

PART OF WAGENINGEN UR

Towards More Effective Cooperative Entrepreneurship

Self-perceptions on the internal functioning and agribusiness orientation of cassava and rice cooperatives in Rwanda



A research project submitted to Larenstein University of Applied Sciences In Partial Fulfilment of the Requirement for The Degree of Master of Management of Development. Specialization Training Rural Extension and Transformation

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LIST OF ABBREVIATIONS

MINAGRI: Ministry of agriculture MINICOM: Ministry of commerce, industry and cooperatives **MINECOFIN:** Ministry of economic planning NGO: Non-Governmental organisation RCA: Rwanda Cooperative Agency PASAB: Projet pour L'Agriculture et la Securité Alimentaire a Bugesera UGAMA CSC: Ugama Centre aux Services Cooperatives A.S.B.L: Association sans but lucratif UCOPRIBU: Union des cooperatives productrices rizicoles de Bugesera IPER: Initiative pour la promotion de l'entrepronariat rural au Rwanda COOPRORIZ: Cooperative des producteurs de riz COODERKA: Cooperative de producteurs de riz de Kanazi COOTRAVAM: Cooperative de transformation et de valorisation du manioc COSCOPA: cooperative de stockage et commercialisation des produits agricoles COADPM: cooperative pour l'agriculture et le veloppement des producteurs de manioc COVAPANYA: Cooperative de valorisation des produits agricoles de Nyamata COGIRIRU: Cooperative girubumwe risicole de Ruvubu ICA: International cooperatives alliance COTERWA: Coperative terimbere Rwabikwano

ABSTRACT

Cooperative entrepreneurship is an excellent instrument in rural development and transformation. Cooperative entrepreneurship promotes agricultural development, rural economic growth and poverty reduction. The government of Rwanda and partners recognise the role of cooperatives in rural development policies. In its development policies, Rwanda adopted the promotion of cooperatives as key to rural economy. This caused a jump-start of huge number of cooperatives. However in agricultural development worldwide, cooperative entrepreneurship face different obstacles. Therefore the competitiveness in organisational and entrepreneurial capacities of young cooperatives may constitute an issue of concern for different promotional initiatives. Facilitating farmers' organisations improve the performance starts by supporting them to assess their perceptions regarding the emerging issues.

This study's aim is to support farmer-members to assess their performance towards cooperative entrepreneurial competences.

The methodology included different techniques and methods including literature, interviews and observation. Self – assessment tool was basically used in methodology and effectively served as basis to collect more qualitative insights. This research also employed various methodological instruments SWOT and PESTEC for analytical purposes.

The performance in both internal functioning of cooperatives and other activities in relation to the development of the agribusiness was critically analysed. In general, the performance in cooperative entrepreneurship is still low. The functioning in internal organisational structure relatively performs better than the activities related to agribusiness and the value chain. Insufficiency in organisational resources management; insufficiency in resources including limited start up capital affecting the functioning of rural cooperatives are among other factors associated with such a low performance. Moreover, the complexities of interlinked institutional deficiencies have huge negative impact on the performance of cooperative entrepreneurship. The main obstacles facing the rural cooperative entrepreneurship in Rwanda include the poor socio economic composition of rural communities, and the deprived nature of internal and external linkages.

The coordinated upgraded efforts from different stakeholders including cooperative structures, government, NGO and other actors in the cooperative sector may be recommended to adjust the current low performance towards more effective cooperative entrepreneurship.

1. INTRODUCTION

1.1 BACKGROUND INFORMATION

Rural entrepreneurship is one of the privileged instruments in promoting rural transformation (Van der Ploeg, et al 2000). Cooperation between farmers tremendously supports rural entrepreneurship. Dabson, (2001) reports that cooperatives have played a major role in the agricultural industries in both developed and developing countries for well over a century. He also adds that in America and Europe rural entrepreneurship has been more effective since farmers organise themselves in farmers' organisations. Wennink et al (2007: 11) note that farmers' organizations today play a much more prominent role in agricultural policy formulation and implementation in Sub-Saharan Africa than ever before.

In Africa, farmers' cooperatives have increasingly been an important instrument to promote farmer entrepreneurship, and tool to sustain livelihood conditions and are recognized as key stakeholders in rural development. Together, farmers can realize things they can't do individually. In fact, organizations enable ordinary people to realize extra-ordinary things. Bosc et al., 2003 and Chirwa et al., (2005) quoted in Wennink et al (2007) confirm that for both the public and private sector, effective farmers' organizations present important opportunities such as: providing research and extension services to farmers and organizing the purchase of inputs and sale of products on a more cost-effective basis; mobilizing resources for local development; and representing the interests and collective voice of farmers in development foray. Hence, farmers' cooperatives are perceived as important tools to promote rural entrepreneurship and transformation of livelihoods in rural households (Wortman 1996, Hayami 1998, Van der Ploeg, et al 2000, Dabson, 2001). This obvious success has, however, been accompanied by frequent failure. Many cooperatives have been forced into liquidation or merger as a result of changing conditions in their business environments, poor business models, bad management or the failure of members to support them. Many failures of the cooperatives lied with managerial approaches. As a result, the term "cooperative has a bad reputation in some developing countries (MINICOM 2006). For example, in Ethiopia, Guinea, Madagascar, Mali, Sudan, Tanzania, Vietnam cooperatives were controlled by the State and the membership was obligatory. In these countries, members consider the cooperatives as a "state business" and often ignore their rights because they have never had the possibility to really exercise them.

In Rwanda, agriculture is the main activity of the rural population and farmers' cooperatives have a long history of nearly 50 years (MINICOM, 2006). Despite the long history, governments always strengthened cooperatives in cash crops such as coffee, tea and pyrethrum (MINAGRI, 2006). Staple food production was always subsistence, and supplement to cash crops only for food security. However, the study done in 1999-2004 by the ministry of economy and financial planning showed that staple food crops such as maize, rice, cassava, potato, wheat and beans constitute a potential engine for the Rwandan economy and major living source for the country's populations (MINECOFIN 2002; MINAGRI, 2004). In recent years, many cooperatives including in staple food sub-sector have tremendously emerged. Cooperatives are formed for different purposes namely to amplify their bargaining power; encouragements and the advantages offered by governments and NGOs. In other cases, farmers pursue the opportunity of a particular business through acting together to improve their livelihood conditions. This later purpose is of entrepreneurial nature of the cooperatives.

In Rwanda, cooperatives generally face different challenges such as inadequate basic infrastructure (roads, electricity, water, etc) and limited access to loans. *Le plan stratégique pour la transformation de l' agriculture (PSTA)* noted that the lack of material, financial and human resources and low level of participation by members defy the development of cooperatives (MINAGRI, 2006). As result, the agricultural cooperatives realise low performance. Such has been the foundation for the "*Initiative pour la Promotion de l' Entreprenariat Rural (IPER)*", a Dutch initiative to coordinate actions of different Dutch NGOs for promoting rural entrepreneurship in Rwanda. This initiative has a key aim to help enhance performance in rural development and transformation through cooperative entrepreneurship.

1.2 PROBLEM STATEMENT

Many aid agencies and development organizations intervening in Rwanda in the scope to reducing poverty and empowering the producers' organisations, have been seeking to reach as much rural population as possible. In their interventions these organizations including those under IPER also want to capitalize opportunities in staple food crops farming, the component of the agricultural sector, which involves the majority of the Rwandan population. Hence, cooperatives engage as tool to inspire rural populations into a trajectory towards rural entrepreneurship. This new direction of intervention led to initiation of huge number of new cooperatives. It is therefore questionable where such young cooperatives have organisational abilities and entrepreneurial capacities to be competitive business. To improve the performance however, farmer-members of young cooperatives would need support to assess their perception on organisational and entrepreneurial competences. This constitutes the will of IPER to assess on promotion of rural entrepreneurship involving cassava and rice cooperatives combining agriculture and socio-economic aspects.

1.3 OBJECTIVE

The main aim of this study is to support farmer-members assess the performance of their cooperatives in order to deduct priorities and suggest new strategies towards more effective cooperatives entrepreneurship in Rwanda.

1.4 RESEARCH QUESTION

- 1. How do cooperatives perceive their organisational and entrepreneurial practices and capacities?
- 1.1 What is the perception of farmer-members regarding the organizational performance?
- 1.2 What is the farmers' perception of the role of their cooperative in agribusiness development?
- 2. What actors and factors influence cooperative entrepreneurship?
- 2.1 What is the role of supporting agencies?
- 2.2 What are other factors influence the viability of cooperatives and improved farmers involvement?

1.5 RESEARCH STRUCTURE

This thesis assesses on promotion of rural entrepreneurship involving agricultural cooperatives combining agriculture and socio-economic aspects. It thus integrates the current agricultural cooperatives typology into a rural entrepreneurship research. It analyses the current performance of staple food (cassava and rice) crops cooperatives, and suggests improved strategies towards rural entrepreneurial practices. This thesis is subdivided into 2 parts. The first part comprises of 3 chapters. Besides the introduction dealt with in this chapter, the next chapter reviews the literature that drives to the scale of this study. Chapter 3 explains the methodology of research and the analytical design. The second part of the thesis is analytical based on the conceptual framework. Chapter 4 is describes the studied cooperatives as seen during fieldwork. Chapter 5 analytically presents the results of the farmer-members self-assessment. The chapter 6 methodically analyses and compares findings in studied cooperatives with the literature. Finally, chapter 7 summarizes the major findings and concludes with recommendations.

CHAPTER 2. RURAL ENTREPRENEURSHIP AND COOPERATIVE MOVEMENTS

In regard to the orientation of this thesis, this chapter explores the theoretical framework about the rural entrepreneurship, cooperative and rural development in general. This thesis considers cooperatives as businesses and distinguished tool of rural entrepreneurship, foundation to rural transformation and development. This chapter begins by defining rural entrepreneurship. The subsequent sections define the nature of cooperatives and reasons why farmers form cooperatives.

2.1 WHAT IS RURAL ENTREPRENEURSHIP?

Rural entrepreneurship is one of the newest areas of research in the entrepreneurship field (Wortman 1996). However since its integration in the field, it has become one of the significant supportive factors for rural economic development and agribusiness. Hoy (1987); Gartner (1988) cited in Greve (2003) simply define rural entrepreneurship as the creation of a rural organization. Crego (1985) also cited in Greve (2003) labels an entrepreneur as a risk launcher. More explicitly, Knudson et al. (2002) cited in Klerkx and Leeuwis (2008) defines entrepreneurship as the personalized drive and capacity to commercialise the product, service, process, or business idea. Therefore rural entrepreneurship can simply be defined as managerial capacity to launch investment and run business either farming or other rural income generating activities.

2.1.1 Obstacles to rural entrepreneurship

Starting and growing a business anywhere is fraught with well-documented perils. These are compounded in rural America by low population density and remoteness, with their implications for access to markets, capital, labour, peers, and infrastructure, as well as the way they shape cultural attitudes towards entrepreneurship (Dabson, 2000). There seems to be general agreement about the obstacles to rural entrepreneurship, although the following descriptions owe much to the characteristics of rural communities (Shaffer, et al 2000). Shaffer, et al. (2000) categorized the obstacles into three broad groups: those associated with the small size and low densities in rural communities, the socio economic composition of rural communities, and the nature of internal and external linkages. Low density of population, with its consequences and limited local demand makes it difficult for rural businesses to achieve economies of scale or critical mass. In absence of such economies, their products and services must be sold at higher prices, often beyond the reach of local consumers, thus limiting their market still further. Small firms have no choice but to sell outside their regions, often in niche markets; although the arrival of e-commerce has made this a more realistic strategy for many rural entrepreneurs. Conversely, small stores in the retail or local services sectors, who are unable to offer competitive prices, are vulnerable to the arrival of large regional and national discounters on the edge of town-as many downtowns across the countries dramatically demonstrate. The complexities in achieving economies of scale are also apparent for those who provide services to small businesses (Walzer, 2003). Entrepreneurs in rural communities are less likely to find the resources and services that are taken for granted in more urban locations, such as regular parcel services, internet access, or specialist technical advice. Suitable buildings with the right access, configuration, or utilities may be difficult to find. In most rural communities, there are few lending institutions, the effect of which is to limit access to capital, limit competition and options, and encourage risk averse and sometimes discriminatory behaviours (Shaffer, et al. 2000; Walzer, 2003). Moreover, entrepreneurs are less likely to encounter peers with whom they can share ideas and problems-the absence of support networks may limit levels of new firm creation. The social

and economic composition of rural communities can also have a dampening effect on entrepreneurship. Agriculture, natural resource extraction, or a single manufacturing plant often dominates a rural economy, with most local institutions geared to serving that industry and its employees. This lack of economic diversity may not be a problem in good times and dependency and complacency—the antithesis of entrepreneurship—become embedded in the culture. However, when farm prices fall down, natural resources are exhausted, or the branch plant leaves town, there is little capacity to withstand the consequences of the change in fortunes (Shaffer, et al. 2000).

2.1.2 Innovativeness as the drive for entrepreneurship

For successful rural entrepreneurship the active attitude towards innovation is required (Gielen et al., 2003; LNV, 2005). Gielen et al., (2003) also notes that in rural entrepreneurship, the acquisition of knowledge and information from the external sources and their internalisation is an important skill. In this respect however, agricultural enterprises much as other small and medium businesses, confront certain difficulties (Senker and Faulkner, 2001). Solving such problems entrepreneurship implies creativity in developing adequate resources and competences in terms of strategies and conceptual focus, organisation, opportunity recognition, building relationship, networking drive. In Europe for example, the current rural entrepreneurship situation requires more initiative from entrepreneurs, whereas the previous system to support innovations amongst agricultural entrepreneurs was largely supply driven and prescriptive. The current situation, calls for competitiveness and networking of rural entrepreneurs, which is, a drive for competences which are with regard to knowledge and information acquisition and learning for innovation (Klerkx and Leeuwis, 2007). At the same time the entrepreneurship plays a major role in innovation system as innovation is seen as a process of creating and managing effective linkages between different subsystem within the system. For this process to progress, a continuous alignment of actors including entrepreneurs, intermediary organisations, providers of research and development policy makers etc, has to take place (Leeuwis, 1999; Smits and kuhlmann, 2004). According to Klerkx and Leuwis (2007) such an innovation system also comprises physical infrastructure, knowledge infrastructure, policy, legislation, funding and institutions (rules, norms, values, incentive system). However, in this innovation system the position of rural entrepreneurship is always in face of different perpetuity of opportunities and obstacles (Wortman 1996), face to which the right entrepreneurs use the appropriate competences as they cooperate.

2.2 DEFINITION AND NATURE OF COOPERATIVES

The International Cooperative Alliance (ICA, 2007) and Watkins (1986) define a co-operative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The International Co-operative Alliance (ICA) is an international body grouping cooperatives from around the world, which is recognised as the collective international voice of cooperatives. Therefore, a cooperative is may be defined as a collectively owned and controlled business, set to support the social economic improvement of livelihood of its members.

2.2.1 The cooperative as a business

Trewin (2004) considers that cooperatives in agriculture are first and foremost businesses. As such, they must succeed in the marketplace, competing against other cooperatives, and businesses established as companies or other entities. To compete successfully, they must

do most of the things that other businesses do (Trewin, 2004). Taking a rice or cassava producing and marketing cooperatives for example, such an enterprise typically collects crops from its members, transports, grades, stores and arranges payments. To undertake these functions, a cooperative must obtain capital at competitive rates, obtain or lease assets, hire employees and contractors, administers funds, acquire and distribute market information, set up corporate governance processes, and so on (Ménard, 2005).

