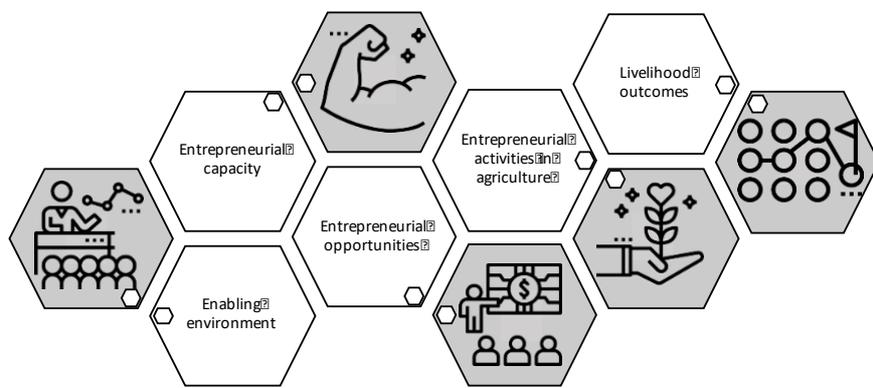


Characteristics of young agricultural entrepreneurs that can be used to develop effective youth-centred policies; Evidence from a case study.

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ABSTRACT

Entrepreneurship is regarded as one of the pillars that can stimulate economic growth within a particular country. Hence, African countries are implementing or want to implement youth-centred policies that are intended to facilitate the entrepreneurial behaviour of their young citizens. The objective of this research is to generate more insight on the diversity of young agricultural entrepreneurs in the Kayonza district of Rwanda for the development of youth-centred policies that respond (better) to the characteristics of the different groups of young agricultural entrepreneurs. Moreover, this research was able to define meaningful typologies of young entrepreneurs, capture the challenges and benefits of the youth's entrepreneurial activities, elaborate on the impact that these entrepreneur activities have on youth's livelihoods and lastly the aspect of the enabling environment that could support young agricultural entrepreneurs. The empirical data for this research was obtained through observations and interviews with young agricultural entrepreneurs. These findings were consolidated in the elements that youth-centred policies should include to adequately respond to the entrepreneurial typologies that were found.

PREFACE

This research was facilitated through a collaboration with the Wageningen University, Bioversity International and the International Institute of Tropical Agriculture. Moreover, this research was undertaken as part of, and funded by, the CGIAR Research Program on Roots, Tubers and Bananas (RTB) and supported by CGIAR Fund Donors (<http://www.cgiar.org/about-us/our-funders/>). Additional funding support was provided by the Belgian Directorate General for Development Cooperation and Humanitarian Aid (DGD) through the Consortium for Improving Agricultural Livelihoods in Central Africa (CIALCA – [<http://www.cialca.org/>])www.cialca.org).

The supervision was provided by Dr. Jos Bijman (Wageningen University), Dr. I.R. Thomas Lans (Wageningen University), Dr. Anne Rietveld (Bioversity International), and Dr. Marc Schut (International Institute of Tropical Agriculture).

The findings of the report are entirely the responsibility of Jean Gaël Shyaka and cannot be taken as expression of the Wageningen University, Bioversity International or the International Institute of Tropical Agriculture policies or viewpoints.

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EXECUTIVE SUMMARY

The objective of the research was to generate more insight into the diversity of young agricultural entrepreneurs for the development of tailored youth-centred policies. These policies would aim to better the response to the characteristics of the different young agricultural entrepreneurs in the Kayonza district. This research was conducted as a qualitative study and relied on observations and interviews as means of data collection. Consequently, eight out of the twelve sectors of the Kayonza district in the Eastern province were included in the observations and eighteen young entrepreneurs were interviewed. The analysis of the collected information was done with a qualitative data analysis software called *NVivo 12*. The first sub-question was structured to prove the heterogeneity among the young agricultural entrepreneurs in Kayonza. Drawing on it, this research confirms this heterogeneity by making a distinction between the two types that were observed. The first type being the individual entrepreneurs that venture on their own and the second type being the entrepreneurs that venture within a cooperative. Findings show that the local governments and other local institutes perceive young entrepreneurs in Kayonza to be less capable, lacking knowledge and experience in their entrepreneurial activities compared to their elder counterparts. This research argues that these perceptions are embedded in the social narratives that form the social structures and make up a part of an enabling environment. These social constructs attribute certain behaviours and roles to gender. For example, males are perceived as being the patriarch of the house, more masculine, risk seekers and the heavy lifters. In contrast to this, these constructs hold a diametric view with respect to their female counterparts. Females are viewed as being more feminine, less independent, risk averse, likely to collaborate within a group and do not do the heavy lifting. As a consequence of this, the observed male and female task division confirms the structures that are found by the described social narratives. This research observed the challenges that the aforementioned entrepreneurial types face. Whilst conducting this study, I encountered entrepreneurs that had limited access to land, financial means and agricultural inputs. These entrepreneurs tend to depend on their own capabilities to develop their entrepreneurial activities. In contrast to this, other types of entrepreneurs encountered are those who venture within a cooperative. This group has to pay membership fees in exchange for better access to land, financial means and agricultural inputs. They tend to be less autonomous. Although the findings show that all the members of a cooperative are treated equal, young entrepreneurs within particular cooperatives at times experience exclusion due to their age. Regardless of challenges, these young agricultural entrepreneurs manage to set up their businesses and gain some benefits that vary from individual to individual. The findings in this study will illustrate how entrepreneurial activities lead to an increase in the social and economic mobility of these young entrepreneurs. Whereas independent entrepreneurs have to adjust their entrepreneurial activities according to the development of the market, those that venture within cooperatives, have more certainty concerning the revenue that can be expected from their products. The findings in this research argue that the current youth-centred policies that are developed on a national level do not meet nor sufficiently address the various challenges young agricultural entrepreneurs in Kayonza face. This research concludes by suggesting three essential elements that policy-makers may need to consider when developing future youth-centred policies. We propose policy-makers develop tailored youth-centred policies that effectively respond to the observed heterogeneity among the young agricultural entrepreneurs in the Kayonza district. Note that these tailored youth-centred are not a replacement of the old policies but rather are meant to complement the national youth-centred policies and create more inclusion for the above-mentioned entrepreneurial types. The first element is to develop more recognition for the youth potential on a local level. Secondly, have more youth representation in the process of policy design and development and thirdly, ensuring that young entrepreneurs gain access and really participate in capacity development programs. Further research is recommended to look at the specific characteristics of entrepreneurs that cultivate or sell a particular crop or product. And also question, whether all the youth are entrepreneurs or whether youth-centred policies

should address all the youth. The last recommendation is to research how education impacts the entrepreneurial activities of the youth.

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1. INTRODUCTION

1.1. BACKGROUND AND RELEVANCE

Entrepreneurship is regarded as one of the two drivers of economic growth next to the establishment of large multinational companies (Herrington & Kew, 2017). Innovations are stimulated through the establishment of new businesses where jobs are created and new markets are developed. Brooks et al (2012) emphasize the important role that young African entrepreneurs can play in these developments.

In comparison with other continents, Africa has the youngest population with the potential to grow into the most populated continent in 2100 with an estimated population of 4.4 billion (Mertule, 2015). At this moment, the top ten youngest countries in the world are located in Africa with a median age that varies from the first 14,8 years (in Niger) and the last 17,0 (in Burkina Faso) (UN, 2017). This large young generation is seen as a major advantage and shows tremendous potential.

One of the potentials can be derived from the increase of the working-age population, that can lead to economic growth. Other opportunities lie with youthful entrepreneurs starting new businesses. Wiggins and Proctor (2001), Okali and Sumberg (2012) and Dawson et al (2016), acknowledge youth-centred policies to stimulate youth entrepreneurship in agriculture could provide a solution to some of the challenges that Africa is facing. Examples of the challenges faced include the growing youth population in Africa (Mertule, 2015), urbanisation (Brooks et al., 2012) and food insecurity (Akash, 2015).

With its youthful population, Africa needs youth-oriented policies to successfully capitalise on the youth potential. Trends have been observed in young people who move from the rural areas to cities seeking non-agriculture-related work opportunities (Sebbumba, 2013; Sumberg et al., 2017). Those who stay, perceive work related to agriculture as a stepping stone to improve their livelihoods (Okali & Sumberg, 2012). A consequence of young people migrating to cities is that agriculture-related jobs are left to the elders who compared to their younger counterparts struggle to adapt to the changing environment (Sumberg et al., 2017).

The aim of this research paper is to generate an insight into the current situation that the youth in agriculture are facing and which opportunities can be associated with them. Yet, little is known about who the young agricultural entrepreneurs are, and this research aims to fill this knowledge gap.

1.2. PROBLEM STATEMENT

There has been an increased interest in youth entrepreneurship from the field of social science. Especially, agricultural research that investigate the role youth in the development of Africa (Anyidoho et al., 2012; Sommers, 2011, Sumberg et al., 2017). Several studies investigate the potential and added value of youth entrepreneurship in agriculture (Herrington & Kew, 2016; Hussein & Nelson, 1998; Palacios-Lopez et al., 2017), develop and evaluate youth-centred policies (Alinda & Abbott, 2012; Anyidoho et al., 2012; Dawson et al. 2016; Deininger, Hilhorst et al., 2014; Miller & Lee, 2014), and gender and youth perspective on agriculture (Archambault, 2014; Bérenger & Verdier-Chouchane, 2016; Global Entrepreneurship Monitor, 2017; Kristensen & Birch-Thomsen, 2013; Sumberg et al. 2017). Although, these research developments have put the concept of youth entrepreneurship in agriculture on the political and development agendas, many of the above-mentioned studies have depicted youth

as one homogeneous group. Young people that show the same characteristics, with little consideration of their different needs and interests. Such as, the different constraints they face in terms of developing business or entrepreneurship. Additionally, the different ambitions and potential they pursue (Okali & Sumberg, 2012). In line with Okali and Sumberg (2012), we acknowledge a need for “...research, policy and youth-related programmes [...] appreciate that rural young people – the youth – are actually highly differentiated...”. Most African countries have or want to develop and implement youth-centred policies to capitalise on the potential of the youth (Alinda & Abbott, 2012; Anyidoho et al., 2012; Dawson et al. 2016; Lintelo, 2011). This research seeks to contribute knowledge to field youth entrepreneurship by providing empirical evidence that challenges the “one size fits all” approach that has been applied to developing and implementing youth entrepreneurship centred policies in the past. In doing so, it can create awareness for the development of youth-centred policies that respond better to the interests, needs and opportunities faced by different groups of young entrepreneurs.

1.3. RESEARCH OBJECTIVE

The objective of the research is to generate more insight on the characteristics of young agricultural entrepreneurs for the development of youth-centred policies. These youth-centred policies should respond (better) to the interests, needs and opportunities faced by different groups of young agricultural entrepreneurs. It seeks to achieve that by the following: (1) developing a typology of young entrepreneurs in the agricultural sector, (2) identify the different corresponding needs, interests and opportunities as entrepreneurs, (3) exploring how the different groups entrepreneurial activities have impacted their livelihoods and (4) identifying the different types of policies, programs and social structures of the enabling environment that could support the different groups of young people in realizing their entrepreneurial goals.

1.4. RESEARCH QUESTIONS

General research question (GRQ):

What are the characteristics of young agricultural entrepreneurs that can be used to develop effective youth-centred policies?

Sub research questions (SRQ):

SRQ 1: What are meaningful categorisations of young entrepreneurs in the agricultural sector?

SRQ 2: What are the entrepreneurial challenges and benefits of these different groups of young entrepreneurs?

SRQ 3: What are the different ways in which the entrepreneurial activities of the different groups impact their livelihood?

SRQ 4: Which type of policies, programs and social structures in the environment could effectively support the different groups of youth to achieve their entrepreneurial goals?

1.5. RESEARCH FRAMEWORK

This research starts with an exploration of the theoretical concepts, by doing a literature review. The literature review provides information from theoretical and empirical studies that have been done on

the topic of youth agricultural entrepreneurship. Furthermore, this information facilitated the development of a theoretical framework and a conceptual framework. The empirical data collection methods that were used are observations and interviews. The findings retrieved from these empirical data collection methods were compared with the information obtained from the literature review. The abovementioned data comparison allows this research to verify whether the observed findings are according to the already existing knowledge or if the findings touch upon a new topic that needs to be researched. Going forward, the primary data collection methods are elaborated on accordingly in chapter 3. The research adopted a combination of observations and interviews in a sequential manner. Appendix I and II illustrate the observational scheme and preliminary interview format that were developed based on the literature review.

The first phase of this process starts with an observation of the environment that facilitates the young agricultural entrepreneurs’ progress. With this method, this research focused on collecting information related to the young entrepreneur’s social-demographic characteristics.

In the second phase, interviews were conducted as a follow-up to the findings of the observations and provide insight on the perspective of the young agricultural entrepreneurs and their livelihood. The collected data was analysed according to the following method. The observations were led by the observation scheme containing observational categories. Notes were taken during the data collection to elaborate on what is observed on the field with regards to a particular observational category. All the schemes were compiled to form one data-set. Hence, the collected schemes were analysed, searching for commonalities and patterns in the entrepreneurial behaviour of young agricultural entrepreneurs. Interviews with purposefully selected candidates provide further explanation of the underlying motives of the observed behavioural patterns. The interviews were conducted, transcribed, coded, and then analysed by the researcher. The coding and analysing process were done with the assistance of a qualitative data analysis software (NVivo 12). This software was useful to cluster the participants answers to a particular interview theme and analyse them independently. The results of these empirical studies provide partially some answers to some sub-research questions and contribute to the answering of the general research question. Chapter 3 provides more details regarding the methods.

Figure 1: Research framework

Literature review	Empirical study	Analysis	Results
<ul style="list-style-type: none"> •Entrepreneurship •Entrepreneurial environment •Entrepreneurial capacity •Youth •Agriculture •Livelihood 	<ul style="list-style-type: none"> •Observations •Interviews 	<ul style="list-style-type: none"> •Categorisation by theme •Documentation •Transcription •Coding •content analysis 	<ul style="list-style-type: none"> •Meaningful typologies of youth •Challenges and benefits of entrepreneurial activities •The impact on livelihood •Potential support systems

1.6. STRUCTURE OF THE REPORT

This research report starts by providing an introduction and broad overview of the concepts that are associated with the formulated researched questions in chapter 1. Chapter 2 covers the information

that was retrieved from the literature review. The methodology is discussed in chapter 3 and the findings from the applied methodology are elaborated upon in chapter 4. The answers to the SRQ's are provided and discussed in chapter 5. Chapter 6 concludes this research by meeting the general research objective and the associated recommendations.

2. LITERATURE REVIEW

This part of the research provides the theoretical framework. The concepts that are introduced were used to create a theoretical foundation and were also applied for achievement of the research objective (Verschuren & Doorewaard, 2010). The following main concepts are being addressed in this part: Entrepreneurship, enabling environment, entrepreneurial capacity, youth, agriculture, and livelihood.

2.1. ENTREPRENEURSHIP IN GENERAL

According to Timmons and Spinelli (2008), entrepreneurship is the discovery and exploitation of profitable opportunities. The entrepreneur is the bearer of the opportunity cost that are associated with the wages and security that job within a company would provide (Venkataraman & Shane, 2000). According to Venkataraman (1997), this field of study involves the analysis of the source of opportunities, the process of discovery, evaluation, the exploitation of opportunities and which individuals are involved in these activities.

