
- **NES**: National Export Strategy
- **OCIR CAFÉ**: - Rwanda Cafe Authority
- **PDR:** Project Design Report
- **PFI:** Participating Financing Institutions
- **PRICE**: Project for Rural Income through Exports
- **RAB:** Rwanda Agriculture Board
- **RCCF:** Rwanda Coffee Cooperatives Federation
- **REMA**: Rwanda Environmental Management Authority
- **RWF:** Rwandan Franc. The currency of Rwanda.
- **SACCOS**: Savings and Credit Cooperatives
- **SPIU:** Single project implementation unit

## 0. ABSTRACT

Rwanda is a remarkable country due to its fast development during the last years. Most of its development is based on the agricultural activities. In 2016, this economic activity represented 33% of the GDP, the 70% of the employment in Rwanda and 75% of the land mass is used for agriculture (Cafe imports europe, 2018).

As a part of the National Agricultural Strategy, the Government of Rwanda has decided to focus the human, financial and technical resources on specifics value chains in order to strengthen the agricultural products. In that way, the government pretends to increase the gross domestic product, attract foreign investment, increase the exports, and so, contribute to increase the well-being indicators and quality of life, specially to the farmers, who are the most important link but also the most vulnerable in the value chains.

Since 2011, the Ministry of Agriculture and Animal Resource- MINAGRI, together with the National Agriculture Export Development Board – NAEB, and the support of the International Found for Agriculture Development –IFAD, has development and strategy for the strengthening of four value chains: coffee, tea, sericulture and horticulture. The strategy has been implemented though the Project for Rural Income through Exports – PRICE. The main objective is “To achieve sustainable increased returns to farmers from key export-driven agricultural value chains (IFAD, 2017). The specific objectives are based on productivity and quality of value chains, market improvement and value chain organizations strengthening.

Taking in to account the complexity of variables and factors that intervene in a value chain, it is important to analyses the results of the project from a neutral and integrated perspective. For this reason, it is convenient to use the sustainable development perspective, analyzing the economic, social, environmental and political factors. This analysis will allow generating proposals and recommendations to be considered to the continuity of the project, as well as sharing good practices that can be replicable in others value chains.

The fieldwork is focused on the coffee value chain. This value chain has been selected taking into account the similarities with the Colombian case and the knowledge and best practices that can be share between the two success strategies.

To accomplish this objective, the results of PRICE project has been analyzed from four pillars (according to the strategy framework): Resources, Knowledge, Partnerships, Public Policy, with two main focuses: women and young people, and with a transverse axis: the Sustainable Development Goal.

Four tools compose the methodology of this analysis: Collection and analysis of existing information, Immersion in field and direct observation, Surveys with the farmers and strategic actors of the project and Interviews with the farmers and strategic actors of the project. The strategic actors of the project are the coffee cooperative leaders, coffee cooperative managers, manager of PRICE project in the SPUI (Single Project Implementation Unit of MINAGRI) and NAEB. This fieldwork was carrying out in Kigali, capital of Rwanda and the districts of Rutsiro, Karongi, Huye and Nyamagabe.

Among the main findings of the project is the need to appropriate knowledge in sustainable development in the first links of the value chain. The sustainable development goals are perceived as a national policy that must be implemented by the government, but the contribution that the base organizations can give to the fulfillment of the same is unknown. Understanding the relationship between projects and SDG should be a constant in all public and private organizations. In this way, national policy can be spread at all organizational levels.

Second, nowadays, sustainable consumption and production patterns are trending topics around the world. Considering that coffee is one of the first commodities in Rwandan exports, organic production should be an important issue to be considered in the value chain. Knowledge, technique and innovation must be key elements to generate new tools and methods that facilitate, improve and optimize organic production. Likewise, alliances with other countries that are already implementing practices should be an important objective for the national agricultural strategy.

Third, the government should consider the creation of an integral commercial strategy for the country, with the objective of promoting Rwanda as a brand, highlighting its products, its diversity, its attributes, its touristic places, its biodiversity and the important achievements it has made in the last years. This unified strategy is more powerful and can be transmitted to the world with a clearer and more direct message. In this sense, efforts are combined to generate the same commercial strategy for several sectors of the economy.

Finally, the youth must be one of the most important focus, not only for coffee, but all agricultural value chains. To encourage them to the agribusiness with incentives that motivate them to be aware of new knowledge, tendencies and innovation technics can also improve the technology level in the agriculture activity and bring more opportunities that can face the new challenges of the world, like the climate change and the responsible consumption.

As a continuity work it is expected that the methodology used in this work will be replicated in PRICE project value chains and other projects supported by IFAD.

## 1. INTRODUCTION

Value chains are one of the best ways to understand development. They allow a general analysis of all the actors and variables that intervene in the industry and in the external environment of a specific sector. Agricultural value chains are the most complex to understand and analyze due to the number of processes that are immersed in them.

In Rwanda, agricultural value chains represent one of the main engines of the economy. As we are in the era of sustainable development, economic activities must be understood in light of the social and environment interaction that intervene on it.

This work aims to understand and analyze, from a perspective of sustainable development, one the most important value chains in Rwanda: coffee value chain, carried out under the Project for Rural Income Through Export – PRICE, managed by MINAGRI, NAEB, with the support of IFAD.

To achieve this objective, the analysis of the economic, social, environmental and political factors that intervene in the value chain at different levels, became the core activity of the work. Based on that, the generation of proposals and recommendations will help to satisfactorily fulfill the project's objectives, and identify the factors to take into account for the next steps on the project. Additionally, good practices will be identified to consider, highlighting the Colombian experience in this sector of the agricultural economy.

The replicability of the methodologies in other value chains and the applicability of the recommendations and proposal given on this project, will be the best reply to the three months of learning, hard working and amusement in RWANDA. The activity planning can be consulted in the *Annex 0. Activity Planning.*

## 2. OBJECTIVES

It is important to differentiate the fieldwork objectives from the PRICE project objectives. The first one is defined to the proposal of this fieldwork, the second one was defined in 2011, when the PRICE Project started.

**FIELD WORK OBJECTIVES**

To understand and to analyze, from a sustainable development perspective, the results obtained in the PRICE project in the coffee value chain, based on a sample of selected cooperatives.

- To analyze the economic, social, environmental and political factors that intervene in the coffee value chain and generate findings that contribute to the achievement of the project's objectives.

- To generate conclusions based on the findings made in the project objectives.
- To generate recommendations and good practices for the continuity of the results achieved in the project

**PRICE PROJECT OBJECTIVES**

To achieve sustainable increased returns to farmers from key export – driven agricultural value chains.

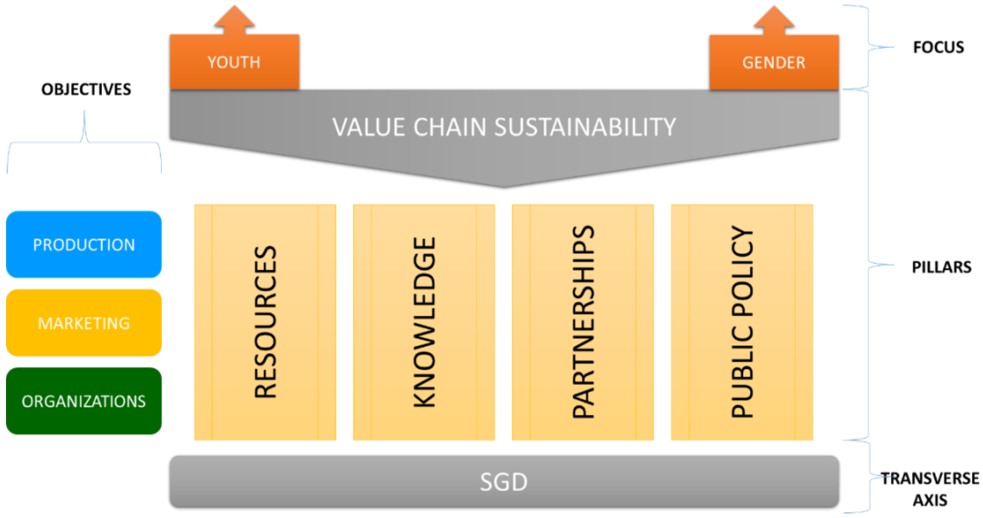
- Increasing volumes and quality production: To work with the best practices, know-how and technical resources to achieve the best quality and productivity results
- Improved marketing: To promote agricultural products and build bridges to trading
- Effective farmer organization: Strengthen producer cooperatives as full-fledged economic partners of the private sector.

## 3. STRATEGY FRAMEWORK

The conceptual framework has in its center the Value Chain Sustainability. The value chains will have two focuses, the youth and the gender. To achieve that, four pillars integrate the conceptual framework: (Resources, Knowledge, Partnerships, and Public Policy) that cross transversally the project objectives. In that way, the field practicum will incorporate activities to guarantee resources, sharing knowledge, building partnerships, and evaluate public policy to achieve the project objectives.

The transverse axis of the framework is given by the Sustainable Development Goals – SDG. It means that the practicum should include the vision of the SGD to incorporate it in every activity, analysis and result generated under the project.

**Graphic 1. Strategy framework**




*The autor, 2018*

Find out the ***Annex 0. Project Charter*** to understand the relation between the fieldwork objectives, PRICE project objectives and the strategic framework.

## 4. ANALYSIS AND FINDINGS

With the aim of fulfilling the first objective of fieldwork, analyze the economic, social, environmental and political factors that intervene in the coffee value chain and generate findings that contribute to the achievement of the project goals, four methodologies has been selected to be implemented:

- Collection and analysis of existing information
- Involvement in field and direct observation
- Surveys with the farmers and strategic actors of the project
- Interviews with the farmers and strategic actors of the project

Each methodology aims to achieve one or more of the expected results of the fieldwork.

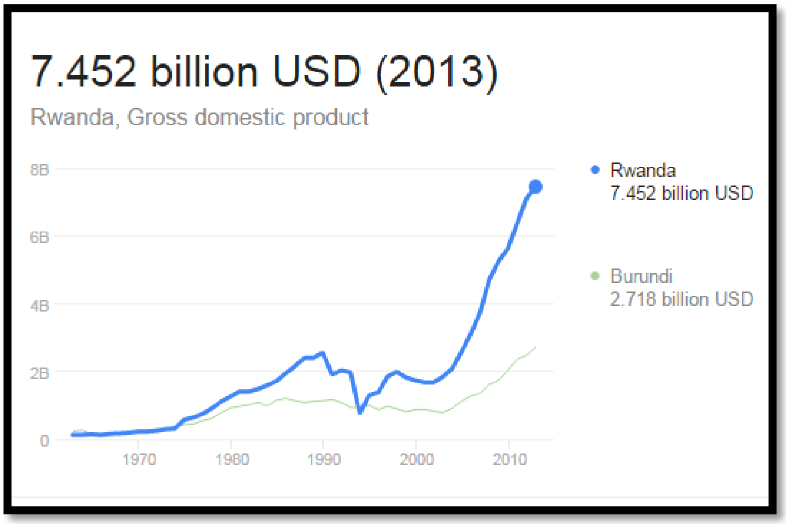
### Briefing of the agriculture in Rwanda

Before go to the field and start with the surveys and interviews, it is important to have the framework of the agricultural sector in Rwanda with focus on the coffee value chain.

Rwanda is at the best moment in its history. It is one of the fastest growing economies in Africa (3.4% in 2016/2017 after 8.6% recorded in 2015/2016) (National Bank of Rwanda, 2017). In 2016, Rwanda was ranked as the second best country to do business in Africa (Choden, 2018).

The following graphic shows the fast growth of Rwanda GDP since 2004.

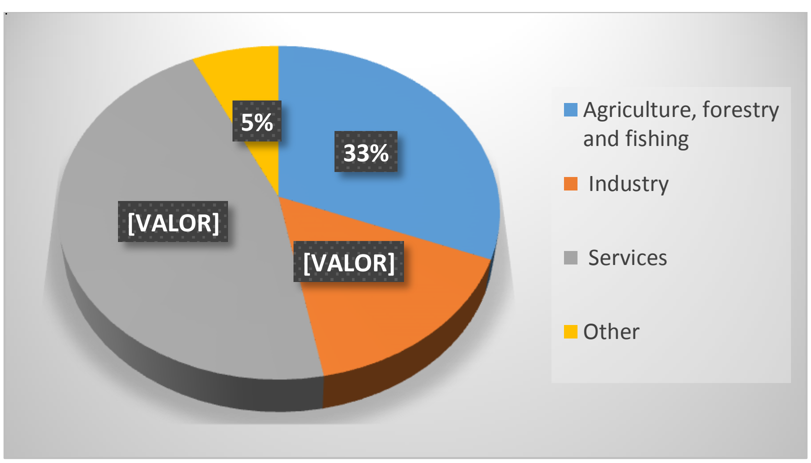
**Graphic 2. GDP growth in Rwanda**




(Choden, 2018)

The main economic activities are services, agriculture and industry. The distribution of Rwanda´s GDP in 2017 is represented as following (National Institute of Statistics of Rwanda, 2018):

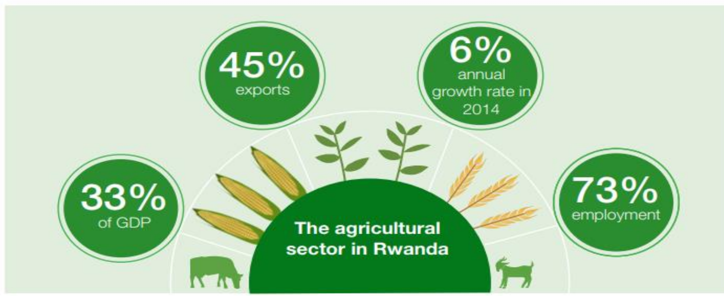
**Graphic 3. GDP distribution in Rwanda**




*The author, 2018*

The agriculture represents the second most important activity for Rwanda, but the employment indicator is even more striking. In 2016, this activity represented 73% of the total generated jobs in Rwanda. In relation with exports, the agricultural products are equivalent to 45% of the total exports.

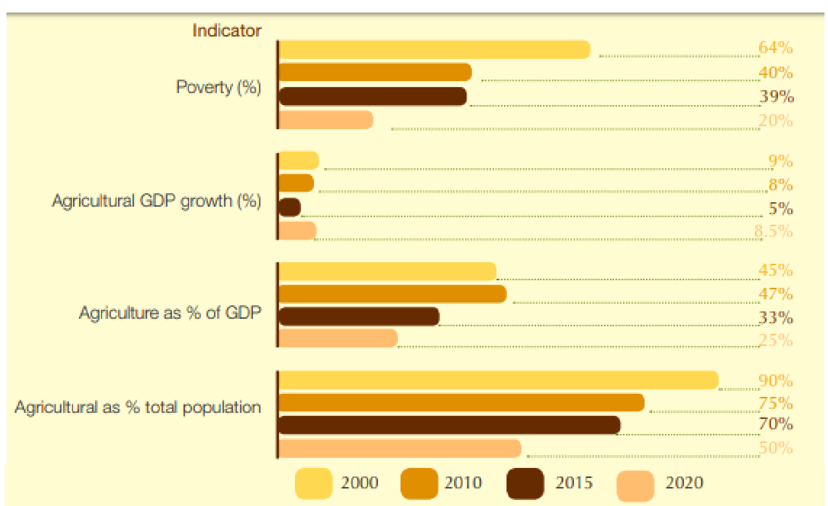
**Graphic 4. The agricultural sector in Rwanda.**




(Ministry of Agriculture and Animal Resources, 2016)

It is true that most of the development in Rwanda depends on the agricultural activities, but there is a risk when more than 70% of the empowerment force is going to the same sector. The land and other natural resources used in agriculture are limited. In addition, a country needs to diversify the economy. For that reason, the Rwanda Vision 2020 aims to strength other economic sectors of the country, and improve the efficiency of the agricultural sector, using innovated methods and technology. The following graphics shows the vision 2020 for some of the critical indicator.

**Graphic 5. National and agricultural related goals for vision 2020**



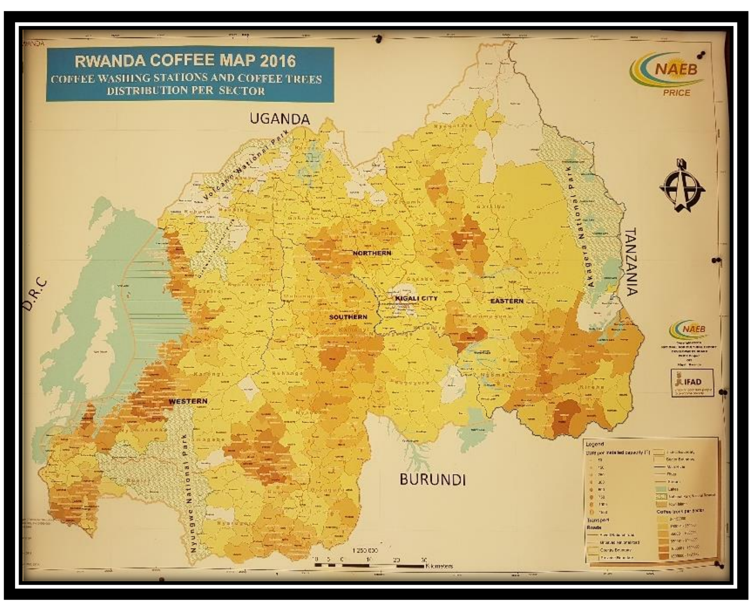

(Ministry of Agriculture and Animal Resources, 2016)

While the government expects agriculture to continue growing (8.5% in 2020), it also expects a higher rate for other sectors of the economy that have been reshaped for years in the Rwandan economy, such as the industrial sector. Therefore, the government is responding to the new challenges in the world by entering into new economies, but without forgetting the important role of agriculture in the development of Rwanda. For this reason, the focus on this sector will be innovation and efficiency, according to the vision 2020.

## Briefing of the coffee sector in Rwanda

Rwanda coffee is named as one of the high quality coffee in the world. It is not a big producer, in 2016, the production was 220.000 bags (60 kg each), compared with Ethiopia 7.000.000 bags and Uganda 4.9000.000 bags (The perfect daily grind, 2017); but its reputation is well known over the world. The mains areas where it is harvest in Rwanda are the Western Province (including Rutsiro and Karongi Districts), Southern Province (including Huye and Nyamagabe Districts), Northern Province (Rulindo District) and Eastern Province (Ngoma District) (Cafe imports europe, 2018). The total area in coffee is currently 42,000 hectares grown and it is grown in most provinces in the country at an altitude less than 1900 m. (National Agriculture Export Development Board, 2016)

**Graphic 6. Map with coffee crops in Rwanda**



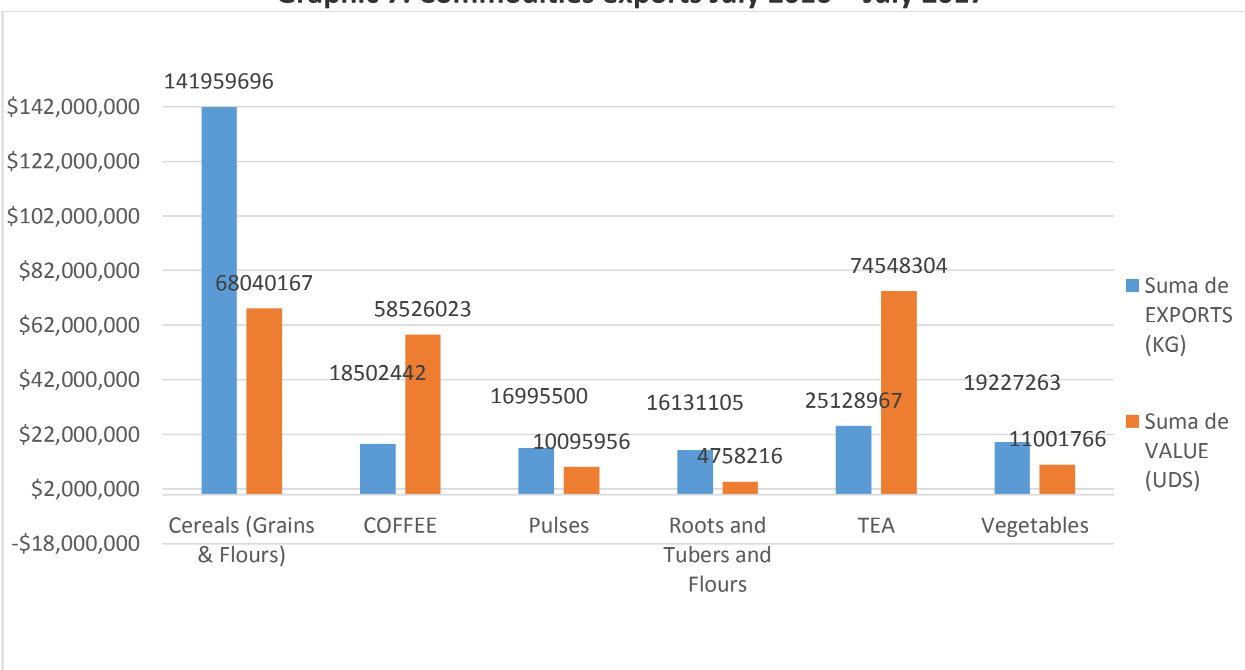

(National Agricultural Export Development Board, 2016)

Rwandan coffee is mostly Arabica type. The most common are Bourbon, French Mission Bourbon, Caturra, Catuai, Mibirizi and the harvest period is in March to July (Cafe imports europe, 2018). Some of the most important brands are Maraba coffee, Gorillas, Rafiki, Migongo.