If a cooperative does not manage properly its resources its management at least as well as its competitors, the cooperative will fail (Cook, 1995). This means that while there are often advantages in establishing a cooperative as a business, the fact that it is a cooperative does not guarantee success, even if members have a strong commitment to making it work (Trewin, 2004; Bijman, 2007). Profits must be made if the cooperative is to sustain its capital base (Cook, 1995). Members must be paid a competitive price; they may accept a lower price for their product for a short period, but cannot do so for long (Trewin, 2004).

Customers must also be offered a competitive price; they will not pay a higher price because they are buying from a cooperative. Successful cooperatives are successful businesses first, and cooperatives second. Therefore in establishing a cooperative, farmers should develop a business plan first. Cook (1995) urges that members should agree on the nature and scope of the business, the sources of capital, the business strategy and so on. Also as part of this process, members should consider the corporate structure, which could be a cooperative, company, association or other structure, which might be particular to the particular country. The best corporate structure will often, but not always, be a cooperative structure (Cook, 1995; Trewin, 2004). However cooperatives often have problems related to internal organization involving membership, governance, leadership, and internal democracy.

Other problems also relate to the nature and management of the common property, issues of common vision for the future of enterprise and other issues associated with influence of politics and costs (Trewin, 2004). For example, the term "cooperative has bad reputation in several developing countries, especially in those where (in the past) they were controlled by the State (Ethiopia, Guinea, Madagascar, Mali, Sudan, Tanzania, Vietnam) and where the membership was obligatory by socio-economic and political approach inkling towards communism (MINICOM, 2006; Batt, 2002). The members considered that the cooperatives were the "state business" and often ignore their rights because they had never had the possibility to really exercise them (Batt, 2002). They do not have a good opinion of the products' prices or where the non-members were benefiting the same treatment, but where the participation to the other activities than purely commercial was inexistent (Tushar, 1996). Far from considering that they benefit from their membership, the members consider that they are exploited and have no ownership feeling (Tushar, 1996; Batt, 2002).

2.2.2 Functioning of the cooperatives

Cooperatives are institutional arrangements, involved in the organization of often-small farmers providing the advantages of reducing costs of accessing input and output markets (Bijman, 2007). Kherallah and Kirsten (2001) add that cooperatives help to enhance the negotiating power of smaller farmers face to large-scale buyers or sellers. Ménard (2005) considers cooperatives as specific types of hybrids. The rationale is that hybrids require from their members some commitment to achieve specific goals; willingness to support or transform existing routines; and respond to incentives by maintaining or improving their participation.

Cooperatives are hybrids that can't rely either on command or on prices to regulating dealings. Thus, according to Ménard (2004) in order to avoid negative externalities that can result from problems of control, the selection of partners is crucial due to the risk of opportunistic behaviour. Long-term relationships are important in this context. These are perceived as continuity that requires cooperation and coordination where, in regards to Ménard (2004), partners must accept to lose parts of the autonomy they would have under market dealings without the benefits of extended control that hierarchies could provide.

Cooperatives may also rely on decentralized decisions because of the high cost of closely monitoring the numerous members. The main system implemented in cooperatives for coordinating parties who maintain their rights of decisions separate is contractual. However, these contracts are highly unfinished (Ménard, 2004). Here, their incompleteness is caused by the impracticality of expensive accounting for all events and contingencies related with uncertainties and complexities of transactions.

2.2.3 Principle guiding the functioning of cooperatives

As highlighted in ICA (2007) In 1995 The ICA amended 7 'Principles of Cooperation' that are regarded as the best guide to distinguish cooperatives from other forms of corporate organisation. Those principles, as amended in 1995, are as follows:

1° voluntary and open membership: Cooperatives are voluntary organizations, open to all people able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.

2° democratic governance: Cooperatives are democratic organisations controlled by their members, who actively participate in setting policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote) and cooperatives at other levels are organised in a democratic manner.

3° equitable participation: Members contribute equitably to, and democratically

control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. They usually receive limited compensation,

if any, for capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing the cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative and supporting other activities approved by the membership.

4° autonomy and independence: Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organisations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

5° *Education, training and information stipulating that* Cooperatives provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their cooperatives. They inform the general public, particularly young people and opinion leaders, about the nature and benefits of cooperation.

6° cooperation among cooperatives : Cooperatives service their members most effectively and strengthen the cooperative movement by working through local, national, regional and international structures.

7° concern for community: since cooperatives also work for the sustainable development of the society through policies accepted by their members, cooperatives act to play a societal role contributing to solve problems of the community (ICA, 2007; Gray and Kraenzle, 1998). Moreover cooperatives need to be in collaboration with other entities for the sake of learning and keep playing the societal role. This principles have been the basic guide for the choice of questions in the self-assessment used to measure the perceptions of farmer-members on the performance of their cooperatives.

2.2.4 Types of cooperatives

MINICOM (2006) distinguishes different types of cooperatives according to different functions as shown in the table bellow. However, the type of cooperatives concerned in this study is cooperatives of producers involved in the agricultural activities

Financial cooperatives	Examples of sectors
These cooperatives provide services, loans or investments and insurance services to their members. The users members or the insurance subscribers own them.	Popular funds Economy funds COOPECs Insurance cooperatives Friendly insurance
Cooperatives of Consumers	Examples of sectors
They provide goods to their members for their personnel use. The consumers of goods sold by the cooperative own them. They operate in different sectors. Their size may vary from small buying groups to super market organizations	Grocery Natural food store School furniture (stationery, school material, computers and software) Hardware Clothing
Cooperatives of services	Examples of services
They provide services to their members. (Individuals or enterprises) Services users own them. Their size may also vary from small stores to big housing cooperatives	Cable distribution Community development Electricity, natural gas Housing Nursery Funeral services Health care Transport & communication Tourism
The cooperatives of producers	Examples of sectors
These cooperatives commercialise directly or process and commercialise the products or the services of their members. Some of them may also sell the inputs necessary to the economic activities of their members (agricultural supply cooperatives) The members own them who buy their inputs or who supply the products and services to these cooperatives.	Processing & commercialisation agricultural cooperatives Supply to the farm Craft industry Breeding and farming Seeds selection and stocking Public markets Fattening parks and pastures Fisheries Use of common machineries

Table 1: The different types of cooperatives

The different types of cooperatives (continued)

The second care and the se	Europeantes of eactors
The workers cooperatives	Examples of sectors
The objective of these cooperatives is to provide jobs to their members by exploiting an enterprise. They may operate in any economic sector. Their employees- members own these cooperatives. In a cooperative of employees, the members collectively owners get a job and control the management and the administration of their enterprise	Agro-business Arts and shows Clothing and clothes selling Communication and marketing Construction & renovation Education Forestry Printing & editing Industrial& manufacturing production Ambulance services Services to the enterprises Home nursing services Home care
Multiple partners cooperatives	Examples of sectors
called also solidarity cooperatives, these regroup different categories of members sharing a common interest within the enterprise: e.g. customers, workers, investors, community institutions	Home services Health services Enterprises for disabled persons Community services

2.2.5 Reasons why farmers initiate cooperatives

The structure and goal of every cooperative is different, hence, the inspirations behind the establishment of cooperative can't be simply stated.

According to Bijman, (2007) cooperatives generally have a double objective.

The first one is scale economies in commercial production or market transactions. The second is about improvement of bargaining position in regards to external agents.

However, Cook (1995): Batt (2002) and Trewin (2004) agree that three motives are common: The first is to amplify their bargaining power. A prominent example is grain farmers in Australia and the USA in the early 20th century, who needed to sell their grain to elevators. Elevator companies would obtain grain from large numbers of farmers so that they could transport and market the grain in sufficiently large quantities to keep the operational cost of these services low. Because of the distances involved, each farmer was able to sell his grain to only one or few elevators and therefore felt vulnerable to exploitation by those elevators. American farmers responded by forming local cooperatively owned elevators, while the Australians established a mix of cooperative and statutory organizations to store, transport and market their grain. In the subsequent decades, however, improvements in transport, communications and on-farm storage largely overcame the weakness in grain farmers' bargaining power, and a wide range of marketing options became available. For example, it is now possible for many farmers to send their grain by truck to one of several elevators or to an end user (mill or livestock enterprise) (Trewin, 2004). In these circumstances grain farmers have less need to sustain their cooperatives and many have ceased trading. While weaknesses in farmers' bargaining power because of storage, transport and communication issues have declined over time, other sources of weakness have increased. In particular, in a modern economy there are more processors that have advantages based on technology or brands that make them monopoly buyers of certain farm products. An extreme example of technology-based market power is the chicken meat industry, where the major companies

control the small number of bloodlines that are capable of producing meat at competitive prices. Farmer-suppliers have virtually no bargaining power except through joint action or government regulation (Batt; Parining, 2000). An example of brand-based market power is the tobacco industry, where virtually all products are sold through a few dozen brands owned by a small number of companies. In Australia, tobacco growers, to negotiate sales to the tobacco companies, have established cooperatives (Cook, 1995).

The second common motivation for establishing cooperatives is the advantages offered by governments to this form of corporate structure (Cook, 1995; Batt, 2002 and Trewin, 2004). In many countries, cooperatives benefit from certain exemptions from competition law. These allow members to act together in a way that is not permitted for other businesses. Also in many countries, cooperatives have privileges in taxation arrangements. Profits are not required to be taxed before they are distributed to members. This allows members to reduce their overall tax burden when the tax rate paid by the farm enterprise is lower than the corporate tax rate (Batt; Parining, 2000). It obvious that this privilege comes at a cost: the same laws that allow this concession also require that the cooperative conducts most of its business with its members. This requirement limits the range of business models for which a cooperative structure is suitable.

The third common motivation for establishing cooperatives has probably become more common in recent decades. This is that the members consider that they have the opportunity to pursue a particular business opportunity through acting together (Cook, 1995; Batt, 2002 and Trewin, 2004). They may see an opportunity to develop a business with lower costs or one producing innovative and value added products. Cooperatives of this type are 'entrepreneurial' in nature and generally carry higher risks. The New generation of cooperatives, on which this study focuses on are generally of this type.

2.3. COOPERATIVES IN RWANDA

Rwanda is a small, densely populated and landlocked country in Central-Eastern Africa. The country has 26, 338 sq. km of total area, of which 24, 950 sq. km (94.7 percent) is made up of land; of this, only 8, 600 sq. km (32.7 percent) are suitable for agriculture. (Rwanda Development Gateway, 2005). The Rwandan economy is predominantly based on agriculture. This is reinforced by the quasi absence of minerals and other natural resources, the landlockedness, the current low level of industrialization and the low purchasing power of the population.

Majority of the total food production (66 %) is subsistence farming for family consumption, but surpluses may be sold. Not all households are able to sell any of their agricultural produce (only 60.3 percent). Crops marketed by smallholders include bananas, potatoes, sorghum, beans, peas, rice, cassava and maize, which constitute the major sources of cash income for rural households (Nkezabahizi et al., 2005).

2.3.1 Historical overview on cooperatives in Rwanda

In Rwanda, cooperatives are recently more encouraged by the Government policy, but they are not new in the economy. MINICOM (2006) reports that the first attempt to institutionalise cooperatives in Rwanda began with the enactment of the Co-operative Ordinance 1949 that operated until the current law No. 31/1988 was enacted on 12th October 1988. Traditionally, Rwanda had its own self-help forms that conform to the principles of self-help. Some of these forms such as Ubudehe, umubyizi and Umuganda have survived to the present day. To-date,

no efforts have been made to consolidate this traditional philosophy of mutual assistance into economically oriented development initiatives.

The cooperative movement in Rwanda started in the colonial period, as a tool for promoting colonial Governments (MINICOM, 2006). By its independence in 1962, Rwanda already had 8 cooperatives registered and totaling 22,475 registered members. These cooperatives were mainly involved in social activities, development of the mining sector or cash crops like tea, coffee and pyrethrum. After the independence, the Government used these cooperatives as tools to implement its policies and plans, thus becoming political instruments. This attitude led to misconception of the notion of *"cooperative"* with *"Associations"*. Cooperatives had a false foundation in Rwanda. Although the government invested a lot of resources in cooperatives, most eventually collapsed because they lacked clear policies and strategies and the spirit of self-help among its members (MINICOM, 2006). Members looked at a cooperative as a means of only getting financial assistance from donors rather than as an economically productive enterprise.

Between 1960 and1970, new cooperatives emerged around the development alternatives, especially in the handicrafts and vocational activities supported by the catholic missions. The 70s experienced a strong intervention of the government that led to the creation of other cooperatives such as savings and credit cooperatives to ensure security of savings and distribution of credits. Until 1992, about 8750 cooperatives were counted (i.e. Banque populaire du Rwanda) (MINICOM, 2006). After 1994 there were 4,757 organizations with a cooperative character (see principles of cooperatives), mainly in the rural areas, allocated in the following categories: there were 3596 farming & breeding organizations; 235 Commercialization organizations; 234 artisan organizations and 692 other services:

Agriculture cooperatives are continuously conceived as organizations established for and by members "as vehicles to provide services to farmers" (Braverman et al., 1991). This also applies to the above classification. These cooperatives substantially helped in supplying agricultural inputs and materials but also commercialization especially in the tea and coffee sector (MINICOM, 2006). However, Studies on agricultural organisations in Rwanda saw many problems in these cooperatives (Bingen & Munyankusi, 2002; Tardif-Douglin, et al., 1996). Cooperatives were mainly engaged in multiple income-earning activities, but capital mobilization remained limited. Most of cooperatives discontinued the payment of dues and report very little savings: "some associations simply do not generate significant collective income" (Bingen & Munyankusi, 2002). To develop these cooperatives, recommendations were made to ensure that the associations could prevent or minimize the damage from critical organizational crisis, such as embezzlement or conflict. Furthermore, their relations with other stakeholders, particularly for input supplies was to be strengthened so that the traders and farmers could work with each other in the provision of needed services (Bingen & Munyankusi, 2002).

Despite the long history, governments always strengthened rice cooperatives in Bugarama and Rwamagana besides cooperatives in cash crops such as coffee, tea and pyrethrum (MINAGRI, 2006). Other staple food production was always subsistence, and supplement to cash crops only for food security (MINAGRI, 2006; MINICOM, 2006).

2.3.2 New vision and policy over the cooperative sector in Rwanda

MINICOM (2006) clarifies that the mission of the sector is to promote a strong and autonomous cooperative movement, which will be in a position to serve equitably and efficiently its members, in view to contribute to the poverty alleviation, to the decentralization

process and to the social integration. MINICOM (2006) continues highlighting that the general objective of the sector is to facilitate the global development of the cooperatives within the country so that they provide an important contribution to the national economy, especially in the domains needing the participation of the population and community efforts.

The policy in the cooperative sector as noted by MINICOM (2006), the following detailed specific objective are defined in this vision.

- 1. To implement a legal and statutory framework favorable to the launching of a great number of really autonomous cooperatives, to their functioning and to their growth
- 2. To implement an institutional framework adapted to the cooperatives needs, especially in implementing a consultation forum among all the partners.
- 3. To facilitate the structuring of cooperatives in the intermediary organizations (unions, federations and confederations) and their membership to the international cooperative movement; these organizations will serve efficiently the members interests and will contribute to the poverty alleviation accordingly;
- 4. To strengthen the active participation of the youth, women, disabled persons and demobilized soldiers in the cooperative movement and to value their role;
- 5. By the cooperative education, training and human resources development, to reinforce the effective ownership of the cooperatives by their members and the professionalism of the cooperatives management;
- 6. To facilitate the access of the cooperatives members to the Information Communication technologies in order to help them to acquire the required knowledge to the promotion of the good practices in cooperative management and to be connected to the national and international markets.