Four significant transformations regarding entrepreneurship have been observed in the past half of a century. The first observation is that entrepreneurship has become a new management paradigm (Sumberg et al. 2017). Hence, most of the management models that have been developed are based on the organisations established in this period. Moreover, the concept of entrepreneurship has fostered a new educational paradigm (Schrader & Lawless, 2004) which has highlighted the necessity of education as mean to prepare for an entrepreneurial future.

Thirdly, entrepreneurship has help in the structuration of a new-business environment where the organisations are not always drive by profit maximization (Oliveira, 2017). The fourth observation is based on the fact that entrepreneurship is no longer regarded a topic that is only thought at business schools. In that sense, the concept of entrepreneurship has transcended to other fields of education. This entrepreneurial observation is also observed on the field on agriculture.

Entrepreneurship is widely associated with uncertainty that can be translated into risks that can manifest into a failure. These failures can have a negative undertone in a particular society and thereby discourage the risk-taking behaviour (Mcgrath, 1999). According to Strom (2007), entrepreneurship is perceived as a lever to create a society that is self-sufficient and a growing economy. Moreover, entrepreneurships help to create new jobs, stimulates innovations and creativity.

However, Carland et al. (1984) emphasises on the difference between entrepreneurs and small business owners. In the description Carland et al. (1984) small business organisation is defined as being a small business without any new marketing or innovative approaches. And entrepreneurial organisations are defined as being engaged in making profit, seeking growth and being innovative (Carland et al., 1984).

In the case of Africa, researchers have encountered difficulties to translate the concept of entrepreneurship into the local language or dialect as Sebbumba (2013) acknowledges. There are many aspects that affect the entrepreneurial climate of a particular region. According Herrington et al., (2017) of the Global Entrepreneurship Monitor, the basic requirements, efficiency enhancers, innovation and business complexity can be derived from the economic phase and the entrepreneurial conditions of a country.

However, the social values of entrepreneurship and the individual attributes make up the foundation of the entrepreneurial activities that a particular entrepreneur engages in. With regard to agriculture, Kahan (2012) states that Smallholders farmers have no future unless they become more entrepreneurial. His definition of an entrepreneur in this case is someone who produces for the market and is characterised by an inventive behaviour, open for new opportunities, takes calculated risk and takes responsibility for the profits and losses. Moreover, Kahan (2012) also acknowledge that farmers possess many of the listed entrepreneurial characteristics and their ability to adapt to changing environment. And that makes them the best candidates to become entrepreneurs. Moreover, Spinelli and Adams (2012) note the following typology with regards to the entrepreneurial activities of an entrepreneur. The first typology addresses the social entrepreneurs. Social entrepreneurship looks at the entrepreneur as a change agent that applies inventive solutions to address the needs in a particular society (Spinelli & Adams, 2012). Hence, a diversity can be observed within the group social entrepreneurs. This diversity can be categorized into four groups that are based on their primary market impact (economic or social) and mission of the organisation (economic or social) (Neck et al., 2008). The first group is categorised as having a social purpose. This due to its orientation towards making an economic market impact with a social organisational purpose. The second group is categorised as being the traditional way of doing business. This is characterised by an economic market impact orientation with also an economic organisational purpose. Social market impact orientation with an economic organisational purpose is categorised in the third group as a social consequence. The fourth group is characterised as enterprising non-profits by adaptation of a social market impact approach in combination with a social organisational purpose (Neck et al. 2008). In addition, Herrington and Kew (2016) provide further insight on the categorisation of the entrepreneurial activities with regard to the stage of entrepreneurial lifecycle. The early-stage entrepreneurial activities can be categorises as being either necessity-based or opportunity based (Herrington & Kew, 2016). Meaning that, the entrepreneurs that engage in necessity-based activities have no alternative than to venture. These are also defined as survivalist entrepreneurs. And the entrepreneurs that engage in opportunity-based activities have an alternative source of livelihood, but at the same time perceive the opportunity to be a better option.

2.2. ENABLING ENVIRONMENT

In the search for a better understanding of an individual's entrepreneurial behaviour. Spinelli and Adams (2012, p38-43) established to find seven determinant aspects that drive the entrepreneurial behaviour. An entrepreneur demonstrates the following behaviour characteristics: commitment, courage, leadership, opportunity obsession, tolerance of risk, ambiguity, and uncertainty, creativity, self-reliance, and adaptability and motivation to excel.

Besides the personal characteristics, the entrepreneurial behaviour is also nurtured by external factors (Gwija et al., 2014, Herrington & Kew, 2016, and Herrington et al., 2017). External aspects such as (non-)governmental interventions that are aimed to raise awareness and facilitate entrepreneurial behaviour towards entrepreneurship. The introduction of youth-related governmental entities such as the ministry of youth, culture and sports in Rwanda and youth centred policies such as the national youth policy in Rwanda demonstrate a perfect example of some interventions. As a result, an individual's attitude and behaviour change in favour of entrepreneurship (Schrader & Lawless, 2004). Drawing from institutional theories, Baughn et al, (2006) note that institutions promote change through the following three pillars. The first pillar being the regulative pillar that implements laws and regulations that make up the

structure or playing field of a particular environment or behaviour. Secondly, is the normative pillar that looks at the norms and values of a given society and the context where the people obtain conformity and from their standards. Lastly, the cognitive pillar looks at the behaviour pattern and habits of a person (Holopainen, 2016). Furthermore, the right infrastructures (such as good roads, rail, electricity, water supply and internet) are also essential for the development of an environment that fosters entrepreneurial behaviour (Salami et al., 2010). All the above-mentioned aspects are facilitated by the macroeconomic stability of a given country.

2.3. ENTREPRENEURIAL CAPACITY

The entrepreneurial capacity is derived from the personal characteristics of an individual. Hence, the interaction of these characteristics with the structure of the enabling environment determines the entrepreneurial engagement of an individual (Herrington et al., 2017). From a psychological perspective, an individual's personal motivation can be categorized into the following three principals: the need for achievement, the need for power, and the need for affiliation (Atkinson, 1964; McClelland & Winter, 1969). The need for achievement refers to need to excel and to measure personal achievements. The need to be able to influence others to achieve a particular goal is what is meant by the need for power. And the need for affiliation points out the need to build warm relations and maintain them for a long period of time. These principals may relatively differ per individual. In addition, gender has been regarded as a social factor that could influence the entrepreneurial opportunity of an individual. Gender is a concept that is defined by a particular societal translation of the differences between men and women with regards culture, norms, values, and practices (Udong, 2011). Hence, in order to analyse gender, an investigation must be conducted towards the understanding of societal definition of the difference between men and women. In the case of Rwanda, women have a maternal (child nurturing) part to perform in the community (Nabalamba & Sennoga, 2014). Thus, suggesting that a woman's ability to work is restricted by the part that she fulfils in a particular community. Moreover, this social phenomenon is observed in the fact that women's general employment rates are lower than men's employment rates (women: 76% and men: 83%). The contribution of women between the age of 15-49 in agriculture was 77% in comparison with the 62% that was contributed by men in 2011 (Nabalamba & Sennoga, 2014). Thus, stating that agricultural labour activities are predominantly done by women based on the observed age-group. Moreover, Bérenger and Verdier-Chouchane (2016) acknowledge that gender inequality is mostly observed in countries where poverty is a common phenomenon. According to their research, the determinant factors are to be found in the household's educational level, employment status and poverty status.

According to Udong (2011), these gender preferences could be explained by the heterogeneous nature of men and women with regard to their interests, needs, responsibilities, and experiences. Thus, deriving an understanding that societal and agricultural activities can vary depending on the definition of gender by a particular community. Moreover, Baughn et al., (2006) argue that the above-mentioned characteristics are perceived differently depending on the norms of a specific society. According to this theory, there should be more women engaged in entrepreneurial activities if the society they reside in accepts and supports it. On the other hand, education is also perceived as an important explanatory variable that interacts with both the capacity of an individual and the opportunity capitalization (Anyidoho et al., 2012). Sebbumba (2013) states the following with regard to education: *"This avenue is widely viewed as the best choice for a well-educated young man, as so few people are aware of the economic potential presented by the land"*. This statement touches upon the aspect of education and

the added value that is perceived. In this sense, education is perceived as catalyst for entrepreneurial behaviour (FAO, 2014). In the case of little to no education would likely limit the productivity and the acquisition of skills of an individual and is considered as an obstacle toward the development of an entrepreneurial behaviour. Moreover, in a general context the average entrepreneur is well educated and has a bachelor or a more advanced degree, comes from a middle-income family, has gained work experience in a company, and is driven by desire to build wealth, capitalize on a business idea, his or her appeal to the entrepreneurial culture, and the inability to find employment (Wadhwa et al. 2009).

Nevertheless, Spinelli and Adams (2012) state that an entrepreneur should not wait for the perfect time to seize the observed opportunity. Because this process of waiting could lead to bankruptcy of the entrepreneur. In addition, Maldonado (2016) shows that the intensity of which a farmer engagement with his social network has predictive value when assessing the profitability of an opportunity or a transaction. Thus, establishing the notion that farmers that maintain their networks are more profitable. In addition, relatives and friends of family are included in the network of the farmer.

2.4. YOUTH IN GENERAL

The concept of youth can be defined as the period in an individual's life when he or she is young, this being a transitional stage from childhood to adulthood (UNESCO, 2017). Youth is categorised on the national level as every person between the age of 15 and 35 years old (UNESCO, 2017). According to the National Youth Policy (NYP) of Rwanda, youth can be defined as a person between the age of 16 and 30 years old. This age group was represented by over three million Rwandese citizens in 2015 (NISR, 2014). In a different context, the term "youth" can be used to indicate more than only the age range, but also indicate the life animation of an individual. In general, governments have recognised the potential of their youths. Governments are developing youth centred entrepreneurial policies to promote entrepreneurship. The aim of these governments is to develop the entrepreneurial mindset of these youths (Gwija et al., 2014). Many of these youth centred policies facilitate the above mentioned basic requirements and efficiency enhancers (Herrington et al., 2017). Moreover, it can be rather challenging for a young individual that wants to engage with entrepreneurship activities in agriculture as research of Salami et al., (2010) of the World Development Bank acknowledges. Some of the general challenges regarding agriculture are land tenure, access rights and land management, financing agriculture and access to credit, access to input and output markets, the lack of infrastructure, lack of agricultural extension services and innovations, policy-related restrictions and institutional constraints and climate change. A research was done by the Food and Agriculture Organization of the United Nation (FAO), Technical Centre for Agriculture (TCA) and the International Fund for Agricultural Development (IFAD) (2014) indicates several challenges that only the youth face. These being the insufficient access to knowledge, information and education, inadequate access to financial services, difficulties accessing employment in agriculture, limited access to markets and limited involvement in policy dialogue. Both the general challenges identified by the World Development Bank and the youth-specific challenges match to some extent. On the other hand, from a more psychological point of view, the self-depiction of youth does have an important part to fulfil in the study of their behaviour (Hardgrove et al. 2015). Sumberg et al., (2017) manages to capture the youth's perception of agriculture through a factorial analysis of the aspect that youth deem to be important to them. A point supported by Okali & Sumberg (2012) case study is that youth cannot be aggregated into a homogeneous group that does not display any variation within. However, when it comes to employment, research shows that youth are less likely to find a suitable job compared to their older counterparts (Bhorat et al., 2017).

2.5. AGRICULTURE IN RWANDA

The International Labour organisation (ILO) define agriculture as *“crop production, forestry activities, animal husbandry and insect raising, the primary processing of agricultural and animal products by or on behalf of the operator of the undertaking as well as the use and maintenance of machinery, equipment, appliances, tools, and agricultural installations, including any process, storage, operation or transportation in an agricultural undertaking, which are directly related to agricultural production”* (ILO, 2011). Agriculture can also be defined as *“the science, art, or practice of cultivation the soil, producing crops, and raising livestock and in varying degrees, the preparation and marketing of the resulting products”* (Marriam-Webster.com, 2017). Both definitions imply that agriculture is a collective concept that involves a range of different activities (crop production, fishery, livestock, poultry and insect raising). Agriculture is regarded as an important economic engine for East-African countries, due to the fact that majority of the population is engaged in agriculture meaning that the economy is dependent on agricultural capital (Salami et al., 2010).

79% of the Rwandan population are currently working in agriculture. The output of these agricultural activities roughly account for 30% of Rwanda’s gross domestic product (Nabalamba & Sennoga, 2014). As such, a thriving agricultural business environment can be observed all around Africa (Beuving, 2010; Okali & Sumberg, 2012; Udong, 2011). Going forward, agriculture provides an opportunity improving the livelihoods of those who are engage through employment or entrepreneurship (Salami et al, 2010). Researchers and policymakers are investigating the agricultural opportunities that could get the youths engaged in order to create new jobs and capitalise on the working capacity (Lintelo, 2011). However, in order to do so, further research directed at understanding the social structure of these youths is recommended by Ripoll et al. (2017). Critical analysis of the green revolution in sub-Saharan Africa by Dawson et al. (2016) suggests that these countries are facing Malthusian trap Malthusian trap is observed when agricultural developments and output show a slower than the population growth (Korotayev & Zinkina, 2015). Hence, the populations growth leads to shortage of food, that also leads to a stagnation in population growth on the long-term. Thus, bringing forth an equilibrium where the food produced is equal or greater than the food demand of a particular population (Tisdell & Svizzero, 2017).

some insight can be gained from Rwanda’s policy implementation during two periods: 2000-2005 and 2008-2012 where agriculture was utilised as an instrument for economic growth and poverty reduction (Alinda & Abbott, 2012). The outcome of the first period (2000-2005) did not demonstrate any significant observable changes with regards to the agricultural production and poverty reduction. However, the second period (2008-2012) demonstrated significant improvements such as an increase in agricultural productivity and a reduced poverty level. Amongst the elements that are mentioned to have contributed to this improvement are the human capacity development, better infrastructure, the promotion of regional economic integration and the demands for or development of a more collective manner of accessing agricultural finance (Alinda & Abbott, 2012).

Assessment of the Green revolution by Dawson et al., (2016) reveals that the improvements largely benefitted relatively rich citizens but not poor citizens, leading to recommendations for policies that also benefit poor citizens (Dawson et al., 2016). This led to a recommendation specific for Rwanda to develop policies that include the poor citizens. In a country where land is scarce and there is an abundant labour force agricultural intensification could pose some challenges (NISR, 2014). Such as

some of these challenges include the reduction of land that are not used, intensification of application of manure and fertilizers to balance the diminishing soil fertility, investments in machinery, land and irrigation (Binswanger-Mkhize & Savastano, 2017; Drechsel et al., 2001). These challenges therefore implying that the agricultural mechanism demands an increase in inputs, when an increase of output is to be expected. However, this statement does not hold with a high rural population density (Josephson et al, 2014). Because, a high population density leads to smaller plots of land to cultivate and high fertilizer usage that does not necessarily lead to more output (Drechsel et al., 2001). These effects have to be considered by both the governance agencies and the farmers.