Rwanda has approximately 355.000 coffee farmers and 300 coffee washing station. The contribution of coffee in the country is given for cooperatives and other private institutions. PRICE project impact is focused in the cooperatives that represent approximately one third of the total coffee production in the country.

In 2017, coffee represented the fourth commodity in exports after cereals, tea and vegetables. In value of exports, it was the third after cereals and tea. Coffee represents the 5.2% of the total exports of the country. In 2016 was the 7% (National Agricultural Export Development Board, 2017).

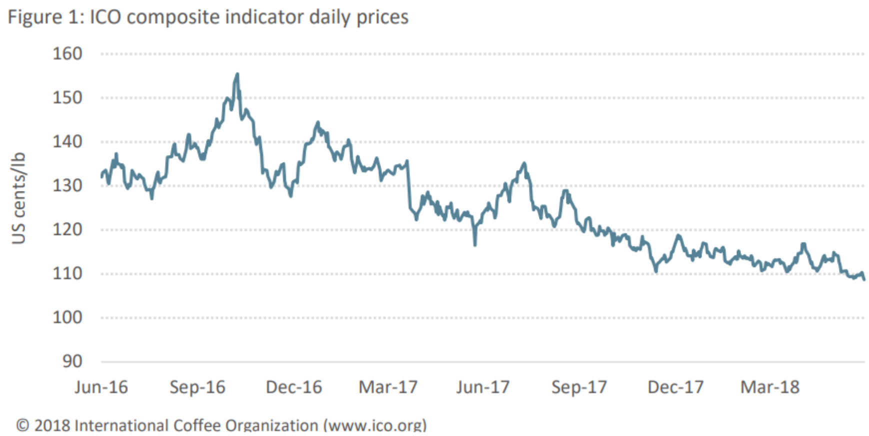
**Graphic 7. Commodities exports July 2016 – July 2017**




(National Agricultural Export Development Board, 2017)

A critical factor that is affecting the coffee trade around the world is the price. According to the International coffee organization, the coffee price has fall down since September 2016. For Rwanda, this is doubly risky, since in 2017 the volume of exports was reduced but also the value.

**Graphic 8. Coffee daily prices 2016 - 2017**




(International coffee organization, 2018)

## Field work methodology

To complement and corroborate the data and analyze the results that the project has achieve until now, four districts were selected to carry out the immersion activities in the coffee crops and the coffee cooperatives. The surveys and interviews were applied to the farmers (at least one women, one men and one young for each district), cooperative leaders, agronomists and other experts. The four districts are Rutsiro, Karongi, Huye, Nyamagabe. In the *Annex 1. Coffee cooperatives check list* is the name of the cooperatives and a brief of each one. Additional activities were developed in Kigali with the PRICE Managers at SPIU and NAEB.

NOTE: For the field activities with the farmers was needed a support of a person in the field to translate the questions and the answers from English to Kinyiaruanda and viceversa.

The following charts show the tools applied in each districts and the objective that is achieving. The next section describes each methodology.

**Graphic 9. Methodologies to apply in the field**

| METHODOLOGY | PROJECT OBJECTIVES | FARMERS (women, men, young) | COOP. MANAGERS | COOP. LEADERS | PRICE MANAGERS |
|---|---|---|---|---|---|
| Survey Contribution to the OBJECTIVES | 0, 1, 2, 3 | x | x | x | x |
| Interview general FRAMEWORK | 1 | x | x | x | x |
| Survey Contribution to the SDG | 0 | | x | x | x |
| Exercise Coffee value chain RISKS | 0 | | x | x | x |
| Exercise Ideation BUSINESS MODEL | 2 | | x | x | x |

The following section shows the methodologies by objective of the PRICE project.

## GENERAL OBJECTIVE: Achieve sustainable increased returns to farmers

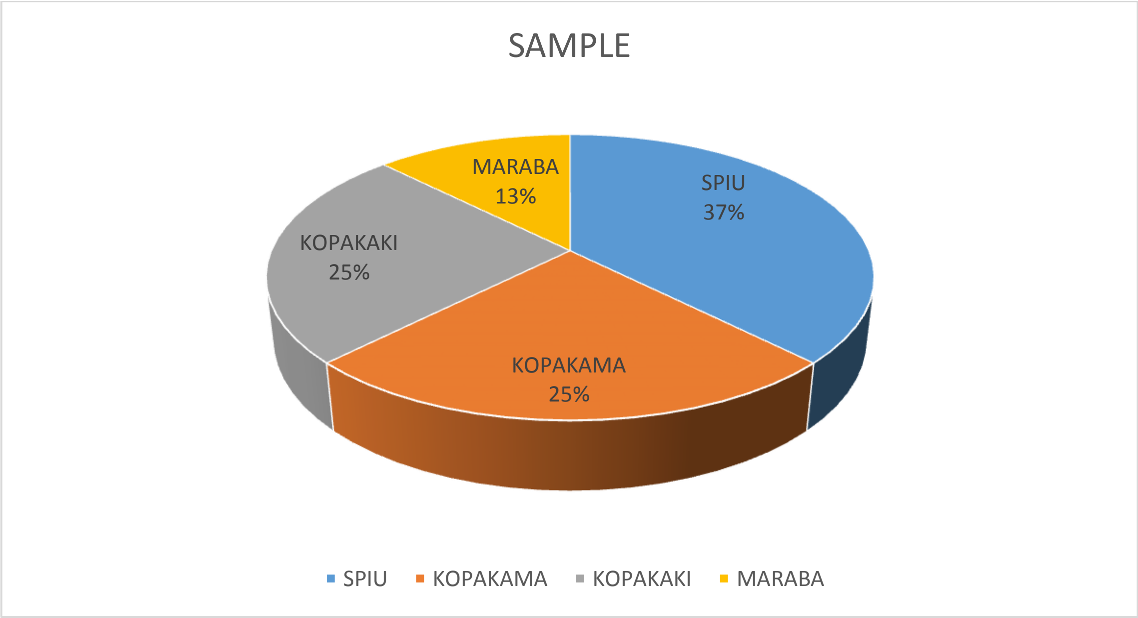
| PILLAR | RESULTS | ACTIVITIES |
|---|---|---|
| **KW** | Contribution of the project to the SDG | * Identify the impacted and contribution of the PRICE to the SDG and targets. |
| **KW** | Risk matrix including mitigation plans | * Identify the risks throw the coffee value chain |

To identify the impact and contribution of the PRICE project to the Sustainable Development Goals - SDG, we defined the *Annex 2. SDG impact analysis*. This tool include strategic questions about each of the 17 SDG to be scored according to the achievement of the PRICE project. The score is given for a number between one and five and each question has a weighing. According to the answer, the template will shows the impact of the project in each SDG. The full results can be consulted in the ***Annex 2. SDG impact analysis.***

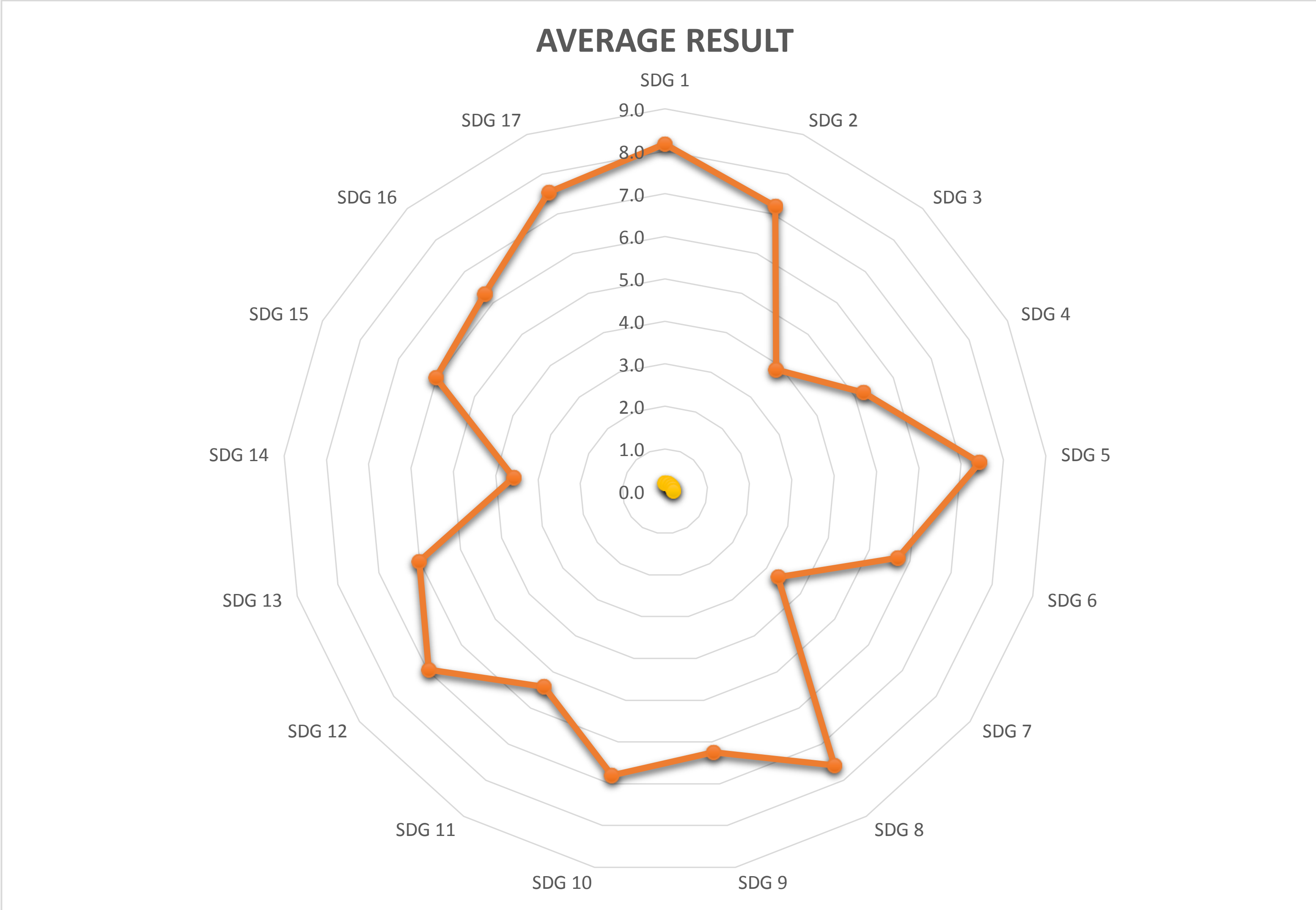
The analysis also wants to present the match between the project, as a national policy, and the SDG, as an international policy, and to identify the main indicators that can be used for each SDG supported by the project.

For that exercise, the sample was the following

| ORGANIZATION | # |
|---|---|
| SPIU | 3 |
| KOPAKAMA | 2 |
| KOPAKAKI | 2 |
| MARABA | 1 |
| **Total** | **8** |




The results for each participant are represented in a spider chart in which is possible to know which of the SDG are supported by the project. Individual results can be consulted in ***Annex 2. SDG impact analysis***. After that, the results were consolidated to know the priorization of the SDG. The following is the result:




There is a high score for the SDG 1, 5, 8, 10, 12 and 17. The following chart shows the SDG by order according to the final average score.

| SDG DESCRIPTION | SDG # | AVERAGE SCORE |
|---|---|---|
| No poverty: End poverty in all its forms everywhere | SDG 1 | 8,2 |
| Decent work and economic growth: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all | SDG 8 | 7,6 |
| Partnerships for the goals: Strengthen the means of implementation and revitalize the global partnership for sustainable development | SDG 17 | 7,6 |
| Gender equality: Achieve gender equality and empower all women and girls | SDG 5 | 7,4 |
| Zero hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | SDG 2 | 7,2 |
| Responsible consumption and production : Ensure sustainable consumption and production patterns | SDG 12 | 7,0 |
| Reduced inequalities: Reduce inequality within and among countries | SDG 10 | 6,8 |
| Peace, justice and strong institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels | SDG 16 | 6,3 |
| Industry, innovation and infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation | SDG 9 | 6,2 |
| Climate action: Take urgent action to combat climate change and its impacts | SDG 13 | 6,0 |
| Life on land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss | SDG 15 | 6,0 |
| Clean water and sanitation: Ensure availability and sustainable management of water and sanitation for all | SDG 6 | 5,7 |
| Sustainable cities and communities: Make cities and human settlements inclusive, safe, resilient and sustainable | SDG 11 | 5,4 |
| Quality education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities | SDG 4 | 5,2 |
| Good health and well-being: Ensure healthy lives and promote well-being for all at all ages | SDG 3 | 3,9 |
| Life below water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development | SDG 14 | 3,6 |
| Affordable and clean energy: Ensure access to affordable, reliable, sustainable and modern energy for all | SDG 7 | 3,3 |

***RESULTS:***

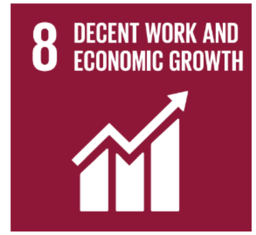
In summary, the participants consider that the project is contributing in high level to the following SDG.

PRICE PROJECT IMPACT


- Increase income
- Social programs for vulnerables
- Access to basic services
- Budget with focus in poverty

*% rural people below poverty line*

*% rural household with access to basic services*




- Per capital economic growth
- Economic productivty
- Jobs, entrepreneurship, formalization, financial services.
- Employment for youth

*% growth rate of rural GDP per capita*

*% of youth as members of cooperative*


- Increase exports
- Promote environmentally technologies
- International support implementing capacity-building

*% growth rate of agricultural exports*

*Value of financial and technical assistance*


- End discrimination
- Women´s participation
- Equal rights for women

*% of woman as members of cooperative*

*# of beneficiaries of programs for equal rights for rural*


- End hunger
- Sustainable food production
- Investment in rural
- Trade restrictions in agricultural market

*% rural people in undernourishment*

*Value of agricultural export subsidies*


- Sustainable consumption and production
- Natural resources care
- Reduce food losses
- Awareness for sustainable development

*# of beneficiaries of education for sustainable development*

*Project food loss index*

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The graphic also shows the proposal of indicators that can be used to measure the contributions of the project to the SDG national policy. That proposal can be included in the next steps of the project.

The Results shows a totally coincidence with the main objective of PRICE: ***To achieve sustainable increased returns to farmers from key export driven agricultural value chains.*** However, there are opportunities directly related with the objective of the project and that can contribute with the SDG´s.

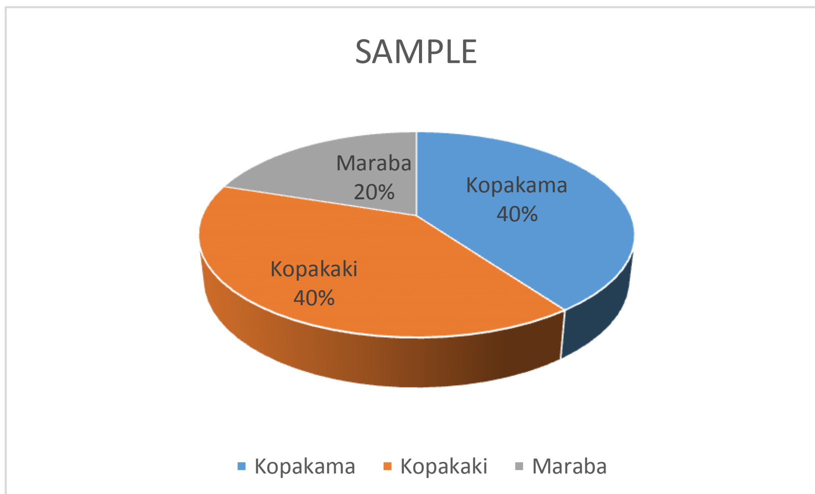
| SDG | | OPORTUNITIES |
|---|---|---|
| 2 | Zero hunger | • To make proposal to the government to enhance trade restrictions in agricultural market |
| 4 | Quality education | • To encourage the development of programs that ensure that all learners acquire the knowledge and skills needed to promote sustainable development. |
| 8 | Decent work and economic growth | • To develop programs for the proportion of youth not in employment, education or training |
| 11 | Sustainable cities and communities | • To generate economic, social and environmental links between urban, per-urban and rural areas, through the influence in the national and regional development planning. |
| 12 | Responsible consumption and production | • To generate programs in Sustainable consumption and production<br>• To generate programs to transmit the awareness for sustainable development<br>• To generate programs to reduce food losses along production and supply chains, including post-harvest losses |
| 13 | Climate action | • To integrate climate change measures, strategies and planning in the project<br>• To generate programs that promote mechanisms for raising capacity for effective climate change-related planning and management |
| 15 | Life on land | • To generate programs to reduce the degradation of natural habitats, halt the loss of biodiversity and protect the extinction of threatened species |
| 16 | Peace, justice and strong institutions | • To provide trainings to straitening capacity building in inclusive, participatory and representative decision-making at all levels |
| 17 | Partnerships for the goals | • To promote and generate science and/or technology cooperation agreements and programs with other countries.<br>• To promote the development, transfer, dissemination and diffusion of environmentally technologies<br>• To enhance international support for implementing effective and targeted capacity building. |

The second tool for this objective is the *Annex 3. Risks analysis*. The exercise aims to identify the risks in the coffee value chain and point them according to the probability and the economic, social and environmental impact they produce. Then, evaluate if there is a control to mitigate it. In addition, the analysis pretends to build the base of the risks matrix to be used in the following steps of the project, as well as in other projects. It is important to notice that the matrix should be updated frequently, according with the new controls that are implemented, new risk identified and any other factor that affects the measures.