2.3.3 societal role of cooperatives: tool for poverty reduction

To decrease poverty requires people's participation. Cooperatives will be a tool for people's participation in the sense that ownership of the cooperative is exclusively of the members, for the members and by the members and also potential members in the process of development (MINICOM, 2006a). The cooperative policy is an instrument through which participatory development can be achieved. Another determinant factor to consider alleviating poverty is savings and credit facility, which enable the people to develop small projects and generate income (MINECOFIN, 2002).

The cooperative sector in Rwanda is large and diverse. It consists of savings and credit cooperatives, banking cooperatives, agricultural cooperatives, small processing and marketing cooperatives, fishery cooperatives, Consumers, workers, handicraft and artisanal cooperatives (MINICOM, 2006a). Cooperatives are suitable mechanisms for pooling the people's meagre resources with a view to providing them the advantages of the economies of scale. Besides, as it is in many other countries, in Rwanda participation and inclusion of cooperatives are central to the approach to poverty reduction (MINICOM, 2006a). Cooperatives are an ideal instrument in such a strategy and Rwanda seeks to harness the potential strength of a vibrant cooperative movement. Furthermore, cooperatives are a key organizational form of community development and a tool for combating social exclusion and promoting peace and reconciliation, for example, through local development initiatives and mobilization of savings, among other initiatives.

CHAPTER 3. RESEARCH METHODOLOGY

The nature, the objective, and leading questions justify the rationale and choice of the following methodology. This research is a case study of staple food crops, agricultural producer cooperatives involved in cassava and rice commodities. It has a qualitative approach and was basically carried out through basis of literature and empirical data collection. In first place, the literature was explored. Secondly the empirical data was collected through three stages. The first stage was the exploration of institutional issues and policies towards cooperatives in Rwanda. This stage was made successful with the collaboration of the related officials and staff in the Rwanda Cooperatives Agency (RCA) and those from the centre for training and cooperative research - IWACU A.S.B.L. who were consulted. Additionally, the leaders of farmers' organisations cluster INGABO in addition to the coordination of the local NGO, UGAMA CSC (Centre for Services to Cooperatives) in Muhanga, Southern Pronvince. Then, the leaders of farmers' organisations cluster UCOPRIBU and PASAB Caritas, the local NGO in Bugesera, Eastern Province. The second stage was meeting with the cooperatives adherents for scoring sessions in self-assessment. Finally, the perceptions on performance in relation to the impact of cooperatives' strategies on their development were examined in debriefing sessions.

This study was carried out within 9 weeks from 29 of June to 11 September 2009. 4 weeks were allocated on the data collection in the eastern and Southern provinces of Rwanda with clusters involved in rice and cassava production.

Cassava and rice require complex work in production and processing. Moreover, these clusters are oriented towards entrepreneurial (business) farming practices. Thus, competences and interventions in growing rice and cassava may apply to any other staple crops producers' organizations. Due to the size of the covered space, information collected can provide enough insights useful to give overview of general characteristics of cooperative entrepreneurship in Rwanda.

3.1 METHODS AND TECHNIQUES USED IN THIS RESEARCH

This study was focused but at the same time was a research subject to forward – backward working approach as specified in Verschuren and Doorewaard (2005). The figure below illustrates the process in this study

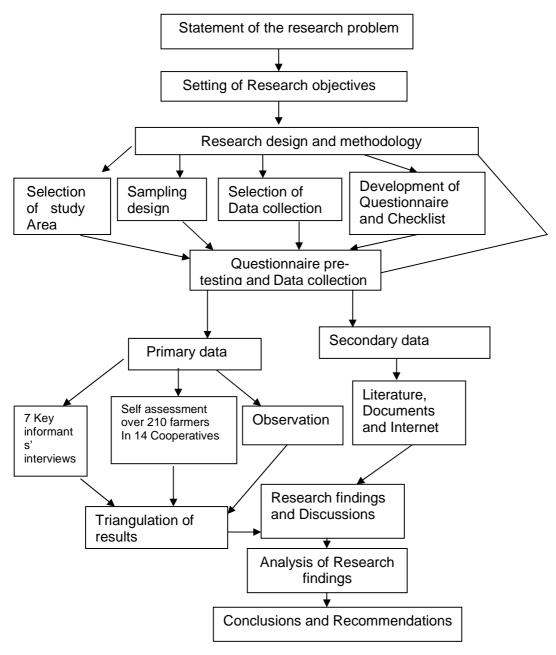


Figure 1: process of research

Several techniques were used to collect the required data. The research process involved literature review, discussion with key informants, questionnaire, interviews with cooperative members and observation. An explanation of how each was performed follows below.

3.1.1 Literature and conceptual framework

This was important in setting up the foundation of all other techniques that were used later. This study paid particular focus on the literature related to cooperative movements, the basic principles and correlation with rural entrepreneurship and its role in development and rural transformation. It provided insights about position of rural entrepreneurship in Rwanda, and particularly through cooperative movements. Hence, such data provided background information on the study area and the studied cooperatives. Several documents that were explored include past studies and reports, policy papers and development plans from different institutions considered relevant in regard to the research objective.

3.1.2 Discussion with key informants

Discussions with key informants were useful to collect key insights about the research area and cooperatives. Key informants were basically the staff in competent agencies dealing with cooperative development activities. The Director of Rwanda Cooperatives Agency and the coordinator of the Iwacu Training Centre were consulted. In the southern Province the key informants were staff from farmers organisations clusters such as INGABO and the UGAMA CSC (Centre for Services to Cooperatives) a local NGO. In Bugesera, Eastern Province the key informants were staff from Caritas – PASAB as well as the coordination of the farmers organisations clusters UCOPRIBU.

Lengthy conversations held with these key informants provided the leading insights. Much of the leading data on the cooperative movements in Rwanda in general and particularly those involved in staple food crops were extracted. These discussions overly led the way for refining the questions designed for formal interviews to the farmers.

3.1.3 Interviews and questionnaire

A total of 210 farmers (average of 15 per cooperative) participated in responding to the formal questionnaire containing statements in regard to entrepreneurial and managerial competences. The subsequent excel analysis of answers to this questionnaire provided a mirror to cooperatives for self-assessment. The questionnaire was adapted to the nature of the specific enterprise in which the cooperatives are involved. This means specific questions for the cooperatives involved in cassava and others particular to rice cooperatives.

After the questionnaire forms were filled in and analysed, debriefing reports reports with debriefing sessions were performed and submitted back to the respondents. The debriefing sessions were done in a form of meeting where qualitative information was collected in discussions about results (image of the mirror) afterwards. There was open-ended (How-Why-What- Where) questions where the farmers detail the benefits or constraints towards the cooperative and express their views on how to improve the performance in functioning of their cooperative. These questions were related to examining the strength, weakness, opportunity and threats around cooperatives.

The questionnaire was subdivided into 2 main parts of factors influencing performance of cooperatives towards rural entrepreneurship. The first were questions about organizational

factors. The second were questions about the nature of enterprise undertaken and questions in regard to institutional arrangements including collaboration and alliances with other actors in the sector. Such interviews were conducted mainly at the cooperatives head quarters, but also at the fields.

3.1.4 Observation and informal interviews

Observations made during interviews and when travelling around the rural areas and farms are also important in explaining certain realities. For instance, farmers can make reflections on problems they faced in the past and how they used to deal with them. This provided an understanding on the cooperatives and behaviour that were not mentioned in official meetings. For instance, they can mention administrative problems and problems of selling secretly some of the produce without informing cooperative representatives and why they do so. In assisting 2 of the cooperative's management meetings, clarifications were made on how the cooperative is managed and the planning of activities and even on the whole leadership processes including the decision-makings.

3.3 SAMPLING PROCEDURE SPECIFICATIONS



The map below indicates the geographical locations of cooperatives covered in this study

Source: <u>http://www.nationsonline.org/oneworld/map/rwanda_map.htm</u> Figure 2 map illustrating geographical location of this research

As shown in the map above, this research in two provinces, Southern and Eastern provinces. In the southern province, 6 cooperatives that participated in this research are located in Muhanga, Kamonyi and Ruhango. In the Eastern province, all 8 cooperatives that participated are from Bugesera.

Sampling plan: The research focused on agribusiness clusters of the Initiative for Promoting Rural Entrepreneurship (IPER - Agri-Profocus). Agribusiness development proposals provided the basic information on the cassava and Rice farming sub-sectors.

In partnership with Van Hall Larensteijn and Wageningen International, agribusiness clusters were asked if they were interested in an organizational assessment. Three agribusiness clusters reacted positively and were retained for this study. In addition, a fourth site was identified (cassava Bugesera). The cooperatives' clusters that were involved in the study are presented in the overview table bellow:

Table 2. Field research plan							
Commodity	Districts	Lead	Facilitator of		Number		
		organization	agribusiness cluster		cooperatives /		
		-	development		farmer groups		
Cassava	Kamonyi	Coopérative	Ingabo		4		
	Muhanga	Mbakungahaze					
	Ruhango	-					
Rice	Kamonyi	COOPRORIZ	Ugama/CSC		2		
Rice	Bugesera	UCOPRIBU	INADES forma	ition	4		
Cassava	Bugesera	COVAPANYA	PASAB – Cari	tas	4		
Total :	·				14		

Table 2 Field research plan

3.4 THE RATIONALE

A self-assessment tool is firstly used to get the perceptions of members over cooperatives on how the cooperative is functioning and how it is operating its agribusiness. The results of the self-assessment provided the basis for further analysis through qualitative interviews and SWOT analysis in addition to PESTEC analysis. This explains why the field work has three main stages:

- 7. Data collection through self-assessment tool
- 8. Preparing debriefing reports
- 9. Debriefing sessions and further probing

The self-assessment tool is inspired by the Integrated Organisational Model (Stephan, 2007), has been used in different contexts including Mali, Niger, Rwanda and Kenya (Nyamwasa, et al, 2007). The self-assessment has been the basic tool to set the reasoning in questionnaire and helped in the collection and analysis of the data.

SWOT analysis helped to analyse so as to understand the context of an organisation in terms of strengths, weaknesses, opportunities and threats recognition.

PESTEC: this helped to understand and analyse the institutional context in terms of political, economic, social, social, technical and ecological impact on the cooperative movements in Rwanda. The combination of 3 tools helped to have a clear image of the studied cooperatives in order to develop strategies towards more effective entrepreneurial cooperatives, the key objective for which this research has been undertaken.

Internal problems farmers' organizations often face

3.4.1 The basic functioning of a farmers' organizations

Farmers' organisations are membership-based organizations. The basic functioning of a farmers' organisation can be described as follows:

Farmers' organizations are established, governed and controlled by farmers, in view of realizing joint activities for the benefit of associated members. Among themselves, members elect the committee or board members. These elected farmers occupy the functions of chairperson, secretary, treasurer and other relevant functions. The elected persons are given the responsibility to govern and represent the organization according to the established internal rules and regulations. The elected persons and bodies need to account for their activities to the members.

Together, farmers and committees define the goals and operational plans of the organization. This is why farmers' organizations are self-help organizations. Goals and plans relate to the results to be attained, activities to be undertaken and the use of resources.

For attaining the goals and expected results, farmers' organizations need human and financial resources. Human resources refer to qualified people (farmer-members, board members and staff). Financial resources refer to money, (internal and external). Both human and financial resources should be managed in a transparent manner. In order to get the desired results, farmers and their organizations also need to collaborate with others (think of: banks, input dealers, trading & processing companies, local government, research, NGO's,). If these preconditions are met, farmers' organizations can provide good services to their members (training, marketing, input supply, etc). If the services and benefits are good, farmers are likely to remain members of the organization and contribute to it. If not, they may leave the organization or become 'dormant' members. These dynamics can be visualized as follows in the figure below:

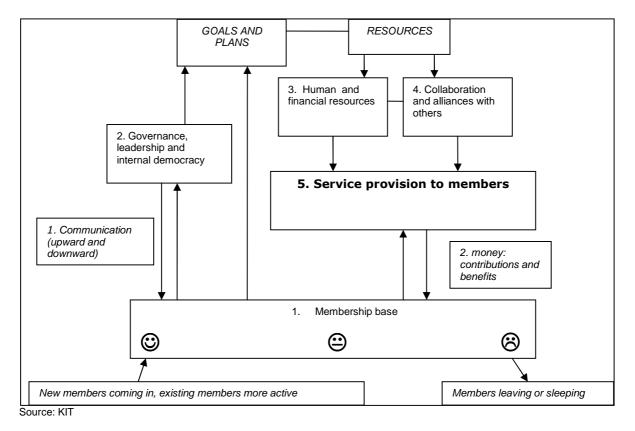


Figure 3. Functioning of cooperatives

3.4.2 Farmers assessing the functioning of their organizations

Thinking about priorities for capacity strengthening and performance improvement At regular intervals, it is useful for farmers and their organizations to think about the progress that has been made (or has not been made) in their organization. Are we really a membergoverned and controlled organization? Is internal communication well developed? Are members happy with the services that are provided ? What results have been obtained? Where are we now and where are (or should) we heading for?

3.4.3 Looking in the mirror

An organization cannot look in a mirror like persons can do. It is however possible to use 'special mirrors', e.g. tools supporting farmers' organizations to have a look at itself.

A self-assessment tool consists of a list of statements on the organization that are 'scored' by the members of the organization. By giving scores on the statements, the members of the organizations communicate how they perceive their organization. By combining all the scores (of different members), it is possible to draw pictures showing how the members perceive the organization. By so doing, it becomes clearer what points are considered as the strong or the weak points of the organization.

3.4.4 The questionnaire

The questionnaire contains a certain number of statements. Depending on the objectives of the self-assessment in regard to the performance of cooperatives towards rural entrepreneurship, these statements have been divided over different parts and/or chapters. The first part of the questionnaire relates to how the farmer-members perceive the functioning of their farmers' organization. A second part relates to how the farmers perceive business relations with traders or with other stakeholders. Thus, this takes the following structure:

Table 3. Questionnaire structure in cluster of st	statements
---	------------

A. Perception organizational performance	B. Perception agribusiness relations (for instance with a company)
1 Membership base	
2 Governance, leadership and internal democracy	6 Production and production risks
3 Management of human and financial resources	7 Relation farmers-traders/company
4 Collaboration and alliances	8 Risks that business transactions
	are not working out
5 Service provision to members	

3.4.5 Scoring the statements

The basic outline of the scoring form looks like this : Table 4. Example of guestionnaire scoring outline

No	Statement	Sc	ore				
1	SUBJECT						
1.1	STATEMENT	0	1	2	3	4	5

Every member gives his/her opinion on the statement by asking "Is this statement true or not true ?" And : "To what extent is this true or not true ?"