Governing entities can choose to adopt a more top-down approach whereby policy is developed and implemented with little consideration of the farmer's opinion. On the other hand, the governing entity can choose to involve the farmers and their opinions into the process of developing and implementing an agricultural policy (bottom-up) (Dawson et al., 2016). Binswanger-Mkhize and Savastano (2017) and Ainembabazi et al. (2017) emphasise the importance agricultural technology in the process of agricultural intensification. Implementation of technology largely depends on farmers access to capital, access to information regarding these technologies, and a balance between risk-seeking and risk-averse behaviour. These aspects are easily accessed and managed when an individual is a part of a group. An individual's solidarity to the group, more power from aggregated resources, the combination of the share life and business experience, and protection from shared disruptions are also considered as advantages that a group has over an individual agricultural entrepreneur. Other advantages that is mentioned is that the majority of the Rwandan population finds employment in agriculture (Alinda & Abbott, 2012). However, a large portion of these people are Smallholders farmers. According to Kahan (2012), these farmers farm for one of these four reasons: cultivation solely for home consumption with little to no surplus, a large portion of the cultivated crops is intended for home consumption and remain surplus is sold on the market, both the consumption portion and market portion are equally divided, and some farmers cultivate their crop solely to supply the market. The Consortium for Improving Agricultural Livelihoods in Central Africa (CIALCA) developed a framework that illustrate the dynamics process in which a Smallholders that cultivated for home consumption goes through to become a medium-large farmer who's main motivations are to supply the market rather than home consumption (CIALCA, 2017).

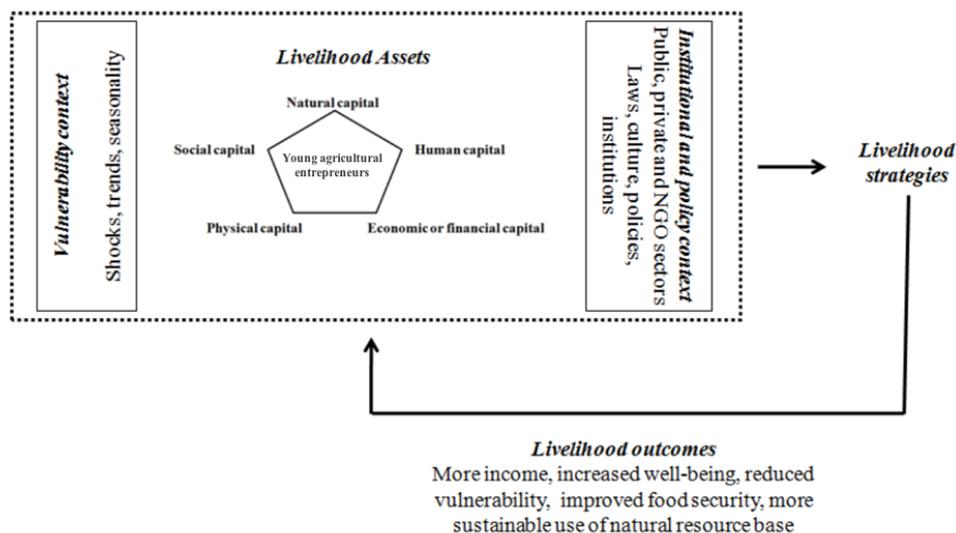
In accordance with the Rwandan thematic report on youth (2014), 64% percent of the youth between the ages of 16 and 30 work in agriculture or in an agriculture-related industry. However, when asked whether they would like to pursue their carriers in agriculture, only a fraction stated they would (NISR, 2014). A declining pattern was observed with regards to the percentage of waged employment in agriculture. Bezu and Holden (2014) observed a similar trend regarding the youth involvement in farm-related activities. The reason for the declining slope was due to the densely populated area and scarcity of land to cultivate. Access to land and the neglect of young people's view in policy development is mentioned multiple times as restricting element for youth to get involved in agriculture (Archambault, 2014; Bezu & Holden, 2014; Herrington et al, 2017; Salami, Kamara et al, 2010). Findings of a Q study on young people's perspectives on farming in Ghana, derived four unfavourable statements concerning agriculture through a factorial analysis (Sumberg et al., 2017). The first statement is based on the perspective that young people want knowledge-based jobs, rather than labour intensive roles and are more educated than their parents. The second statement emphasises the perspective that farmers are not respected in the community leading to young people wanting a modern job. Further, the third statement indicates that farming in general is perceived negatively by the community. This is due to the

association of farming with hard work with little rewards and also not being respected in the community. The fourth perspective is founded on the fact that rural areas are not attractive for young people who perceive that work is available in other areas (Sumberg et al., 2017). In addition, the paper by Miller and Lee (2014) addresses the age-appropriateness of some agricultural jobs that youth have to carry out. Due to the lack of experience these youths possess, they recommend appropriate training and supervision in the process of work. Deininger et al. (2014) applied the Land Governance Assessment Framework (LGAF) to gain insight on the land governing mechanisms in ten different countries. The findings suggest that most of the African countries demonstrate a weak protection of rights with regards to land ownership, a difference between male and female accessibility to land and limited effectiveness to record right ownership of land. This further emphasises the importance of land governance in agriculture.

2.6. LIVELIHOOD

All the previous parts of the theoretical framework lead to the concept of livelihood. Livelihood can be defined as the means of gaining a living (Chambers & Conway, 1991). moreover, Chambers and Conway (1991) note that livelihood can be captured through three fundamental concepts that can be perceived as an end and as means towards the capture of a particular livelihood. The first fundamental concept (capability) elaborates on a person's ability to do and be whatever he or she want to be. the application of a particular capability to facilitate a choice and performance according to a particular situation is perceived as a means towards livelihood. Equity is the second concept that discuss the unequal distribution of assets, capabilities and opportunities. The third concept (sustainability) covers the long-term perspective that an individual possesses towards understanding the consequences of his or her action (Chambers & Conway, 1991).

Figure 2. The sustainable livelihood Framework (Scoones, 1998)



Going forward, the United Kingdom's Department for International Development (DFID) introduced an analytical framework to analyse and understands the process that people incur to achieve sustainable livelihoods (Krantz, 2001). This analytical framework (illustrated in figure 2) is called the sustainable livelihood framework (Scoones, 1998). The framework consists out of five different element that are analysed in a certain order to determine the livelihood situation of a person or a group. In accordance to the framework, the context, conditions and trends are analysed, by investigating the disruptive

changes in the given environment. The analysis of livelihood resources with their trade-offs, combinations, sequences and trends is done through the evaluation of the five capitals. The first capital addresses the natural resources available and their diversity. The human capital element looks at the health, education, knowledge and skills of a person or a group. The monetary resources are discussed with the financial capital. The physical capital captures the influences of infrastructure and tools and technology. The social capital covers the networks, connections and relationships of a particular person or group. The next step of analysis elaborates on the institutional and organisational influence on accessing livelihood resources and design of a livelihood strategy portfolio and path. Moreover, these institutions and organisations include the public, private and non-governmental entities that structure the livelihood environment. In addition, these entities facilitate governing mechanisms such as laws, policies and cultures. There out, the livelihood strategies are analysed accordingly to determine the sustainable livelihood outcomes.

With regards to development studies and the rural agriculture development, Hussein and Nelson (1998) note that agriculture-based initiatives have a choice of three strategies to improve their livelihood. Agriculture intensification is perceived as one of the three options that an individual has in order to improve their livelihood. This strategy is built on the assumption that an increase in input automatically results in an increase in output (Binswanger-Mkhize & Savastano, 2017). The second way an individual can improve their livelihood is by diversifying their sources of livelihood. As exhibited by the tomato farmers in Okali and Sumberg (2012) case study who had multiple sources of income besides farming to contribute to their livelihood. The third option an individual has is to abandon their rural location and agricultural work to search for non-agriculture related livelihoods in urban areas. As such was the case in the findings of Bezu and Holden (2014). The sustainable livelihood outcomes are analysed to better understand what the benefits and trade-offs are of the livelihood assets that an individual possesses.

2.7. CONCEPTUAL FRAMEWORK

Figure 3: Original conceptual framework

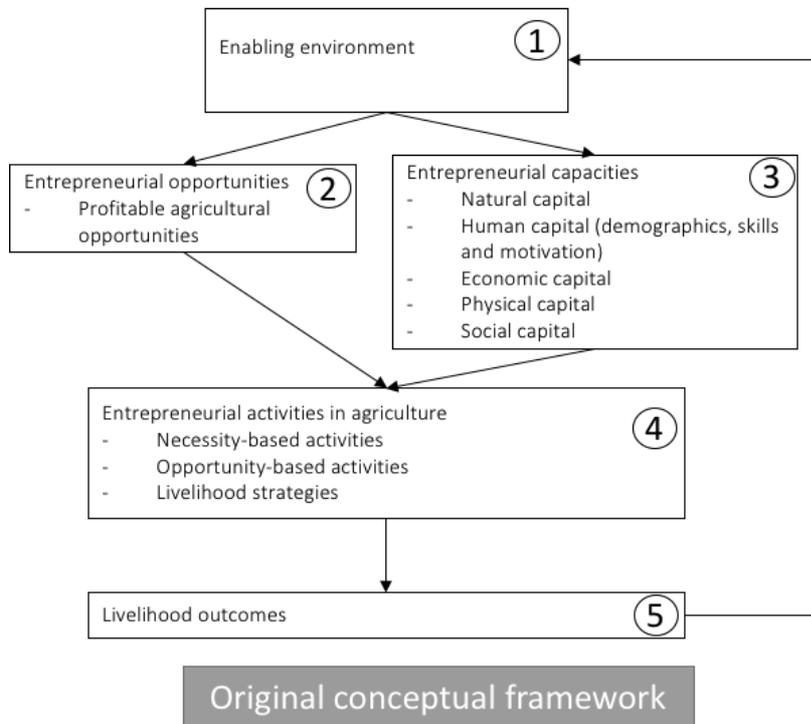


Figure 3 provides an overview of the conceptual framework that was developed from the collected literature. This conceptual framework was developed with the objective of providing this research with a structure to answer the general research question. This framework consists of five main concepts that are related with each other. Moreover, the structure and sequence of the different concepts of the conceptual framework are inspired by Global Entrepreneurship Monitor's conceptual framework (Herrington & Kew, 2016) and the sustainable livelihood framework (Scoones, 1998). The first concept focuses on the enabling environment that surrounds the young agricultural entrepreneurs. The enabling environment includes both governmental and non-governmental policies and programs that address youth entrepreneurship in agriculture. The culture of a given sector of Kayonza district were added to understand the social structures and norms of that specific area. These aspects did cover both regulative and normative context regarding youth entrepreneurship in Kayonza district. According to the structure of this research, the first concept lays the foundation for the second and the third concept which are intrinsically dependent on each other. The second concept focuses on profitable entrepreneurial opportunities that are created by the enabling environment. Therefore, focusing on the agricultural opportunities that the youth can seize in order to initiate their businesses. Additionally, the entrepreneurial capacities of the youth in agricultural are analysed in the third concept. These capacities include the natural capital, human capital, economic capital, physical capital and lastly the social capital. The second and third concept lead to the fourth concept. This concept elaborates on the agricultural activities and the motivation to why the young entrepreneurs ventured into agriculture. Thereby trying to understand whether starting an agricultural venture was out of necessity or rather just seizing on a particular entrepreneurial opportunity. Accordingly, young entrepreneurs are grouped according to their production capacity and the commercialisation of their products. the livelihood strategies that the young entrepreneurs choose to pursuit is also elaborated on in the fourth concept. The entrepreneurial

capacities and the entrepreneurial activities address the cognitive context of the youth's entrepreneurial behaviour. These particular concepts analyses whether youths are able to seize the observed entrepreneurial opportunities given their individual capacities. The livelihood strategies that are derived from the fourth concept are elaborated on in the fifth concept. Thus, the fifth concept discusses the implications of these agricultural entrepreneurial activities and strategies with regards to the added value that is obtained by the young agricultural entrepreneurs. The information retrieved from this sequence of concepts leads to the answering of the general research question and a recommendation for the development of future youth-centred policies.

2.7.1. OPERATIONALISATION OF THE CONCEPTS

This subchapter provides an overview of the literatures that were applied to operationalise the concepts.

Table 1. Operationalisation of the concepts

Enabling Environment.	Description	Example
(Non-) Governmental policies	The policies that engage with young agricultural entrepreneurs	Rwanda and Ethiopia's national youth policies (Bezu & Holden, 2014; Government of Rwanda, 2005)
(Non-) Governmental programs	Programs that are of any assistance to young agricultural entrepreneurs	Youth program for tomato farming (Okali & Sumberg, 2012)
Education and Training	Special entrepreneurial teachings or training that stimulates entrepreneurial behaviour	Training to develop an entrepreneurial mindset (Sebbumba, 2013)
Commercial and professional infrastructure	The physical platforms that provide access to the market and professionalization of the entrepreneurial process	Creating favourable market condition (Kristensen & Birch-Thomsen, 2013)
Access to physical infrastructure	The accessibility of roads in combination with the mode of transportation	The importance of transportation of fresh products (Beuving, 2010)
Cultural and social norms	The social structures that influence entrepreneurial behaviour and the composition of it with regards to the age and sex of the entrepreneur	Selling fish is only done by women (Udong, 2011)
Financial support	Capital that is made available for young agricultural entrepreneurs to venture with	Youth savings groups (Flynn & Sumberg, 2016)

Entrepreneurial opportunities.	Description	Example
Profitable agricultural opportunities	The entrepreneurial opportunities in agriculture that are facilitated by the enabling environment	The opportunities for youths in agriculture (Brooks et al., 2012 and 2013)

Entrepreneurial capacities	Description	Example
Natural capital	The soil, water and air that the agricultural entrepreneur relies on.	Soil nutrient depletion (Drechsel et al., 2001)
Human capital	The demographics, skills, interest, needs and motivations of the entrepreneur	Young people's perspective (Sumberg et al, 2017)
Economic capital	How the entrepreneur accesses capital to invest in his/her venture	More dynamic financial services (Brooks et al. 2012)
Physical capital	The availability and accessibility of inputs, land and equipment for production purposes	What is really required to farm effectively (Binswanger-Mkhize & Savastano, 2017)
Social capital	The networks, social demands, relationships and affiliations that the agricultural entrepreneur depends on to prosper	community law prohibiting women to own land (Deininger et al., 2014)

Agricultural activities	Description
Necessity-based activities	Entrepreneurs that venture to survive without any other sources of livelihood
Opportunity-based activities	Entrepreneurs that seize the entrepreneurial opportunity but have other sources of livelihood
Subsistence producers	Producers that consume 100% of their yield
Producers with commercial potential	Producers that consume 70% of their yield and send 30% to the market
Commercially successful producers	Producers that consume less than 50% of their yield and send more than 50% to the market
Median-large agricultural business	Producers that send 100% of their yield to the market
Livelihood strategies	Intensification, diversification or migration

Livelihood outcomes.	Description
The different livelihood outcomes	Job creation, poverty reduction, well-being and capacities, livelihood adaptation, natural resources and sustainability

3. METHODOLOGY

Primary and secondary sources of data were consulted for the collection of information. The secondary data is retrieved from documents including governmental publications and research articles. Primary data collection has been applied in the form of observations and interviews. The previous chapters provided an overview of the information that is required for the research question to be answered. Accordingly, this chapter elaborates on the method used to obtain this information.

3.1. LITERATURE

A literature search enables this research to systematically obtain information from literature, reports and other related document (Verschuren & Doorewaard, 2010). Moreover, a list of key concepts was established derived from the research objective and research questions. These key concepts were operationalised from the collected literature. This approach helps to understand the foundation of the concepts and to conceptualise the context in which they are applied. The added value of this content analysis can be derived from the abundance and diversity in information that may lead to other questions that need to be studied. The information is accessible and consistent. The advantage of literature is that the content does not change due to human interactions and allows this research to compare various sources of literature in order to build a robust theoretical framework.