The full results can be consulted in the ***Annex 3. Risks analysis***

The following is the sample who participated in the exercise:

| SAMPLE | |
|---|---|
| Kopakama | 2 |
| Kopakaki | 2 |
| Maraba | 1 |




The participant had to validate tree risks of the value chain. For each one, they had to consider the causes and the consequences. Then, rated from one to five the probability of occurrence and the impact in economic, social and environmental fact. Finally, they had to identify if there is any control to mitigate the risk. The control rating is represented for the percentage of mitigation that the control has in the risk. The formulas used are the following:

*FORMULAS:*

- *Total impact: (Economic impact + social impact + environmental impact) / 3*
- *Inherent risk: Total impact * Probability*
- *Residual risk: Inherent risk * (1 - Control Rating %)*

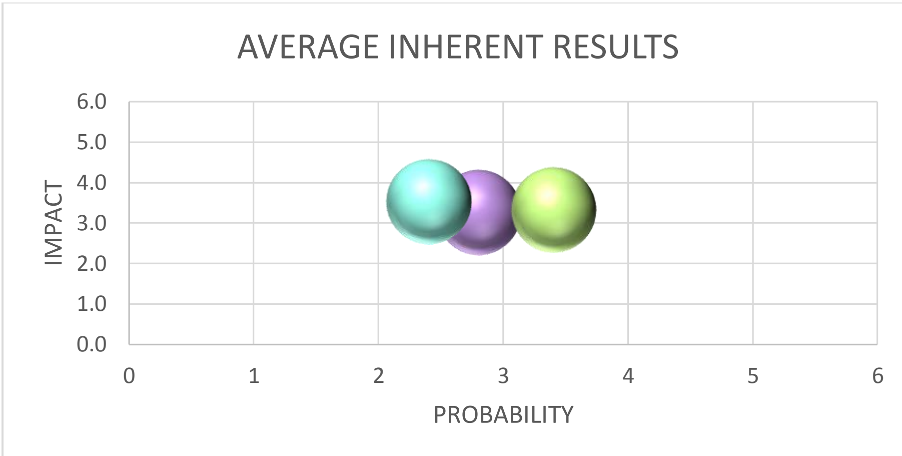
According to this, the risks are classified in three levels: Severe, moderated and slight. The risk scale is the following:

| LEVEL | RISK SCALE |
|---|---|
| SEVERE | 16 < X < 25 |
| MODERATE | 9 < X < 15 |
| SLIGHT | 1 < X < 8 |

The results were processed and are presented in the next chart:

| RISK | # | Causes | Consequences | Probability | Economic Impact | Social Impact | Environmental Impact | Total impact | Inherent risk | Control | Control rating | Residual risk | LEVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Potato defect and other pests and diseases | R1 | * Climate change * Lack of awareness in the farmers to control the pests * Pest (antestia back) * Lack of maintenance. * Lack of mulching | * Less quality. * Less production * Lost of clients * Losses of money for the cooperative. They pay to the farmer but the product is a lost | 2,8 | 3,6 | 4 | 2,2 | 3,3 | 9,1 | *Hand sorting *Integrated pest management IPM * To apply biological good practices * To apply chemical pesticides is the last option * Best practices in Mulching and pruning *Trainings about maintenance and protection of diseases * Use of banana and bee traps | 60% | 3,7 | SLIGHT |
| Climate change | R2 | Green house effect | * Low production * Long periods of sun, so the coffee trees die * The hail affect the cherry | 2,4 | 3,4 | 3,4 | 3,8 | 3,5 | 8,5 | *Reforestation using agroforestry *Intercroping using trees shade | 25% | 6,4 | SLIGHT |
| Price fluctuation | R3 | * Over production around the world * International market * Quality of coffee | * Low prices *Low income * Abandonment of plantations | 3,4 | 3,8 | 3,8 | 2,4 | 3,3 | 11,3 | *Improve quality * Price agreement with the international buyers according with the quality. | 20% | 9,1 | MODERATE |

The inherent risk (probability * impact) is represented in the following chart that combines the average of the probability in the horizontal axis and the average of the impact in the vertical axis. For the three risks, the level was moderate.




After considering the controls that are implemented to mitigate the risk, the inherent risk decrease, becoming the first two risks from moderated to slight level. That means that there are not severe risks.

***RESULTS:***

According to the results, the highest risk is the price fluctuation. There are not many actions to control it, due to it is an external variable affected by international trade market and the coffee production worldwide. The price agreement with the international buyers is a good alternative to mitigate this impact. For that, the quality of the coffee is extremely important. To maintain the relation with the international buyers through formal agreements is a guarantee of profitability, even in moments when the coffee price is in a high fluctuation.

The climate change is the risk with the second highest score. As well as the previous risk, this external variable requires action for all over the world. However, agroforestry and intercropping with trees of shade are some examples that can help to face this phenomenon and maintain the quality of the coffee crops.

The third risk is about pests and diseases. It is a serious risk because in case of occurance, it can affect the reputation and of course the sales in the future. There are many actions to control this risk, like, the use of integrated pest management, trainings to the farmers in best practices to the maintenance of the crops and protection from the diseases.

The methodology is flexible because allows to define the risk scale and the evaluation of the controls implemented. However, it is important to review the risk matrix frequently to identify new risks and evaluation the existing.

## OBJETIVO 1: Increasing volumes and quality of production

| PILLAR | RESULTS | ACTIVITIES |
|---|---|---|
| **RE** | Proposal to improve the coffee value chains | * Identify the process and technical level of coffee value chain though observation methods and interviews with farmers and stakeholders.<br>* Identify new technical know-how that could be applied in the coffee value chains (organic production, innovative techniques, friendly environmental practices). |
| **KW** | Good practices identified | * Use inputs and better agricultural practices (Organic supplies, protection of land, rivers and ecosystems)<br>* Study the good practices of Colombian cases. |
| **PP** | Public policy recommendations to influence coffee value chain | * Identify opportunities to strengthen agricultural productivity, especially in coffee value chains. |

To identify the process and technical level of coffee value chain, we designed the *Annex 1. Coffee cooperatives check list*. There is one checklist for each cooperative in each district. The first part includes the profile of the cooperative, the contact personas and the most important information to take into account during the fieldwork. The checklist also has the main aspect to be observed and analyzed on field.

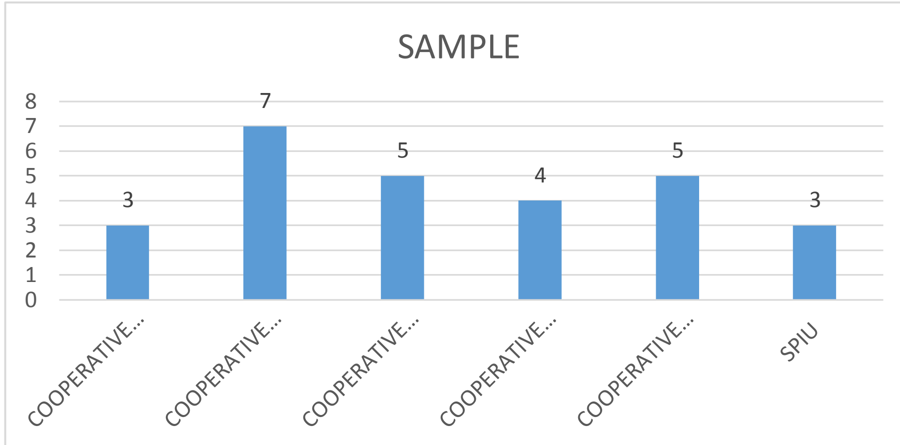
The results can be consulted in the ***Annex 1. Coffee cooperatives check list***

The second tool to achieve this objective is the *Annex 4. Interview analysis.* Notice that this interview is not only to achieve this objective, but also to achieve all of them, so it is a transversal tool. The interview was made up of for 20-stretgic question; each one specifies the objective that is related with, as well as the pillar, according with the strategic framework. Most of the question are closed type to facilitate the answer to the farmers in the translation process. However, few questions allow the interviewed to express the feeling and the thoughts about the project results.

The full results can be consulted in the ***Annex 4. Interview analysis***

Below is the sample of the interview:

| ROLE | # |
|---|---|
| COOPERATIVE LEADER | 3 |
| COOPERATIVE MEMBER MEN | 7 |
| COOPERATIVE MEMBER WOMAN | 5 |
| COOPERATIVE MEMBER YOUNG | 4 |
| COOPERATIVE STAFF | 5 |
| SPIU | 3 |
| **Total general** | **27** |




***RESULTS:***

- The **18.5%** of the sample knows what the SDG (Sustainable Development Goals) are. In many cases, the answer were positive, but when the interviewed explained the meaning of the SDG, it was not related with the concept. Although the higher levels have the concept clear, it is important to make a pedagogical work transmitting the concept, the factors and the impact and the benefits of the SDG to the cooperatives and the farmers.
- The 50% of the sample does not the main objective the PRICE project. The 100 % of the cooperative staff know it. This is a good point considering that the direct impact of the project is through the cooperatives. However, it is important that farmers know about the project and recognize the direct and indirect impact. This is important for the governance and the legitimacy of the government and the sponsors of the project.
- For those one who know about PROCE project, the average of the score about the impact of PRICE project in their economic and social condition is 8.4 out of 10. The minimum result was 7 and the maximum was 10. That means that the deviation of the results is low.
- The 100% of the interviewed has access to microcredits. The first source they use is the loans provided by the group they belong inside the cooperative. The second one is the loans directly with the cooperative and the third one is the loans of the banks.
- The **91%** of the interviewed does not access to gas. They use charcoal and wood to cook.
- The water and electricity are first necessity services. However, **34.5%** of the interviewed does not access to them. In the case of water, they can access to it by going to a water collector center, where they can buy or have it by free. In some cases, they don´t have electricity but have solar panels.

- In all cases more than 77% of the interview said that has been part of one the trainings on the list. However. Comparing with the results of the SPIU staffs, they agree that the training in Politics factors has not been done. That means that could be a misunderstanding about the politics factors.
  meaning. In any case, it is important to transmit the politics factors in all levels of the value chain in order to become farmers into public policy actors that can participate in the dialogs that involves common and publics' affairs.
- The average of the score given for all the cooperatives and the SPIU staff was **8.78**. In general, we can infer that the interviewed consider that the trainings are supporting in a high level their daily activities. Farmers from Koakaka and Maraba find a higher impact in the trainings. However, they would like to include other topics like Project management, Business Planning, Good agricultural practices in coffee, Information technology, leadership, international trade and marketing, Intercropping, Climate change, Organic production.
- From a score of 1 to 10, and according with the average of the answer of the interviewed, the problems listed do not represent a big challenge. However, the main problem that cooperatives have to face is the **access to financial and work capital**. Other problems identified for the interviewed are: Marketing, transportation of the crops, old coffee trees, climate change, Lack of mulching materials, Disasters caused by climate.
- The **40%** of the interviewed consider PRICE or NAEB as an important organization to the coffee value chain. More than **33%** consider Tween, an international NGO as the second important actor for the development of the coffee value chain. In third places are the cooperatives, with **30%** and in fourth place are the buyers and the local government with **26%** of the interviewed. Other important stakeholders are the financial institutions, sustainable harvest, another international NGO, the exporters, Trademark east Africa and the farmers. It seems like the PRICE and NAEB are in the top of mind of the interviewed, and they recognize the important role of those institutions for their development.
- IFAD have the highest score, however many participants don´t know what is IFAD and some of them gave the score based on the support that the cooperatives receive at the beginning at the project. For that reason, there are two different score for IFAD, according with the support given in the pass (only 54% of the interviewed answered this question) and the other one according with the currently support (only 16,6% answered this question).
- Although NAEB belongs to MINAGRI, the interview asked about those institutions separately. In that case, they recognize NAEB as a closer institution, more than MINAGRI. The 100% answered the question about NAEB, and 83% answered about MINAGRI
- The total average of the PRICE satisfaction given by the interviewed is 7.19 out of 10. The cooperative with the highest satisfaction is Kopakama, with 8.8. Most of the lowest results

are because they notice that the impact of PRICE project is going to the cooperatives, and do not to the farmers. They do not perceive the direct impact of PRICE as they perceive the impact of other organizations.

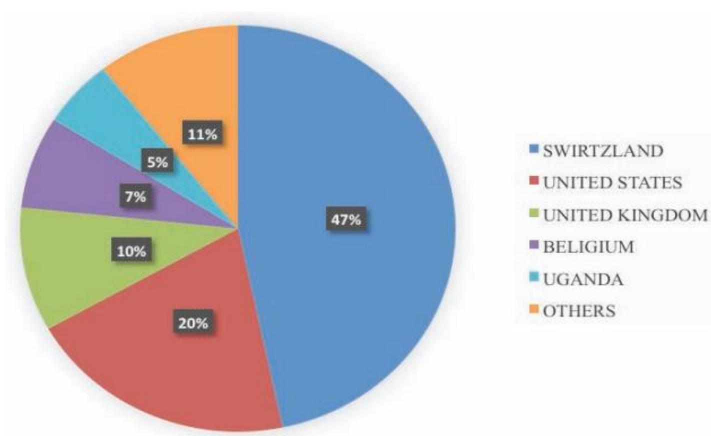
## OBJECTIVE 2: Improved marketing

| PILLAR | RESULTS | ACTIVITIES |
|---|---|---|
| KW | Best practices to spread the coffee market in Rwanda and worldwide. | * Identify the countries which Rwanda has the largest trade market.<br>* Identify new tendencies and best practices to take into account for spread coffee market |
| PA | Potential markets and key aspects for a trade campaign. | * Identify the key aspects for a foreign trade campaign. |

The National Agricultural Export Development Board – NAEB is an important actor to achieve this objective. They address the international trade strategy, but also they have all the information about the exports and international markets.

The following graphic shows the coffee export destination in 2016 – 2017.

**Graphic 14. Coffee export destination 2016 - 2017**




(National Agricultural Export Development Board, 2017)

Almost 70% of the Rwanda's coffee goes to Europe, being Switzerland the first destination. United States is the second country that buys Rwandan coffee. Latin America, Asia and Africa, with the exception of Uganda, are not in the list. They share the same characteristic of being producers as African countries.

Following this idea, the international strategy should be focused on European and USA market. The strategy needs to consider the new consumption habits in those countries. For the most part, these countries tend to the organic, environmental friendly and shared value products with the communities where they are produced.

To complement this first finding and with the aim of generate new ideas to the international coffee marketing strategy, we design the *Annex 5. Coffee business analysis* based on the Slice and dice tool. This exercise let stimulate new perceptions and ideas through the answer of non-common questions about the coffee attributes, one attribute at a time. In this way, the answer let identify changes or new business opportunities.

The first step is to identify the Rwandan coffee main attributes, the second step is formulate challenges question about each attribute, and the last step is to answer the questions.

The full results can be consulted in the ***Annex 5. Coffee business analysis***

The results were consolidate and are presented below:

| ATTRIBUTE | QUESTIONS TO CHANGE OR IMPROVE THE ATTRIBUTE | ANSWERS - IDEAS FOR EACH ATTRIBUTE |
|---|---|---|
| ***High quality coffee*** | Is there any other process that can be implemented to produce coffee with higher quality? | * Natural process can increase the flavor quality of the grain.<br>* Growing coffee in higher areas means increasing the sweetness of coffee.<br>* Semi-washed coffee: Honey coffee is another way to process coffee |
| ***Coffee for a cup of coffee*** | Is there any other use (different from the coffee drink) in which we can use the coffee grains? | * Coffee for medicine<br>* Strengthen the use of coffee in Rwandan cuisine (desserts), as well as in food and drink industry (beers)<br>* The coffee can be offered as a touristic experience in Rwanda. |
| ***Share value in the process (Economic + social value)*** | What additional social activities aimed to the farmers can be developed in the coffee production? | * A school for the farmers where they can have trainings about how cultivate other products and beekeeping as an organic best practice with coffee production.<br>* A school or kindergarten for the cooperative member´s children.<br>* The cooperative can connect electricity to other cooperative members that are far from the cooperative.<br>* More help in microfinance for cooperatives members. (SACOO. Financial institution)<br>* The cooperative can include the banana as a crop for its mission. In that case, the cooperative can be a cooperative for coffee and banana. |
| ***Organic coffee in some cooperatives*** | Can the organic best practices applied for some cooperatives be replicated in others? | * Through the exchange of knowledge and learning communities among cooperatives<br>* Understand the economic and environmental benefits of having a organic coffee<br>* The cooperatives can increase the price of the organic production and at the same time they are acting responsible with the environment and thinking in the life for the future generations. |

| | | |
|---|---|---|
| ***Coorporate social responsibility*** | Is it possible to reuse the waste of the process? | * Circular economy: Evaluate the possibility of produce complementary products like creams.<br>* Cherries for composting<br>* Water reuse in coffee production<br>* The waste of the dry mill can be used to make bricks, roofs and fuel to cook. |

***RESULTS:***

In summary, there are many coincidences between the participants about the natural coffee production as an alternative process. However, the focus of NAEB as an implementer of the agricultural exports strategy is to produce and sell full washed coffee. That means that the natural production is not in the scope of the agricultural policy. It is important to take into account the market trends. For example, some countries like USA, Netherlands or Germany have decided to start to buy naturally processed coffee with a higher quality, allowing an over price based on the quality of it (Hernández, Soto, & Montoya, 2014). For that reason, it is important that Rwanda review its focus and reconfirm its strategy. Whatever the decision, the most important step is to close the gaps to become one of the best coffee producers of the world.

Below are the results presented by objective:

**Objective 1 – Production:**

Trainings in best practices like:

- Beekeeping and the relationship with coffee production.
- Intercropping
- Circular economic: Cherries for composting, water recycling, dry mill waste to make bricks, roofs and fuel

**Objective 2 – Marketing:**

New business opportunities for coffee:

- Coffee for medical proposes.
- Coffee for Rwanda cuisine (desserts, beer, etc)
- Coffee as a touristic experience in the field.

**Objective 3 – Cooperatives:**

Shared value for communities

- Access to new services for the cooperative members, like electricity, water and micro financial.
- Kindergarten for cooperative member´s children

## OBJECTIVE 3: Effective farmer organization

| PILLAR | RESULTS | ACTIVITIES |
|---|---|---|
| KW | * Results of the effectiveness of the KM | * Evaluate the effectiveness of KM (Intensive care in capacity building, rehabilitated management structure, a better leadership and governance systems) and identify new opportunities. |
| PA | * Strategy to link the new environmental stakeholders in the value chains. | * Identify new environmental stakeholders<br>* Design a stakeholders network to the value chains. |

The cooperatives are the core of the coffee value chain. The cooperatives are a private organization conformed by farmers that share the same principles and objectives. They are the link between the farmers and the markets. Each farmer independently, cannot achieve the same if he work with other together; they become stronger when they can be part of the cooperative. In that way, the cooperatives are the gate to access the trade for the small farmers.

For coffee sector, the cooperatives are associated in the Rwanda Coffee Cooperative Federation - RCCF. This organization represents the interest of all the coffee cooperatives. In that way, it becomes an important stakeholder for the coffee value chain to link the private sector with the cooperatives and to have an important role in the market.

There are approximately 90 cooperatives with coffee washing station, others 20 are in new expansion areas and others 25 are improving their existing farming systems, 40 without washing stations and 3 are producing under organic standards. In 2016, there were 26.380 signed up farmers (12.927 men and 13,453 women, 15.506 households) (National Agriculture Export Development Board, 2016).

To evaluate the effectiveness of Knowledge Management that cooperatives have receive under the project, we design the *Annex 4. Interview analysis*, which include question about the effectiveness of those trainings. There is also the *Annex 6. Project objectives analysis*, which has different aspects to be evaluated in each objective of the project.

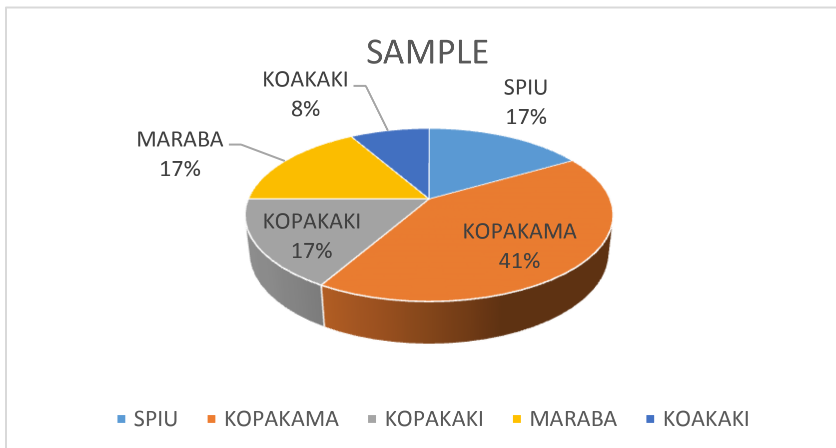
The full results can be consulted in the ***Annex 4. Interview analysis*** and the ***Annex 6. Project objectives analysis***

The instrument used was a survey with statements for each objective and each pillar / focus / axis. The selected sample had to score from one to five each statement according to their perspective about the level of accomplishment of the project with the elements of the framework.