Table 5. Score interpretation and rationale

Not true			<			
Scores	0	1	2	3	4	5
	Sibyo nagato	Sibyo	Sibyo buhoro	Nibyo buhoro	Nibyo	Nibyo rwose
Si byo				→ T	rue	ni byo

3.4.6 The explanation of the results of the self-assessment

All the scores are put in the computer. The computer calculates: highest and lowest scores, average scores (for organization, different chapters and each statement). The computer can help to make pictures of the scores. The picture of the scores for statements may look like this:

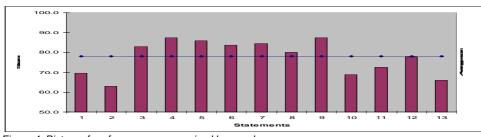


Figure 4. Picture of performance as perceived by members

Every bar corresponds to the score given to a certain statement / subject. The horizontal line is the average score that is given to the overall subject of the chapter. These figures are like the mirror of the organization: it shows how the members perceive the organization. The scoring exercise is thus like communicating with the members and getting their viewpoints.

How to read the results? The bars show to what extent the members are happy or unhappy. If well above the average: members are happy !

If well below the average: members are not so happy or even unhappy.

If more or less the average: members are neither happy nor unhappy.

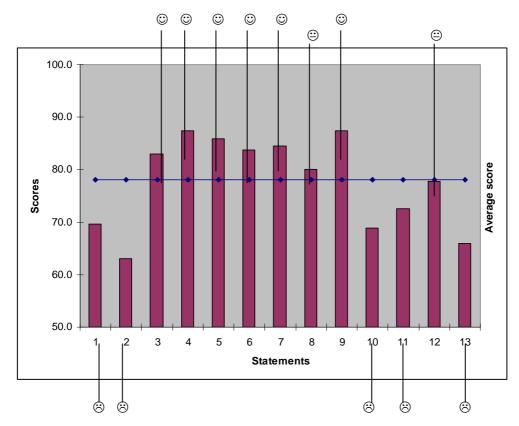


Figure 5: Interpretation of members' perceptions

The level of happiness or unhappiness relates to the average scores that were given. It is very well possible that: There is need for improving on the subjects that already get high scores. Subjects that get low scores are not very important for taking action.

In other words: the farmer organization needs to discuss and analyse the results of the assessment. Next steps: A self-assessment exercise allows to put issues on the table of the farmer groups, committees and boards. The self-assessment does not lead to external advice or suggestions for improvement. Although outsiders (all those that are not member of the organization) may give suggestions and even advise, it is up to every organization to analyse the results of a self-assessment and discuss follow-up action. Farmers' organizations are member-based self-help organizations that are governed by its members. As result, in subsequent meetings, the farmers' organization could continue asking questions like:

- 10. What is the image that we see of ourselves in the mirror?
- 11. What are the issues that need attention?
- 12. What can we do?
- 13. What needs to be done in the first place?

In that manner, "burning issues" can be identified. The tool (the mirror) helps to care for farmers' organization. It helps to communicate, analyse, react and evaluate.

CHAPTER 4: DESCRIPTION OF STUDIED COOPERATIVES

Generally, farmers differ in their individual characteristics and entrepreneurial capacities. These differences establish and reflect the picture of cooperative formed by such individual farmers. Therefore, cooperatives also differ in the type of the enterprise undertaken by farmers of different amounts of knowledge, skills and entrepreneurial competences. In the wide geographical area the performance of the cooperative may also be determined by the geographical location including ecological aspects and other institutional patterns available in the area. 210 farmers including 15 from each studied cooperatives in both eastern and southern province participated in this research for the scoring session. Moreover, the new experience was that during the debriefing sessions more than one thousand farmers participated. In section 4.1 the interviewed farmers' personal characteristics will be analysed. Subsequent sections elucidate the characteristics of the assessed cooperatives.

4.1 CHARACTERISTICS OF FARMERS

The farmers members of cooperatives that participated in this research in southern and eastern provinces are characterized through 3 different aspects including gender, age and level of education as follows in the table below.

Aspects	Detailed		ticipants in Participants in Totals			Max		
•	aspects	eastern province		southern province				
		Total & %		Total & %		Total & %		
Gender	Male	54	51%	47	45%	101	48%	
	Female	51	49%	58	55%	109	52%	210
Age	≤ 3 0	16	15%	9	≈9%	25	12%	
	31 - 40	30	29%	41	39%	71	34%	
	41- 50	39	37%	25	24%	64	30%	
	51 - 60	17	16%	22	21%	39	19%	
	≥ 61	3	≈3%	8	8%	11	5%	210
Level of	No schooling	0	0%	0	0%	0	0%	
education	Primary	97	92%	89	85%	186	89%	
	Technical	8	≈8%	15	14%	23	≈11%	
	Secondary	0	0%	1	≈1%	1	0,4%	
	University	0	0%	0	0%	0	0	210

Table 6: Overview on farmers' characteristics

As mentioned above, members who are different in terms of general features such as gender, age and education form the cooperatives. However these are not the only characteristics of farmers in cooperatives in Rwanda. The general observation is that farmers are also different in their personal entrepreneurial characteristics. When a comparison is made between members of cooperatives and other farmers there are other particular differences, which can be explored. This section describes and analyses the farmers in cooperatives in regard to the gender, age and schooling aspects.

Sex: Overly, the participants comprised of more females than males: out of a total number of 210 respondents, 109 were females, constituting a proportion of about 52% whereas the males constituted only 48% of the participants. There are no prominent particular reasons to explain this because this phenomenon was not the case in all cooperatives. The number of females in the eastern province (region of Bugesera) was lesser than the male participants.

However, in all cooperatives subject to this research, the number of males was always lesser than the number of females. However it is important to note that, taking this outcomes in account, this may mean that women participate more actively in the activities of cooperatives than the men do. This may also be explained through the fact that men always discussed the fee for their participation in this research to substitute their daily pay of their ordinary activities.

Age: Concerning the age of the participants, 83% of 210 respondents are between 31 and 60. This sample was randomly selected. Therefore this can also generally reflect the average age of the population constituting cooperatives. This also means that the cooperatives are composed by the people who are within the boundaries of active age. Only 12% of these 210 participants have less or equal to 30 years of age. The lower bound of the people below 30 is explained by the fact that the people in this category are still busy pursuing the formal education and/or other professions than farming. The people of above 61 years compose a lowest proportion of 5% of 210 participants. These bounds of age can be explained by several reasons. The low life expectancy of 44 years for males and 47 for females, consequences of war and genocide may impact on this issue.

Education: Concerning the education of farmers in cooperatives. The data reveals that the majority, 89% of 210 farmers that participated in this research have only the primary education level. The proportion of about 11 % of the participants attended technical schools, whereas the secondary schooling is quasi inexistent among the participants. Only one participant out of 210 had the secondary school level. Those who are engaged in farming do not have high level of formal education or have discontinued their education mostly at primary level because of various reasons. So far, this may clearly indicate that farming is the vocation that does not interest the intellectuals in the zone that this research was carried out. Farmers with a certain level of secondary education are found in agriculture as they follow their own interests or they want to undertake farming. Another reason that can explain the presence of such intellectuals in agriculture as the participants expressed, it is the restructuring of the public sector services (ministries and other government institutions). The dismissal of many non-university staff resulted in the entrepreneurial practices where people after loosing their jobs decided to take risks in the career change of a different custom. They undertook farming, but the proportion of farmers who have attended secondary schools is still quite small. The disregard given to agricultural activities is understandable, as it does not pay enough due to the agribusiness sector, which is still poorly exploited. It should be expected that intellectuals would understand the benefits provided by the cooperative. On the other hand, the cooperatives are mainly formed of members whose level of education is low. This may also impact on the cooperatives' performances so long as the technical and intellectual capacity is needed for the development of the cooperatives.

4.2. CHARACTERISTICS OF COOPERATIVE

As farmers differ from each other with their practices, knowledge, skills and competences in different domains, cooperatives in which they operate also differ in their performances. Cooperatives in Rwanda however have got a lot in common. As informed by the director of th Rwanda cooperative agency, there about 3200 cooperatives in Rwanda legally recognized. The legal recognition however is not enough to make the cooperative work and perform well.

Table 7. Size, commonly, facilitation and location of studied cooperatives									
Cooperative	Number of	Commodity	Facilitator of	District					
	members		agribusiness cluster						
COOPRORIZ	3059	Rice	Ugama CSC	Kamonyi					
CODERKA	240	Rice	Ugama CSC	Ruhango					
COTERWA	708	Rice	UCOPRIBU	Bugesera					
COGIRIRU	626	Rice	UCOPRIBU	Bugesera					
Inkingiyubuhinzi	932	Rice	UCOPRIBU	Bugesera					
Twizamure	704	Rice	UCOPRIBU	Bugesera					
Mbakungahaze	22	Cassava	Ingabo	Ruhango					
Ituze	205	Cassava	Ingabo	Kamonyi					
Cotravam	42	Cassava	Ingabo	Muhanga					
Abahizi	800	Cassava	Ingabo	Muhanga					
COVAPANYA	23	Cassava	PASAB	Bugesera					
COADPM	78	Cassava	PASAB	Bugesera					
COSCOPA	72	Cassava	PASAB	Bugesera					
Abahuzabushake	75	Cassava	PASAB	Bugesera					

Table 7: size, commodity, facilitation and location of studied cooperatives

14 cooperatives involved in staple food crops production participated with self – assessment in this research. 8 of them are involved in cassava production and other 6 cooperatives produce rice. Additionally 8 were from the eastern province and 6 were from the southern province. Most of these cooperatives are young with two years of age as explained by the same source. This young age of cooperatives is explained by the fact that it is very recently that the government of Rwanda decided to implement the development policies though the collective actions. This has inspired a number of people to start the cooperative movements since 2007 as was explained by the official in the Rwanda Cooperative Agency (RCA). These cooperatives are still in the starting phase. Most of them don't have offices, don't have storerooms for their produces, don't have technical equipment including machinery to add quality and value to the produce. Most cooperatives depend on external assistance. In the southern province local NGOs namely UGAMA CSS and Syndicate (Union) INGABO assist cooperatives. In the southern province: Kamonyi and Muhanga COOPRORIZ, COODERKA altogether with (3299 members) are under the assistance of UGAMA CSS. ITUZE, MBAKUNGAHAZE, ABAHIZI, COOTRAVAM altogether with 1069 members are assisted by Syndicate INGABO. In the Eatern province in the region (District) of Bugesera 8 cooperatives participated. PASAB – Caritas (NGO project) and Syndicate UCOPRIBU assist cooperatives in Bugesera. Among other cooperatives assisted by PASAB include ABAHUZABUSHAKE, COSCOPA, COADPM and COVAPANYA with a total number of 321 involved in cassava production and processing. The syndicate UCOPRIBU is composed by 6 cooperatives and 4413 members among whom 3011 constitute four cooperatives: COGIRIRU. INKINGIYUBUHINZI, COTERWA and TWIZAMURE that participated in this research.

CHAPTER 5. COOPERATIVES IN SELF - ASSESSMENT

To examine the cooperative entrepreneurial features, a questionnaire was developed and this questionnaire prepared for the subsequent sessions for debriefings. These questionnaire comprised of 8 assessment areas of 88 statements to which the participants had to score between 0 and 5 to express their perception about the functioning and entrepreneurial competences of their cooperatives in regard to the undertaken enterprise. The assessment areas were basically set according to the principles of cooperatives and entrepreneurial competences in consideration of the nature of enterprise in which the cooperative is involved. These 8 assessment areas of 88 statements were also clustered in 2 groups of aspects: internal organization aspects and Agribusiness development aspects. The findings of this research in regard to the mentioned criteria are presented in the following sections of this chapter.



Figure 6: members of COADPM assessing their performance

5.1. COOPERATIVES' INTERNAL ORGANIZATION

The internal organizational features are considered as the leading elements on which the proper functioning is based for the performance of the enterprise. The internal organization aspects comprised of 5 clusters: membership base; governance leadership and internal democracy; management of human and financial resources; internal network and collaboration and service provision to the members.

5.1. 1. Membership base

The cooperatives are established, governed and controlled by farmers, in view of realizing joint activities for the benefit of associated members. In initiating the cooperatives, farmers consider a number of conditions and principles (Bijman, 2007; Cook, 1995; Batt, 2002 and Trewin 2004). Based on those principles, this study assessed the perception of the members by asking their opinions on the following 9 statements.

- 1. The conditions for adhering to cooperative are clearly defined
- 2. Cooperative has clearly formulated the objectives it wants to reach
- 3. These objectives are shared with all individual members
- 4. All people who want to, can be member of the cooperative
- 5. Cooperative actively seeks the adherence of new members
- 6. Farmers know that the cooperative has a member register that is up-to-date

- 7. The cooperative knows how much land members have
- 8. All members regularly pay their membership fees
- 9. All members actively participate in the activities of our organization

These statements were addressed to 15 members of the cooperatives. 10 ordinary members and 5 members who are in the higher hierarchy of leadership constituting the board members participated in this assessment. Each of the 14 cooperatives gave the score to these statements. In most cases there were high disagreement on the score especially between the board members and the ordinary members.

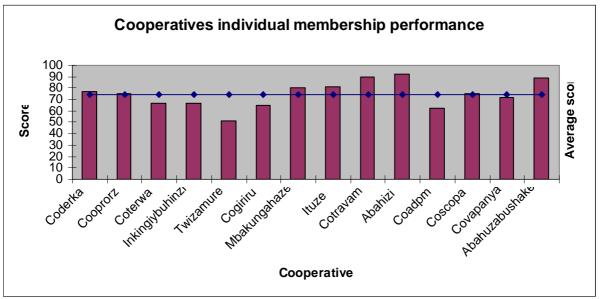


Figure 7. Farmers' perception on membership

Those who are in the leadership always scored very high, sometimes up to 100% while the ordinary members scored lower. This provided a number of interpretations: first, this showed that the leadership committee understand better the functioning of the cooperative. The other interpretation is that the leaders don't have enough sharing of the vision and other cooperative concerns with the members. Another interpretation would be that the cooperatives' ordinary members understand well the functioning of the cooperative but may be not satisfied about management of the membership. At the same time, this would mean that the leaders don't want to show the true image of the cooperative. In the debriefing sessions subsequent to the assesment, the members expressed their opinions and in 11 cooperatives divergence was most clear about the issues of setting and sharing goals. However other concerns were about the active participation of members in cooperatives' activities. Many of the members especially those in cooperatives involved in cassava, indicated that active participation does not pay them back. However Trewin, (2004) argues that the cooperative must pay dividends to members. Such statements would provide a number of insights questioning about the successfulness of the cooperative entrepreneurship when cooperative entrepreneurs have neither the same objective nor involve they in the cooperative activities at the same scale. In Bugesera for example, one cooperative scored very low about the adherence of new members, however this was a very small cooperative of only 22 members. The question "why such a small cooperative doesn't want to gain new members while according to the principles cooperatives should seek to have new members (ICA, 2007) and Watkins (1986). The answer

was that the current members staid after others had left the cooperatives. Additionally, there were others who were just dormant members. The concern again was why the dormant members in the cooperative and why were the members living the cooperative. This would indicate a number of internal problems including in governance and in service provision to members. In this case the leaders took measures to strengthen the internal regulations but this impeded the membership principles – members would obey the rule instead of deliberate self-investment and commitment. On the other hand 13 other cooperatives had been registering a number of new adherents. Statement like regular payment of the membership fees scored high in most of the cooperatives (10). This may positively indicate that members are dedicated to developing their cooperatives as they invest their strength and resources. The figure bellow indicates how averagely 14 cooperatives score towards the membership base.