3.2. OBSERVATIONS

Observations are the chosen method of data collection applied in this research to access information from both the environment and the participants (Verschuren & Doorewaard, 2010). In the case of this research, the researcher observed the entrepreneurial behaviour of young individuals active in agricultural sector. Appendix I provides an overview of how the observation scheme was structured and what information was acquired from the participants. The open variant observation technique was applied. Thus, implying that the researcher acquired the observational data from a particular point of interest. The researcher provided the participants with general information regarding this research without revealing his objective to the observed individuals. Moreover, he participated in the entrepreneurial activities in the role of an observer. These observations were accompanied by several questions relating to the entrepreneurial activities of the given community that was observed. For example; local market workers were asked whether they worked for themselves or if they worked for an employer. These questions were asked in order for this research to make a distinction between employees and entrepreneurs during the observations. The researcher chose not to reveal the research objective, due to the fact that the observed individual would change the observation results to bend to it to their advantage. By doing such, this research addresses the intrusion effect that would otherwise occur. However, the researcher explained to the participants that the collected data with regards to the views and behaviours of youth entrepreneurship in agriculture of that community. Moreover, the data collected from the observations enable an analysis and detect patterns of young entrepreneur's interactions during agricultural business activities. Key to this method is the understanding of the individual's views and entrepreneurial behaviour. The researcher observed the following enabling environment categories with accompanying questions regarding the general representation of male and female young entrepreneurs in agriculture.

The research was based in the Kayonza district. However, only eight out of the twelve sectors were included in the observations. The observed sectors were Mukarange, Rukara, Rwinkwavu, Ruramira,

Gahini, Murundi, Mwiri and Nyamirama. These sectors are comprised out of a number of cells that consist of multiple villages. Appendix III provides an administrative map of the Kayonza district and highlights the sectors that were included in the observations. The researcher was situated in the Makarange sector (Kayonza cell) and travelled to other sectors and cells using a motorcycle. This mode of transport helped ensure mobility to certain areas of the district that were not access by other means of transport and difficult to access by foot. Pictures were taken to document certain observations. Hence, appendix III provides a list of the observed sectors of the district.

3.3. INTERVIEWS

Interviewing is a method for accessing information from a person as the primary source in this case an entrepreneur. This process was steered by the formulated research questions, the operationalised of key concepts and a sample of entrepreneurs that have been strategically selected. Table 1 illustrates the categories that facilitated the sampling procedure. The four persons in each category were randomly chosen. An individual face-to-face interview is the questioning technique that was used. Additionally, the interviews were structured with a combination of both open and closed questions. Although, this is a technique that is time-consuming and expensive in comparison with other polls it collects the information needed to answer some research questions. The interviews contributed to an in-depth understanding of how the entrepreneurial capacity is applied in agricultural activities and how this impacts the livelihood of the young entrepreneurs. The personal identity of the participants was concealed by the codes that are illustrated in table 2. Appendix II provides a preliminary interview format that was adjusted according to the findings of the observations. A youth coordinator employed by the district provided the researcher with a list of young agricultural entrepreneurs who were willing to participate in this research. Appendix IV provides an overview of the coded list of these participants. The researcher was able to interview over eighteen young entrepreneurs of whom eight participated in a focus group interview (appendix VI). Table 2 also provides an overview of the distribution of these participants categorised by their age and gender.

Table 2: Sample size (intended sample, actual sample and the coding scheme)

Young agricultural entrepreneurship	Intended sample		Actual Sample		Coding scheme	
	Male	Female	Male	Female	Male	Female
16 – 19 years	4	4	0	0	Min (n=0)	Fin (n=0)
20 – 24 years	4	4	1	1	MIIn (n=1)	FIIn (n=1)
25 – 30 years	4	4	13	3	MIIIIn (n=1-13)	FIIn (n=1-3)

Note: see appendix VI: List of interviews

3.4. METHODS OF DATA ANALYSIS

This research collected qualitative data that were analysed through an iterative process. NVIVO 12, a qualitative data analysis software was used to analyse the data. NVIVO 12 helped to manage, organise and adjust the collected data in order to strengthen the analysis, and facilitate transparency. The observations were documented through the observations scheme and several pictures were taken as visual evidence. The written observation reports were added into the NVIVO 12 database for analysis. Several interviews were recorded, and others were documented with notes during the dialogue. All interviews were transcribed and added into the NVIVO 12 database to analyse. An iterative process was

applied to analyse the observations, the interviews and compare the findings with existing literature. The iterative process consisted of an individual researcher who reviewed and interpreted the collected data in accordance with the formulated categories. However, these reviews and interpretations were facilitated by the themes and categories that were established in the observation scheme and interview framework. Coding was applied to analyse the words and short phrases of the transcribed interviews that were clustered due to their commonalities with a given theme or category. The coding structure was determined by the structure of the observation and interview. The process of data collection was documented in order to allow other researchers to assess the process and establish guidelines for future (comparative) studies. A detailed approach and the availability of time were crucial elements while applying these methods of data of collection and data analysis. The next chapter provides an overview of the findings of the iterative process that was applied.

4. FINDINGS

This part of the research provides an overview of the empirical findings. The presented data are a consolidation of multiple observations and interviews. The following information was derived from qualitative data analysis with the assistance of the NVIVO 12. Accordingly, the elaboration of these findings follows the structure of the observation scheme and that of the interview format (see appendix I and II). The findings from the observation include the following elements of the enabling environment: youth-centred policies and programs, education and training available for young entrepreneurs, the commercial and professional infrastructure, access to physical infrastructure, cultural and social norms, and the availability of financial support for young agricultural entrepreneurs. Moreover, findings relating to profitable agricultural opportunities were included in the observations as an element of the entrepreneurial opportunities. The findings from the interview include the entrepreneurial capabilities that consist of the natural capital, human capital, economic capital, physical capital, and social capital. Additionally, the findings regarding the agricultural activities, livelihood strategies, and livelihood outcomes were also derived from the interviews.

4.1. OBSERVATIONS

The observation focuses on generating a better understanding of the entrepreneurial environment as briefly mentioned in the methodology section. This chapter starts by providing a hierarchical overview of the policy environment. This is followed by the findings regarding youth-centred policies and programs, education and training access to the market and physical infrastructure in combination with modes of transportation, cultural and social norms and access to capital. The findings from the observations also contain profitable agricultural activities that are facilitated by the observed environment. The Rwandan government has multiple governing layers that develop and reinforce policies. It is divided into eighteen ministries that exercise executive authority. One of the ministries that is in alignment with this research is the ministry of youth. The ministry of youth interacts with the other seventeen ministries to ensure the equal representation of youth in all governments policies. Policies in Rwanda are developed and introduced on a national level such as the national youth policy which is steered by the 2020 vision and the millennium development goals. These are delegated to the provincial authorities who formulate an objective for the districts. The districts are responsible for the creating a plan on how the policies are going to be implemented and governed. Although, the planning and governing happens on the district level the implementation happens on the sector and cell level. Villages are chosen based on their potential to accomplish the objective that was set by the province. The district of Kayonza has several governing bodies that watch over the development of the youth-centred policies in agriculture. The agriculture department has the responsibility of making sure that farmers in the district have good harvest. This is done by providing the farmers with advice on how to cultivate particular crops and maintain their farms. The advices are given by agronomists who are employed by the district on different levels. The youth department represents the youth in the district that collaborated together with youth coordinators on the sector and cell level. The department of business development and employment reinforces business development and job creation for everybody who is capable of working. The Rwanda Agriculture Board is a government agency that supplies farmers with agricultural input that has been tested to ensure a good harvest. The Rwanda Youth in Agribusiness Forum is a youth community with the objective of changing current youth mind-set on agribusiness. These governing bodies have a representative on both sector level and cell level.

4.1.1. YOUTH CENTRED POLICIES AND PROGRAMS

There is a national youth centred policy that emphasises youth participation in the labour market. However, this research did not observe any distinctions being made by government bodies between youth entrepreneurs and other groups in Kayonza. Furthermore, this observation was also made within the cooperatives where all the members were treated equally regardless of their age and gender. Meaning that all the activities organised within a cooperative were open for all members. The young members in a cooperative were therefore able to learn from the practices and experiences of elderly members in the cooperative. On average youth made up 20 to 30 percent of the members in the cooperatives that were observed. These youth groups are well informed about the current youth centred policies and programs on the national level. However, they do not see those policies being implemented on the village level (MIII7, 2018) There are some criteria that youth need to meet before participating in some (non) government programs, such as being established and able to produce a pre-specified quantity of harvest to gain access to a specific program. This process of participation and getting support from the authorities is perceived as being long and expensive. This is due to the lack of transparency with regard to what is required in order to participate in a particular program and who the decision makers are in the process. Meaning that youths need “to spend in order to receive”. quoting MIII3 (2018). In addition to this issue, the support that is meant for youth is sometimes given other groups of society because of their relationship with the local authorities and because of their business establishment in society. The findings show a clear distinction between two types of entrepreneurs. Namely, individual entrepreneurs and ventures within a cooperative. The individual entrepreneur is characterised by restricted access to public resources such as land, water and roads. These group of entrepreneurs can access land by using the family land, renting land and buying land. The family land is mostly governed by the family who is very vigilante with the what is cultivated on it. The rented land provides more liberty to the entrepreneur to execute his/her own vision in cultivating the land. However, land that is bought provides the entrepreneur more liberty to cultivate more freely without the fear of losing the land after a certain period. Regardless of how the entrepreneur accesses the land he/ she still have to comply to the government’s land management guidelines that indicate which crops can be cultivated in which area. A part of the entrepreneurs’ encounter difficulties to cultivate the location allocated crops due to lack of knowledge, experience and capital to get the necessary input to start.

Regarding support, individual entrepreneurs must provide proof of how their venture is or will benefit the larger community before gaining access to support from the local authorities. This condition that is placed on them makes it nearly impossible for an entrepreneur who is trying to sustain themselves to gain access to these supports. The majority of individual entrepreneurs that participated in this research were not registered by the government or other agencies as being entrepreneurs. This means that their business did not have a legal form, or a legal status as was mentioned by the respondents. Due to this fact they frequently encounter difficulties when they try to access support that is meant for entrepreneurs. The individual entrepreneurs carry the burden of having to do everything by him/herself regarding the entrepreneurial activities. This burden is characterised by having to conduct all the physical labour or outsource it if there is sufficient means, accumulate capital to invest in the venture and also having to carry the risk of not succeeding.

The other type of entrepreneurs is those within a cooperative. In this case a cooperative is a group of individual farmers that combine their means and resources to cultivate a large plot of land. These

entrepreneurs are characterised as having a clear objective and being able to access the public resources more openly. Most of the cooperatives are situated in the near vicinity of a water source and are accessible through roads. Moreover, cooperatives are registered by the government and have a legal form. This legal form enables the cooperative to request land from local authorities to exploit their cooperative objective, access agricultural inputs and tools, apply for a bank loan to invest in the cooperative and gain more bargaining power when negotiating with customers.

The government favours cooperatives with regard to land distribution. The cooperatives have a clear objective and can impact more people in the larger community. Moreover, the land that is provided to the cooperative is borrowed from the government based on an agreed period. Another way that allows cooperatives to gain access to land is by combining all the members' plots of land to make one large plot that is cultivated by the cooperative. The Rwanda Agriculture Board facilitates the farmers with agricultural inputs and the district supplies the necessary tools that are normally lacking or too expensive to acquire such as an irrigation pump. The banks are more willing to provide a loan to a cooperative because they trust in the capacity of the group to be able to pay back. COPEDU limited is a bank that was founded by cooperatives and attends to the needs of both cooperatives and other clients. Most of the cooperatives that participated in this research have a bank account at COPEDU limited.

This research encountered youth that changed from venturing as an individual to venturing within a cooperative. This change was motivated by the following reasons: being organised and having a clear objective that aligns with the government land management plans, being able to access land easily as a cooperative, having the means to contribute to the cooperative and through previous experience as an individual entrepreneur, being able to show the potential of working within a cooperative. Also observed were some entrepreneurs who ventured in cooperative that switched to become individual entrepreneur. The reason for this transition was led by the following: the cooperative had acquired insufficient land to accommodate all the members and still make a profit, disagreements with the other members of the cooperative (most of the time about how the capital was managed), and lastly the inability to pay the membership fees to the cooperative.

From a policy point of view agriculture is regarded as only one of the many sectors that the Rwandan government is focusing on. Meaning, that the available resources are distributed based on a particular sector's program or priority. The Rwanda government emphasises the more creative and innovative initiatives in agriculture. These creative and innovative initiatives are aimed on adding value to the final product. Such establishments integrate technology into the farming systems to improve the harvest. The underlying objective is to support initiatives that can create employment.

The National Employment Program is a government led initiative with the objective of strengthening employment programs and creating over 200,000 off-farm jobs. This objective will be reinforced by more vocational education in extended services that are related with agriculture. At the end of the vocation education graduates are provided with a toolkit that is tailored to the vocation education that they received. Graduates that had a technical education received a toolkit filled with the basic equipment needed to start working, including a hammer, screwdriver and pair of pliers. The agriculture graduates receive a toolkit containing seeds, fertilizer and a hoe.

4.1.2. EDUCATION AND TRAINING

The findings suggest that the kind of education or training an entrepreneur is able to attend differs depending on the background of the entrepreneur. Entrepreneurs that venture in a cooperative are able to consult the agronomist that is provided by the cooperative. This agronomist has the responsibility of making sure that crops are healthy and produce a good harvest by supplying members with knowledge about the most efficient or effective way of cultivating a particular crop. The agronomist works according to the guidelines of the cooperative and do not make distinctions based on the age or gender of the members. The knowledge within a cooperative is supplied through training by both the agronomist and by the district. The agronomist provides crop specific training to members of the cooperative that want to participate. However, the training is provided by the district and informs the people of the trends and developments with regard to the governments land management policies. There are some trainings that are exclusively organised for the agronomist in the district and training that are open for all the farmers to attend. Members of the cooperative have to be informed in order to participate in such an open training. However, most of the time this information is shared with the head of the cooperative who then shares it with the agronomist and one or two other members thereby depriving the other members of this information. The members that receive the information are those who have an intimate relationship with the head of the cooperation or have a significant influence within cooperative. The young entrepreneurs in a cooperative are sometimes not even considered as potential participants due to their lack of experience and are also often the ones who are excluded from accessing the information that could enables them to attend a training.

Individual farmers access knowledge through the information that is provided by the agronomist from that specific cell through tailored consulting and training. On the one side some sectors/cells do not have the means for any additional education or training to provide the individual entrepreneurs. Hence, not all sectors and cell receive the same amount of education or training. Whereas on the other side some sectors or cells receive continuous training. Individual entrepreneurs from sectors and cells that receive trainings are open to share their knowledge with the individual entrepreneurs who did not receive any training. The presence of the education and training in a given sector or cell mainly depends on the governments perception of the (potential) contribution to a larger society. Meaning that sectors or cells that are perceived as not being able to contribute are neglected and those with more (chances of) contribution receive education and training. It can be argued that access to the information regarding training and the attendance of a training is limited to those who are academically educated, are close acquaintances with the local authorities who organise the training or have an already established business. Individual entrepreneurs will sometimes look for training in neighbouring sectors or cell because of the above-mentioned constraints. The provision of primary, secondary, vocational and university education to the youth are facilitated by district. Meaning that some youth choose to follow their academic studies elsewhere and come back when their done with it.