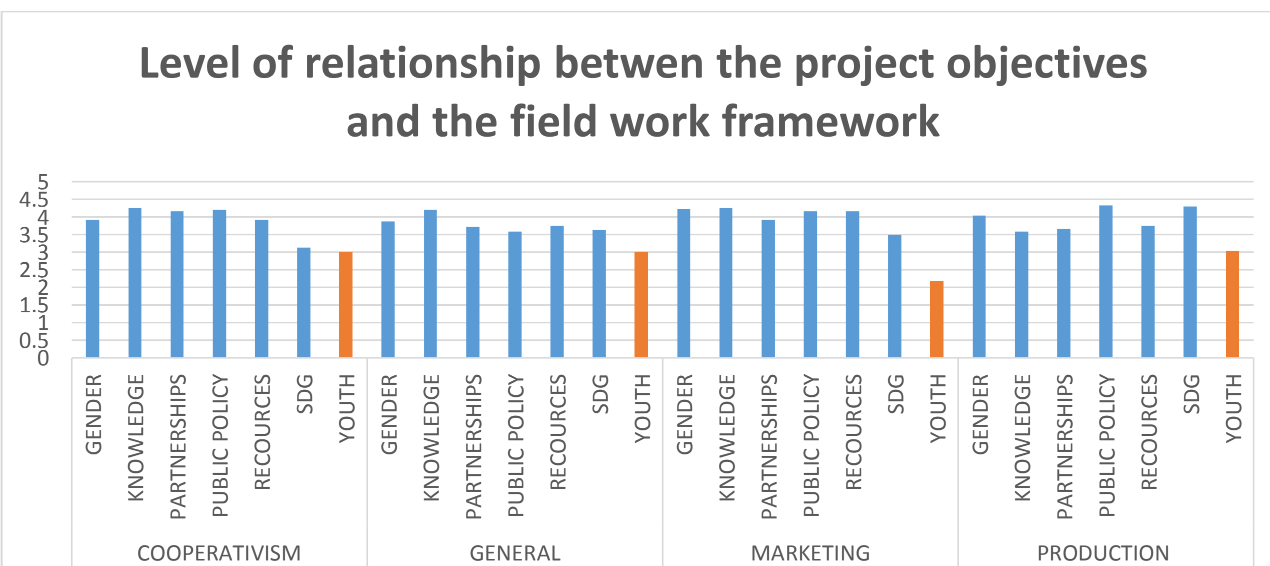
| OBJECTIVE | PILLAR |
|---|---|
| PRODUCTION | KNOWLEDGE |
| MARKETING | RECOURCES |
| COOPERATIVISM | PARTNERSHIPS |
| GENERAL | PUBLIC POLICY |
| | YOUTH |
| | GENDER |
| | SDG |

The following is the selected sample:

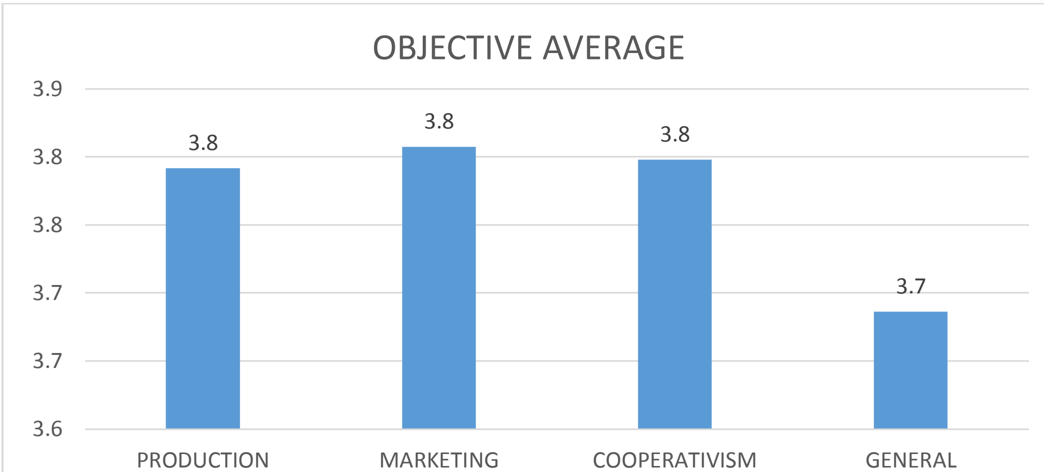
| SAMPLE | |
|---|---|
| SPIU | 2 |
| KOPAKAMA | 5 |
| KOPAKAKI | 2 |
| MARABA | 2 |
| KOAKAKI | 1 |
| **TOTAL** | **12** |




The general result shows that for the four objective, the lowest result was related with the ***youth*** focus.



To go deeply, the results were classified by **project objectives** and by **pillar**. For the project objectives, the lowest score was given for the general objective. However, the difference is only 0.1 point. The other components of the project has the same score. That means that there is a balanced accomplishment in the three objectives according to the framework.

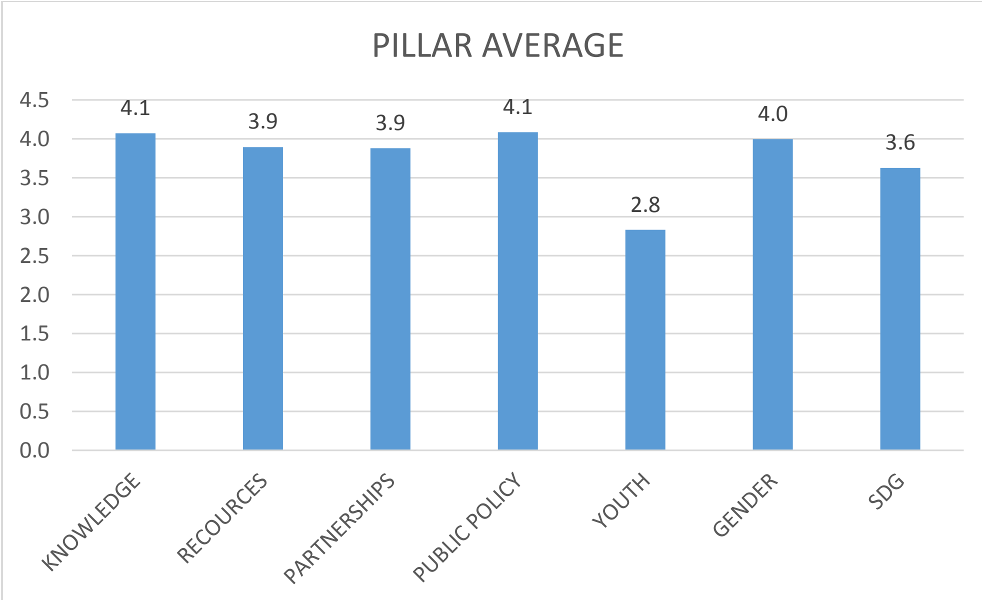



The general objective has the following statements:

| OBJECTIVE | PILLAR | QUESTION | AVERAGE |
|---|---|---|---|
| GENERAL | KNOWLEDGE | In which level the project has reached the goals. | 4,2 |
| GENERAL | RECOURCES | The project has managed to increase farmers' income | 3,8 |
| GENERAL | PARTNERSHIPS | The project has include new strategic actors for the improvement of the coffee value chain | 3,7 |
| GENERAL | PUBLIC POLICY | The project has proposed changes or new public policy recommendations for the improvement of the coffee value chain | 3,6 |
| GENERAL | YOUTH | The project has increased the inclusion of young in the coffee value chain | 3,0 |
| GENERAL | GENDER | The project has increased the inclusion of women in the coffee value chain | 3,9 |
| GENERAL | SDG | The project's results has contributed to the fulfillment of the SDGs | 3,6 |

That means that the lowest results was due to the Youth pillar, followed by the SDG and Public policy pillar.

Regarding to the pillars, the lowest score was given to the youth with 2.8.




The youth pillar has the following statements:

| OBJECTIVE | PILLAR | QUESTION | AVERAGE |
|---|---|---|---|
| PRODUCTION | YOUTH | The project has development programs to encourage young people to the agricultural practices with evident results | 3,0 |
| MARKETING | YOUTH | The project has development programs to encourage young people to the coffee market with evident results | 2,2 |
| COOPERATIVISM | YOUTH | The project has strengthen the cooperative management in young people | 3,0 |
| GENERAL | YOUTH | The project has increased the inclusion of young in the coffee value chain | 3,0 |

In that case, all the statement related with the four objectives of the project has a low score. The lowest is related with the encouragement of young people in the coffee market. Comparing with the markets for woman, there are more advances for them due to their coffee can be sold with the coffee women *stamp*. That gives them a differentiated value on the market. For young there are not incentives.

Regarding with the level of accomplishment with the framework that is perceived in the cooperatives, the average result is 74%. The highest score was given by Kopakama with 89,3%, and the lowest by Maraba with 55%. There is a difference of 34.3 points.

| NAME | SCORE Max = 140 | PERCENTAGE |
|---|---|---|
| **KOPAKAMA 4** | 125 | **89,30%** |
| **MARABA 2** | 121 | **86,40%** |
| **KOPAKAMA 5** | 115 | **82,10%** |
| **KOAKAKI 1** | 111 | **79,30%** |
| **KOPAKAMA 3** | 110 | **78,60%** |
| **KOPAKAMA 2** | 107,5 | **76,80%** |
| **KOPAKAMA 1** | 106,5 | **76,10%** |
| **SPIU 1** | 101 | **72,10%** |
| **SPIU 2** | 98 | **70,00%** |
| **KOPAKAKI 2** | 88 | **62,90%** |
| **KOPAKAKI 1** | 85 | **60,70%** |
| **MARABA 1** | 77 | **55,00%** |
| **AVERAGE SCORE** | **103,8** | **74%** |


***RESULTS:***

In summary, some opportunities can be incorporated in the next steps of the project:

- **YOUTH**: The young people is on the bottom of the value chain. The next steps of the project can incorporate a strategy that allows them to access to the value chain with no restriction and give them facilities and incentives, for example to access to the land, to financial capital and to be a member of the cooperatives.

- **SUSTAINABLE DEVELOPMENT GOALS**: The project was designed with the SDG as a framework. The SDG are also including transversally in all the Rwanda national policy. However is important to transmit the pedagogy about the SDG in all levels (community in general, private sector and public sector) to incorporate them in the accomplishment of that international policy. To understand the concept and the way in which every citizen can contribute with the SDG can be part of the implementation of the project, specifically in the rural area, with the influence of the farmers, cooperatives and the other stakeholders of the agricultural value chains.

- **INFLUENCE IN PUBLIC POLICY**: It is known that the project is an implementer of the agricultural national policy. However, the project can identify opportunities that can be improved in the public policy to generate a more flexible, accessible and efficient coffee value chain for all the stakeholders. Implementation is one of the steps of the public policy and should be closely linked with the design of the public policy. During the implementation, improvements and changes to the public can be identified. Implementation and design are steps that can not be separated.

## 5. CONCLUSIONS

According to the tools used on field, here are the main conclusions:

1. Most of the participants have heard about the Sustainable Development Goals. However, in many cases the explanation does not match with the real concept. Although there is a national policy to implement the SDG, the concept has not been internalized at all levels. For some of the stakeholders that belong to the value chain is not easy to understand how the project is related to the SDG. For most of them, the SDG is a national policy and the government is the one in charge of implemented it. To correct that misunderstanding, it is important to transmit to the stakeholders the interconnection between economic, social, environmental and political aspects. As well, it is important that people understand how, since small activities and daily habits, each of us can contribute positively to fulfillment of the SDG.
2. Many of the interviewees do not know the main objective of PRICE. Some of them associate the project only with the support received with the fertilizers and pesticides. The cooperative staff knows more than the cooperative members about the project.
3. Most of the interviewees think that the main achievement of the project is the positioning of coffee in the market. However, they expect more support of the project in marketing and climate change topics.
4. Some of the cooperative staff know about IFAD. They recognize the organization as one of the founders of the washing stations, but now a day, they do not recognize the support of IFAD and its participation on PRICE. In the case of the farmers, the majority of them do not know what IFAD is. IFAD could play a closer role with the farmers. That would allow them gaining reputation and legitimacy on the field.
5. The absence of programs aimed at young people is observable in many cases for the interviewees.
6. Some of the participants have a misunderstanding about the organic production. They link the concept just with composting, considering organic elements but forgetting other ones like the green elements, the molasses, microorganisms as well as the important variables to consider (carbon, nitrogen, ph, humidity, air and temperature) (Abarrataldea, s.f.)
7. Some of the main topics the interviewees are interested in are the climate change, intercropping and business planning.

8. Regarding the access to basic services, the majority of the interviewees do not have access to gas. They use electricity, charcoal or wood as fuel to cook.

## 6. BEST PRACTICES AND FINAL RECOMENDATIONS

According with the finding and the conclusion, below are the recommendations and best practices classified by objective.

**GENERAL OBJECTIVE**

1. PRICE project is almost in the end. After 7 year of implementation, the results in the exports of coffee are notable. Nevertheless, some links in the value chain do not perceive the same results. The farmers and rural people are still facing necessities to achieve a better quality life. At the same time, the environment has been affected because of the settlement of new farmers and not appropriated practices that involve the preservation of the environment. It is important to consider in the new steps of the project, to encourage to all actor at all levels of the value chain to know the factors of the sustainable development, the causes and the consequences of any decision, not only in their economic status, but also in the environment and the communities.
2. Programs and incentives to encourage youth in the coffee value change are very important. To offer trainings to teach them about financials, how to invest the money in the long terms, benefits of the coffee, how to manage different economic activities and how to create new business are some of the topic that has to be include for that target.
3. Some of the activities that can be implemented in the next steps of the project and that can contribute to the SDG are:
    - SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. That include young people.
    - SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
    - SDG 12: Ensure sustainable consumption and production patterns
    - SDG 13: Take urgent action to combat climate change and its impacts
    - SDG 16: Promote peaceful and inclusive societies, provide access to justice and build effective, accountable and inclusive institutions
4. It is important to evaluate periodically the risks of the project to identify new and upgrade the controls and the mitigation plans, in the case to be needed. The matrix generated through this field work could be used and adapted, according with the future necessities of the project

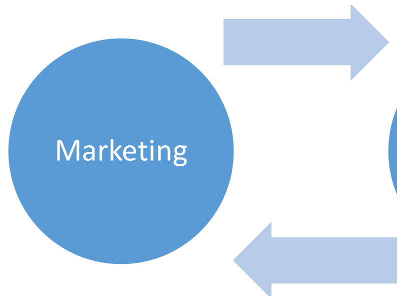
**OBJECTIVE 1 – PRODUCTION**

5. Innovation and the technology are fundamental for the project and the entire agricultural sector. As the national policy addresses, the education should be oriented in entrepreneurship, innovation and technology. The agricultural project should guarantee the movement of resources though the bridges and alliance with other countries, to adopt the newest practices in agriculture around the world and to bring innovative knowledge to the country.
6. The regulation about intercropping would be a very important step for the coffee crops. There are different information about this practice and the farmers are waiting for a unified communication by the government. Although RAB (Rwandan Agricultural Board) is working on a research, with the support of PRICE project, it is also important to consider the experiences of other countries like Hawaii and Colombia, where the intercropping is considering a good practice to improve the quality and maintain the environmental conditions.
7. One of the variable that can affect the quality of coffee is the maintenance of the equipment and infrastructure used in the coffee production. For that reason, it is important to generate preventive maintenance plans. It is also important to maintain in good conditions the infrastructure of the coffee washing station, including the tanks, pumps, canals, pools and water treatment systems. It is also important to consider the correct storage of waste, in order to avoid the generation of unwanted microorganisms.
8. Regarding with the technology and innovation that is working around the world, here are some of the examples of practices and equipment (TV Agro, 2015) used in other countries that can be considered in a future:
   - Coffee transportation using gravity and screws system instead of water: This practice allows having saving in work force and time at the same time that is taking care of the environment. The coffee is transported for a dry screw that classifies the good coffee and the bad coffee and take it to the fermentation tanks
   - Coffee fermentation without water (eco1000 technology): This new process ferments the coffee without water. The process uses stainless steel tanks. After that, the coffee is washed using 0.4 liter of water by kilo of dry parchment coffee. This process allows savings of up to 20% in time and resources and is used for big producers. (Capacity of 300.000 trees / 10.000 k). However, small producers can also use it since 500k. Scale economics should be considerate for the Rwandan case.
   - Cherries waste pit: The pit has a roof to avoid contact with water in case of rain. The cherries are transported to the pit by gravity.

**OBJECTIVE 2 – MARKETING**

9. Integrated marketing strategy: Promoting Rwanda as a brand, developing the same commercial strategy for several sectors of the economy and including the message of social and environmental responsibility in the production of coffee. For example, promoting coffee as a touristic experience including the trip to rural areas, visiting the houses and crops of the farmers and a walking through the beautiful hills of Rwanda with the amazing view of the Kivu lake and testing on of the best coffees in Africa. It is important that the Rwanda Coffee Cooperative Federation – RCCF plays a special role in the decision about coffee marketing strategies.
10. Increase revenues with the use of coffee for different proposed additional to coffee cup, for example the use in medicine, Rwandan cuisine like desserts, typical dishes, beers, ice creams, cakes and smoothies.
11. The responsible and ethic consumption trend (CEMBALO, MIGLIORE, & SCHIFANI, 2012) have started to affect the industry. The consumer has started to care about the origin of what they consume and how it is processed. Although that is a new tendency, the coffee strategy has to be aware of this changes that are affected the industries all around the world. Those trends are moving so fast due to the globalization and social networks. The decision of the consumers can affect in high level the processes that have been implemented during many years Changes in industries are not easy and they have to start with anticipation to receive the new trends with no surprise.
12. It is important for Rwanda to understand the special coffee like a different coffee with high standards of quality, traceability and that allows a revenue to the producer. Following the example of Colombia, there are three groups that determine a special coffee (Federación Nacional de Cafeteros, 2017):
    - Origin coffee: The coffee comes from an specific region recognized for its particular qualities
    - Sustainable coffee: The process has a strict supervision of the social, environmental and economic factors associated with coffee production.
    - Preparation coffee: The coffee has a special appearance because of their size and shape

    Any case, a responsible consumer can know exactly the type of coffee he is drinking due to the traceability process.
13. Marketing and production are symbiotic processes. One of the role of NAEB is to do benchmarking exercises to identify the last tendencies in coffee market, and then implement the production strategies. There should be a constant communication between both processes.




NAEB

To find the market

Benchmarking exercises

FARMERS AND COOPERATIVES

Guarantee the best coffee according with the marketing g necessities.

**OBJECTIVE 3 – COOPERATIVES**

14. Cooperatives play an important role in the coffee value chain, not only as the link between the farmer and markets, but also as a mediator, to solve problems and protector organism. The farmers feel the benefits of belonging to a cooperative. In this way, the cooperatives become an important organism for the economic and social development. It is important to guarantee and consider the training and other pedagogic methods they need to strength their economic and social capacities. They know they are stronger when they are together.
15. Trainings are important for the farmer and cooperatives. Management, financial and marketing knowledge are very important for the successful of the business. However, the perspective of the cooperatives should not be only inside the organization, they also have to think outside, in the environment. In this way, the political factor becomes important to the business and to the people. Farmers are not only assuming the role of farmers, they are also citizens with rights and duties. The public affairs and the citizen participation are fundamental part for the education. Giving training on this topics educates people to the decision making process, to be award of the political factors and to understand how the country and the world works. The more educated the people, the more developed the country.
16. Community of learning in cooperatives: The level of understanding is different between cooperatives and farmers. Some of them are more familiar with public and collective affairs. That implies that the trainings and the strategies should be different for each cooperative. Some cooperatives have more advanced procedures and knowledge that can be transmitted to other ones as a good practice. That knowledge exchange allows

strengthening ties between cooperatives and joining efforts. To create learning communities to share knowledge about agricultural, sustainable and managerial practices and to join efforts to optimize resources can be part of the exit strategy of the project. It is also important that they appropriate a knowledge management methodology and systematize it to avoid the loss of knowledge throw the year or because of the rotation of the cooperative staff, leaders and members.