All of these 14 cooperatives are from different regions and are assisted by different intervening organizations. 8 of them are from Bugesera district (Eastern province) and other 6 are in Muhanga, Kamonyi and Ruhango districts (Southern province). In general the overall average of all 14 cooperative was 74.5%. 6 cooperatives including all 4 (COTERWA, INKINGIYUBUHINZI, TWIZAMURE and COGIRIRU) assisted by UCOPRIBU involved in rice production in Bugesera and other 2 (COADPM and COVAPANYA) under PASAB – CARITAS also in Bugesera scored bellow the membership overall average score. However during the debriefing sessions, by the observation, it was clear that in the above – mentioned cooperatives that scored low, the members were more open and knowledgeable about principles of membership than is some of the cooperatives that scored very high. This may indicate that members in these cooperatives strongly feel wanting to see their respective cooperatives develop much more than they appear so far.

5.1. 2. Governance, leadership and internal democracy

Members choose among themselves and elect the committee or board to shape the cooperative leadership and governance. These elected farmers occupy the functions of chairperson, secretary, treasurer and other relevant functions. The elected persons are given the responsibility to govern and represent the organization according to the established internal rules and regulations. The elected persons and bodies need to account for their activities to the members.

In principle, together, farmers and committees define the goals and operational plans of the organization. This is why cooperatives are self-help organizations. Goals and plans relate to the results to be attained, activities to be undertaken and the use of resources. These principles inspired the setting of the following 13 statements through which the participants (cooperative members) showed their opinions by scoring.

- 1. The internal regulations of our cooperative are well documented
- 2. All members know the internal regulations of our cooperative
- 3. The statutory bodies of our cooperative (general assembly, board meetings) function according to their mandates
- 4. The governing board of our cooperative has been democratically and transparently elected
- 5. The duration of the mandate of a leadership position is well defined
- 6. Criteria for being a good chairman are clearly spelled out
- 7. Internal communication within our cooperative is well organized: members are well informed about whatever is happening
- 8. We have elected a treasurer who can keep the books correctly

- 9. Women and youth are sufficiently represented in the elected bodies of our cooperative
- 10. During meetings all participants share their point of view
- 11. Every year, our organization elaborates a plan that indicates what we are going to do
- 12. Every year we evaluate the results that we have obtained
- 13. Board decisions get immediate follow-up and are implemented

During the scoring sessions, cooperatives' members gave different scores for their cooperatives. After the analysis of the score with the help of excel, results show that members of all 14 cooperatives scored high in the average, 73%. This tends to mean that members were relatively happy.

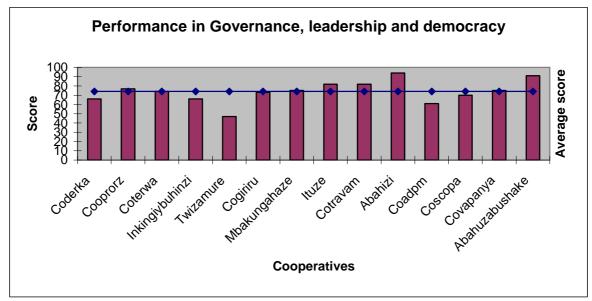


Figure 8: Members' perception on governance

Concerning the differences of scores between cooperatives, the table above shows that Twizamure scored the lowest score with the average of 47 %. Other cooperatives: CODERKA, Inkingiyubuhinzi, COADPM and COSCOPA scored also below the overall overage score. This may indicate that general perception in these cooperatives is that members are not happy with the current leadership – this of course according to the average score. However it should be useful to note that this may relatively indicate that members are free to express their opinions in these cooperatives. Therefore in comparison with others that scored very high to 91%, there may be doubt whether realistically cooperatives can score this high for governance issues or that the influence of the leaders is far too big towards the decisions of the other members.

Taking case by case, these statements scored high that in most cooperatives women are sufficiently represented in the elected bodies of cooperatives. This can be felt in conformity with the principle of non-discrimination (ICA 2007). However it was rare to see the youth in the governing board. The statement about sharing opinions generally scored relatively the lowest of all the statements in these cooperatives. This can indicate that the leaders often take the lead in decision making without giving enough room to consultation of the other ordinary members. The elections take place in the cooperatives. This makes all members happy, however, the key concern may be the process of voting and even the management of the

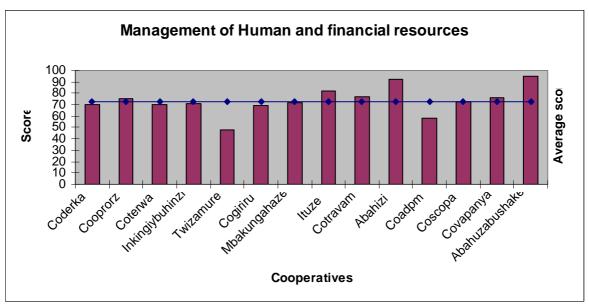
leadership after elections. This was also expressed by some members of the cooperative in Muhanga during the debriefing session. In most cooperatives also the concern was about the elaboration of the annual plan and its follow up. Here the question can be whether or not the members have the expertise to elaborate the plan or the management of the elaborated plan itself is problematic. Trewin, (2004) urges that cooperative as a business, members must elaborate a a shared business plan before even starting the business. It's therefore clear that in this cluster, there some technical problems of expertise and communication between leaders and the ordinary members in cooperatives.

5.1.3 Management of human and financial resources

To attain the goals and expected results, farmers' organizations need human and financial resources (Cook, 1995). Human resources refer to qualified people (farmer-members, committee members and staff). Financial resources refer to money (internal and external). Both human and financial resources should be managed in a transparent manner. The criteria to assess the management issues in the cooperatives were set according to the cooperative management principles (See the chapter 2). The following statements constitute the basic criteria for such an assessment.

The board members receive training to improve the competencies and skills that are needed to perform their tasks

- 1. I know that important documents are well kept
- 2. Recruitment of staff or advisors follows transparent procedures that are known to the members
- 3. Our cooperative functions on the basis of the financial contributions of the members
- 4. I am benefiting from trainings organized by the cooperative that make me a more professional farmer
- 5. We have a committee that controls how expenditures have been done and how the financial books are kept
- 6. We write down important financial data of the cooperative
- 7. I am sure that the cooperative has a manual describing how money has to be handled
- 8. Our cooperative can function well without outside financial support
- 9. When the cooperative needs to buy something, the procedures to do so are transparent
- 10. Our cooperative has a bank account
- 11. Every year, the board explains how resources and income of the cooperative have been used



After scoring sessions, the results of the score were analysed with excel. The overall average of different averages of 14 cooperatives 73% as shown in the figure below.

Figure 9. Members' perception on management of resources

This figure shows that Twizamure, COTERWA, Inkingiyubuhinzi, COGIRIRU and COADPM are below the average score in management of human and financial resources. This may indicate that in these cooperatives, members are highly concerned about management of resources. But taking in account statements cases, in most cooperatives many of the participants expressed concerns about the trainings. This can also be explained by the fact most of the cooperatives do not have professional staff to train. Apart from COOPRORIZ other cooperatives that participated in this study do not have the permanent professional staff. This also results in the confusion of authority where the president and treasurer are always omnipresent in all issues of the cooperative, which may end making them consider the cooperative as their own property. The majorities in almost all cooperatives scored very low about the transparency in staff recruitment. This is also related to the above argument in the regard to the capacity of cooperatives to hire technical staff. The score about keeping the important documents showed that the account books are well kept. According to the score that was given to the related statement, members of different cooperatives indicated they weren't sure whether their cooperatives function on the basis of the financial contributions of members. In the debriefing sessions, however, participants indicated they understood the principle that the cooperatives function according to the contribution of the members. This indicates that members don't have enough capital to contribute to the effective functioning of the cooperative. It was clear that members knew that their respective cooperatives had bank accounts. This indicates that members have basis to collaborate with banks and may manage the financial resources transparently.

Another big concern for all cooperatives was about the transparent procedure when the cooperative needs to buy something.

5.1.4 Collaboration and networks

One of the most important components of the entrepreneurship principles is collaboration and networks (ICA 2007). In order to get the desired results, farmers and their organizations also need to collaborate with other cooperatives and organisations in the same field or even other potential stakeholders such as: banks, input dealers, trading & processing companies, local government, research, NGO's. For the examination of collaboration and networks through cooperatives, 8 statements were given to the cooperatives' members to express their perception.

- 1. If we want something to be done we seek collaboration with others
- 2. We are working together with local authorities
- 3. In the past years, our organisation has approached researchers and extension workers to find answers to the questions we had
- 4. Our cooperative had written project proposals with the aim to get support and funding for our activities
- 5. Our cooperative has formal agreements with banks facilitating members' access to credit
- 6. My cooperative is establishing relations with traders to buy our produce
- 7. Our cooperative actively participates in meetings of other organizations
- 8. We exchange our experiences with other farmers' organisations

In this case, the focus will be put on collaboration between cooperative and other organisations in the same field as agricultural cooperatives. Other aspects of collaboration and networks especially the stakeholder collaboration will be explored later.

By analysing comparatively throughout cooperatives that participated in this study, the figure bellow shows how issues of collaboration and networks are apprehended in different cooperatives.

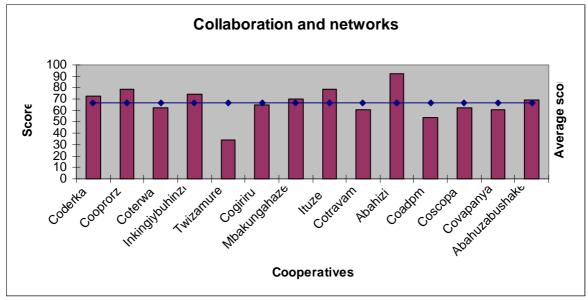


Figure 10. Members' perception on collaboration and networks

Results of the self-assessment showed (with the average score of 67%), this is average score. This tends to mean that the participants were neither happy nor were they angry with the way collaboration and networking with others is done

This table shows that the issues in collaboration and network are neither particular to cluster commodity (Rice or Cassava) nor to isolated district, but, particular to individual cooperatives. COTERWA, Twizamure, COGIRIRU, COTRAVAM, COADPM, COSCOPA and COVAPANYA scored low. These cooperatives constitute the half of the cooperatives that participated. Twizamure scored much lower (to 34%) in relation to the overall average score of all cooperatives which is already low (67%). This shows how much members were concerned or (even/if not) do not understand the principles of collaboration and networks in the cooperatives entrepreneurship system.

For example in most cooperatives the results of scoring showed that statements such as: "cooperative actively participates in meetings of other organizations; we exchange our experiences with other farmers' organizations: If we want something to be done we seek collaboration with others" scored very low in most of the cooperatives. To examine the reasons of such low scoring enough time was invested on the discussion about these statements during the debriefing sessions. Participants indicated that the emerging of openminded context in cooperative offers collaborative opportunities to members to experiment with incoming into relationships such as strategic partnerships, joint ventures, contractual supply and marketing arrangements with other members but also with other cooperatives. This was prominently the case of UCOPRIBU. However, in some other cooperatives like COVAPANYA, participants expressed some apprehension about the implications of such collaboration on the autonomy of production and management. The issue of autonomy was emphasized in regard to independence of policymaking governance systems, strategic, management and operational control systems of members in cooperative especially when the capacity of production is different. Here then comes the issue of selfishness in the cooperative structures. A number of other misunderstandings including resource sharing, pricing, risk sharing, divest, transfer of shares to other partners, and accountable functioning of partners and resolution of conflicts showed the anxiety.

In the debriefing sessions several participants from different cooperatives expressed concerns and raised many questions about impacts that strategic partnerships, contractual supply and marketing arrangements would bring about when cooperatives are in collaboration for example. This made it clear that members in many cooperatives don't understand principles of collaboration and networking.

5.1.5. Service provision to members

One of the key functions of the cooperative to the members, for which they initiate it, is to benefit to them (Bijman, 2007). If the services and benefits are good, farmers are likely to remain members of the organization and contribute to it. If not, they may leave the organization or become 'dormant' members. In general, the questions that where asked to participants meant to see how the following articles are perceived in different cooperatives are as follow.

- 1. The services of the cooperative respond to the needs of members
- 2. The cooperative defends the interests and needs of farmers
- 3. The cooperative is efficient in providing information and training to the members
- 4. Thanks to the cooperative farmers now use inputs (such as seeds, fertilizer, pesticides), which farmers otherwise would not have had outside cooperative
- 5. Because farmers sell products collectively they fetch better prices
- 6. The cooperative has helped farmers to get access to credit and other financial services

- 7. The cooperative has the habit of asking the members if they are happy with the services that are provided
- 8. Members discuss activity reports during official meetings
- 9. By being a member of this cooperative, farmers are earning more

The clear picture of the results from the scoring of different participants from 14 cooperatives is presented in the figure bellow. It can be seen in this figure that participants gave a relatively low average score about service provision to the members.

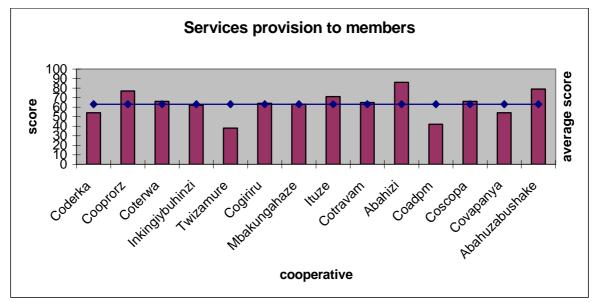


Figure 11. Members' perception on services provision to members

The overall average score of 14 is 63%, the lowest cooperative's individual average score is 38% by Twizamure. Abahizi scored the highest average score with 86. This however can be questionable. Is Abahizi the best cooperative in service provision to the members? The general high score may depend on different reasons including the level of leadership and internal democracy. This may also depend on the mindset of participants in regard to their respective cooperatives and the level they want their cooperative to reach.

The outcome was that in most cooperatives, participants approved that services provided by cooperatives meet their needs. On the other hand they disapproved that their respective cooperatives provide efficient trainings to the members. However in 12 cooperatives, farmers approved that thanks to the cooperatives they use adequate inputs. With this it can be questionable what kind of services farmers need – Not training? Only in COOPRORIZ and cooperatives assisted by UCOPRIBU farmers scored high about earning more by being cooperative members. Other cooperatives scored lower than the cooperative's individual average scores in this cluster. This could also be easily seen considering the production capacity of COOPRORIZ (4000 T per season). Concerning the intervention of the cooperative to help members to access credits, participants in all cooperatives scored with economic interests which is also noted in Batt (2002) as crucial for formation of the cooperative. In interview held with the president of one cooperative (COVAPANYA), he explained that they didn't have enough warrant to help members to access loans. The warrant issue seems to be the case for most of the cooperatives.

Many members also indicate that cooperatives have the habit to ask them the type of services they would need but the follow up and implementation was always corresponding to the needs. Another statement that scored low for most of the cooperatives was the collective selling, which doesn't provide better prices. This also leads to potential different questions about what services the cooperatives provide to the members.

The table bellow compares the internal agreement between Twizamure and Abahizi.

Table 8. Co	mparison of level o	f agreement in coo	operatives
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Clusters	Average score	Highest score	Lowest score	Standard deviation	
Twizamure					
5. Service provision to members	38	62	22	12	
Abahizi					
5. Service provision to members	86	93	67	6	

*Standard deviation from average score: the lower the score, the higher the level of internal agreement

By the interpretation of the standard deviation as a tool or mirror to look at the level of internal agreement in relation to the average, this table gives a picture that there should be misunderstandings between farmers. This may also indicate the level of freedom of expression or how the cooperative is organized. Therefore Abahizi having scored the highest about service provision to the members does not necessarily mean that Twizamure provides the worst quality of services to the members.