4.1.3. PHYSICAL PLATFORM AND ACCESS TO MARKETS

These findings show that the market is accessed differently depending on the quantity and quality of the products that have to be marketed. Entrepreneurs that venture in a cooperative access the market through the cooperative. Some cooperatives are a part of a federation of cooperatives. The federation of cooperatives is responsible for market acquisition and all the activities associated with initiating a contract with a customer. The federation is therefore responsible for negotiating with the customer

about the quantity, quality and price of products. The specific details about the quantity, quality and price are communicated back to the cooperative to make sure that the contract will be met. In some cases, the federation collects products from multiple cooperatives to supply one large customer. What was observed is that the cooperative produces more harvest on a bigger plot of land and have collection facilities where the harvest is collected and stored. The individual entrepreneurs have to find a market for their products by themselves and most of the time it is the local market that that is held twice a week. These individual entrepreneurs sell their products on the spot and also negotiate the price in accordance to the availability of that particular product. Hence, scarce high-quality products and products are priced highly. The products in the district that are more common and are readily available are priced accordingly (lowly). The surplus and products that the entrepreneur is not able to sell on the local market are stored at his/her home until a new market is held. The individual entrepreneur can also choose to be a supplier to a seller on the market who in that case would buy a big portion of the products to sell on the local market. In this case the producer is not selling per se. Whether an individual entrepreneur becomes a supplier depends on the quality, quantity and price of the products. The district advises individual entrepreneur to cooperate with their peers in order for them to combine their harvest and supply a one big customer such as a processing factory. However, the Kayonza district has only a processing factory for rice. For the other processing factories an entrepreneur has to look outside the district.

4.1.4. INFRASTRUCTURE IN COMBINATION WITH MODE OF TRANSPORT

The road infrastructure in the district consists of mostly unpaved roads followed by tracks and paved roads are the least common. The unpaved roads go through the entire district and connect sectors with each other. They are some unpaved roads that connect the sectors with villages and a few that connect village to village. These are inaccessible during the rain due to the formation of mud pools, and dusty during dry periods. The unpaved roads are traced and placed by the district and are maintained by the local communities near it. The paved road also goes through the district and connects the district with other districts. The district has only two main roads that are, but they are well maintained and very accessible. Other infrastructures that are traced by the community themselves are the tracks. These tracks are mostly present within a village and also connect the often-unpaved road to a plot of land that is being cultivated. The tracks are sometimes accessible with a bicycle but the majority of people in the district access them by foot. Just like the unpaved road, tracks are also inaccessible in during the rain.

The type of infrastructure that is placed in a particular area depends on location and what is being produced there. These findings indicate that the areas where a cooperative is located are more likely to get an unpaved road. Whereas an area where only small individual farmers are grouped does not get any changes in its road infrastructure. The most common modes of transport transporting goods are by bicycle, car, motorcycle, truck or by carrying it on one's head. The mode of transport differs depending on the road infrastructure that is available at a given location. All the modes of transport are able to function very well on a paved road. Cars and trucks are less usable on an unpaved road and even more less on tracks. Leaving carrying products on the head as the most used mode of transport while using track.

4.1.5. CULTURAL AND SOCIAL NORMS

Culture and norms have placed high expectation in the hands of youth who got the opportunity to extend their education past secondary school. Youth who have enjoyed studying and then return to their home village without an office job are perceived differently than youth that did not pursue an educational career beyond primary or secondary school. This perception is dependent on the general awareness of a given community. Hence, when a given community is educated and has a good understanding of how the job market operates, youths are more likely to be accepted although they did not manage to get an office job. The contrary is observed in a given community where the people are less educated and have no understanding of how the job market operates. In this community, youths are perceived as a disappointment if they return home after finishing their education and start carrying out farming activities like the other youths that did not have any education. This is because the less educated community questions the reason why the parents had to pay all those tuition fees for all those years for the youth to end up farming just like there people who did not study. Educated youth are expected to introduce new farming techniques, have better harvest, higher quality and quantity compare to their uneducated counterparts.

Although the youth population is well represented in agricultural activities merely a small portion of these youth is engaged in entrepreneurial activities. These youths are encouraged by their direct community to study as much as they can to become a teacher, doctor or an engineer. Findings show that cattle and poultry farmers would encourage their children to pursuit an educational carrier that leads them to become veterinarians, so that they can help take care of the family business. The farmers that are engaged in crop cultivation did not want their children to practice the same agricultural activities as they were practicing because the deserved better.

In addition, this research captured the following social narratives that are embedded in the culture with regard to gender and the entrepreneurial activities. In general, males represent the majority of the participants in agricultural entrepreneurial activities within the district. Males manage the income, land and work division in the household, they are driven by competition, prefer to work alone, and exhibit a risk seeking behaviour towards venturing. Moreover, males are also willing to conduct the physically challenging labour. With regards to work division males are regarded as the managers and females are perceived as the individuals that execute the majority of the work. It is observed that females like to take care of the family, they exhibit a risk aversive behaviour and like to work together with other females. Moreover, females are not willing to conduct physically challenging labour unless there is no other solution. The participation of females in entrepreneurial activities is steadily increasing with each year and it will not take too long before the entrepreneurial activities are equally distributed between male and female. These characteristics are captured by the following social narratives with regard to gender and the entrepreneurial activities. The females are not able to run a business versus males are more suited to do so, females are physically weaker than their male counterparts, and lastly females are more reluctant (risk averse) to start a business versus males who are more willing (risk seeking) to start a business.

4.1.6. ACCESS TO CAPITAL

The capital to invest into the agricultural business is accessed differently. The members of a cooperative can request for a loan within the cooperative to invest in their business. This process of accessing capital

does not make a distinction between the members of cooperative so ever. A request has to be handed in by a member, get assessed and approved by a governing body within the cooperative before the member can gain access to capital. If the cooperative is not able to handout a loan from its own funds a loan is requested in the name of the cooperative. Although the loan is meant for one particular member the loan is carried by the cooperative until the loan is payed back. Individual entrepreneurs have to look search within their own capabilities and resources before starting a venture. Hence, the practices of using the family's plot of land to start, working first to save money, starting very small with limited resources and conducting all the work that is associated with the venture by themselves is how the individual entrepreneur manage to access and save money.

4.1.7. PROFITABLE AGRICULTURAL OPPORTUNITIES

The agricultural business opportunities in the district heavily depend on the access to land and the availability of financial resources. The access to a plot of land is already discussed in the part about public resources. Land can be accessed through the means of ownership, renting and borrowing from the government. And dependent on the size of the plot different crops can be considered as being profitable to cultivate. The big self-owned plots of land provide a great opportunity to cultivate either bananas or maize on a large scale. The reason for this opportunity can be deducted from the fact that the banana is an all-season crop that provides a harvest after one year. Maize on the other side is a seasonal crop that produces a harvest after 3 or 4 months depending on the variety. Moreover, on a small self-owned plot of land vegetables are considered the best option to cultivate. Vegetables are characterised by a short harvesting period and the availability in all seasons. Moreover, there is a big demand for vegetables both locally and nationally. Most of the vegetables are consumed locally and the other portion is brought to the bigger cities. But due to sensitive and perishable nature of vegetables most of the harvest is sold locally or sold to a seller who will transport it to other cities. Maize is considered as the most profitable crop to cultivate on a big plot of land that is rented and vegetables on a small plot of land. What crop is cultivated on the plot of land that is borrowed by the government is dependent on the government's agenda. Moreover, depending on the region cooperatives are governed towards the cultivation the priority crops. Hence, the government supports the cultivation of vegetables on a smaller plot of land. The mind-set of being able to create value with the given resources no matter many or less is an important aspect to be able to capitalise on these agricultural business opportunities. Moreover, it is also important to apply agricultural inputs before and during the cultivation process. Continuous monitoring of the crops is essential in order for the entrepreneur to know when the additional input is needed and to ensure that he/she will have a good harvest. In addition to these aspects, the entrepreneur is advised to join a cooperative in order to gain easier access to land, capital, equipment and agricultural inputs.

4.2. INTERVIEWS

This chapter provides an overview of the findings regarding to consolidated responses given by the interview participants. The objective of the interview was to generate date that would facilitate a better understanding of the young agricultural entrepreneurs in Kayonza. This chapter is structured according to the interview framework (appendix II). Hence, the first part of the findings provide insight on the entrepreneurial capabilities that the young agricultural entrepreneurs in Kayonza possess. However, these insights are facilitated by the five capitals that were derived from the sustainable livelihood model (Scoones, 1998). The second part provide an overview of the responses given regarding to the

entrepreneurial activities. The responses regarding to how the young agricultural entrepreneurs were able to convert their entrepreneurial capabilities and activities into specific outcomes are provided in the last part of this chapter.

4.2.1. ENTREPRENEURIAL CAPABILITIES

4.2.1.1. NATURAL CAPITAL

Deducted from the interviews the participants indicated that they rely on the following public resources for their business. Moreover, a farmer that cultivates crops rely on the water, soil, sun and infrastructure. The most common source of water that is used to irrigate the crops is rain, but it is considered not too reliable due to climate change. The farmers experience long periods of droughts and short heavy rain falls that jeopardise their harvest. Surface water and water from a water tap are the other means of water that farmers have access to. Surface water is better accessible for the people that live in the near of the source. However, those who live far from the water source have to go fetch the water. The practice of fetching the water is considered to be very exhausting and time consuming too. Not all the villages had access to running tap water. Hence, the farmers would have sometimes walk past two or three villages before getting to running tap water that they can use to irrigate their land. Land ownership differs per farmers depending on their financial means and their entrepreneurial status. Thus, a plot of land can be accessed by buying it and owning, renting and borrowing a plot of land. The size of a plot of land that can be bought depends on the financial means of that particular individual. Farmers with less financial means buy small plots where the farmer with more financial means buy bigger plots of land. The majority of the people that cannot afford a plot of land will rent it. Renting a plot of land is less expensive and provides the farmers the possibilities to rent for a season that is suited for the cultivation of a specific crop. Hence, a farmer can choose to rent for a few months or for a year depending on the cultivation period of the crop. The latter option of accessing land is through a cooperation and the collaboration with the local government. The local government stimulates the consolidation of farmers and rewards them by providing them with a plot of land to cultivate on. Moreover, the cooperative has to have an organisational status and hand-in a request for a plot of land and find a plot of land that they can cultivate on. These farmers use the roads to transport the water to their plot of land. The paved roads are very accessible for all modes of transport, the unpaved roads are inaccessible during the rainy days and dusty during the dry sunny days. The majority of the input suppliers use public transport to supply to their stores. Public transport operates mainly on paved roads and is very accessible.

4.2.1.2. HUMAN CAPITAL

The findings on the human capital are based on the personal capabilities of an entrepreneur. The perception of the youth entrepreneurs on the requirements, distinctive features and the importance of physical health are addressed. According to the participants an entrepreneur has to meet the following personal requirements to be an entrepreneur. An individual has to be able to recognise an opportunity and have the willingness to seize it. Consequently, having a vision helps to set objectives of where the business wants to go in the future. Hence, starting a business requires financial means and having sufficient funds and being resourceful with the given means can help to reach the business goals. In addition, the individual has to be able to manage his/ her business and has to know what he/ she is doing or going to do. An entrepreneur always surprises the customer by providing more than they

expect. Being an entrepreneur means that the individual is constantly competing with other entrepreneurs, continuously learning and adopting to the changing environment. Lastly, as an entrepreneur an individual should be prepared to work hard. Furthermore, the participants indicate that they can be distinguished from the other entrepreneurs because of the following reasons. Entrepreneurs that cultivate a specific crop that is also cultivated by many others is distinguished by his or her specific cultivation method and the application of additional agricultural inputs. Farmers that serve a demonstrational purpose in the community have the possibility to work together with the Rwanda Agriculture Board to get the first seeds before the others get them. Moreover, these model farmers are expected to show an example of how the given seeds should be cultivated. The input suppliers distinguish themselves by their ability to supply their customers with crop specific knowledge and advise. The majority of the input suppliers are self-employed and educated in crop science or are agronomists by training. However, they are input stores that are set up by a business person that then employees an agronomist or veterinarian to run it. The agricultural input that is supplied by the suppliers is identical and the distinction is made based on the customer service that is provided. Hence, some stores just sell the inputs without any extended services, other sell the inputs and also provide advice on how to apply it and others sell the inputs to the farmers, provide them with advice and help them also with the application of it. Moreover, where some retailers choose to have one physical location where their customers can find them and others willing to go to the customers by establishing subsidiaries in remote villages. These input suppliers with subsidiaries store their supply at home and distribute them accordingly for replenishment.

The farmers that work on the wild perceive their physical health to be an important asset in the cultivation process. They cannot permit themselves to be sick because they conduct almost all the farm related labour by themselves. These farmers have the possibility of asking direct family members for assistance or outsourcing the labour to someone else if they get sick. The family's assistance is free but possibility to outsourcing the labour is only available for farmers with sufficient financial capacity to pay for the conducted labour. The farm is mostly abandoned and neglected if the farmer's family is not willing to assist them or the farmer is not able to outsource the labour in the period of time that he or she is sick. Moreover, besides working on the land, which is physically demanding, farmers also have to carry their harvest from the land to the storage facilities, market or to their homes. Hence, the transportation of the harvest from the field to the local varies depending on the infrastructure of a certain location and the ability of a farmer to pay for another mode of transport except his own. Given a paved road, the farmers have the possibility to use all the modes of transport. Where if given some unpaved roads, these farmers can also deploy all the modes of transport but is limited to using them in dry weather conditions only. The tracks provide also a road infrastructure that is only accessible by bicycles or by foot. Hence, the tracks demand more physical strength from the farmer in comparison with the paved or unpaved roads.

4.2.1.3. ECONOMIC CAPITAL

Also, here the findings indicate that access to capital differs from entrepreneurs who venture within a cooperative and those who venture individually. Entrepreneurs that venture within a cooperative can count on the financial support of the cooperative. All the members of the cooperative have to go through a request procedure before acquiring a loan from the cooperative. In some cooperatives the members' contribution fees is saved and used to grant loans to members in need and other cooperatives get a loan from the bank to grant to a member. The entrepreneurs that have chosen to venture

individually had work first and save up the money for venturing. Some entrepreneurs used their heritage as a collateral for a bank loan, others had to work together with others in order to consolidate the means and a few thank their religion (GOD) to have helped throughout the entire entrepreneurial process. The entrepreneurs who worked in order to save the money to invest in their venture mention that it was not easy to find a job in the district. It is like all the jobs were taken and those in the given position are not willing to change their position. The option of using the plot of land that was inherited as a collateral is not common among youth. Moreover, some of the participants mentioned that their parents didn't own land and that when their families did have land it was too small to split among all the siblings. In some cases, individual entrepreneurs seek for other individual entrepreneurs with whom they will collaborate and combine the means to work of a bigger plot of land and increase their harvest.