17. Economies of scale between the cooperatives: To optimize resources and time is one of the principles of productivity. New technology has been created and is coming to different parts of the world. Those new technologies should be a matter for the cooperatives, not only because of the productivity, but also because allows to have a better quality of the bean to compete in the international market. It is important that Rwanda considers the merger of cooperatives to reduce costs, maximize operational capacity and increase profitability, through the use of that technology. There are costs and benefits that should be evaluated, for example the transportation of the cherries to the production center. However, is important to evaluate these factors to do not stay behind of the new technologies. Access to new technology is most difficult if each cooperative try to do it by its selves. Nevertheless, if they join efforts and resources it could be easier and profitable. Some cooperatives have in their strategic long plan the acquisition of equipment. That decision should be evaluated carefully taking in to account the installed capacity, the average production for season, the costs, and the benefits of having the equipment instead of share it with another cooperative using a scale economic strategy.

## 7. FINAL CONSIDERATION AND NEXT STEPS

Below are some consideration and recommendation to continue working during the next steps of the fieldwork:

1. Focus on education, entrepreneurship and innovation: Many of the agricultural public policies in Rwanda have an innovative approach. For example, ICT4RAg 2016-2020 that is aligned with the National ICT Strategy, SMART Rwanda master plan (SRMP 2016 – 2020) SRMP. It is important to transmit that knowledge to the cooperatives and farmers, to promote the creation of innovative business and practices. For young people, that topic should become necessary in urban and rural areas. The creation of new business is one of the most important tools for the development of a country. They become an incentive for foreign investment and tourism for foreigners, which leaves resources to the country and generates development.

2. Sometimes, the cooperatives focus their effort in the certification, and forget the most important: The quality. In some cases, the international buyer prefers the quality above the number of certification they have. For that reason, it is important do not forget the focus in the quality. The certification process demands a lot of time and money. It is important to remember that the certification is just a paper, but the real quality is on the field and the crops.
3. The outcomes about the trainings are most related to the number of trainees, but not to the impact. The quantity of the trainees is important but also the quality. To include a qualitative outcome that allows understanding the level of the impact of the training can complement the measure of the indicator.
4. Zero paper policy and document management policy: To evaluate the possibility of having an online repository with the public information of the project in a single portal, using open data protocols. It allows centralizing the information, eliminating reprocessing, eliminating time in requesting information that is already public and accessibility to the project staff. Also, contributes with a zero paper policy. It is important to define the policy for the online document including the roles, responsibilities, the protocols, and the main activities to take into account for the users. For the documents that have to be printed, it is recommended to define a printed document management policy that includes the conditions of storage and traceability.

In general, the result of the fieldwork are highly satisfactory and the work schedule has been completed. However, it is important to bring some elements to consider in the results:

a. Due to the number of the beneficiaries is huge, around 500.000 farmers, the sample for the surveys and questionnaires had to be limited. The samples of the cooperatives to be visited were selected with the support of the Project manager. The farmers where selected considering the gender and age variables.
b. The methodology used in this fieldwork (surveys, interviews and other tools) is scalable and replicable. That means that can be applied to the next steps of the project as well as in other projects.
c. The names of the interviewees have been hidden for this propose; in this sense, the results and answer are presented in anonymous ways. The answer and the name are in custody of the author of this fieldwork report.

## 8. ANNEXES

0. Activity planning
0. Project Charter
1. Coffee cooperatives check list
2. SDG impact analysis
3. Risks analysis
4. Interview analysis
5. Coffee business analysis
6. Project objectives analysis
7. Poster Rwanda field work

## Annex 0. ACTIVITY PLANNING FOR THE FIELD WORK IN RWANDA

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | STEPS |
|---|---|---|---|---|---|---|---|---|
| Junio | | | | 14 | 15 | 16 | 17 | 0. Travel |
| | 18<br>IFAD Workshop | 19<br>IFAD Workshop | 20<br>IFAD Workshop | 21<br>Meeting the team SPIU and NAEB | 22<br>Meeting the team SPIU and NAEB | 23 | 24 | 1. Recognition of the country and key team work of the project |
| | 25<br>Collecting information | 26<br>*National Agrishow<br>* Collecting information | 27<br>*National Agrishow<br>* Collecting information | 28<br>*National Agrishow<br>* Collecting information | 29<br>*National Agrishow<br>* Collecting information | 30 | 1 | 2. Collect existing information |
| Julio | 2<br>* National Agrishow | 3<br>* National Agrishow<br>* Collecting information | 4 | 5<br>* Documents review | 6<br>* Interviews (PRICE team and NAEB)<br>* Documents review | 7 | 8 | 3. Identify gaps in information and collect it and preparing the methodology for the rural fieldwork. |
| | 9<br>* Documents review | 10<br>* Interviews (PRICE team) | 11<br>* Interviews (PRICE team) | 12<br>* Documents review | 13<br>* Preparing field work tools and methodology | 14 | 15 | |
| | 16<br>* Preparing field work tools and methodology | 17<br>* Preparing field work tools and methodology | 18<br>* Preparing field work tools and methodology | 19<br>* Interviews (PRICE team and NAEB)<br>* Documents review | 20<br>* Preparing field work tools and methodology | 21 | 22 | |
| | 23<br>Fieldwork – rural area | 24<br>Fieldwork – rural area | 25<br>First progress report | 26<br>Fieldwork – rural area | 27<br>Fieldwork – rural area | 28<br>Fieldwork – rural area | 29<br>Fieldwork – rural area | 5. Fieldwork in rural area and data collection |
| Agosto | 30<br>Fieldwork – rural area | 31<br>Fieldwork – rural area | 1<br>Fieldwork – rural area | 2<br>Fieldwork – rural area | 3<br>Fieldwork – rural area | 4<br>Fieldwork – rural area | 5 | |
| | 6<br>* Analyze information collected | 7<br>* Analyze information collected | 8<br>* Analyze information collected | 9<br>* Analyze information collected | 10<br>* Interviews (PRICE team and NAEB) | 11 | 12 | |
| | 13<br>* Interviews (PRICE team and NAEB) | 14<br>* Interviews (PRICE team and NAEB) | 15 | 16<br>* Interviews (PRICE team and NAEB) | 17<br>* Interviews (PRICE team and NAEB) | 18 | 19 | |
| | 20<br>* Proposals and recommendations | 21<br>* Proposals and recommendations | 22<br>* Proposals and recommendations | 23<br>* Proposals and recommendations | 24<br>* Proposals and recommendations | 25 | 26 | 6. Generate proposals and results |
| | 27<br>* Proposals and recommendations | 28<br>* Proposals and recommendations | 29<br>* Proposals and recommendations | 30<br>* Proposals and recommendations | 31<br>* Proposals and recommendations | 1 | 2 | |
| September | 3<br>* Proposals and recommendations | 4<br>Final report | 5 | 6<br>Feedback | 7<br>End of the practice | | | 7. Final document of results |

## ANNEX 0. ACTIVITY PLANNING FOR THE FIELD WORK IN RWANDA – RURAL DISTRICTS

| DAY | DATE | DEPARTURE | ARRIVAL | CORE ACTIVITIES | LOGICTIC ACTIVITIES | CONTACT IN FIELD |
|---|---|---|---|---|---|---|
| Monday | July 23 | Kigali | Karongi | * Meeting and interview with the director of the Cooperative in Karongi to have background and strategic information.<br>* Interview with the Agronomist /Expert in Karongi. Environmental aspects.<br>* Review of the questionnaire for the farmers with the translator. | * Transport from Kigali to Karongi<br>* Transport from Karongi to the field<br>* Transport from the field to Karongi<br>* Stay in Karongi | * Director of the cooperative in Karongi<br>* Agronomist / Expert In Karongi<br>* SPIU Staff (PRICE, PASP OR RDDP) in Karongi.<br>* Translator |
| Tuesday | July 24 | Karongi | Karongi | * Observation activity in field and the coffee crops<br>* Visit the Washing station of the Cooperative<br>* Interview with the farmers in Karongi<br>* Interview with other leaders of the cooperative in Karongi | * Transport from Karongi to the field<br>* Transport from the field to Karongi<br>* Stay in Karongi | |
| Wednesday | July 25 | Karongi | Karongi | * Visit the Dry Mill of the Cooperative<br>* Interview with the farmers in Karongi<br>* Interview with other leaders of the cooperative in Karongi | * Transport from Karongi to the field<br>* Transport from the field to Karongi<br>* Stay in Karongi | |
| Thursday | July 26 | Karongi | Rutsiro | * Meeting and interview with the director of the Cooperative in Rutsiro to have background and strategic information.<br>* Interview with the Agronomist /Expert in Rutsiro. Environmental aspects.<br>* Review of the questionnaire for the farmers with the translator. | * Transport from Karongi to Rutsiro<br>* Transport from Rutsiro to the field<br>* Transport from the field to Rutsiro<br>* Stay in Karongi | * Director of the cooperative in Rutsiro<br>* Agronomist / Expert In Rutsiro<br>* SPIU Staff (PRICE, PASP OR RDDP) in Rutsiro<br>* Translator |
| Friday | July 27 | Rutsiro | Rutsiro | * Observation activity in field and the coffee crops<br>* Rout through the coffee process<br>* Interview with the farmers in Rutsiro<br>* Interview with other leaders of the cooperative in Rutsiro | * Transport from Rutsiro to the field<br>* Transport from the field to Rutsiro<br>* Stay in Karongi | |
| Monday | July 30 | Huye | Huye | * Meeting and interview with the director of the Cooperative in Huye to have background and strategic information.<br>* Interview with the Agronomist /Expert in Huye. Environmental aspects.<br>* Review of the questionnaire for the farmers with the translator. | * Transport from Huye to the field<br>* Transport from the field to Huye<br>* Stay in Huye | * Director of the cooperative in Huye<br>* Agronomist / Expert In Huye<br>* SPIU Staff (PRICE, PASP OR RDDP) in Huye<br>* Translator |
| Tuesday | July 31 | Huye | Huye | * Observation activity in field and the coffee crops<br>* Rout through the coffee process<br>* Interview with the farmers in Rutsiro<br>* Interview with other leaders of the cooperative in Rutsiro | * Transport from Huye to the field<br>* Transport from the field to Huye<br>* Stay in Huye | |
| Wednesday | August 1 | Huye | Huye | * Observation activity in field and the coffee crops<br>* Rout through the coffee process<br>* Interview with the farmers in Rutsiro<br>* Interview with other leaders of the cooperative in Rutsiro | * Transport from Huye to the field<br>* Transport from the field to Huye<br>* Stay in Huye | |
| Thursday | August 2 | Huye | Nyamagabe | * Meeting and interview with the director of the Cooperative in Nyamagabe to have background and strategic information.<br>* Interview with the Agronomist /Expert in Nyamagabe. Environmental aspects.<br>* Review of the questionnaire for the farmers with the translator. | *Transport from Huye to Nyamagabe<br>* Transport from Nyamagabe to the field<br>* Transport from the field to Nyamagabe<br>* Stay in Nyamagabe | * Director of the cooperative in Nyamagabe<br>* Agronomist / Expert In Nyamagabe<br>* SPIU Staff (PRICE, PASP OR RDDP) in Nyamagabe<br>* Translator |
| Friday | August 3 | Nyamagabe | Nyamagabe | * Observation activity in field and the coffee crops<br>* Rout through the coffee process<br>* Interview with the farmers in Nyamagabe<br>* Interview with other leaders of the cooperative in Nyamagabe | * Transport from Nyamagabe to the field<br>* Transport from the field to Nyamagabe<br>* Stay in Nyamagabe | |

## ANNEX 0. PROJECT CHARTER

| | |
|---|---|
| ***Project name*** | *PRICE - Project for rural income through exports* |
| ***Partners*** | MINAGRI - Ministry of Agriculture and animal resources of Rwanda |
| ***Another Partners*** | IFAD – International found for the agricultural development |
| ***Duration*** | 3 months |
| ***Geographic coverage*** | Rwanda |
| ***Number of students*** | 1 |
| ***SDG most relevant to the field work*** | No 1. No poverty |
| ***Results/Products*** | Results of the contribution of the project to the SDG |
| | Risk matrix of the value chain |
| | Proposal to improve the coffee value chains |
| | Good practices identified in coffee value chain |
| | Public policy recommendations to influence coffee value chain |
| | Potential markets and key aspects for a trade campaign. |
| | Strategy to link the new environmental stakeholders in the value chains. |
| ***Next activity plan*** | The fieldwork will be executed according to the *Annex b. Activity Planning fieldwork in Rwanda*. The next activities will be:<br>• Visit to rural districts: Rutsiro, Karongi, Nyamagabe and Huye<br>• Immersion and observation process<br>• Surveys with the famers and cooperative managers<br>• Interviews with the famers and cooperative managers<br>• Analysis of the data collected<br>• Final interviews with SPIU and NAEB staff, project manager in Kigali.<br>• Final report will be send at the end of the practice; it is first week on September. |
| ***Date*** | June 12 – September 7 of 2018 |

| *Beneficiaries* | *Direct* | *Indirect* | *Impacto on the field* |
|---|---|---|---|
| People who is receiving the benefits of the Project. | Farmers involved in coffee value chain | Coffee Cooperatives<br><br>Stakeholders of the coffee value chain | • To identify the general perceptions of the farmers about the project results.<br>• To identify the gaps and latent needs for farmers and coffee cooperatives.<br>• To generate proposals that respond to the needs of farmers and cooperatives.<br>• To identify variables and environmental impacts generated by the coffee value chain |

## 1. FRAMEWORK

### 1.1 RESEARCH PLAN

- General context about Rwanda
- Understanding the project, the general objectives and principal results for the last years
- Designing of the strategy framework
- Presentation and approval of the research plan

### 1.2 UNDERSTANDING OF THE TERRITORY

- Arriving to the country and adaptation to the Rwandan culture.
- First approach with the project team at SPIU and NAEB.
- To collect existing information about the project.
- To attend to the different workshops and agricultural exhibitions related to the project.

### 1.3 FIELDWORK PLANNING IN RURAL AREA

- To identify the general framework of the agricultural sector and the coffee value chain.
- To choose the rural districts to visit and the target group in each one.
- To design the methodologies and tools to apply in the field: surveys, interviews and observation methods.

**Beneficiaries:** The beneficiaries of the Project are farmers that develop agriculture activities in one of the selected value chains: Coffee, tea, sericulture and horticulture. However, the fieldwork is focused on the coffee value chain.

**Geographic coverage:** The rural fieldwork is developed in four districts of Rwanda where the coffee is cultivated. The target group to apply the surveys and interview in each district is 1. Farmers: At least one women, one men and one in each district and 2. Cooperatives: At least the manager and one leader of the cooperative. The marketing strategy and management of the project are analyzed in Kigali, with the MINAGRI and NAEB staff.

## 2. IMPLEMENTATION

a. **Stage 0: Field prospection:** In this phase, the research plan was designed. It includes the general description of the selected project, the general diagnosis of the country in which the project is developed, the objective of the fieldwork and the strategic framework. The documents about the project, like the progress report, were an important element to know the progress of the project and in that way to propose the plan of activities during the field work.

b. **Stage 1. Context analysis and validation of the first approach:** During this stage, the following activities were carried out: The adaptation process to the country, the on-site recognition of the country, the validation of the country background, the first approach with the project team, the collection of existing information related to the agricultural sector with special emphasis on the coffee value chain, the validation of information with colleagues in MINAGRI and other partners, the formulation of the activity plan for the fieldwork in the four chosen districts and the different tools and methodologies to be applied with the target group in each district.

c. **Stage 2. Fieldwork:** The collection of primary data is carried out through the instruments and methodologies applied to the target group in each rural district: farmers engaged in coffee production and coffee cooperatives. These are the tools used: Immersion in field and direct observation, surveys with the farmers and strategic actors of the project and interviews with the farmers and strategic actors of the project. Each methodology is associated with a project objective and one of the pillars of the strategic framework (Resources, Knowledge, Partnerships and Public Policy)

d. **Stage 3. Analysis of results:** After collecting the information in the field, the results are analyzed through consolidation, comparison and are classified by district, gender, project objective and strategic pillar. In this way, conclusions and recommendations are generated to be taken into account in the following phases of the project and to be replicated in other future projects.

e. **Stage 4. Closing: Results:** The results are delivered to the Project manager in the SPIU (Supporting project implementation unit) with all the annexes and documentation generated throughout the fieldwork. He gives the feedback according to the results and the general experience during the three months of the fieldwork.

## 3. STRATEGY

The conceptual framework has in its center de Value Chain Sustainability. The value chains will have two focuses, the youth and the gender. To achieve that, four pillars integrate the conceptual framework: (Resources, Knowledge, Partnerships, and Public Policy) that cross transversally the project objectives. In that way, the field practicum will incorporate activities to guarantee resources, sharing knowledge, building partnerships, and evaluate public policy to achieve the project objectives.

The transverse axis of the framework is given by the Sustainable Development Goals – SDG. It means that the practicum should include the vision of the SGD to incorporate it in every activity, analysis and result generated under the project.

1. ***Resources:*** It refers to the economic, financial and technological resources that are mobilized to support the different activities involved in the value chain***.***

2. ***Knowledge:*** It refers to the knowledge management that support the development of the value chain. It includes the trainings and the best practices transmitted under the project.

3. ***Partnerships:*** It refers to the current stakeholders as well as potential actors that has an important role in the different levels of the value chain.

4. ***Public policy:*** It refers to the public policy factors that influence the agricultural sector, the marketing strategy and international trade for coffee exports and the associativity process in the coffee value chain.