However several cooperatives scored low about the services provision to the members. This may rather indicate that members in cooperatives are generally complaining about the services they are provided.

5.2 PERFORMANCE OF THE ENTERPRISE: AGRIBUSINESS DEVELOPMENT

The cooperatives are always initiated to serve a certain purpose of the members who form them. The cooperative is also initiated with a particular enterprise through which members invest their resources, energy and time in order to reach their goals. The agricultural entrepreneurs need to be able to cop with different environmental factors in order to develop and increase the quality of their production in relation to the amount of resources invested. After harvesting the production many other issues may be found including changes in demand, which obviously affects the prices on the markets. The development of such an enterprise involves not only the elements in organizational structure but also many other different actors in the sector.

This part of the chapter will present the findings about perception of cooperative entrepreneurs in regard to production and productivity, post harvest activities and the collaboration and networking with different stakeholders for the agribusiness development.

5.2.1 Production and productivity

The examination of production and productivity involved 12 statements to look at challenges in farmers' entrepreneurial practices and innovativeness in the agricultural sector. The following statements were presented to the farmers:

- 1. Farmers can manage soil fertility in order to produce a lot
- 2. Farmers use the best varieties
- 3. Farmers can produce enough even if the rains are unpredictable

- 4. Farmers know how to avoid the pests and diseases that can possibly affect their production
- 5. The costs of production (seeds, fertilizer, pesticides, labour) are low
- 6. Members can buy good quality fertilizers at a fair price
- 7. Farmers have the highest possible productivity (kg/ha)
- 8. Farmers are producing the best quality
- 9. Within the cooperative farmers are multiplying and distributing good quality seeds
- 10. Every season, farmers calculate the costs and benefits of the production
- 11. If members need, can get credit at the bank to finance production costs
- 12. Every season, farmers are trying out new things to improve their production

The figure below indicates the level of scoring of different cooperative according to the overall average score about production and productivity.

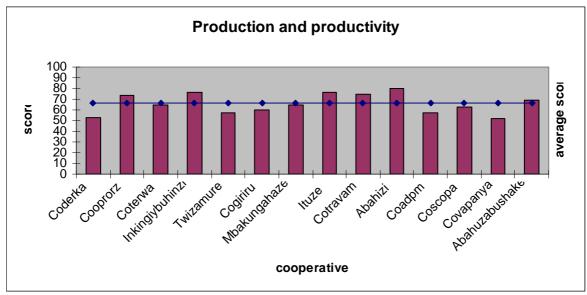


Figure 12. Members' perception over production and productivity

This figure shows that 6 cooperatives (CODERKA, Twizamure, COGIRIRU, COADPM, COSCOPA and COVAPANYA) scored bellow the overall average score (66%). Two cooperatives scored right in the average. It is clear that there are issues of concern in these cooperatives about production and productivity. Abahizi scored the highest with average score of 80%. If the participants scored reasonably, this would mean that this cooperative performs well in production and productivity. The COVAPANYA with 52% and CODERKA 53% scored low. In the same case, if the respondents were reasonable enough without being too severe for the sake of being severe against their cooperatives, this would be the clear indicator that these two cooperatives are the most concerned with the issues of production and productivity mentioned in the above statements.

In many cooperatives participants scored low about the use of best varieties, good production when there is no rain and use of pesticides. This means that they are still applying the traditional methods of farming. They do not apply all possible means to improve productivity. However most of the farmers in cooperatives are the small-scale farmers with limited pieces of land. They also indicated that cost of production is high. However the cost of production should have been reduced by the fact that the officials inform that the government made the inputs such as certified seeds, fertilizer and pesticides available. It was found out however

that participants highly admitted that they were multiplying and distributing the good quality seeds. This indicates that the future of agriculture can be good. They also scored relatively high that they were producing good quality produce. Many participants indicated that they do not necessarily get loans if they need to. This may indicate that there is a problem of production of scale because farmers don't easily access capital for new investments. This may also impede the use of different technological methods of production. Another statement that scored low in many cooperatives was about the seasonal calculation of costs and benefits of the production. However (Batt, 2002; Trewin, 2004; Cook, 1995) urge that members must always do business plans before any investments. Therefore, this may indicate there was still lack of capacity in the management of production.

5.2.2 Post harvest activities

The post harvest activities as cluster of statements meant to examine the management of the production after the harvesting. What do farmers do with their produce? How do farmers manage it when there are disequilibria of surplus on the market? How do farmers compete with others' prices settings? How do farmers take risks? This would indicate clearly the emerging of the entrepreneurial farmers in cooperatives and their competences into the business and market – oriented agriculture in Rwanda. A series of following 12 statements was exposed to the farmers to show their views and appreciation.

- 1. Farmers are experts in processing the production
- 2. Farmers have the best processed cassava or rice in the region
- 3. By storing the dried production, farmers can wait for prices to go up
- 4. Farmers are happy with the price they get for the dried products (cassava/rice)
- 5. Farmers are dealing with reliable traders
- 6. Farmers do not have to wait long for the traders to collect the produce
- 7. Farmers are happy with the current method buyers are paying them
- 8. The cooperative can have a bank loan to buy the produce from farmers
- 9. When farmers deliver their produce to the buyer they get immediately paid
- 10. Farmers know how much the traders want to buy from them
- 11. Farmers are able to manage a cassava/rice processing unit
- 12. Farmers approach traders/intermediaries to negotiate prices before selling

The ovarall average in 14 cooperative is 60% that seems low. However, the analysis of the scored results indicates that some statements generally score high in some cooperatives and others score lower. Therefore this indicates that cooperatives apply the entrepreneurial competences differently.

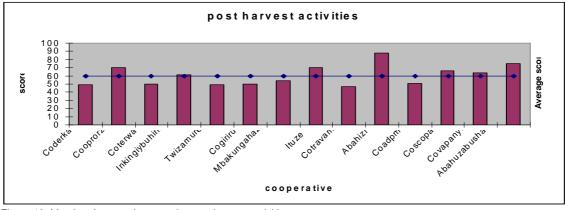


Figure 13. Members' perception over the post harvest activities

The table above may simply mean that some cooperatives are better than others in managing the production and markets complexities after the harvest.

There are statements that showed particularities in scores. The attention will be paid to the statements, which scored generally high or low in many cooperatives. Farmers generally expressed that they were not happy with the prices they get paid for their processed produce. This would mean that there was no balance on the market or the marketing issues. This was followed by the fact that farmers scored low about dealing with reliable traders. The combination of the low score for the two statements may indicate that farmers do not trust the traders. Additionally farmers indicated that they wait long for the traders to collect the produces. This also indicates that there are some issues in the value chain system: this is also complementary to the fact that farmers do not trust traders. On the other hand, participants generally scored high that they knew how much they would sell their produce. This means that the level of uncertainty about selling is reduced. There are quasi null trading intermediaries for the agricultural produce in Rwanda, but participants scored high that they approach intermediaries to negotiate the prices before selling. This may probably mean that the cooperative facilitates negotiating with traders or the cooperative may intervene in helping to find the commissioners.

The table bellow indicates that the participants from all the 14 cooperatives gave the average score of 60%. This is relatively a low average score. This tends to mean that participants perceive with dissatisfaction the management of post harvest activities through cooperatives. However this dissatisfaction may be relative because even if cooperatives helps farmers to perform their activities there are many other entrepreneurial activities that are still done at the farmers level. It is also visible in this table that the half of the cooperatives scored lower in average with around 50%. The highest individual cooperative average score was Abahizi with 88% meaning they are satisfied. The lowest score was COTRAVAM with 47%. Here the members meant they were seriously concerned about the post harvest activities in their cooperative. In COOPRORIZ for example, as informed by participants in the debriefing session, they have to travel more than 70 km to Kigali to get the rice processed. This may have contributed to the low scoring sanctioned by the members. On the other hand, cooperatives have got plans to be competitive and become very reliable entrepreneurs. In respect to their strategic plans, COOPRORIS envisaged to build rice-processing factory units to facilitate in the post harvest activities and gain more money as well as to add desirable quality to the rice they produce. Here participants expressed concerns and consciousness that their rice was not competitive on market, as it lacked quality they needed.

5.2.3 Stakeholder collaboration

In the entrepreneurial system, farmers and their cooperatives also need to collaborate with others in order to get the desired results . Collaboration vehicles innovations as it enables large scale adoption of technologies and results in positive impact in terms of higher yields and income for farm households, as well as other less tangible and indirect gains (Klerkx and Leeuwis, 2007). Among the potential collaborators of the farmers cooperatives may include banks, input dealers, trading & processing companies, local government, researchers and NGO's. A series of statements set for this cluster meant to indicate how farmer cooperatives see the opportunity and capitalize it in collaborating with stakeholders. This would therefore show the level of maturity of cooperatives in helping the members get open to the horizon in the environment. The following statements constitute indicators of the farmers' perception. In

addition, this meant to indicate how the farmer cooperative influences the value chain system and how the members perceive it.

- 1. Farmers can get appropriate loans from the banks
- 2. Farmers' input supplier gives them advice on how best to use fertilizers
- 3. Farmers are negotiating with district authorities for supporting the cassava/rice chain
- 4. Farmers are discussing with researchers about what they could do for them
- 5. Farmers cooperative has extension materials on cassava/rice production and processing
- 6. Farmers know the quality requirements of consumers in different markets
- 7. Farmers are discussing delivery contracts with traders / processors
- 8. Farmers understand that if they save more, can get a higher amount of loan from the bank
- 9. If there is a problem, farmers openly discuss matters with the traders
- 10. If the cooperative would engage in collective marketing and sells at a better price, farmers would be happy to contribute some francs per kg for the benefit of the cooperative
- 11. Farmers know cassava/rice prices at different markets in Rwanda
- 12. Some of cooperative members are trainers/advisors
- 13. Within the district, different stakeholders are discussing how best to develop the cassava/rice value chain.

The figure shows that cooperatives scored overall average of 60%. This is a low average score. However 6 cooperatives are still below this average. This may indicate that in these cooperatives, participants were very concerned by the low performance in collaboration with stakeholders.

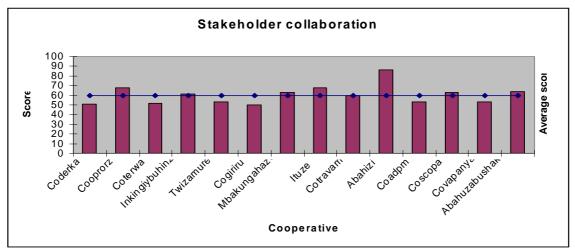


Figure 14 members' perception of collaboration with stakeholders

The opinion of the farmers is that cooperatives don't have extension materials on cassava/rice production and processing. This extension materials would be machines; mills, processing unit and others. Many cooperatives do not have mills or other units to process and give the added value to the production. This was also one of the concerns of participants during debriefing sessions. They also made it clear that they don't get sufficient loans from the banks. The question may be to know whether farmers and their cooperatives are not able to negotiate loans; banks do not trust farmer cooperatives or banks do not have enough money to invest in the agribusiness sector. Farmers also scored low about the open discussion over

the matters with traders whenever there are problems. This meant that farmers and traders do not openly collaborate. Questionably one may wonder whether there is rivalry between farmers and traders. Farmers also scored low about knowing prices at different markets in Rwanda. With this it is clear that there are issues of communication among farmers in Rwanda. This also may results from the fact that there was no private apex instance of farmers' organisations throughout the country.

However, farmers were happy about the negotiating with district authorities for supporting the cassava/rice chain. This may be explained by the fact that since 2006, public authorities are putting efforts in reinforcing the cooperatives as was explained by the district agronomist in Muhanga district. The highest score was allocated to the statement stipulating that if the cooperative would engage in collective marketing and sells at a better price, farmers would be happy to contribute some francs (money) per kg for the benefit of the cooperative. This shows that farmers can like to contribute to the development entrepreneurship in Rwanda if they really benefit from the collective marketing. The other issue concerning the value chain and communication was that farmers don't generally know the quality requirements of consumers in different markets. The lack of developed communication technological tools may explain this. None of the 14 cooperatives that participated in this research has Internet website.

Generally many participants were happy that within the districts, different stakeholders were discussing how best to develop the cassava/rice value chain. This may likely be best explained by the implication of many actors in for the development of the agribusiness in Rwanda. Mostly international and local NGOs as well as the local government are very much involved.

5.3 COMPARISON OF PERFORMANCES AND PONTENTIAL

5.3.1 Difference between commodities: Cassava and rice

Commodities like cassava and rice require different potentials and in means of production. Therefore, it is not always easy to set indicators for comparison, and in this study no tools were preset to compare performance between these commodities. However by observation, rice farmers seem to be more organised. Taking into account the mood in sessions mostly in debriefing sessions and questions that were raised by members, rice farmers were more open about principles of cooperatives and more active. In all session participants from rice cooperatives were more present than members from cassava cooperatives. In addition, further analysis in regard to the scored results. Members from cassava cooperative gave themselves relatively higher score than rice farmers. The relative low score in rice cooperatives may be more valuable than the high score in cassava cooperatives. The low score might indicate that members have a standard they want to achieve and understand the higher performance they should reach. On the other way round, the higher score in cassava cooperatives may indicate that they are satisfied with their performance which is not necessarily enough to be a competitive business. Here the questions that can rice are about the longer experience. The position allocated to rice as highly valued commodity (MINAGRI, 2006; MINICOM, 2006), in which the government and other supporting agencies put more effort than in cassava may impact on performance.

5.3.2 Difference between internal organisational and entrepreneurial abilities

In this section, the figure bellow gives the comparative overview between the performance in the cooperatives' internal functioning and the activities in the agribusiness development.

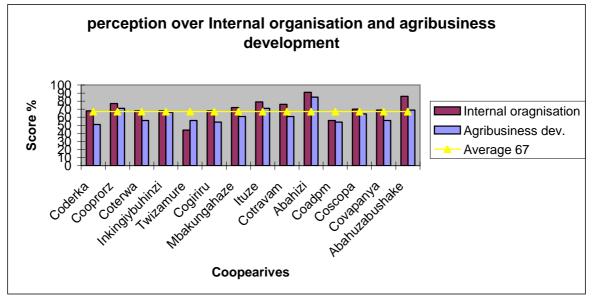


Figure 15. Comparison of performance over internal and agribusiness activities

The figure above shows clearly that the performance in internal functioning of cooperatives is generally higher than it is in the agribusiness development in most cooperatives apart from in Twizamure. Additionally, performance in agribusiness is generally below the average 67%, performance of both clusters with only 4 cooperatives above it; whereas the internal the internal functioning scores generally above the average with only cooperatives below the average (67%). The questions may be: why this the agribusiness is consistently scored lower? In debriefing sessions in most cooperatives participants blamed government and NGOs for issues like management of soil and many more others. Another smaller number were suggesting that government and NGOs would assist with capacities to perform better in assessment areas of agribusiness development. In general according to farmers government and NGOs should play a greater role. Therefore one of the possible answers to the question above may be that participants don't feel owner of the agribusiness development – rather as strange to the cooperative. Another possibility may be that members feel owning it together with other different actors, but they don't see earning good results from the system. This may indicate that farmers tend to deny their responsibilities.