4.2.1.4. PHYSICAL CAPITAL

The entrepreneurs use various equipment to add value to their end product. The following equipment is mainly used to transport the entrepreneur and his or her products: bicycle, motorcycle, car, public transport and truck. These modes of transport are accessed by frequent use, owning, renting or borrowing them. Hence, most of the entrepreneurs who frequently use public transport or rent their mode of transport are inspired to buy their own mode of transport in the future. The watering can and irrigation pumps/ machine that are used to irrigate the crops are access by owning, renting them from the municipality and borrowing them from the cooperative. All the individual entrepreneurs were not able to afford an irrigation pomp/ machine due to the high price. The available pumps/ machines are few in numbers and do not sufficiently serve the demand. However, these individual entrepreneurs indicate the urgency and aspiration of getting their own irrigation pump/ machine. One of the participants had fabricated a ladder, watering can and a support structure to support the passion fruit plants. Due to the lack of financial means he was forced to become more inventive with his given resources. Another participant had a cultivation facility build for a specific crop that he wanted to cultivate.

4.2.1.5. SOCIAL CAPITAL

The social capital provides insight on the people that depend on the entrepreneurs for support and the networks that they are engaged in. Furthermore, the participants provide insight on how their entrepreneurial activities are perceived by their direct community and how important this perception is regarded by them. They are many parties that depend on the entrepreneurs' business activities for different reasons such as the entrepreneurs themselves depend on their business activities to ensure a source of livelihood. Hence, the family of these young entrepreneurs rely on them to help their spouse and children with the main source of livelihood, parents to supplement their subsistence way of living and build them a house. The siblings rely on them for cloths and school fees and materials. Besides the fact that established young entrepreneurs are perceived to be able support of their family the local community also depends on them to share their knowledge and experience with regard to their entrepreneurial carrier. Hence, the cooperatives employ the knowledge of the young members who have studied agronomy at university. The young entrepreneurs with agricultural educational background assist cooperatives and their direct community with advice on how to introduce better farming systems that accordingly increase their harvest. The local authorities also depend on these young entrepreneurs to create job opportunities either for themselves or the larger community. Moreover, some young entrepreneurs are also employed by the local authorities to educate the youth

on how to venture on themselves and to help evaluate the entrepreneurial process in the district. As entrepreneurs, these young people have to rely on themselves to find the financial means to invest into the company, staying health in order to able to conduct the work that needs to be done and also providing a source of livelihood to their household.

The entrepreneurs in Kayonza are engaged in multiple network groups for different reasons. The agricultural input dealer is a part of a cooperative (KABDECO) of input supplies that provides their members with training and education to gain an agricultural input deals certificate and also provide him with the opportunity to purchase goods on credit and pay for them when he has sold them. Some of the participant are members of a farmer's cooperative that provides them with better access to land, agricultural input, access to a diverse pool of accumulate knowledge and experience. In addition, these young entrepreneurs who have finished their university get the opportunity to join Rwanda Youth Agribusiness Forum to expend their network or apply for a professional internship in agribusiness. IKEREKEZO is a program that teaches youth how to save money and also use that saved money to handout loans as venture capital to its participants. They are some young entrepreneurs who chose to work individually although the engagement with a network group can be perceived as being beneficial. The reason to the individualist behaviour can be found in the fact that these individuals do not agree with the objective of the group or are not able meet the requirements of the group.

How the young entrepreneurs are perceived in their direct community varies depending in the educational background and the level of success that is associate with their business activities. Moreover, the young entrepreneurs that did not have any form of school education with regard to agriculture are perceived to just be doing what their parents are doing. Their direct community has no high expectations for the uneducated young entrepreneurs at first and are perceived to not be able to realise commercial success. However, this perception changes when these youth demonstrate the opposite behaviour by starting to educate themselves and becoming commercially successful. Then they are perceived as examples to the community and a specially to those with entrepreneurial aspirations. Much is expected from the youth who have finished university. The parents of these young entrepreneurs had to invest in them by paying their school fees and materials with the money accumulated by selling their harvest, borrowing and even selling their land. It is expected from these youth to have an office job with sufficient income to support him/herself and the family that invested in him. However, an office job is not available for all graduates and some go back to their parents and start venturing in farming like their parents. Their direct community is very sceptical about the entrepreneurial activities of these young entrepreneurs and they are regarded as scammers, lazy and good for nothing when they start. When making a comparison the field work ethos of the graduates is lower than those who did not have an education. Hence, the perception changes when these graduates manage to establish an agricultural business that is successful. Then they are perceived as hardworking entrepreneurs that know what they are doing, as wealthy people in a society and a strong figure community because they employ people. In addition, people look up to them to understand how also they can become successful. In some cases, the young entrepreneurs did not know what their direct community thought with regards to their entrepreneurial activities. And in this case, they could also not provide indication of whether these opinions important to them or not. The young entrepreneurs who were able to describe the perceptions of their direct community on their entrepreneurial activities indicate that it is very important for them to know what the community is thinking and saying about them. Some of the young entrepreneurs consider their social appearance before deciding in a community where everybody knows something about somebody. Hence, they avoid decisions that can

negatively impact their image in that given society. Furthermore, some these young entrepreneurs are perceived as role-models in a given society. And a role-model is perceived as the embodiment of the positive social norms and values that encourage the youth to seize the reaction of the local community before taking certain business decision because their community is also their customer. Others indicate that they live in a very tight community with intensified social control their potential.

4.2.2. AGRICULTURAL ACTIVITIES

This part looks at the motivation to why these young entrepreneurs decided to venture into agriculture, their supply to the market and what they think they can improve in their entrepreneurial process. The motivation to start a venture into agriculture varies. There are entrepreneurs who always had a venture next to school and chose to continue it after graduating, some followed their passion or dream of being able to do what they like to do with an added incentive of getting paid for it. Moreover, other are motivated by the possibility to increase their financial means and increase their livelihood or continue with the study. However, they were also entrepreneurs who did not find employment as soon as they expected or were only able to find temporary jobs and had no other option than to create employment for themselves by venturing into agriculture. On the other hand, the were entrepreneurs who saw an opportunity in venturing into agriculture and seized it by starting their own venture. Some of these entrepreneurs indicate that their business is going well and to according to their expectation. This is because they were able to accomplish both the business and life goals that they set when they first started the venture. They were also entrepreneurs that indicated that their business went much better than expected because they exceeded both their business and business goals. The starting entrepreneur are not yet able to indicate what the outcome will be until a certain period of time passes. All the young entrepreneurs no matter established or not established they are all oriented towards supplying of the market. Some entrepreneurs supply seventy up to hundred percent of their products to the market. It is noted that the entrepreneurs who supply between seventy and eighty percent to the market have the aspiration to supply a hundred percent of their products to the market.

4.2.2.1. LIVELIHOOD STRATEGIES

The observed agricultural entrepreneurs were able to sustain themselves, buy a mode of transport, build a house, get married, support their family and expand their businesses with the gains of their venture activities. Moreover, some indicate that they were able to become less dependent on the family to support them with financial means or physically with shelter. However, these entrepreneurs still see room for improvements with regard to putting more effort into the venture by diversifying the products, marketing of the products and getting their own means of transport. The young farmers indicate that they should use more agricultural inputs to secure a good harvest and special tools such as an irrigation machine to irrigate the crops. The findings show that some of these young entrepreneurs were applying intensification and diversification. The intensification is done by applying more and better agricultural input such as fertilizer and fungicide it increases the harvest of a given plot of land. Diversification is done by combining multiple sources of income like the entrepreneurial farmer who is also an agronomist for the local community. However, a combination of both was also observed as in the case of the input supplier who also used his input to supplement and intensify his farming activities.

4.2.3. LIVELIHOOD OUTCOMES

All the agricultural activities lead to the following livelihood outcomes. The participants indicated that their life has changed in a positive manner since they started their ventures. This impact is observed on their business side of life where they were able to learn from their experiences as entrepreneurs to become more effective and efficient in the work that they do. And in their personal life they have gained more independence by buying plots of land, building houses, getting married and establishing their own family. Furthermore, the participants indicate that they have gained better social status after becoming financially independent from the family. The following challenges were regarding the agricultural entrepreneurial activities were observed. The farming can be rewarding and punishing at the same time. Where some farmers manage to have a good season with an equally good harvest others that cultivated in the same season have harvest. Moreover, the bad harvest is derived from unexpected crop diseases and insufficient financial means to combat those diseases. Due to insufficient financial means farmer are not able to buy irrigation machines and irrigate manually instead. However, manual irrigation is only possible if the plot of land is situated near a source of water and it is not water has to be fetched and or bought what is some extend can lead to partial irrigation. Protective gears neglected because the farmers are not able to afford them. It is also mentioned that it is difficult to work alone because there is a lack of trust in the other people's ability to work for them and manage their financial means. The finding shows that most the entrepreneur always has to be in the field to make sure that the work that he/ she outsources is done accordingly as the workers tend to prioritise their own objective instead that of the commissioner and a people who buy on credit are unreliable when it comes to paying for the goods that they have purchased. The suppliers then have to invest more effort in getting the money back and that leads to unwanted tensions and debt. As a young entrepreneur there is no such thing as a stable income, sometimes it there is a high yield and low. The benefits of being an entrepreneur is mainly discussed with the entrepreneurial activities and livelihood strategies but can be summaries as such; The young entrepreneurs gain a lot of independence when their venture takes off. Moreover, most of the entrepreneurs of financial capital to invest in both their business and personal life. The entrepreneurs indicate that given better access to financial and a better access to training that teach them how to develop a market for the products they produce it could help them to accomplish even more with their entrepreneurial activities. Hence, given an ideal situation these youths would tackle the challenges that they face currently, expand their businesses, transform the products into other products, buy plots of land to cultivate on, and create employment by employing the unemployed in their community.

5. RESULTS AND DISCUSSION

This chapter combines the collected empirical information with literature to answer the sub-research question. Starting by providing a context in which the answers were considered. The first sub-research question includes the categorisation of the young entrepreneurs in the Kayonza district. The second sub-research question is about the challenges and benefits that these young agricultural entrepreneurs are experiencing through their entrepreneurial activities. How these challenges and benefits impact the young agricultural entrepreneur's livelihoods is covered by the third sub-research question. Lastly, the fourth looks at the types of enabling environment that could support the different young entrepreneurs to achieve their entrepreneurial goals.

Entrepreneurship in agriculture has been perceived as one of the potential solutions to youth unemployment (Ismail, 2016; Kahan, 2012). Many countries have implemented youth-centred policies in order to capitalise on their young populations' capacity to work or create their own jobs (Anyidoho et al., 2012; Sommers & Uvin, 2011). This research is set up to generate insights on youth agricultural entrepreneurship in a specific district in Rwanda, namely Kayonza. Kayonza is the district out of thirty districts that was analysed during this research. Drawing on the accumulated data this research will form a knowledge foundation for the Kayonza district and build a framework that other districts can utilise to conduct comparative studies. The meaningful typologies of young entrepreneurs were identified, the associated challenges and benefits were specified. In addition, this research observed how the livelihood of the different groups of entrepreneurs is impacted, and the aspects of the enabling environment that could effectively support these young entrepreneurs to achieve their entrepreneurial goals are described accordingly.

SRQ 1: What are meaningful categorisations of young entrepreneurs in the agricultural sector?

According to Oxford dictionaries (2018), typologies are considered the classifications according to general types or social sciences. In this research a typology is derived through the interpretation of the accumulated findings into the different types of young entrepreneurs in agriculture. Patterns of their demographic characteristics and social structures were identified in order to build the foundations of the typology (Woo, Cooper, & Dunkelberg, 1991). However, the guidelines of the demographic aspects such as age and sex that were used to sample, observe and interview individuals seemed to be inadequate to base the typology on. The findings show that young agricultural entrepreneurs defined as youth between the age of 16 and 30 years old that are venturing in agriculture, were not perceived differently from other groups in society. The observed treatment of youth and other groups of society as equals dismisses age as potential criteria towards defining an age-based characterisation of the young entrepreneurs in agriculture. With regard to the sex, males and females are also perceived as equals regardless of the social narratives that perceive these sexes differently.

However, this research was able to define two types of young agricultural entrepreneurs based on how the entrepreneurs choose to conduct their business. Drawing on the findings, a clear distinction was observed between how some individuals choose to conduct their business on their own (Peck et al., 2013; Salami et al., 2010) and others prefer to venture within a group or cooperative (Adjognon et al., 2017; Verhofstadt & Maertens, 2015).

The first type of entrepreneurs that is identified are the individual entrepreneurs. These individual entrepreneurs are characterised by their restricted access to a plot of land, no formal status in their direct community, having to buy or rent equipment to use and to have to conduct all the labour by themselves. Without any experience or collateral these young entrepreneurs also have restricted access

to financial means (Adjognon et al., 2017; Salami et al., 2010). To some extent these findings align with the general description of a smallholder farmer by Salami et al. (2010). However, Salami et al. categorises these small farmers based on their agro-ecological zones, the type and composition of their farm portfolio and landholding and lastly on the basis of annual revenue they generate from farm activities. This research looks beyond the farm activities and includes the commercial activities of the youth entrepreneurs. The findings show that individual entrepreneurs have developed a successful strategy of starting their businesses very small with limited resources and investing most of the profits back into the expansion of the business. Moreover, this expansion is also coherent to the increase in livelihood. This strategy however does poorly when an entrepreneur encounters unexpected costs. Unexpected cost such as crop diseases could lead to the end of the business, because most of these entrepreneurs do not have any reserves that will allow them to replace the diseased crops with other crop varieties. And according to Peck et al. (2013), smallholder farmers generally have limited financial means to cover their crop production costs. This research agrees with Peck et al.'s (2013) observations with regard to individual entrepreneurs have limited financial space and that expected expenses can be destructive for the business.

The second type of entrepreneurs are those who choose to conduct their businesses within a group (Verhofstadt & Maertens, 2014). This group is categorised by being organised in one organisational entity, having good access to the plots of land, having a formal status, having more bargaining power, and also having easier access to the equipment and financial means. By venturing within a cooperative these young entrepreneurs are able to consolidate their limited means together with other entrepreneurs to create more added value for all the members. These results are also aligned with the findings of Verhofstadt and Maertens (2014) during their analysis of the difference between farmers that venture on their own and those who venture within a cooperative. Moreover, the cooperative that were involved in this research were mainly producer-owned. Meaning that they were controlled by the member and not by an investor. However, these cooperates operate within the Rwandese governments agricultural guidelines. In addition, a collective decision-making process is what was applied in the observed cases. Although these young entrepreneurs do not receive any distinctive support apart from other groups of entrepreneurs, they get the opportunity to learn from the older members of the cooperative (peer-to-peer learning). This shows some similarities with the concept of community learning as discussed by Laforge (2017). Although, Laforge's (2017) research looks at how Canadian farmers apply this concept it is also observed in the case of how youth acquire knowledge and experience.

SRQ 2: What are the entrepreneurial challenges and benefits of these different groups of young entrepreneurs?

The above described groups of entrepreneur encounter and experience the following challenges and benefits relating to their entrepreneurial activities differently. Hence, the challenges or benefits that are encountered and experienced by the individual entrepreneurs are not similar to those the entrepreneurs within a cooperative will encounter or experience per se and vice versa. These challenges and benefits could also be perceived differently by each individual entrepreneur regardless of the group's categorisation that he or she is placed in. Moreover, universal similarities with regards to the challenges were observed when it came to the aspect of how young entrepreneurs are perceived at the beginning of their entrepreneurial carrier. The young entrepreneurs are perceived with scepticism from their direct communities with regard to the start of their entrepreneurial activities. This scepticism is experienced differently when it comes to young entrepreneurs that have studied and those have not had an expended educational past. From the youth who have finalised their studies much is expected with regard to finding a well-paid office job. However, they are perceived as being lazy and incompetent because if they do not manage to find an office job and are also unable to conduct physical labour

because they have no endurance. With regards to the youth who do not manage to finish their studies little is expected and everything they do is perceived as a scam or a waste of time and money. In Lintelo's (2011) observation they also encountered similar stereotypical behaviour by adults that projected an image of youth being apathic, lazy and not ready to contribute constructively in the community.