**LOGIC FRAMEWORK**

**PROJECT GENERAL OBJECTIVE**

| |
|---|
| Achieve sustainable increased returns to farmers from key export-driven agricultural value chains. |

**PROJECT SPECIFIC OBJECTIVES**

<table>
<tr><th colspan="5">FIELDWORK - RWANDA</th></tr>
<tr><th>PROJECT OBJECTIVES</th><th>PILLAR</th><th>FIELD WORK OBJETIVES</th><th>RESULTS</th><th>ACTIVITIES</th></tr>
<tr><td rowspan="2">0. To achieve sustainable increased returns to farmers from key export-driven agricultural value chains</td><td>KN</td><td rowspan="2">A. Analyze SD factor in CVC<br>B. Generate recommendation to achieve the project results<br>C. Identify good practices</td><td>Contribution of the project to the DGD</td><td>* Identify the impacted and contribution of the PRICE to the SDG and targets.</td></tr>
<tr><td>KN</td><td>Risk matrix including mitigation plans</td><td>* Identify the risks throw the coffee value chain</td></tr>
<tr><td rowspan="3">1. Increased volumes and quality of production</td><td>RE</td><td rowspan="3">A. Analyze SD factor in CVC<br>B. Generate recommendation to achieve the project results<br>C. Identify good practices</td><td>Proposal to improve the coffee value chains</td><td>* Identify the process and technical level of coffee value chain though observation methods and interviews with farmers and stakeholders.<br>* Identify new technical know-how that could be applied in the coffee value chains (organic production, innovative techniques, friendly environmental practices).</td></tr>
<tr><td>KN</td><td>Good practices identified</td><td>* Use inputs and better agricultural practices (Organic supplies, protection of land, rivers and ecosystems)<br>* Study the good practices of Colombian cases</td></tr>
<tr><td>PP</td><td>Public policy recommendations to influence coffee value chain</td><td>* Identify opportunities to strengthen agricultural productivity, especially in coffee value chains</td></tr>
</table>

| FIELDWORK - RWANDA | | | | |
|---|---|---|---|---|
| **PROJECT OBJECTIVES** | PILLAR | **FIELD WORK OBJETIVES** | **RESULTS** | **ACTIVITIES** |
| 2. Improved marketing | **KN** | A. Analyze SD factor in CVC<br>B. Generate recommendation to achieve the project results<br>C. Identify good practices | Best practices to spread the coffee market in Rwanda and worldwide. | * Identify the countries that demand more coffee and could be potential market.<br>* Identify the countries, which Rwanda has the largest trade market. |
| | **PA** | | Potential markets and key aspects for a trade campaign. | * Identify the key aspects for a foreign trade campaign |
| 3. Strengthen producer cooperatives as full-fledged economic partners of the private sector | **KN** | A. Analyze SD factor in CVC<br>B. Generate recommendation to achieve the project results<br>C. Identify good practices | * Results of the effectiveness of the KM | * Evaluate the effectiveness of KM (Intensive care in capacity building, rehabilitated management structure, a better leadership and governance systems) and identify new opportunities. |
| | **PA** | | * Strategy to link the new environmental stakeholders in the value chains. | * Identify new environmental stakeholders<br>* Design a stakeholders network to the value chains. |

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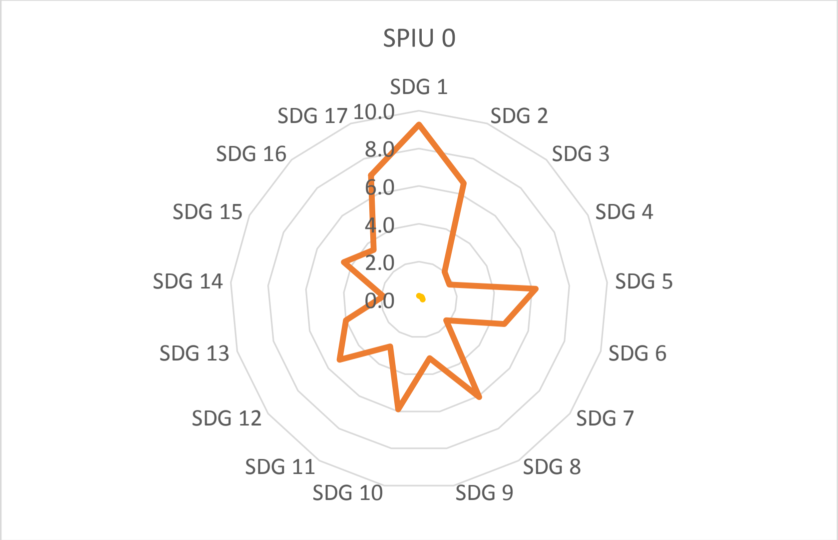
## ANNEX 1. COFFEE COOPERATIVES CHECKLIST

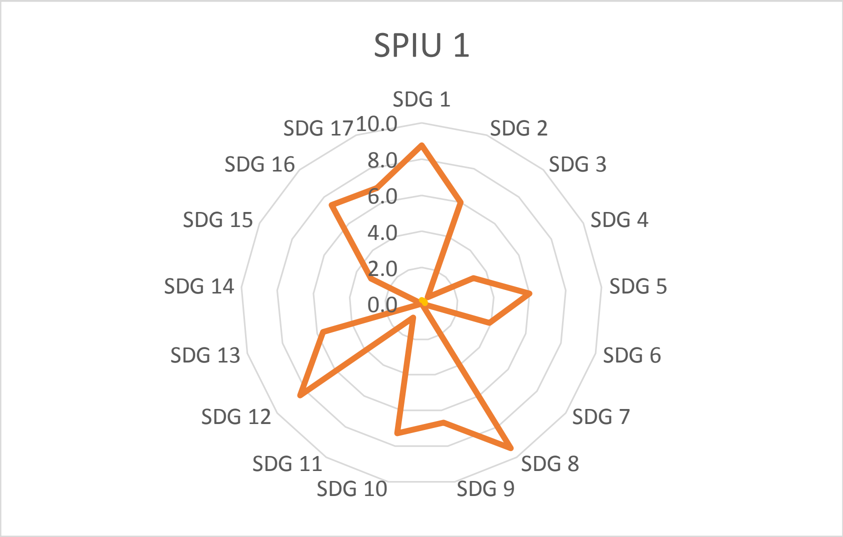
Click here to consult the Coffee cooperatives checklist in Excel document

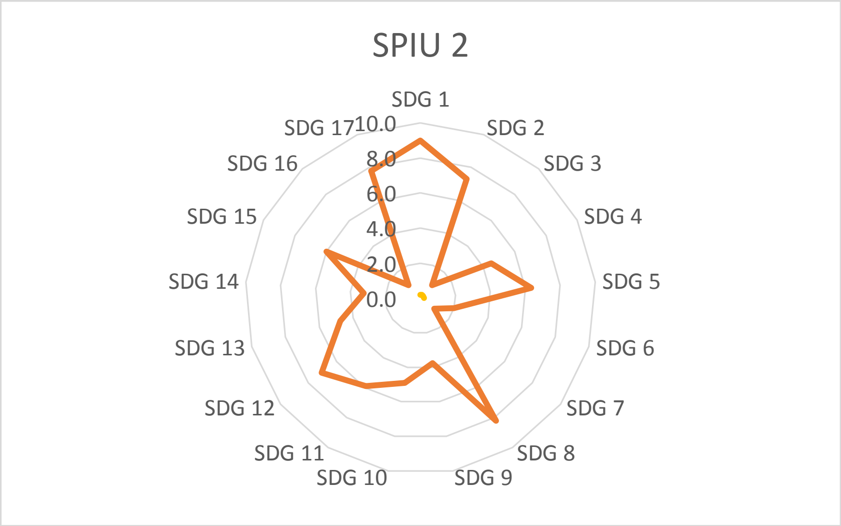
ANNEX 2. SDG IMPACT ANALYSIS

[Click here to consult the SDG impact analysis in Excel document]

INDIVIDUAL RESULTS

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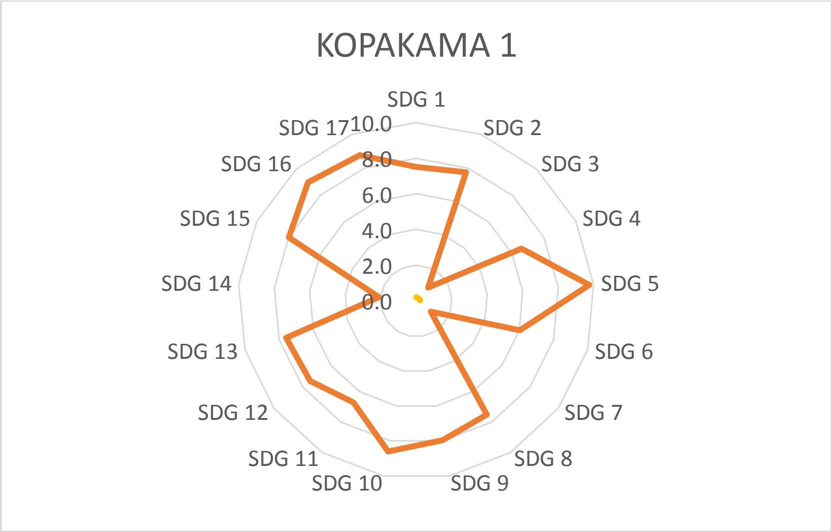
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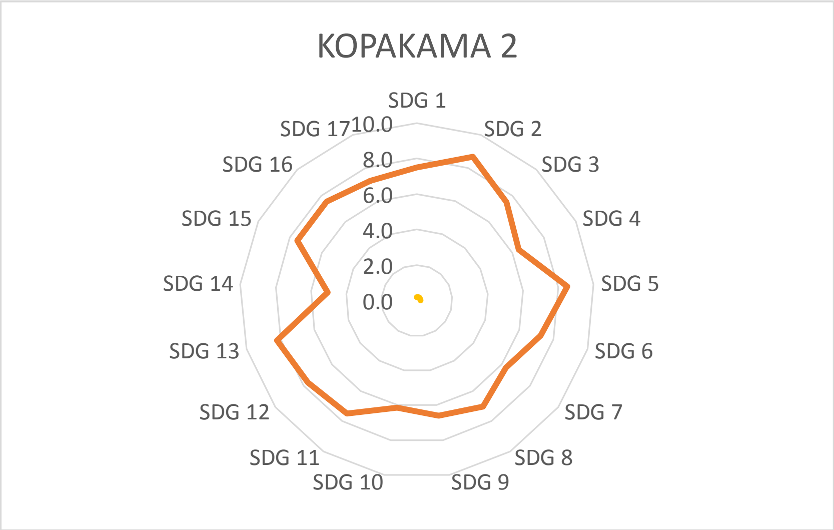
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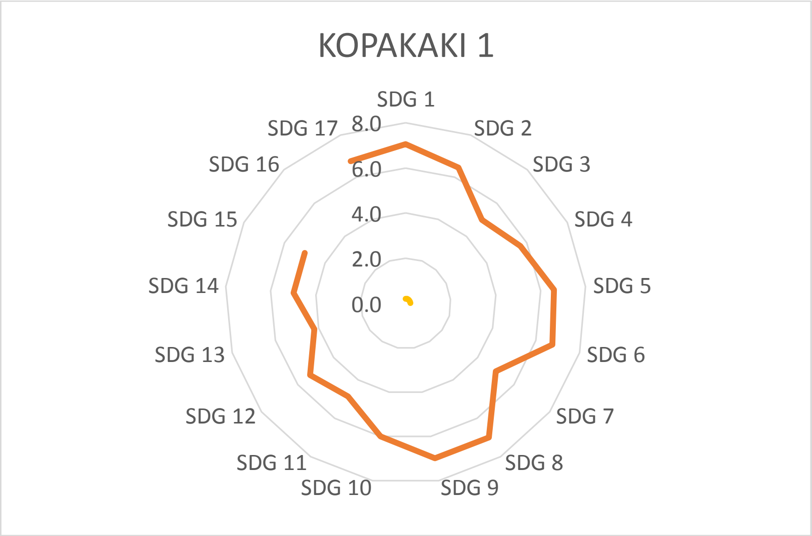
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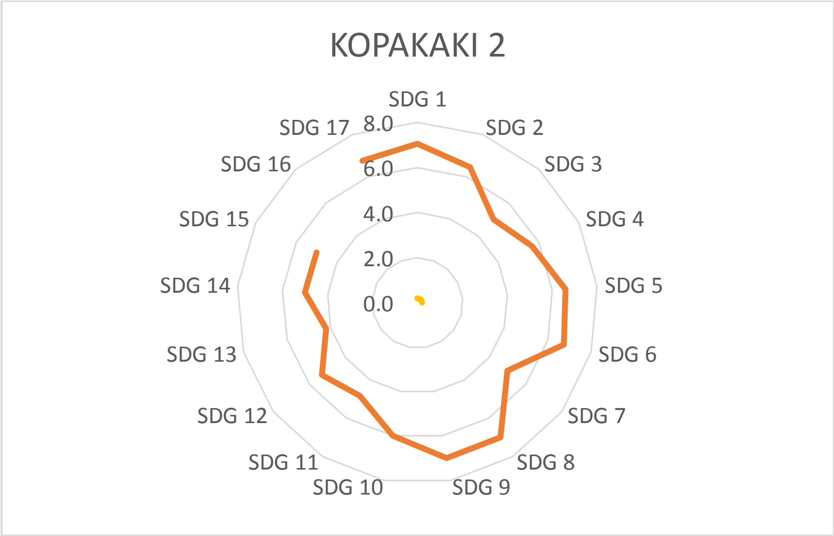
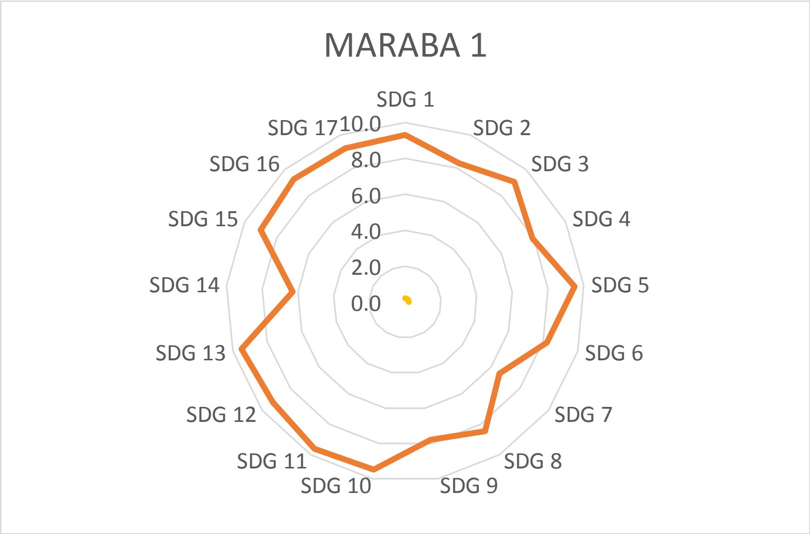
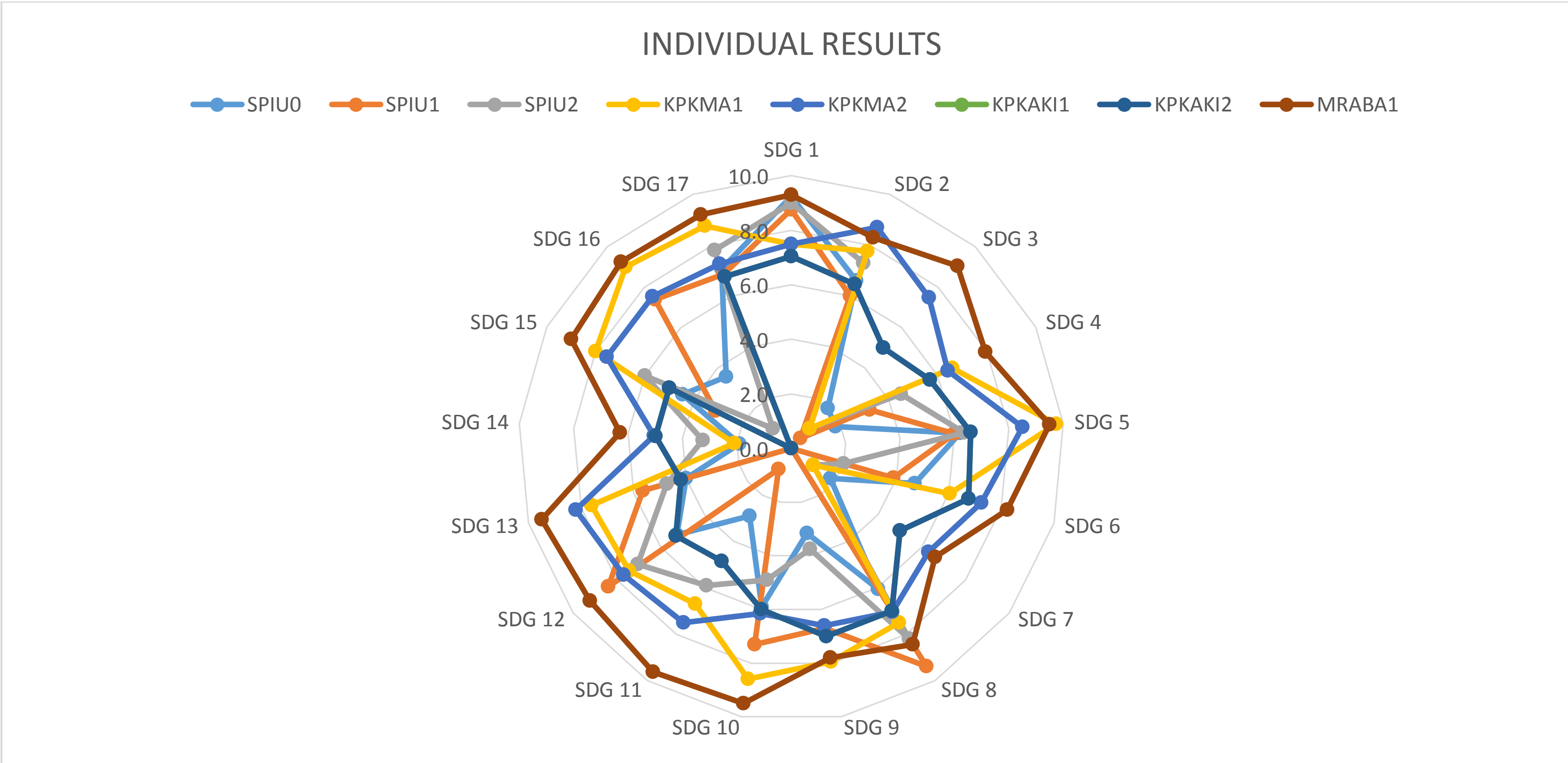



According to the previous results, we can differentiate two different kind of charts. The first four has a star shape, and the last four has a ring shape. The first results could be based on a narrow, sharpie and more argumentative analysis, according to the real and direct impact to the project to the SDG. Some of the SDG have high score and other low. It does not mean a bad result. What it means is that the project have a specific focus and scope, and it is putting the effort in specific objectives and activities.

The results of the ring shape results show a more global and transversal impact of the project to all the SDG. That can be based on the idea that the project is trying to put efforts in all the SDG.