5.4 METHODOLOGICAL APPRECIATION AND DIFFICULTIES

At the field, the methodology applied for assessment on promotion of rural entrepreneurship involving agricultural cooperatives went through 3 stages. First it was to meet with the key informants at the national level as well as those from the coordination of UGAMA CSC, Ingabo, UCOPRIBU and PASAB Caritas who facilitated the appointments with the farmers in cooperatives. Second stage was the discussion with cooperative coordination and setting appointment of proper meetings with the farmers. The collection of primary information involved the application of the self-assessment tool with statements that were already translated in Kinyarwanda. The self-assessment contained 8 clusters of 88 statements. These statements were grouped in cluster in regard to the research questions that led this research.

Farmers then scored on each statement for their cooperatives from 0 to 5 depending on individual experience and the extend to which they perceive their cooperatives. The scoring session would take approximately one hour. The score on each statement was put in the computer for analysis with the help of excel. After the analysis the debriefing report was prepared for each cooperative and taken back to the cooperative in the debriefing sessions. The debriefing report served as the mirror to the farmers to see how they think their cooperatives look like. Within the debriefing reports farmers raised debates about their cooperatives and measures they would take; here farmers themselves had to give solutions. It is also during the debriefing sessions that more qualitative information about cooperatives and their practices was collected. The information gathered during the debriefing meetings constituted the basis to understand and to analyse the strength, weakness, opportunities and threats within and around the cooperative. This also facilitated to understand and to analyse the impact of institutional issues around the cooperatives' environment. Such institutional issues were perceived in terms of political, economic, social, technological and ecological environment. The process using the self-assessment tool was well perceived by the participants as it gave them back the image of their cooperatives and opportunity to examine them. It was effectively participatory. In fact, only 15 members from each cooperative participated in the scoring sessions. However, thanks to the use of the self-assessment tool, during debriefing sessions many more farmers sometimes more than 150 per session participated and were very active and motivated asking different questions. This tool also gave the researcher the opportunity to have double insights and learn more about cooperatives' functional environment. The participants appreciated the self-assessment tool as a democratic and secret tool to help them express their opinions without fear of conflicting with others. It was also appreciated as a tool that gives new inspirations to the participants so long as the statements have been carefully prepared to apply to the context. It was also a flexible tool, which can apply to any context.



Difficulties: This research however also registered some difficulties. There were times were I had to go twice or 3 times not meeting enough (15) farmers for the score session, although the appointment was set in time. However, this may be understood because farmers are always under pressure seeking to sort their daily issues out. However such difficulties associated with the shortage of time made it difficult to realise the goals of reaching 16 cooperatives as was planned in the research proposal.

Figure 16: Enthusiastic COGIRIRU farmers in debriefing session look at their scores

CHAPTER 6: ANALYTICAL LOOK AT INFLUENCING FACTORS

The literature reviewed (see chapter 2) has focused on principles that lead cooperatives in the entrepreneurial practices. Moreover such a literature looked at the cooperative movement in Rwanda. The results of this research proved that cooperatives in Rwanda have registered different problems at both internal organisation and development of the agribusiness industry. Issues in services provision to the members may affect the whole aspects in internal organization of the cooperatives. Mostly membership status becomes hard to coordinate when members don't feel benefiting from their common property. They loose the ownership. Issues of capital for wide and long-term investment may also lead to collapsing of the cooperative enterprise as argued in Cook (1995). Considering the objective of this research alongside with the literature reviewed this chapter will critically analyse the issues found in cooperative entrepreneurship at both organizational perspectives and at the institutional level.

6.1 ORGANISATIONAL ISSUES

Most cooperatives are very young without much experience in cooperative business and management. Many cooperatives emerged and members joined them to seek access for inputs without conscious need to necessary work collectively. Others entered cooperatives with social economic (entrepreneurial) vision to access and challenge market issues collectively. This mix of view created diverse degrees of success and weaknesses.

6.1.1 Control and management in cooperatives

Ménard (2005) notes that an important issue related to cooperative businesses is the capability of management, and its control by management boards. Where farmers have modest understanding about downstream processes, and little marketing experience beyond traditional first channels, management will undergo inexpert leadership.

One of the key issues in the young cooperatives in Rwanda is the issue of control and management. However, cooperatives as business should be managed by a competent professional team to insure the operational sustainability (Ménard, 2005). To compete successfully, they must do most of the things that other businesses do (Trewin, 2004). However it was found out that a management team from the board manages most cooperatives: president and treasurer who seem employees of the organization. Questions that may arise include, if the ordinary members or other members from board who are elected from the group of member-patrons may really oversee such employees? Another issue may be about the one head one vote principle (see ICA 2007), during elections. Here is always the issue of accountability that may irritate other members. In organization, management decisions are meant to take into account the effect of those decisions on its patrons. The degree to which this is achieved depends on the strength of the executors and how they are controlled. When the management board does not feel the challenge of control some decisions will lack the follow up. This, then, may be the case in cooperatives that do not have the professional executive team other than the president and the treasurer. In 14 cooperatives that participated in this research, only COOPRORIZ had effective management office with manager and other employees paid by the cooperative. In this case an active board will ensure that members' interests are accounted for, and facilitate the job of manager to run the business efficiently.

Issues in management and control may have been causes of the severe scoring for different statements of the membership base. For example because members did not have enough

control on the management, would have been the cause to sanction that they don't have the same share of the vision of the cooperative concerns as the board members who always scored high. This also might have been the reason why the services provision to the members was relatively more criticized compare the rest of internal organizational aspects. The management and control issues may be resulting on immaturity and lack of experience in cooperatives that are involved in the staple food crops. Most of them started in 2007.

6.1.2 Size of cooperatives and centralization power

Some cooperatives are large with more than 1000 members; COOPRORIZ for example already has more than 3050 members. It is however subdivided into 12 zones. Other cooperatives such as Abahizi and those under UCOPRIBU coordination have more than 800 each. The problem that rises is whether concerns of all 800 members can be solved at sole coordination instance of the cooperative. If that can be, how can it meet everybody's satisfaction? To what extend this can let all members participate actively in the solutions finding process and management of the cooperative? For example if members don't participate actively in the cooperative management, they can lose their feelings over the cooperative ownership. What can be solution to this problem? Economic theory suggests a federal entity with a unified, single identity but with several constituent sub-units or small subgroups (Cook, 1995). Therefore one way should be to divide such big cooperatives into small sub-groups to insure more active participation of the members. In this case where members need to see cooperative providing fast economic services and more options would be envisaged to restructure the governance. Trewin (2004) suggests that reordering the cooperative structure in the light of economic rationalism may be a paramount task. According to Ménard (2005) cooperatives may also rely on decentralized decisions because of the high cost of closely monitoring of the numerous members. Therefore, cooperative development with the decentralization of the cooperative leadership should be associated. However, centralisation seems to be the route through which many cooperatives in Rwanda have moved. For example when the groups are subdivided as they network in sub-units and collaborate through the unifying cooperative identity, this may still promote an essential sense of being part of a large organisation without eroding their sense of ownership.

6.1.3 Lack of professionalism and low degree of vision sharing

In principle, one of the services that the cooperatives provide to the members is training in different domains (ICA, 2007). Additionally, members must understand the cause of membership to the cooperative and share the vision. The share of vision should be emphasized in different training sessions to the members as suggested in (Watkins, 1986). However, it was indicated in the debriefing sessions that many members entered the cooperatives just to seek different economic interests such as inputs. Others are registered in the cooperative only because a colleague invited them, but without consciousness about what the cooperative is. Others came in just to feel the required number of people in cooperative (7 members minimum). However after they got somewhat trained, began to understand their cause in cooperative. These trainings, however, were limited. For example if they were sufficiently trained about principles of cooperatives, there should not have been members irritated about the heterogeneity of membership and opinions in the cooperative as it was sensed in one cooperative in Bugesera. This would make members conscious about the advantages of working together in as cooperative entrepreneurs ready to share the same risk. It was found out that in many cooperatives calculation of costs and profits of production fails members. However, Trewin (2004) urges that as business, cooperatives must able to set a business plan. Trainings about management of resources to all members of the cooperatives

should have been important for the members to be able to calculate the costs and profits of the production. As was informed by the officials in the Rwanda Cooperative Agency and confirmed by the participants in the cooperatives that were involved in this study, some cooperative received trainings. It was indicated that about 1000 cooperatives were involved in the trainings so far. The question may be: What kind of trainings were they? Who participate in such trainings? What was the content of the training? How long did it take? Where were they organized? How were they organized? How were the participants motivated?

Many participants expressed concerns that the trainings are often in Kigali, in very expensive and luxury conditions where few selected participants participate. Caffarella (2002) suggests that the content and location of the training must be relevant to the need of trainees. Then, the question may be: why don't the organizers of trainings make it cheaper, in cheaper locations and reach more farmers? Here the issue of logistics may be problematic; but then, why do the organizers not hire cheap subject matter experts near the cooperatives and strike the most important skills need. More questions may be about the extent to which the farmers participate in the choice and organization of the training arranged for them.

In one cooperative in Nyamata, the methodology used to the members to make the members participate actively in the cooperative activities is to strengthen the rule and consequential penalities. However one can ask him/herself if the strong regulations can keep members for active and deliberate participation in the cooperative activities. Wouldn't it mean better to the members if there were other leadership methods to stimulate participation? Therefore one can still ask him/herself if there were trainings organized about leadership in cooperatives. In other cases, members of some cooperatives have the mentality that the cooperative must necessarily provide them with services. This means that these members still have the same thinking as they had before in associations where members depended on the charity assistance (MINICOM 2006a). But now they have been transformed into cooperatives with social economic mission. With such missions, members must work hard and innovatively to multiply resources and opportunities to make cooperative business bear sufficient services, which can be provided to them in return. Therefore, for the sake of mentality change, appropriately related training topics would be administered to the members.

6.1.4 Lack of equipment and deficiency in agribusiness industry

Questions that were posed in production and productivity clusters were related to the capability in management of production factors. The post harvest activities focused mainly on processing, storing and marketing of the produce. Generally, participants scored low in these clusters because of key reasons: - lack of infrastructure and equipment for logistics, to finance, to process and store the production. Shaffer, et al (2000) and Dabson (2000) agree that these are indeed general obstacles in rural to the rural entrepreneurship but these problems can be particularly much more fatal to young cooperative entrepreneurs operating in poor context. For example, most cooperatives involved in rice didn't have barns to store the amount of rice they already had harvested. They had strategic ambitions to tremendously increase the production so as to earn more from their initiatives. This seems to be the entrepreneurial strategy. However, one can wonder how innovative such decisions are? To increase the production, which can be spoiled by the rain of one day? Such an amount of rice was just put on the yard waiting for traders who, probably, would not even come. This was a risk taking option that the cooperative entrepreneurs took in dilemma conditions. Any rain would turn such a massive amount of rice on which the hope of the cooperative' tomorrow was built into nothingness. Additionally, not only cooperatives do not have barns to store the produces, but also do not have machines for processing their production. One of the key concerns to the members of COOPRORIZ was about the quality of their rice that they can't control. Adequate equipment and infrastructure is a special ingredient to the development of entrepreneurship (Cook, 1995; Dabson, 2000)



The farmers' view was that if they were equipped with processing units and adequate machinery, they would be able to produce better quality of the white rice, which indeed would add quality to their rice resulting in higher price and competitiveness at the market.

Figure 17: farmers in assessment; tones of rice on the yard at COOPRORIZ headquarter

This also the similar case for cooperatives in cassava production. COADPM produce cassava but they don't have adequate equipment for soaking process. This reduces the quality and opportunity for competitiveness of their cassava.

None of the 14 cooperatives had computer or internet facilities. Lack of such an infrastructure for communication may, at certain extend, hinder the marketing process – for example if cooperative had a web site it would be easier to expose their production to the rest of the world. Internet for example would facilitate the cooperatives to be in full and permanent network with other producers' organization as they exchange experience, skills and price information. Besides most cooperatives do not have access to electricity. This may therefore be the key to explain why the agribusiness scored low.

6.1.5 Issues in capital and investment

By tradition and principle cooperatives should be financed by the capital contributions from members (Cook, 1995; Batt, 2002 and Trewin, 2004). These capital contributions can effectively be amount of money directly from members or loan to the cooperative. In return members earn from this capital invested according to a regulated and fixed cooperative repayments principle Scully, 1987.

Cooperatives in Rwanda have problems related to services provision including dividends payments. This gives rise to 'horizon problem' cooperative sustainability. Such problems of dividends would be more understood if, at least, this share holding is enough to sustain all activities of the enterprise. In Rwanda the share contributed to the cooperative by a member is 5000Frw ($7 \in$). This is a small amount of money one can contribute in relation with the expensive economic context in which cooperatives function. As was revealed by participants in the debriefing sessions, banks do not trust the credibility of cooperatives. Loans are given to cooperative members in very restricted procedures. This makes it difficult for cooperatives to run different projects for the development of the agribusiness industry. For example one president of a cooperative made it clear that if he had to work as efficiently as he had promised the members during elections, he would consume all the money only by telephone communicating with other stakeholders. This is a first operational - economic challenge of the cooperative with limited capital. Additionally, most cooperatives lack adequate equipment due to the lack of sufficient capital assets to start with. This also makes it difficult to provide services to the members. This study found out that when farmers initiate cooperatives, expect

quick economic monetary benefits and services paid back in return to the energy, time and resources invested. However, right in the middle of the running, cooperative members start to feel impatient to see their expectations not happening. This may be also basis to issues of membership that cooperatives face. Those shareholders heighten counts on the benefits of investment by the cooperatives, and pressure for a larger repayment profits as dividends, in relation to retained earnings for investment. Such a pressure from members exacerbates difficulties in financing the cooperative long-term investment projects. These problems are most harsh in young cooperatives where long-term capital investments are needed



Figure 18: Traditional facility of drying cassava in poor con

Cooperatives in cassava and rice need modern processing technologies to contribute to the significant economies of scale, and need investment in human resources development for important technical innovations. The dilemma is to find the adequate solutions to the capital problems suffered by the cooperatives in Rwanda. In nature, new members are only required to contribute equity according to a prescribed formula, rather than paying in proportion to the value of benefits they receive, which are the benefits of patronage (Cook and Iliopoulis, 2000). This may also be a problem that further reduces motivation in capital investment by new members.

6.1.6 Ambitious spirit strengths the future of farmers' cooperatives

One of the strengths cooperatives have is the ambition. In most debriefing sessions farmers expressed their need to further develop their enterprises: some farmers said "our cooperative will be employing more staff than the district in 5 years". These ambitions express the will and determination as strategic plans can tell. This is also a supplement to the effort of the public authorities to drive the cooperatives out into the entrepreneurial move. These ambitions don't limit to the investments in the agriculture but also in other different areas like micro credits. For example COOPRORIZ has organized a micro credit unit where members get loans, though limited in size, but surely, guaranteed without massive interest rates as applied by other banks. In addition the cooperatives want to capitalize the opportunity they see, for example COOPRORIZ has also started the process of pulling the electricity to their office. Once electricity is near the cooperative can also invest in the highly sized rice processing units with or without outside investors. Other strength in cooperatives include committed members that can be further trained on effective application of participatory methods. There are also a lot of unexploited skills in the farmers' organizations in Rwanda. Farmers can forecast rains. Additionally, once the services are provided to them, farmers in cooperatives are friendly and like to collaborate with outsiders once they have the occasion. This may help them to adopt new methods and techniques quite easily. Besides, the responsibilities in cooperatives farmers have got their participatory approaches already designed considering gender. Well-structured approaches for subsistence loan already exist. It would only require enhancing institutional support and creating an interactive learning environment.