On the one side the challenges that only the individual entrepreneurs face is restricted access to plot of land, limited access to the financial means and always having to rely on their own means and strength in order to produce or sell successfully. Hence, these challenges were also observed in a report initiated by the World Bank (2017). That specific report on small-holders farmers describes the following challenges: limited access to land, limited access to credit, no access to input and output markets, infrastructure, limited agricultural extension services and institutional constraints (World bank, 2017). In the Kayonza case, limited access to land, limited access to credit, no access to input and output markets, bad infrastructure, limited agricultural extension are the challenges that an individual farmer endures (World Bank, 2017). It has been observed that the family can reduce these challenges by providing the youth with a loan or a plot of land which the young entrepreneur can use to start their business. However, Flynn and Sumberg's (2016) findings show that the family assistance can also be perceived as double-edge sword. The family assistance provides the young entrepreneurs with foundation that they can build on. However, the aftereffects of paying back the family is experienced as a burden. Hence, when the young entrepreneurs start to get established, it is expected that they also support the family. The support that they provide to their families is deducted from business investments and therefore becomes a growth constraint.

On the other side young entrepreneurs that venture within a group face the following challenges. Having to contribute to the cooperative financially but also physically. And it is not always financially and physically feasible for the entrepreneur to remain a the cooperative due to the lack of financial means or poor health. Hence, some youth are able to contribute physically by conducting manual labour for other members in exchange for monetary compensation. Although, this monetary compensation allows the youth to pay their membership contribution it also interferes with the time that youth are able to spend on their own ventures. This leads to the neglect of their own work. Another challenge that these young entrepreneurs face is having to comply with the decision of the majority (Verhofstadt & Maertens, 2015). Although, the decisions are derived through a democratic decision-making process it does not mean that all the members agree and/or are able to comply to those decisions. The youths that venture within a cooperative also face a challenge of being excluded from discussions that develop the policies. This exclusion is experienced more so by young females than males. This is due to the fact that females are perceived to be risk averse and more reluctant to manage things in comparison with the males.

The benefits that these young entrepreneurs in agriculture encountered are to some extent similar. Both the individual entrepreneurs and those entrepreneurs within a cooperative show an increase in livelihood due to their entrepreneurial activities. Moreover, the increase in livelihood consists out of an increase of financial and material wealth. Further, the perception of local community on the youth's entrepreneurial activities changes in a positive sense with this regard to their credibility. The social roles of the young entrepreneurs within the community also changes from an unbeloved deviating individual into admired members of their community, sources of inspiration and advice for both the youth and the older members of the community. However, this is only possible when the young entrepreneur is able to demonstrate the wealth the given individual was able to accumulate through particular agricultural entrepreneurial activities. In addition to these benefits, the individual entrepreneurs enjoy their ability to diversify their sources of income, change their production according to the presented circumstances and solely keep all the benefits that arise from these actions. The youth that venture with a cooperative benefit from a good access to land, good access to credit, better access to input and output

market, better infrastructure and extension service. The above-mentioned benefits are valid for the young entrepreneurs that are either individual entrepreneurs or entrepreneurs within a cooperative. Furthermore, a dynamic process was observed whereby an individual entrepreneur will become a member of a cooperative because of the benefits that a cooperation provides. And also, members of a cooperative become individual entrepreneurs because they cannot meet the requirements of the cooperative or are searching for autonomy.

SRQ 3: What are the different ways in which the entrepreneurial activities of the different groups impact their livelihood?

This research observed both young entrepreneurs that were busy with setting-up their business and did not yet have the opportunity to evaluate and elaborate the impact that their venturing will have on their livelihood. Also observed were start-ups that were between one and three years of age. These were able to indicate how entrepreneurship impacted their livelihood. Youth that have been venturing for more than three years were also included and they were able to give an elaborative description of how their entrepreneurial activities have impacted their livelihood.

Furthermore, this research observed both entrepreneurs that venture out of necessity and those who venture to pursue an opportunity were encountered in this research. The necessity driven entrepreneurs are in some cases the graduates that could not find an office job and had to return to their home village to venture into agriculture. The youth that did not finish their studies and were therefore not qualified to apply for office job, consequently sought for opportunities to start a business agriculture related business. The opportunity driven entrepreneurs had different multiple job opportunities including venturing into agriculture. However, these opportunity driven entrepreneurs deciding to seize a particular opportunity by venturing into agriculture.

Nevertheless, the process towards becoming an entrepreneur varies for the different entrepreneurs. As stated in the findings, the individual entrepreneurs endure the most hardships by mostly having to acquire land, source for agricultural inputs and conducts almost all the manual labour by themselves. However, the individual entrepreneurs solely enjoy the profits that is derived from these activities. On the opposite, the entrepreneurs that venture within a cooperative have an easier access to communal land, agricultural inputs and could divide the labour within the members of the cooperative. The profit that is generated from the entrepreneurial activities is shared proportionately across the members of the cooperative. The members with the biggest share of land will receive proportionately a bigger share of the profit than those with a smaller plot of land.

The findings also show that the majority of the young entrepreneur can be categorized as being commercially oriented. The observed young entrepreneurs plan to and are supplying the market with a majority of their products. The most commercially oriented entrepreneurs were the input suppliers that served the market with a hundred percent of their products and seventy up to ninety percent with regard to the farmers. However, a different aspect can be observed when considering the size of the company with regard to number of employees and the plot of land that is associated with the entrepreneurial activities. Only one out of nine entrepreneurs were in a position of hiring employees on a temporary basis and the other entrepreneurs did not consider that particular option of hiring yet.

Going forward, both the individual entrepreneurs and the entrepreneur within a cooperative show similar patterns when it comes to how their entrepreneurial activities and how their livelihoods are

impacted. On one hand they are some changes that occur on the business side of the livelihood and on the other hand changes that occur on the private side of the livelihood.

Hence, on the business side a revenue stream is maintained by continuous intensification and diversification of source of livelihood. Moreover, intensification in this case is observed as farmers that constantly aim to produce more on the same plot of land and at the same time expand their plot of land too. However, an entrepreneur has to have the necessary means to initiate his/her intensification process with regard to the cultivators. This is aligned with the use of more agricultural input to secure and increase the harvest. Hence, only a wealthy minority is able to conduct this process properly (Dawson et al., 2016). With regard to the input supplier, it is the expansion of the product range in the same amount of space. The expansion of the diversification in product is associated with having a stable revenue stream to source the products that will increase this product range and therefore cater to more customer demands. However, diversification was also observed on the business side of the livelihood. Thus, diversification in this research is observed as the young entrepreneurs having multiple sources of livelihoods beside the main one. The most academically educated farmers and input suppliers provided an extended service as agronomists to their community. A livelihood combination of an input supplier who also had a farm and also advised the local community on how to cultivate their crops. The diversification is mostly established as reaction to the customer demand. The other income generating activities are conducted side by side with the main entrepreneurial activities. Although, both activities are on-going simultaneously they were established in a particular sequence and also require different means to operate. Hence, in these cases the different entrepreneurial activities complement each other.

On the private side of the livelihood, these young entrepreneurs are able to accumulate wealth, gain personal and financial independence, improve their social status, build a house and a family and become a support pillar in their particular communities through the job creation and wealth creation (Okali & Sumberg, 2012). The above-mentioned benefits facilitate social and economic mobility for these young entrepreneurs.

SRQ 4: Which type of policies, programs and social structures in the environment could effectively support the different groups of youth to achieve their entrepreneurial goals?

All youth-centred policies and programs that are initiated in Rwanda have to be in alignment with the National Employment Programme of Rwanda (Gray et al. 2017). This program is supported by all the Ministries of Rwanda. As a part of the National Employment Programme the National Youth Employment Programme is specifically oriented towards the creation of employment for the youth population. However, the main objective of this youth-centred policy is the creation of 200,000 non-farm jobs annually. Thus, the young entrepreneurs who were engaged in on-farm work activities are excluded from this particular policy.

Another governmental agency such as the Rwanda Youth in Agribusiness Forum that is charged with the development of the youth's potential only engages with university graduates for professional internships and other events. Although they reach the educated youth, the uneducated youth are not included in the RAYF's mandate of developing the youth's capacity. The government facilitates some youth that have graduated from vocational education with a tool kit that contains the resources to start a business by themselves. However, this program has not yet been implemented in the Kayonza district. There is evidence to suggest that being young and not being academically educated can present some

difficulties with regard to the participation on these events. Respondent MIII3 (2018) stated “If we were doing it for grade some would be able to name all the youth-centred initiatives in their Sector”. This statement emphasizes the fact that the availability of youth-centred initiatives is not equal to the accessibility of them.

Nevertheless, the above-mentioned results show that it is not adequate to introduce youth-centred policies when the youth that are supposed to be reached do not gain access to them. Furthermore, the young individual entrepreneurs encounter the most difficulties when trying to access policies and programmes that are supposedly meant for them.

Most of the participating individual entrepreneurs were not officially registered at the Rwandan Development Board and did not have any formal entrepreneurial status. These young entrepreneurs were not registered because of the difficulties that they face when trying to gain access to land, capital and crop-related training. This research did not encounter youth-centred policies that addressed the abovementioned entrepreneurial constraints that the young individual entrepreneurs in Kayonza encountered.

Although the government stimulates the consolidation of land and people in order to be able to access to governmental support, individual entrepreneurs do everything by themselves and persist towards the accomplishment of their business goals without the governmental support. The entrepreneurs that venture within a cooperative have the advantage when it comes to the added value that the policies provide. The district government invests a lot in the support of cooperatives. It provides cooperatives with land, agricultural inputs, extended services and makes sure the infrastructure toward and from the cooperative is well organised. Despite these efforts youth that venture within a cooperative are perceived as being less capable than the elder members of the cooperative and are therefore excluded from training and policy development discussions. Because a cooperative has a formal business status it has also privilege to be able to access capital, agricultural input and relatively better infrastructures than the individual entrepreneurs. In addition, cooperatives are able to gain to access government owned land and equipment in order to realise their entrepreneurial goals. As already established in the findings the cooperatives that profit from these policies do not differentiate their members by sex or age but on the means that an individual is able to contribute. The more a member contributes in land and or other ways the more that specific member is able to benefit from the revenues. The entrepreneurial goals that were observed during this research range from having access to sufficient financial capital to buy agricultural inputs to expanding the plot of land to being able to supply large processor with raw materials (maize, bananas and vegetables). It will take a very long and tiring process to reach these goals given the current situation that both the individual and the cooperative entrepreneurs are facing.

5.1. CRITICAL REFLECTION

This research applied literature, observations and interviews as method of data accumulation. Hence, this research triangulated the sources of data to insure the credibility (Verschuren & Doorewaard, 2010). Nevertheless, this research was conducted by one researcher and therefore considers the presence of a bias that is derived from the researcher. This bias could have been dealt by having another researcher analyse the same data and compare and discuss the finding. The described observations are based on information that was retrieved from a male dominated sample size. Hence, the absence of

female representation is contributed to the applied sampling method that proved to be insufficient to allow equal sex representation. The applied sampling method had the assumption that the local government had a data set of the young agricultural entrepreneurs. However, the opposite was true and adjustments on the sampling method had to be made accordingly. This research adjusted from a simple random sampling technique to the chain-referral sampling technique (Verschuren & Doorewaard, 2010). However, the data analysis was done systematically, and any systematic errors were dealt with accordingly. Moreover, the above-mentioned findings were crossed with existing literature in order to determine the academic and institutional contribution of this research. The added value of this research is found in answers to the sub-research questions. This research identifies meaningful typologies of young entrepreneurs that are engaged in agricultural entrepreneurial activities. Hence, the categories will facilitate future research to better understand the youth in agriculture in Kayonza. And on an institutional level, the identified categories can be included in the current policies and programs.

Furthermore, the observed challenges and benefit of the entrepreneurial activities were well aligned with the findings from the literature. However, this research notes the fact that the presented results are based on a consolidation of multiple sources of data that were accumulated from multiple individuals. Thus, providing insight that is based on entire dataset and the group characteristics. The individual representativeness is less present due to the consolidation of the empirical findings. As this research presents the range of the challenges and benefits that youths could encounter during their entrepreneurial activities. Hence, it is up to the (non)government entities to conduct further research on the specific challenge that they would like to mitigate or benefit they would like to enhance.

The findings on how entrepreneurial activities impact the youths' livelihood is well aligned with the literature. The observed results regarding the impact on livelihoods are divided in business-oriented changes and private life-oriented changes. Although, this research identified two different groups of young entrepreneurs the impact on their livelihoods were similar to some extent. The observed differences were based on rate in which the changes took place and the risks that were associated with those particular changes. Hence, these particular observations could facilitate future research on how these changes could be enhanced positively and how the experienced risks could be mitigated.

The observed policies and programs that support the youths' entrepreneurial behaviour were initiated by the government or were aligned with the government's policies. Nevertheless, this research noted the fact that the entrepreneurial behaviour was grounded in the perception of the local community. This research emphasises the fact that added value of the youth-centred policies are well acknowledged on the national policy level and less on the local community level. Moreover, this observation is accompanied by the knowledge and exposure that is consumed on the national policy level and lack of it on the local community level. This identification of this knowledge gap is essential in understanding why particular youth centred policies work and others do not. Through a multi-level approach this research creates a holistic understanding of the existing policies, programs and social structures. Overall, the policies and programs were applied based on a higher hierarchy on a national level, the different government entities received specific tasks that were further delegated to regional and district level. Hence, this research argues that a top-down approach towards policy implementation was at place.

6. CONCLUSION

The objective of this research was to generate more insight into the diversity of young agricultural entrepreneurs for the development of tailored youth-centred policies. The aim of these tailored youth-centred policies is to better respond to the characteristics of current young agricultural entrepreneurs in Kayonza district. This research was conducted as a qualitative case study. Hence, observations and interviews were the methods selected for collection of data. The process of the data collection involved the observation of eight out of the twelve sectors of Kayonza district and interviews with eighteen young agricultural entrepreneurs.

As the youth-centred policies are perceived as instruments to guide the youth into particular agenda, the Rwanda government has implemented a youth-centred policy to combat youth unemployment. This research found that the current youth-centred policies are insufficient to adapt to the observed heterogeneity of young entrepreneurs in agriculture from Kayonza. Findings show that on a national policy development level there is a strong recognition of the potential that the youth can have on the national economic development. However, the same recognition is less observed on the district level and even less on a sectoral, cell and village level. Hence, these regions are governed by social narratives which make up the structures for the local enabling environment. Notably, youth in this local context are perceived to be less capable than their older counterparts. In addition, these social narratives were observed to make a clear distinction between the roles of males and females within that given community.