To have a unique result for the project, the results were consolidated and are presented in the following chart:



INDIVIDUAL RESULTS
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SPIU2
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KPKAKI1
KPKAKI2
MRABA1
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SDG 2
SDG 3
SDG 4
SDG 5
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## ANNEX 3. RISKS ANALYSIS

Click here to consult the Risks analysis in Excel document

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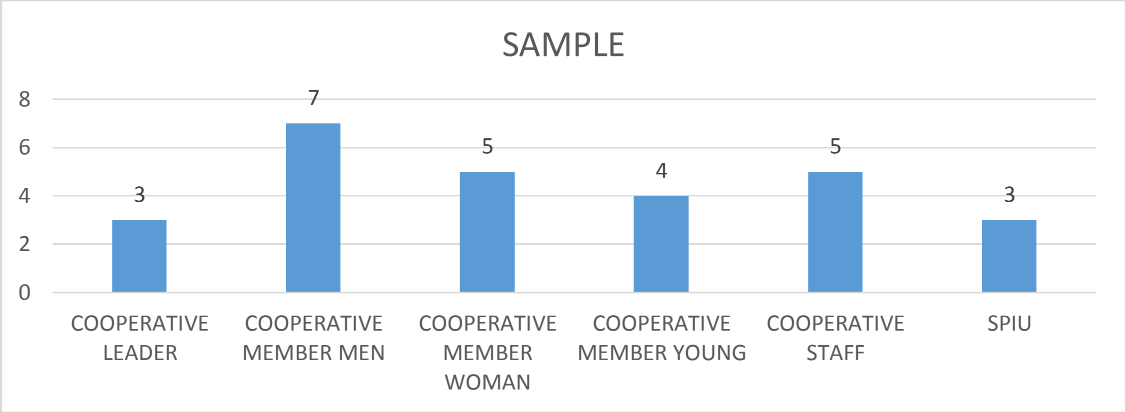
## ANNEX 4. INTERVIEW ANALYSIS

Click here to consult the Interview analysis in Excel document

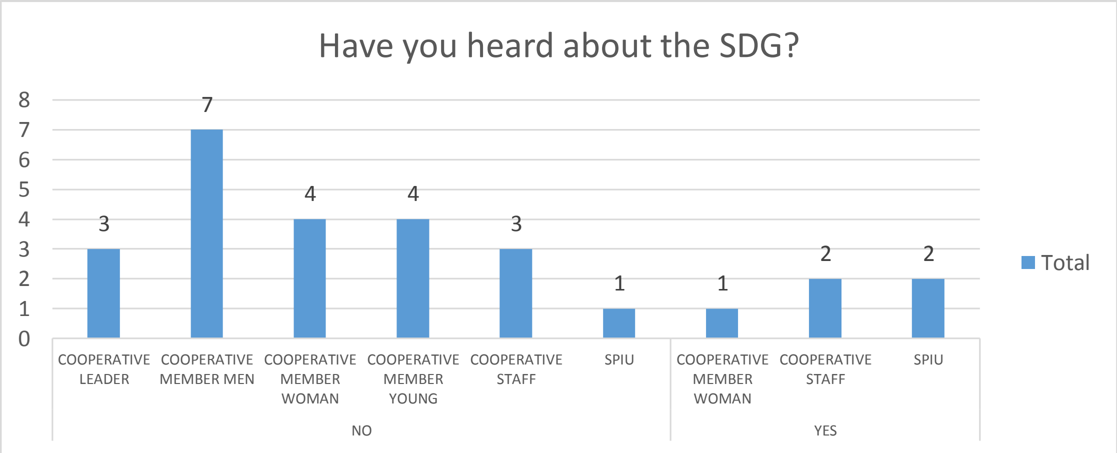
**0. The interview was conducted in the districts of Karongi, Rutsiro, Huye, Nyamagabe and Kigali with 6 different categories:**

| ROLE | # |
|---|---|
| COOPERATIVE LEADER | 3 |
| COOPERATIVE MEMBER MEN | 7 |
| COOPERATIVE MEMBER WOMAN | 5 |
| COOPERATIVE MEMBER YOUNG | 4 |
| COOPERATIVE STAFF | 5 |
| SPIU | 3 |
| **Total general** | **27** |




**1. Have you heard about the SDG?**

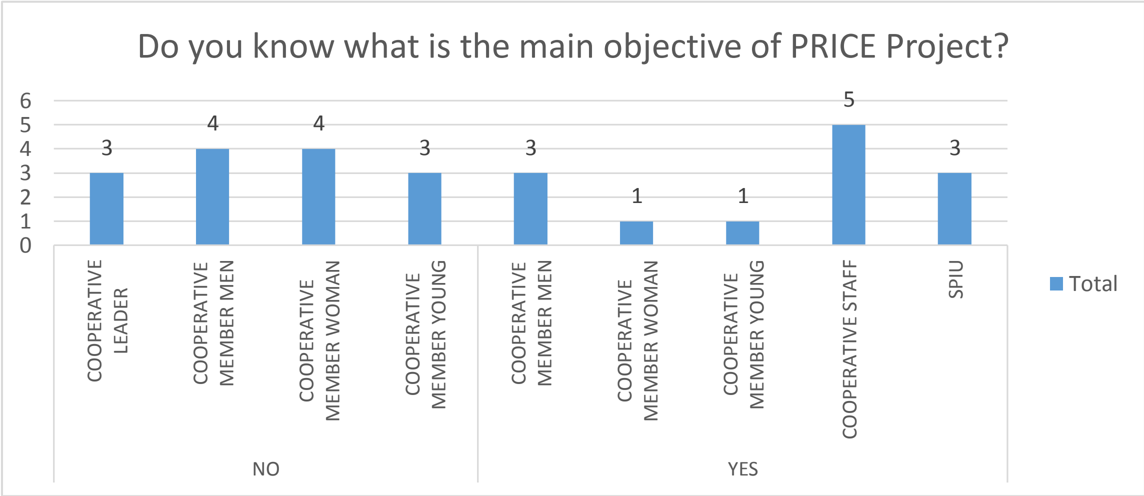
| SDG | # |
|---|---|
| **NO** | **22** |
| COOPERATIVE LEADER | 3 |
| COOPERATIVE MEMBER MEN | 7 |
| COOPERATIVE MEMBER WOMAN | 4 |
| COOPERATIVE MEMBER YOUNG | 4 |
| COOPERATIVE STAFF | 3 |
| SPIU | 1 |
| **YES** | **5** |
| COOPERATIVE MEMBER WOMAN | 1 |
| COOPERATIVE STAFF | 2 |
| SPIU | 2 |
| **Total general** | **27** |



The **18.5%** of the sample knows what the SDG (Sustainable Development Goals) are. In many cases, the answer were positive, but when the interviewed explained the meaning of the SDG, it was not related with the concept. Although the higher levels have the concept clear, it is important to make a pedagogical work transmitting the concept, the factors and the impact and the benefits of the SDG to the cooperatives and the farmers.

**2. Do you know what is the main objective of PRICE Project?**

| PRICE | # |
|---|---|
| **NO** | **14** |
| COOPERATIVE LEADER | 3 |
| COOPERATIVE MEMBER MEN | 4 |
| COOPERATIVE MEMBER WOMAN | 4 |
| COOPERATIVE MEMBER YOUNG | 3 |
| **YES** | **13** |
| COOPERATIVE MEMBER MEN | 3 |
| COOPERATIVE MEMBER WOMAN | 1 |
| COOPERATIVE MEMBER YOUNG | 1 |
| COOPERATIVE STAFF | 5 |
| SPIU | 3 |
| **Total general** | **27** |

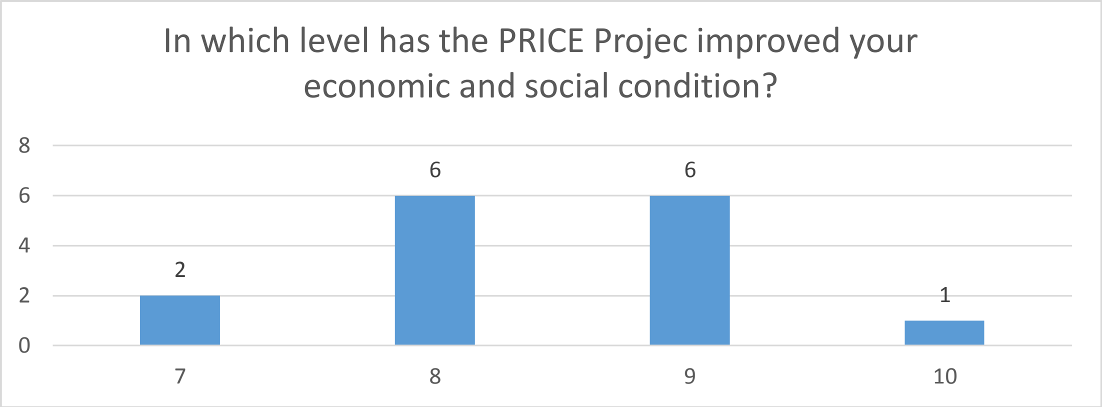



The **50%** of the sample does not the main objective the PRICE project. The **100 %** of the cooperative staff know it. This is a good point considering that the direct impact of the project is through the cooperatives. However, it is important that farmers know about the project and recognize the direct and indirect impact. This is important for the governance and the legitimacy of the government and the sponsors of the project.

**3. In which level has the PRICE Project improved your economic and social condition?**

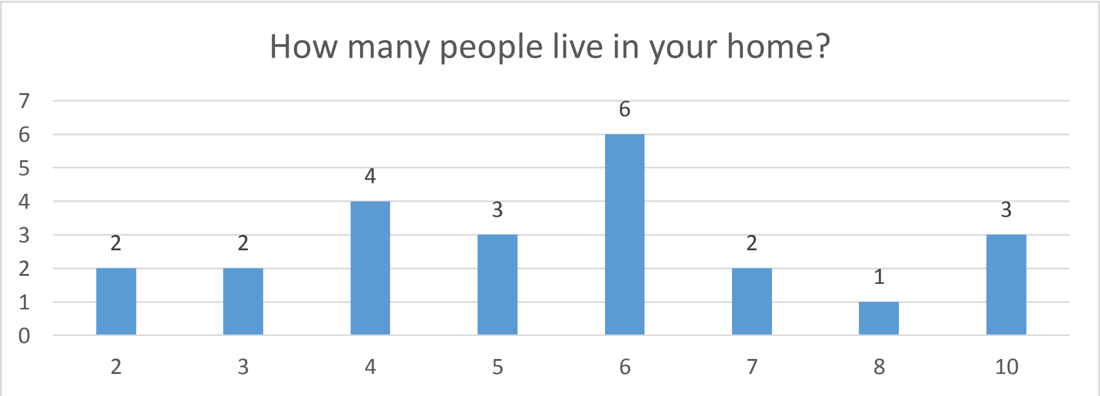
For those one who know about PROCE project, the average of the score about the impact of PRICE project in their economic and social condition is **8.4 out of 10.** The minimum result was 7 and the maximum was 10. That means that the deviation of the results is low.

| PRICE | # |
|---|---|
| 7 | 2 |
| 8 | 6 |
| 9 | 6 |
| 10 | 1 |
| **Total general** | **15** |
| | |
| **Average** | **8,4** |




#### 4. How many people live in your home?

| People at home | # |
|---|---|
| 2 | 2 |
| 3 | 2 |
| 4 | 4 |
| 5 | 3 |
| 6 | 6 |
| 7 | 2 |
| 8 | 1 |
| 10 | 3 |
| **Total general** | **23** |

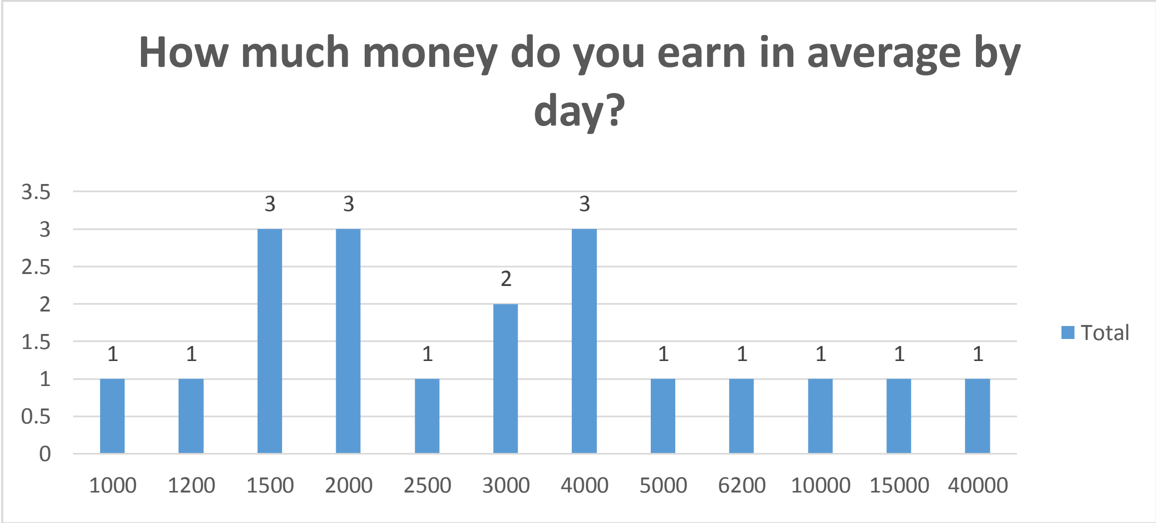



The arithmetic mean is **5.6**, that means that the tendency of children in family farmers is between 5 and 6 people at home.

#### 5. How much money do you earn in average by day?

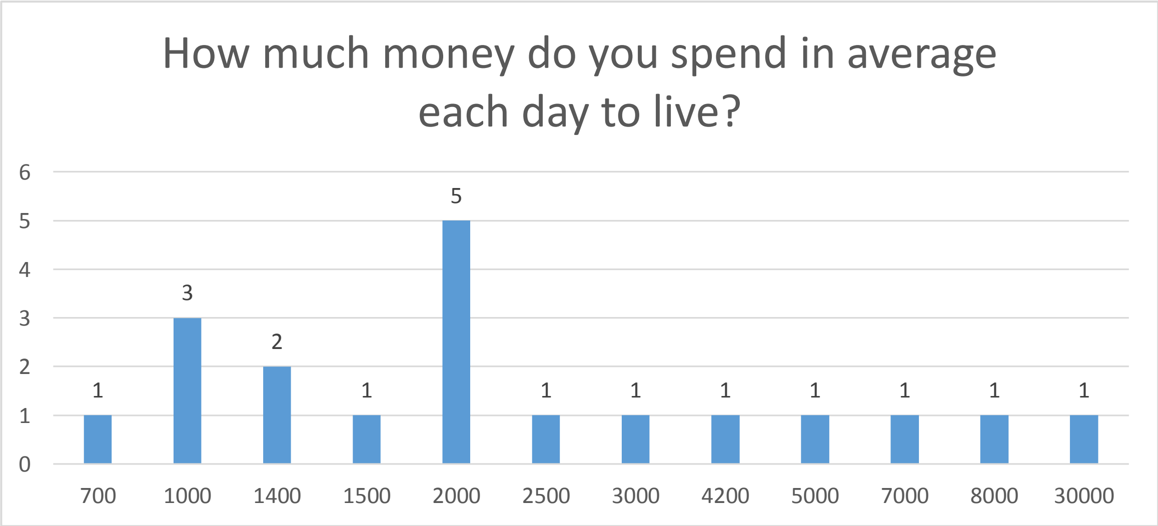
The arithmetic mean is 5.757 RF, which means that in average the interviewed earn 5.757. However, the standard deviation is high, that means that between the lowest value, 1.000 RF, and the highest, 40.000 RF, there is a big gap. Removing the higher value, the means is **3.855 RF** by day.

| Earns | # |
|---|---|
| 1000 | 1 |
| 1200 | 1 |
| 1500 | 3 |
| 2000 | 3 |
| 2500 | 1 |
| 3000 | 2 |
| 4000 | 3 |
| 5000 | 1 |
| 6200 | 1 |
| 10000 | 1 |
| 15000 | 1 |
| 40000 | 1 |
| **Total general** | **19** |




**6. How much money do you spend in average each day to live?**

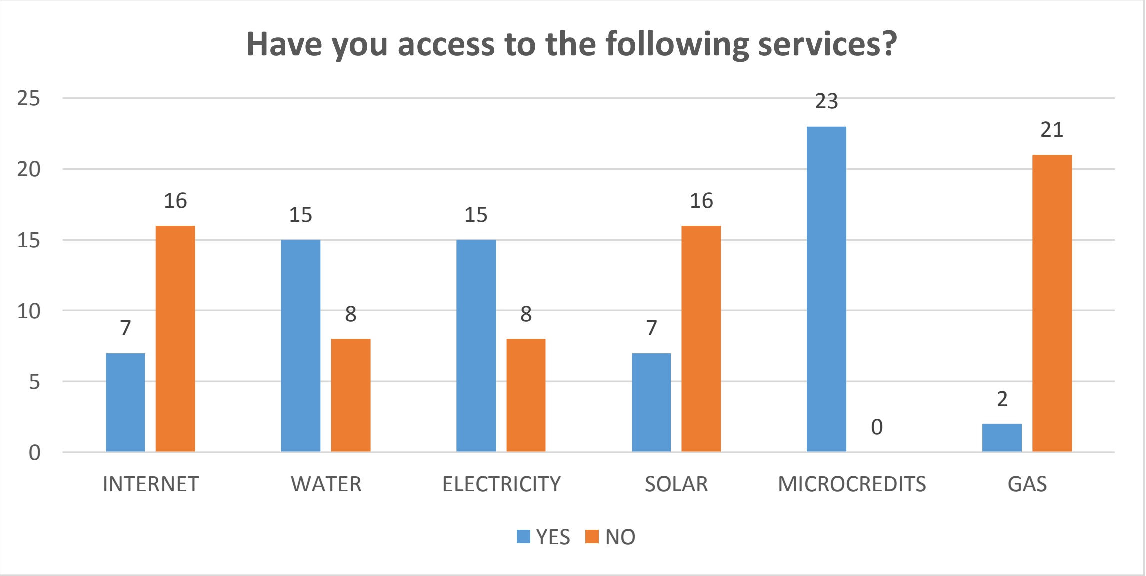
| Expenses | # |
|---|---|
| 700 | 1 |
| 1000 | 3 |
| 1400 | 2 |
| 1500 | 1 |
| 2000 | 5 |
| 2500 | 1 |
| 3000 | 1 |
| 4200 | 1 |
| 5000 | 1 |
| 7000 | 1 |
| 8000 | 1 |
| 30000 | 1 |
| **Total general** | **19** |



The arithmetic mean is 4.089 RF, which means that in average the interviewed spend 4.089 RF. However, the standard deviation is high, that means that between the lowest value, 700 RF, and the highest, 30.000 RF, there is a big gap. Removing the higher value, the means is **2.650 RF** by day. The difference between the earnings and the expenses is **1.205 RF**.

**7. Have you access to the following basic services?**

| | YES | NO |
|---|---|---|
| INTERNET | 7 | 16 |
| WATER | 15 | 8 |
| ELECTRICITY | 15 | 8 |
| SOLAR | 7 | 16 |
| MICROCREDITS | 23 | 0 |
| GAS | 2 | 21 |



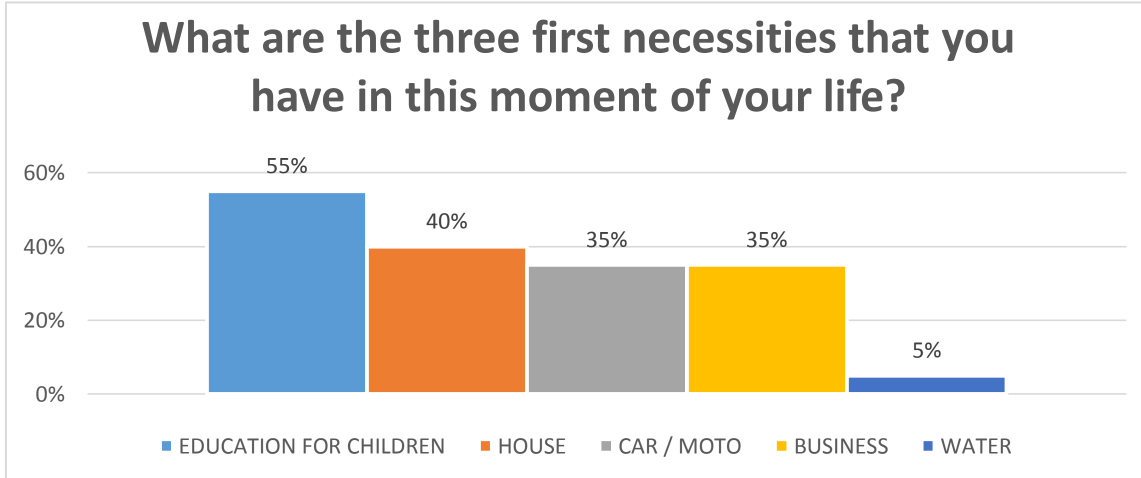

The **100%** of the interviewed has access to microcredits. The first source they use is the loans provided by the group they belong inside the cooperative. The second one is the loans directly with the cooperative and the third one is the loans of the banks.

The **91%** of the interviewed does not access to gas. They use charcoal and wood to cook.

The water and electricity are first necessity services. However, **34.5%** of the interviewed does not access to them. In the case of water, they can access to it by going to a water collector center, where they can buy or have it by free. In some cases, they don´t have electricity but have solar panels.