Heterogeneity is an observed fact among the young agricultural entrepreneurs in Kayonza. The entrepreneurship typology that was formulated according to the collected data was the individual entrepreneurs and the cooperative entrepreneurs. The finding show that policies were structured to accommodate the entrepreneurs within a cooperative and not the individual entrepreneurs per se. Hence, this research found that the individual young entrepreneurs are not represented in the discussions towards policy development and are therefore not accounted for in the distribution of support. Accordingly, the same findings show that the young individual entrepreneurs have a harsh entrepreneurial career whereby they solely rely on their own capabilities in order to venture. This research observed entrepreneurs that started their venture out of necessity and others out of a given opportunity, this research also shows that the young agricultural entrepreneurs in Kayonza can be categorised as commercial agricultural entrepreneurs regardless of a given typology.

Furthermore, this research found that both the private life and the business life are intertwined to the extent that they influence each other. Thus, the private life benefits when the young entrepreneurs manage to establish a successful business and the business life benefits from a young entrepreneur that has a healthy private life. Most of the research participants were already engaged in agricultural entrepreneurship and for the most of them it is their main source of livelihood. Although they are already venturing, these young agricultural entrepreneurs lacked the proper guidance and support to facilitate their business. However, this is not a unique phenomenon because similar observations have been documented in other counties in sub-Saharan Africa (FAO, 2014 and Salami, 2010).

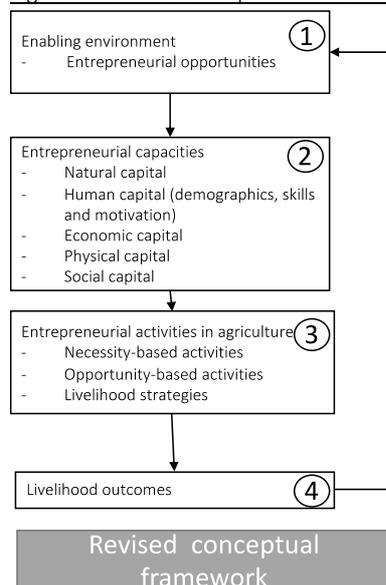
This research concludes by providing three key characteristics that future policies need to include in order to develop youth-centred policies that effectively respond to the observed heterogeneity among the young agricultural entrepreneurs in the Kayonza district. The first key characteristic is to educate the local communities about the impact the youth could have on regional and national economic

development. Creating awareness and recognition for the potential that the youth possess. The second key characteristic focusses on having more representation of the young agricultural entrepreneurs in the policy development process. Through co-creating inclusive policies in collaboration of both the individual and the cooperative entrepreneurs in agriculture. This research primarily observed youth that were already venturing into agriculture and not those who were aspired to become entrepreneurs. The third key characteristic that should be included is to invest in these youth that are already venturing to develop their businesses and facilitate them in the accomplishment of their business goals. Thus, investing in the future of their business and in their potential to become successful businessmen or women who reinforce the economy and create jobs for other youths in their particular communities. Note, that these characteristics should be perceived as a generalisation of the analysed data.

The findings of this research touched upon several topics that were not covered by this research but that could supplement the already acquired knowledge. Thus, this research recommends further research with regard to the following topics: a comparative research regarding youth entrepreneurship with a focus on a specific crop or product. It is observed that the different crops and products require different inputs to produce and also marketed. The second, question that this research was not able to answer is whether youth centred policies should address all the youth in a general sense. The underlying question is whether all the youths have the potential to become entrepreneurs. The third question that was not addressed in this study is whether the educational background of a young entrepreneur has an impact on his or her entrepreneurial success. Finally, this research recommends a comparative study with other districts to establish a knowledge foundation that can facilitate future research.

Also, the conceptual framework was revised according to the findings mentioned above. The revised conceptual framework consists of four parts instead of the five parts that were used in the original conceptual framework. Moreover, this research found that the entrepreneurial opportunities that the original conceptual framework sought to understand are a part of the enabling environment. The revision was based on the fact that the young entrepreneurs that were involved in this research had already seized specific entrepreneurial opportunities. Hence, the revised conceptual framework acknowledges that the foundations for the entrepreneurial opportunities are a part of the enabling environment.

Figure 4: Revised conceptual framework



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APPENDIX I: OBSERVATIONAL SCHEME

Good morning, afternoon or evening, my name is Jean Gael Shyaka and I am student collecting data regarding youth entrepreneurship in agriculture. If you can spare some time, I would like to ask you a few questions with regard to how the young agricultural entrepreneurs are perceived in this particular community.

Date: _____ Time: _____ Engagement activity: _____
 District: Kayonza Sector: _____ Cell: _____ Village: _____

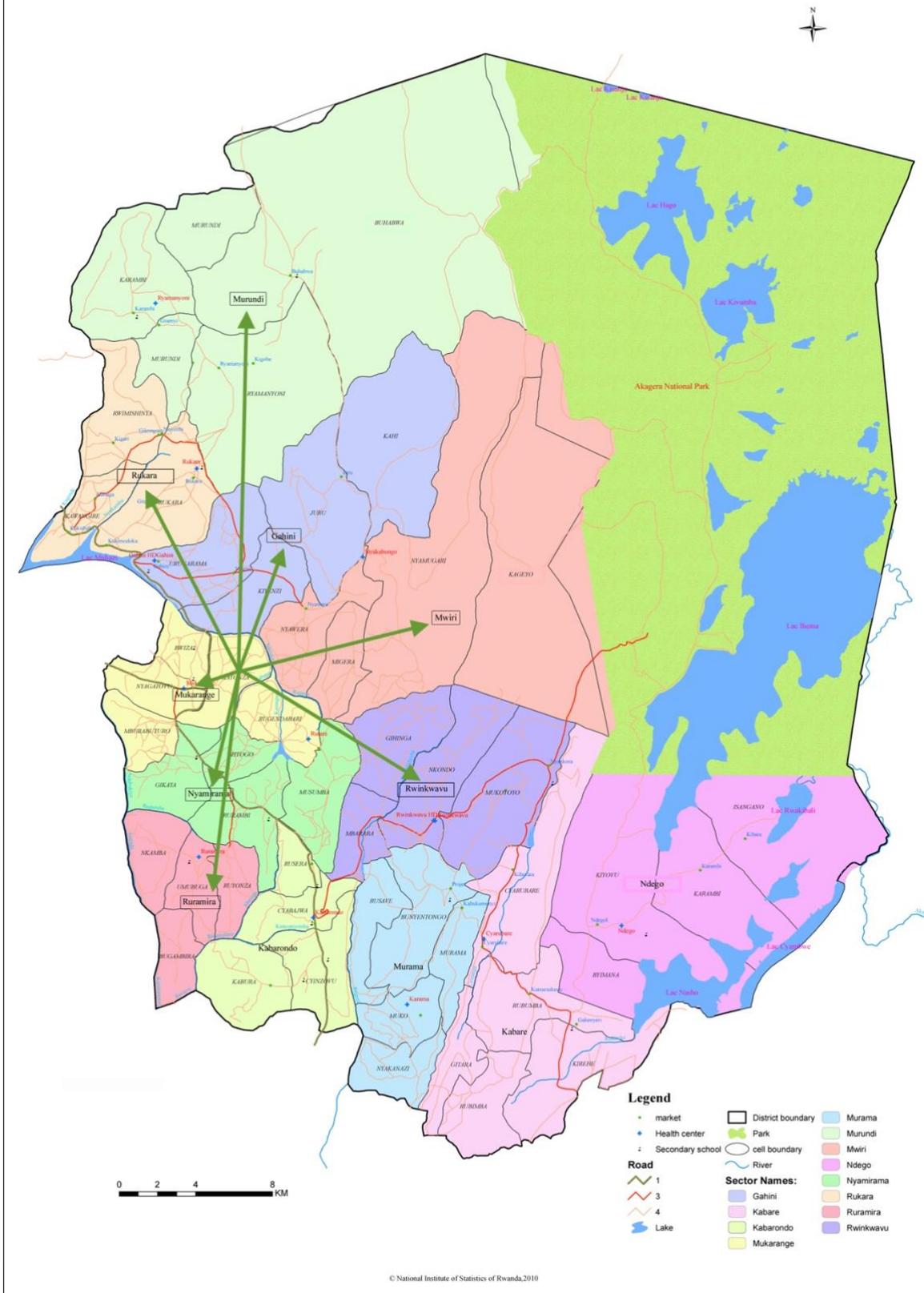
Enabling environment themes	Observations	Notes
(Non-) Governmental policies The policies that engage with the youth agricultural entrepreneurs		
(Non-) Governmental programs Programs that are of any assistance to young agricultural entrepreneurs		
Education and Training Special entrepreneurial teachings or training that stimulate the entrepreneurial behaviour		
Commercial and professional infrastructure The physical platforms that provide the access to the market and professionalization of the entrepreneurial process		
Access to physical infrastructure The accessibility of roads in combination with the mode of transportation		
Cultural and social norms The social structures that influence the entrepreneurial behaviour and the composition of it with regards to the age and sex of the entrepreneur		
Financial support Capital that is made available for the young agricultural entrepreneurs to venture with		
Entrepreneurial opportunities	Observation	Notes
Profitable agricultural opportunities The entrepreneurial opportunities in agriculture that are facilitated by the enabling environment		

Agricultural activities themes	Interview questions
Necessity-based activities Entrepreneurs that venture to survive without any other sources of livelihood	Why do you do what you do? What other opportunities did you leave behind to seize this one?
Opportunity-based activities Entrepreneurs that seize the entrepreneurial opportunity but have other sources of livelihood	How did this choice work out for you?
Subsistence producers Producers that consume 100% of their yield	What percentage of the produced products do you consume? What percentage of the produced products do you sell on the market?
Producers with commercial potential Producers that consume 70% of their yield and send 30% on the market	What other purpose does take a share of the produced products? How long have you been operating under this composition (consumption /market and others)?
Commercially successful producers Producers that consume less than 50% of their yield and send more than 50% on the market	Have you ever thought about changing this composition (consumption /market and others)? What do you think is required (land, capital, labour force or other) to change the composition?
Median-large agricultural business Producers that send 100% of their yield on the market	Or to transition from subsistence producer to producer with commercial potential? From the producer with commercial potential to commercially successful producer? From commercially successful producer to median-large agricultural business? Or the backwards transitions?
Livelihood strategies Intensification, diversification or migration	What are you able to do with your particular resources? What do you think you can do better?

Livelihood outcomes themes	Interview questions
The different livelihood outcomes Job creation, poverty reduction, well-being and capacities, livelihood adaptation, natural resources and sustainability	Did any changes occur in your life due to your entrepreneurial choices? What are the challenges that you face as an entrepreneur? What are the benefits that you enjoy as an entrepreneur? What do you think that need to be improved in your entrepreneurial life? What is required to initiate those improvements?

APPENDIX III: KAYONZA ADMINISTRATIVE MAP

KAYONZA ADMINISTRATIVE MAP



APPENDIX IV: LIST OF THE YOUTH COORDINATORS IN THE DIFFERENT SECTORS

GAHINI	Not provided	Not provided
KABARE	Olivier	0783747509
KABARONDO	Hodar	0783715370
MUKARANGE	Richard	0781720033
MURAMA	Jean de due	0783355954
MURUNDI	Baptist	0783660883
MWIRI	Koragege	0784249049
NDEGO	Gideon	0788779222
NYAMIRAMA	Bikorimana	0784512133
RUKARA	Fisto	0788797882
RURAMIRA	Jeannette	0783192973
RWINKWAVU	Cesar	0784326465

APPENDIX V: LIST OF OBSERVATIONS

Date	Location	Activity
10- 01- 2018	Rukara (Kamumbaba)	Visit the local market and talk to Tharcisse
11- 01- 2018	Mukarange (Mukarange)	Visit the mush lands
12- 01- 2018	Nyamirama (Gikaya)	Visit the wetlands where vegetables are grown
	Mukarange (Kayonza)	Local market
15- 01- 2018	Rwinkwavu (Nkondo 1)	Visit the maize cooperative and talk to the director
16- 01- 2018	Gahini (Urubarama)	Visit the farmers that work together but are not registered as a cooperative
17- 01- 2018	Mukarange (Rugendobari, Karambo 1) Mukarange (Rugendobari, Rugendabari)	Visit a maize cooperative (Cooperative KARAMBO 1) Visit a rice cooperative (Cooperative Cocurivamu)
18- 01-2018	Mwiri (Kageyo)	Visit a farmer's community that cultivate their crops together
19- 01-2018	Mukarange (Kayonza)	Meeting with the mayor Getting a research approval
22- 01-2018	Mukarange (Kayonza)	Meeting with the agriculture department
23- 01-2018	Mukarange (Kayonza) Ruramira (Bugambira, Buhoro)	Meeting with the youth department and the director of business development and employment. Meeting with youth coordinator of the cell and a young entrepreneur.
Date	Location	Activity
10- 01- 2018	Rukara (Kamumbaba)	Visit the local market and talk to Tharcisse
11- 01- 2018	Mukarange (Mukarange)	Visit the mush lands
12- 01- 2018	Mukarange (Kayonza)	Local market
15- 01- 2018	Rwinkwavu (Nkondo 1)	Visit the maize cooperative and talk to the director
17- 01- 2018	Mukarange (Rugendobari, Karambo 1) Mukarange (Rugendobari, Rugendabari)	Visit a maize cooperative (Cooperative KARAMBO 1) Visit a rice cooperative (Cooperative Cocurivamu)
19- 01-2018	Meeting with the mayor	Getting a research approval
22- 01-2018	Mukarange (Kayonza)	Meeting with the agriculture department
23- 01-2018	Mukarange (Kayonza) Ruramira (Bugambira, Buhoro)	Meeting with the youth department and the director of business development and employment. Meeting with youth coordinator of the cell and a young entrepreneur.

APPENDIX VI: LIST OF INTERVIEWS

Date	Name (sex, age)	Occupation	Location
24- 01-2018	MIII13	Agro dealer and farmer	Mukarange (Kayonza, kayonza centre)
24- 01-2018	FII1	Agro dealer	Mukarange (Kayonza, kayonza centre)
24- 01-2018	MIII8	Agro dealer	Mukarange (Kayonza, Kayonza centre)
25- 01-2018	MIII12	Mushroom farmer	Rukara (Rukara, Karubamba)
26- 01- 2018	MIII3	Tomato farmer	Gahini (Urubarama, Urubarama)
26- 01- 2018	MIII11	Chilli pepper farmer	Mukarange (Kayonza, Kasogororo)
26- 01- 2018	FIII3	Carrot farmer	Mukarange (Nyagatovu, Irebero)
26- 01- 2018	FIII2	Rice farmer	Mukarange (Kayonza, Buhonde)
26- 01- 2018	MIII7	Banana farmer	Murundi (Karambi, Nyamirama)
26- 01- 2018	FIII1	Vegetable farmer	Mukarange (Nyagatovu, Irebero)
26- 01- 2018	MIII4	Passion fruit farmer	Ruramira (Bugambira, Buhoro)
26- 01- 2018	MIII5	Banana farmer	Ruramira (Bugambira, Buhoro)
29- 01- 2018	MIII2	Agro dealer	Murundi (Kabambe, Kabambe)
30- 01- 2018	MIII9	Passion fruit farmer	Mwiri (Nyawera, Murehe)
30- 01- 2018	MIII1	Maize farmer	Murundi (Karambe, Karambe)
30- 01- 2018	MIII10	Passion fruit farmer	Mwiri (Nyawera, Nyakabungo)
31- 01- 2018	MIII6	Sweet potato farmer	Nyamirama (Rurambi, kabuye)
31- 01- 2018	MII1	Carrot and vegetable farmer	Mukarange (Rugendobari, Rugendabari)