**8. What are the three first necessities that you have in this moment of your life?**

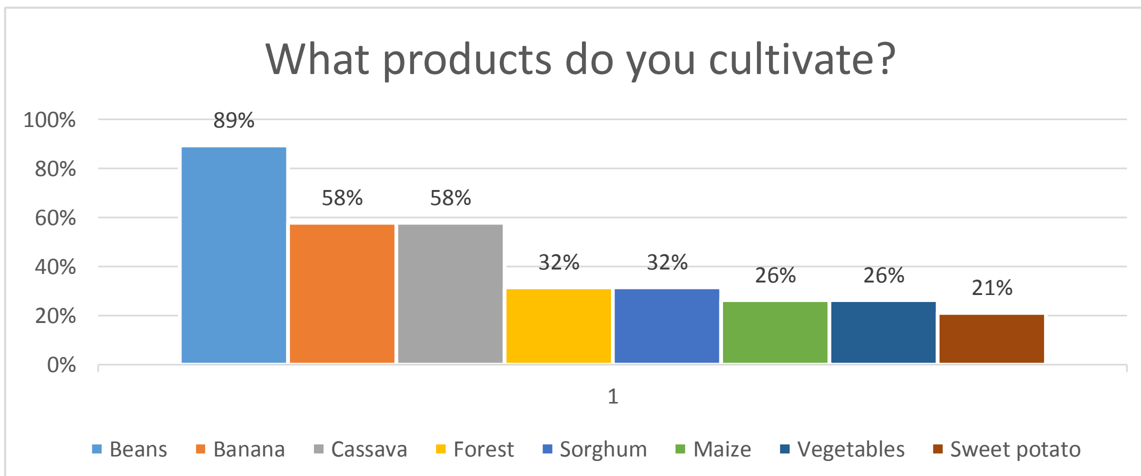
| NECESSITIES | |
|---|---|
| EDUCATION FOR CHILDREN | 11 |
| HOUSE | 8 |
| CAR / MOTO | 7 |
| BUSINESS | 7 |
| WATER | 1 |




The **55%** of the interviewed considers the education for the children as the first necessity. In the second place is to have a better house, with a **40%** of the interviewed, and in third place is to have a business and to have a transport media, with a **35%.**

**9. What products do you cultivate?**

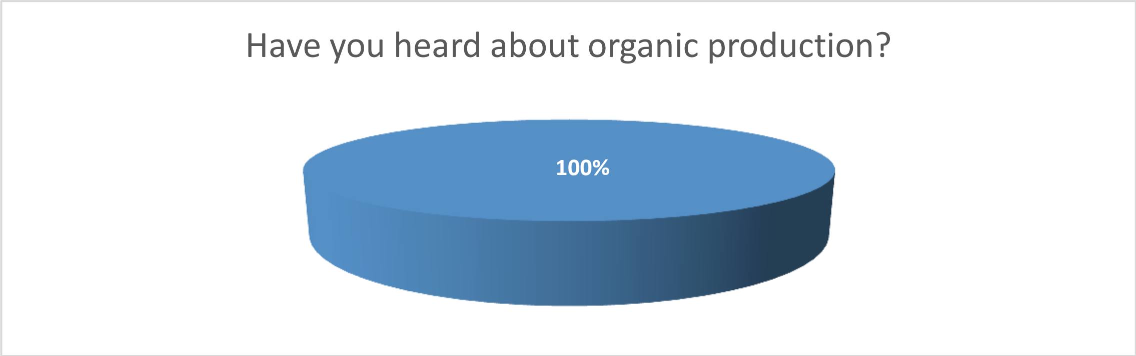
| PRODUCTS | YES |
|---|---|
| Beans | 17 |
| Banana | 11 |
| Cassava | 11 |
| Forest | 6 |
| Sorghum | 6 |
| Maize | 5 |
| Vegetables | 5 |
| Sweet potato | 4 |



The **89%** of the interviewed cultivates beans, the 58% banana and cassava. The forest is used for the **32%** of the interviewed.

**10. Have you heard about organic production?**

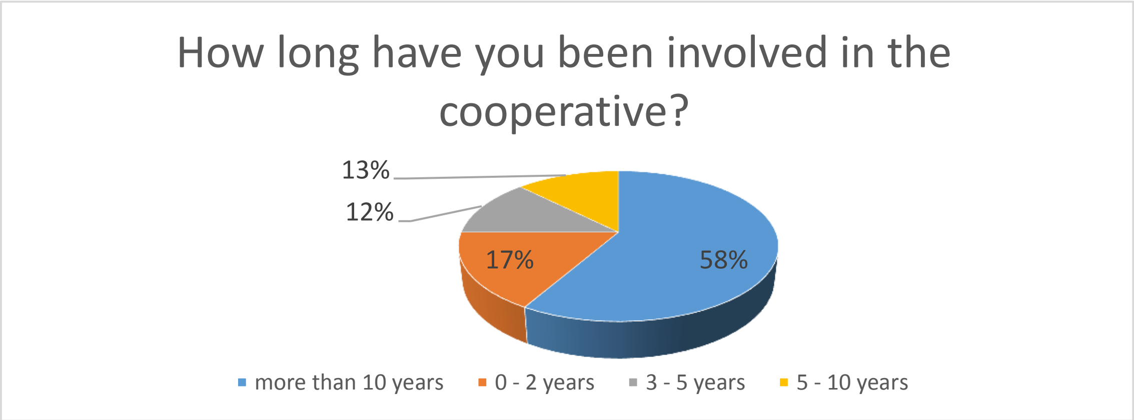
| ORGANIC | # |
|---|---|
| YES | 27 |
| **Total general** | **27** |




The **100%** of the interviewed have heard about organic production. However, not all of them have the right concept. Sometime they link the concept just with the composting using only organic product. The concept should be reinforced and extended in all value chain, not only in the harvest.

**11. How long have you been involved in the cooperative?**

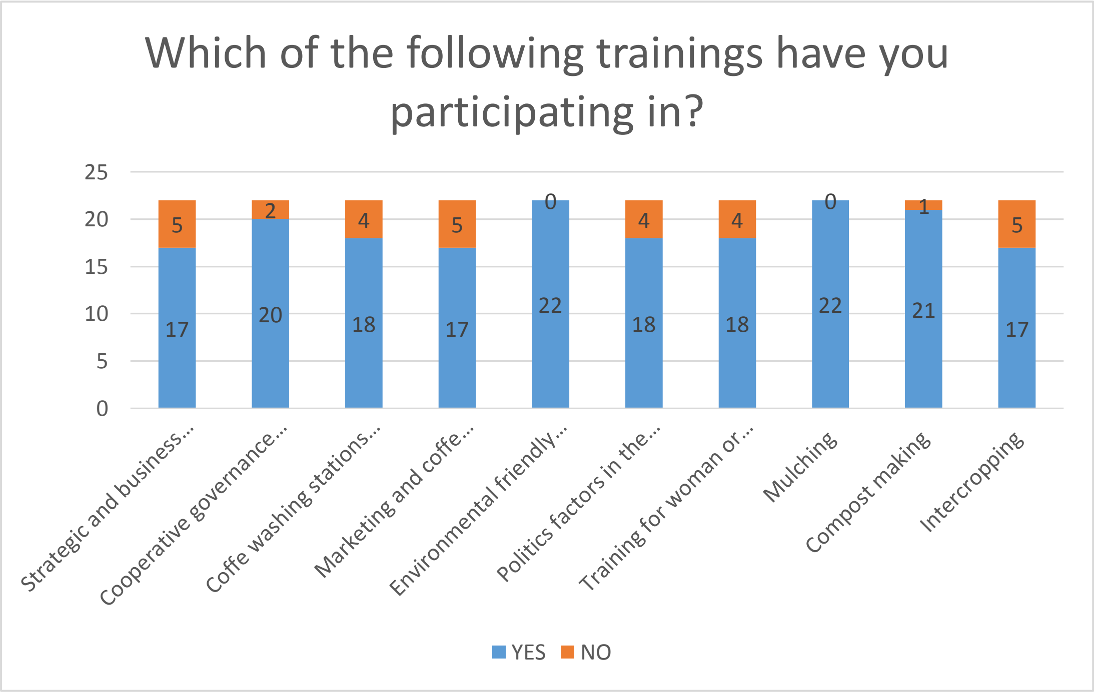
| YEARS | # |
|---|---|
| more than 10 years | 14 |
| 0 - 2 years | 4 |
| 3 - 5 years | 3 |
| 5 - 10 years | 3 |
| TOTAL | 0 |



The **58%** of the interviewed enrolled the cooperative more than 10 years ago. We can infer that more than a half of the interviews has a long experience in the cooperative and can compare the changes and improvements through the years. That means that most of the answers are based in good and well knowledge of the farmers.

**12. Which of the following trainings have you participating in?**

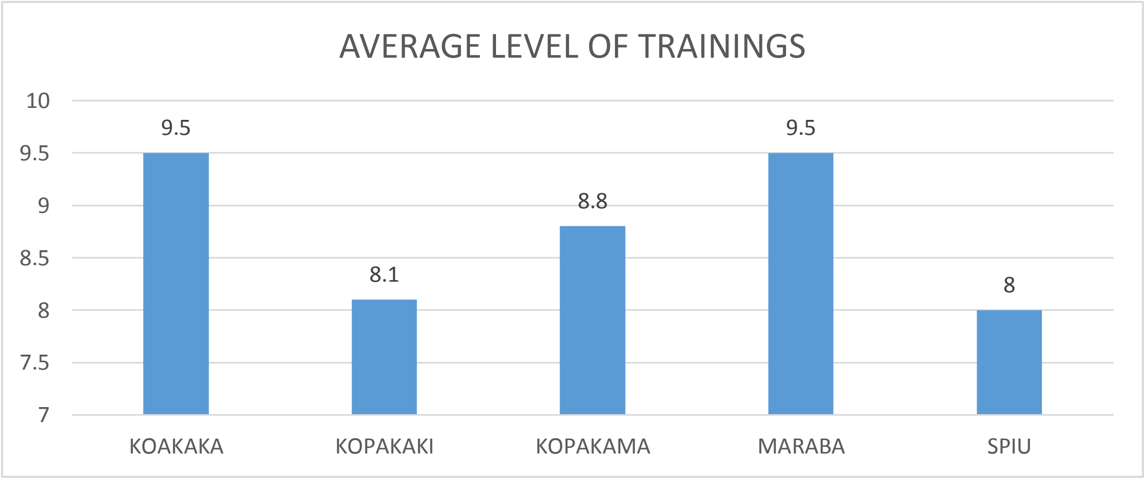
| TRAININGS | YES | NO |
|---|---|---|
| Strategic and business planning | 17 | 5 |
| Cooperative governance and management | 20 | 2 |
| Coffe washing stations management | 18 | 4 |
| Marketing and coffe export procedures | 17 | 5 |
| Environmental friendly practices | 22 | 0 |
| Politics factors in the coffee value chain | 18 | 4 |
| Training for woman or youth | 18 | 4 |
| Mulching | 22 | 0 |
| Compost making | 21 | 1 |
| Intercropping | 17 | 5 |




In all cases more than 77% of the interview said that has been part of one the trainings on the list. However. Comparing with the results of the SPIU staffs, they agree that the training in Politics factors has not been done. That means that could be a misunderstanding about the politics factors meaning. In any case, it is important to transmit the politics factors in all levels of the value chain in order to become farmers into public policy actors that can participate in the dialogs that involves common and publics' affairs.

**13. In which level the trainings have impact your daily activities.**

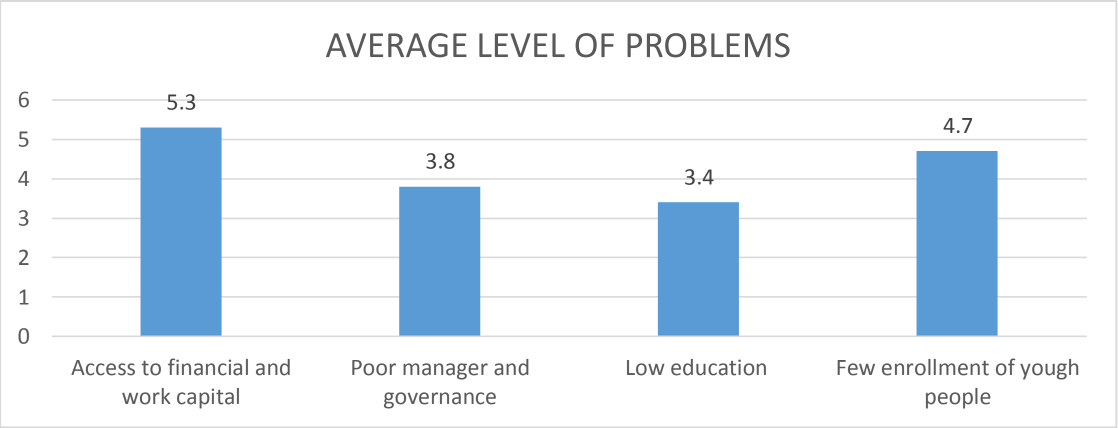
| COOPERATIVE | AVERAGE |
|---|---|
| KOAKAKA | 9,5 |
| KOPAKAKI | 8,1 |
| KOPAKAMA | 8,8 |
| MARABA | 9,5 |
| SPIU | 8 |




The average of the score given for all the cooperatives and the SPIU staff was **8.78**. In general, we can infer that the interviewed consider that the trainings are supporting in a high level their daily activities. Farmers from Koakaka and Maraba find a higher impact in the trainings. However, they would like to include other topics like Project management, Business Planning, Good agricultural practices in coffee, Information technology, leadership, international trade and marketing, Intercropping, Climate change, Organic production.

**14. Problems that a cooperative faces**

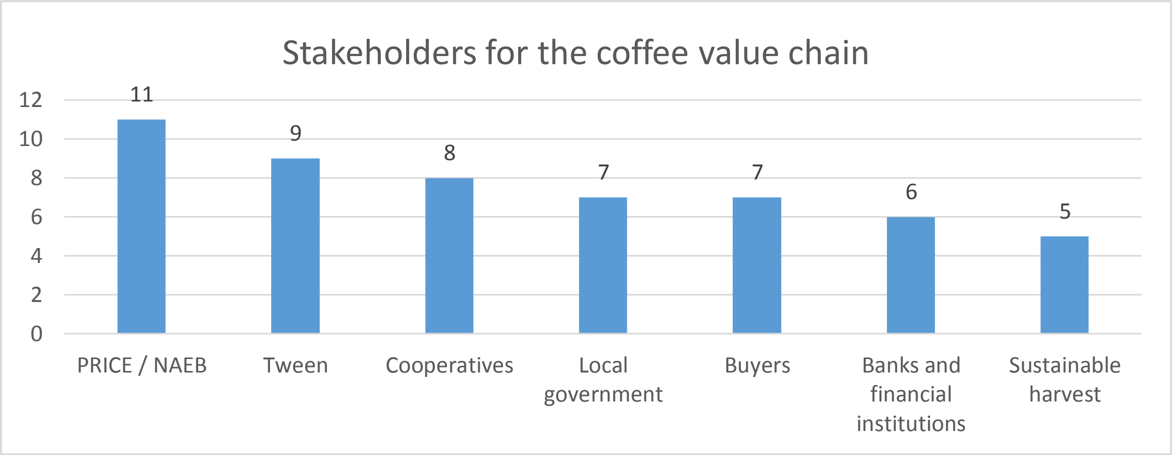
| PROBLEMS | AVERAGE LEVEL OF PROBLEMS |
|---|---|
| Access to financial and work capital | 5,3 |
| Poor manager and governance | 3,8 |
| Low education | 3,4 |
| Few enrollment of yough people | 4,7 |



From a score of 1 to 10, and according with the average of the answer of the interviewed, the problems listed do not represent a big challenge. However, the main problem that cooperatives have to face is the **access to financial and work capital**. Other problems identified for the interviewed are: Marketing, transportation of the crops, old coffee trees, climate change, Lack of mulching materials, Disasters caused by climate.

### 15. Most important stakeholders for the coffee value chain

| STAKEHOLDER | # |
|---|---|
| PRICE / NAEB | 11 |
| Tween | 9 |
| Cooperatives | 8 |
| Local government | 7 |
| Buyers | 7 |
| Banks and financial institutions | 6 |
| Sustainable harvest | 5 |



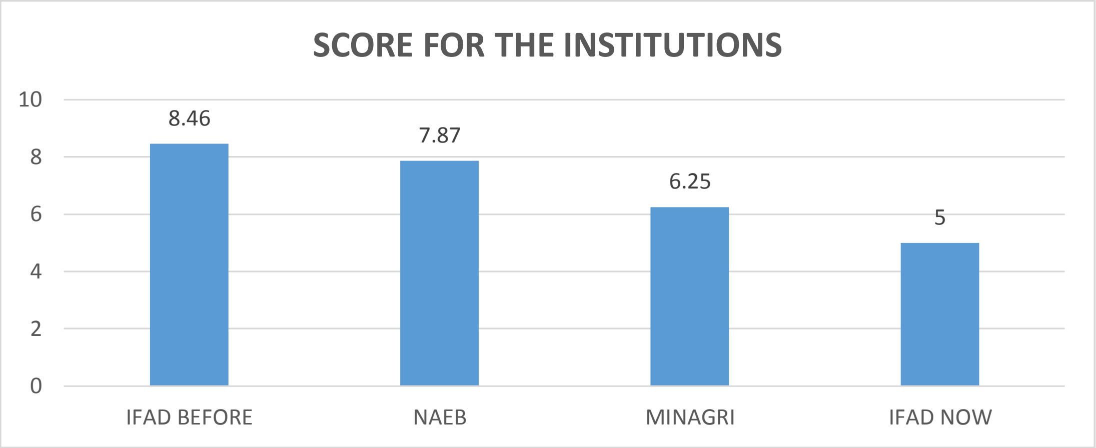

The **40%** of the interviewed consider PRICE or NAEB as an important organization to the coffee value chain. More than **33%** consider Tween, an international NGO as the second important actor for the development of the coffee value chain. In third places are the cooperatives, with **30%** and in fourth place are the buyers and the local government with **26%** of the interviewed. Other important stakeholders are the financial institutions, sustainable harvest, another international NGO, the exporters, Trademark east Africa and the farmers. It seems like the PRICE and NAEB are in the top of mind of the interviewed, and they recognize the important role of those institutions for their development.

### 16. Rate from 1 to 10 the support that you have receive from the following organizations

IFAD have the highest score, however many participants don´t know what is IFAD and some of them gave the score based on the support that the cooperatives receive at the beginning at the project. For that reason, there are two different score for IFAD, according with the support given in the pass (only 54% of the interviewed answered this question) and the other one according with the currently support (only 16,6% answered this question).

Although NAEB belongs to MINAGRI, the interview asked about those institutions separately. In that case, they recognize NAEB as a closer institution, more than MINAGRI. The 100% answered the question about NAEB, and 83% answered about MINAGRI.

| INSTITUTION | SCORE | ANSWERS NO GIVEN | ANSWERS GIVEN |
|---|---|---|---|
| IFAD BEFORE | 8,46 | 11 | 13 |
| NAEB | 7,87 | 0 | 24 |
| MINAGRI | 6,25 | 4 | 20 |
| IFAD NOW | 5,00 | 20 | 4 |

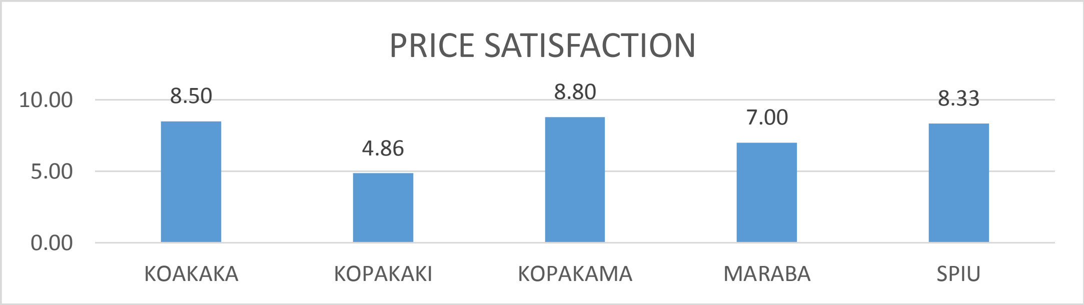



### 17. How satisfied are you with the results of the project?

The total average of the PRICE satisfaction given by the interviewed is 7.19 out of 10. The cooperative with the highest satisfaction is Kopakama, with 8.8. Most of the lowest results are because they notice that the impact of PRICE project is going to the cooperatives, and do not to the farmers. They do not perceive the direct impact of PRICE as they perceive the impact of other organizations.

It is important to notice the number of answer in each cooperative because this question was answer only for the people who knows the project.

| COOPERATIVE | AVERAGE SCORE | ANSWERS |
|---|---|---|
| KOAKAKA | 8,50 | 4 |
| KOPAKAKI | 4,86 | 7 |
| KOPAKAMA | 8,80 | 5 |
| MARABA | 7,00 | 2 |
| SPIU | 8,33 | 3 |
| **Total general** | **7,19** | |



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## ANNEX 5. COFFEE BUSINESS ANALYSIS

Click here to consult the Coffee business analysis in Excel document

## ANNEX 6. PROJECT OBJECTIVES ANALYSIS

Click here to consult the Project objectives analysis in Excel document

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