There are also other opportunities in cooperative entrepreneurship in Rwanda. These constitute various environmental factors that cooperatives can exploit to improve the entrepreneurial practices. The *Public/private partnership in cooperative entrepreneurship*

development: the involvement of government has tremendously transformed the atmosphere in the cooperative movements. The free agricultural extension service delivery has been decentralised to the sector level. On the other hand the vision of government (see MINALOC, 2006) can still be contestable, as it seems too ambitious and has proved some pitfalls in trainings organised for cooperatives. *Government and Donor (NGOs) commitment to* support cooperatives in terms of trainings, finances may facilitate the transfer of knowledge and information and tremendously benefit to the development of agricultural cooperatives. However the only cooperatives with creativity, innovativeness and entrepreneurial competences can maximise this. For example cooperatives that are able to create collaboration and networks and learning environment to learn from others' experiences may profit from such opportunities.

6.2 INSTITUTIONAL ACTORS AND FACTORS

6.2.1 Role of NGO and rural entrepreneurship promotional agencies

In Rwanda, many local and international NGOs as well as other governmental promotional agencies such as the Rwanda Cooperative agency are impacting on the development of rural cooperative entrepreneurship. This also may mean that the promotion of cooperatives and their organizational structures result from external project initiatives and funding. The UGAMA CSC operating in the Southern Province of Rwanda seems to have been the key engine for the cooperative promotion in the Southern province.

The PASAB Caritas project also promotes cooperatives in Bugesera. The interventions of different agencies combined with the government involvement resulted in a fast and jump start of many associations and groupings in Rwanda into cooperatives. As indicated in the Rwanda cooperative policy document those associations and groupings were reduced from more than 12000 to about 3200 legalized cooperatives as was reported by the Rwanda Cooperatives agency (RCA, 2006). These cooperatives, although they receive some warranting financial support from promotional agencies they still have a number of problems of capital to become competitive entrepreneurs. As indicated by participants in debriefing sessions, low capital stakes from members are not enough to run the cooperative functions (including tax paying) and lead to the desirable level. These financial deficiencies have huge impact on different structure of the functioning of the cooperatives at both internal organizational and agribusiness level. In most cases this weakens the development of the cooperatives in terms of accountability and transparent management. For example most cooperatives can't hire professional managers for the day-to-day running of operations. Not only by lack of skills but also with little of the capital they share, members do not persist on the efficiency and profitability of the operations. This may be the basis of different problems of membership and inactive participation in management and development of the cooperatives. If this remains, questions may rise about the future of farmers' cooperatives. However many organizations also consider the principle that the cooperative should function on the basis of the members' contribution. Therefore this leads to questioning if the role of support agencies and NGOs is to make farmers' organizations and their structures truly successful as self-reliant and sustainable instruments for rural entrepreneurship and development. Another question may rise about the alternative appropriate tools support agencies can use to ensure the durability of cooperatives. Many participants complained for the equity participation, technical and managerial capacity, policy advocacy, involvement including takeover of management and operations, providing backward and forward linkages, capacity building, subsidizing assets costs and operational expenses etc?

6.2.2 Influence of interlinked institutional factors

The Government of Rwanda considers the cooperatives as full partners in efforts of alleviating poverty and sustainable development (MINICOM 2006). There is also visible government involvement in the cooperatives establishment. This can raise questions whether the cooperatives members should consider the cooperatives as the government business as it was once seen in other developing countries in Asia and Africa (see section 1.1) (MINICOM 2006). It may well be understandable that the government finds the strong involvement in the cooperative movement as the best strategy to alleviate poverty as quick as possible. However questionably, one may wonder about the tactical plan established to implement this policise. For example the government and donors condition their assistance through the cooperative establishment. However in one way this can spoil people. They can make people form cooperatives just to earn and receive the financial assistance from the donors and government without considering their cooperative as the productive economic enterprise. This has already been testified out.

The government also has adopted the jump-start policy of the cooperative movement. But the key issue may be whether the government has established the necessary infrastructure for the cooperative to function. The banking system for example, can be problematic and barrier to the speed of the cooperative sector. The banks do not trust the cooperatives because cooperatives do not have assets to guarantee the loan. The participants, in the debriefing sessions testified this. Will it be possible to keep the haste of the cooperative movement jump-start only on the basis of members' little contribution? The government and donors give some financial assistance to the cooperative. Not only such supports are consequential to the farmers' psychology but also are too little to help establish and sustain economically reliable partners and viable cooperatives. Different approaches were applied elsewhere in the world. In United States, the government involvement in the agricultural movement was through the creation of the special bank to finance the cooperatives (Cook, 1995). Is it possible that this same approach can apply to the Rwandan context? Does the Rwandan government have enough funds to establish such a bank?

The market of agricultural products is not stable in Rwanda. For example cooperatives that are involved in rice production produced a lot of rice, with a high production cost (as was informed and seen) expecting to compensate those costs after selling their rice in different cities in Rwanda. However, they suddenly saw the price of rice drop because the rice from east African community and abroad entered the Rwandan market with extremely competitive low prices. However, poor people who can't sustain high prices when there are products at lower prices constitute socio economic composition of rural communities MINALOC 2006.

Cooperatives in Rwandan context have other cultural issues. Some members consider any outsider as a finance provider. This may have resulted from the association and groupings contexts, which were transformed into cooperatives. After the Rwandan disaster of the 1994, many international organisations gave urgent assistances. Now some people may still correlate the same context the aid was given as with the actual context of cooperatives. If this is the case, the cooperative movements may not be sustainable.

The sustainability of the cooperative movement not only needs capital for investments but also social, educational support and shaping of cultural attitudes towards entrepreneurship (Dabson, 2000). Therefore cultural patterns must be flexible and oriented towards context communication and entrepreneurship.

So far there is no specialised instance that culminates cooperatives in Rwanda. For example such an instance would make cooperatives collaborate with both internal and outside the country. The lack of such an instance and its functions to make cooperative, was probably the reason why clusters of statements, "collaboration and networks and collaboration with stakeholders" scored very low.

In terms knowledge infrastructures, research institutes that would support cooperative in new technology and innovations are very limited in numbers and probably in quality. ISAR with its branches for example is the sole agricultural institute in Rwanda. There no private agricultural research institute that would challenge ISAR either quality or in quantity of services to the cooperatives.

The Rwandan context also has geographical challenges. The dense housing is scattered throughout the country's territory (MINICOM 2006), and Rwanda is mountainous. This reduces the arable land, which makes it difficult for the extensive and even intensive agriculture.

In terms of legislation and politics, MINICOM 2006 reveals that there is no document of a coherent national policy for the cooperatives promotion helping to determine the role of each partner. There are no clear rules relating to consultation of stakeholders in the cooperative sector and long procedure. This discourages the cooperatives setting in addition it hardens coordination. Politically, in Rwanda there are frequent changes of ministries in charge of the cooperatives supervision. This may result in discontinued follow up of policies and instable management of the strategies towards cooperative promotion.

7. CONCLUSIONS

Rural entrepreneurship has been given a privileged leading position in rural transformation in both developing and developed countries. In such rural development approach agricultural cooperatives are incontestable actors. In Rwanda cooperatives have massively been increasing in numbers due to new policies and objectives involving cooperatives as tools for rural economic expansion. However, the cooperative entrepreneurship worldwide has been facing different obstacles. Thus, the problematic issues may lay with the organisational ability and entrepreneurial capacities of young cooperatives if they are to compete as business.

For initiatives to support cooperatives improve their performance, the starting point would be to assist them assess their performance. This study was therefore initiated with aim to support farmer-members assess their performance in order to deduct priorities and suggest new strategies towards more effective cooperative entrepreneurship in Rwanda. Given the rationale, the self-assessment tool constituted the basis for this study's data collection. This tool was effective in cooperative entrepreneurial context as it returns the fresh feedback to the farmer- participants and inspires them with reflection for the future of their enterprises. Its effectiveness made more farmers than those who were present in scoring sessions participate in the debriefing sessions. It set the basis for the collection of insights about the strength, weakness, opportunity and threats. This later instrument gave more inspiration and further analysis of the cooperative entrepreneurship functioning within the institutional context. The assessment focused on internal organisational performance as well as on entrepreneurial abilities to contribute in the agribusiness development.

The agribusiness development consistently scored lower than the internal organizational aspects. Farmers don't feel full ownership of responsibility for agribusiness development – they rather feel that other actors in the sector such as government and NGOs would assume more responsibility in the agribusiness development. This lack of initiative by farmer-members leads to slow development of the sector. Therefore, the key concerns for the promotion of rural cooperative entrepreneurship lays more with the issues in value chain, and agribusiness development in general. As results, the cooperatives still have deficiencies in entrepreneurial capacity.

On the other hand, the ambition and the will of farmers to share the risk and exploit opportunity collectively as they contribute by investing their time, energy and little financial capital they have into cooperatives might constitute the key strength the future of the cooperative entrepreneurship. The involvement of the government and other promotional agencies constitute the compliment opportunity to ambitions in cooperatives.

The ambition however encounters several obstacles leading to the generalised low performance of rural cooperative entrepreneurship. Inside cooperatives, some members don't have the membership spirit of working collective towards a common goal. Some of the members enter the cooperative following the short-time cooperative advantages such as inputs and other advantages guaranteed by the government, NGOs and other promotional agencies. Such members leave or remain inactive in the cooperative especially when the cooperative doesn't quickly respond to their primary expectations services provision. The slow service provision is dependent of different other factors. The performance in one aspect of the cooperative functioning affects the whole enterprise. The deficiency in services provision to members weakens the sentiment of cooperative ownership and threatens the ownership status. The low performance in services provision to members also depends at the same time on the style of leadership, on low performance in management of resources as well as on the

small amount of capital invested as well as on different issues in the institutional context. Therefore this influences the low performance of the whole enterprise: production, post harvest management and relations with the outside actors.

Administrative issues also have been sensed. Some cooperatives are large in number of members, but the power of decisions is still centralised at sole decision-making board. This leads to the deficiency in member participation of the cooperative principles. This results in deficiency in communication as well as in following up the implementation of decisions. Moreover most of cooperatives don't have technical and professional staff for management of resources and implementation of decisions through day-to-day activities.

Generally, there is still deficiency of competences in different domain. Many cooperatives still have limited skills in leadership, business wise planning and communication with both internal and external. Other technical issue such lack of expertise in use of pesticides, soil fertility management, low or quasi inexistent irrigation system – sole dependence on rain for production. This is also linked with lack of equipment and infrastructure.

The internal governance of cooperatives is linked with the performance in of the whole agribusiness system. Hence, the impact of institutional factors is heavily sensed in the internal functioning of cooperatives. Therefore the deficiency in environmental functioning around the cooperatives constitutes obstacles to rural entrepreneurship in one way or another. In the Rwandan context, financial obstacles to cooperative entrepreneurship are in two categories: those associated with the "socio economic composition of rural communities" and the "poor nature of internal and external linkages". The insufficiency in capital for investments results from both organisational and institutional incapability. The banks don't trust small-scale farmer cooperatives and restrict loans, however the farmer's contribution in terms of membership fee is limited. Hence, cooperatives lack capacity to sustain long-term investments.

Cooperatives also undergo problems associated with both physical and knowledge infrastructure. This means lack of infrastructure not only in terms of water supply for irrigation and lack of electricity, lack of production processing and storing units, insufficiency in communication technology but also lack of enough research institutes.

Cultural and geographical issues affect the development of cooperative entrepreneurship too. The topography and mountainous landscape makes it difficult for the use of means and modern equipment of production such as appropriate machinery. The scatted housing on small pieces of land limits space for cooperative production activities. Policy and legislative issues such lack of (con) federation of cooperatives at the national level in addition to frequent changes of ministries in charge of cooperatives makes it difficult for the coordination and follow-up of policies in cooperative movement. Furthermore the lack of document of a coherent national policy for the cooperatives promotion helping to determine the role of each partner makes difficult the role of supporting agencies.

Recommendations

In respect to the objective of this study, recommendations towards more effective cooperative entrepreneurship are formulated in regard to the main issues found out as well as to the specific actors to the sector.

To the cooperatives:

- Need to adopt leadership which will keep the participatory and active membership in the cooperatives to keep ambitions and attract more new members
- To decentralise the decision making power where applicable and adopt strategies for efficient management of the resources
- To capitalise all recognisable and new opportunities for the sustainability of cooperatives
- Create linkages with different potential partners to build capacity in human resources in different domains
- Promote internal and external collaboration and put more effort in services provision to members, production and post harvest activities.
- > To hire experience from each other and compete as they learn from each other

To the government

- > To facilitate the initiation of the national cooperative federation to promote effective collaboration of cooperative at both national and international level
- > To initialise the financial system including the initiation of specialised banks to facilitate cooperatives get sufficient loans to finance the long-term and sustainable investments
- > To promote more competitive research institutes by involving the private sector
- To collaborate more with NGOs and cooperative for participatory specification of need and implementation of policies in cooperative sector

To NGO and other promotional agencies

- In collaboration with other actors, to sustain and reinforce efforts in trainings in specific areas such as leadership and communication, management of resources, simplified business planning and costs-benefit analysis.
- > To help fund long-term investments of the cooperatives such as equipments and infrastructures wherever applicable.

To the private sector

> To invest more in agro-food industry so as to participate in the quick move of the agricultural sector by creating wealth and employment in rural areas.

To researchers

- > To undertake more research about rural entrepreneurship
- > To apply & perfection the self-ass tool to experience it effectiveness and flexibility.

Further research

So far, this outcome of this study prove that the current Government policies and effort from other promotional agencies towards cooperatives didn't necessarily guarantee immediate high performance.

Therefore further research could focus on the approaches used in promotions of cooperatives by the end of which, the results would lead to development of more appropriate methods.

Rural cooperative entrepreneurship is a business that involves various actors including the traders at different levels, however the relationship between traders and cooperatives was not at its height as shown in this study. Consequently, further research would also step towards the characteristics of trade and the role of traders in the sector of cooperative entrepreneurship in particular and/or in agribusiness in particular. This would lead to the formulation of recommendation towards improved agribusiness and agro-value chain

Further studies about some instructional arrangements such as rules both informal and formal would be undertaken to evaluate their particular impact on development of rural entrepreneurship in order to develop strategies accordingly.

REFERENCES

- 1. Attwood, D.W. and Baviskar, B.S., 1988, Who shares?: Co-operatives and rural development, Oxford University Press, Oxford
- 2. Batt J., Parining N., 2000. Price–quality relationships in the fresh produce industry in Bali. International Food and Agribusiness Management Review 3(2), 177–187.
- Batt J., 2002. Report for Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) on the market for seed potatoes, fresh potatoes and processed potato products in Vietnam
- Bijman J., 2002: Essays on Agricultural co-operatives-Governance Structure in Fruit and Vegetable Chains, Ph.D. Series Research in Management 15, Erasmus Research Institute of Management (ERIM)
- 5. Bijman J., 2007, The role of producer organisations in quality-oriented agrifood chains, an economic organization perspective In Tropical food chains-Governance regimes for quality management, Ruben R., Van Boekel M., Van Tilburg A. and Trienekens J. (eds.), Wageningen Academic Publishers, Wageningen
- Bingen J. and Munyankusi L., 2002, Farmer associations, decentralization and development in Rwanda: challenges ahead, Rwanda Food Security Research Project, MINAGRI, Kigali
- 7. Braverman A., Guasch J., Huppi M. and Pohlmeier L., 1991, Promoting Rural Cooperatives in Developing Countries: The Case of Sub-Saharan Africa, World Bank discussion papers, No 121, The World Bank, Washington D.C.
- 8. Caffarella, R.S., 2002. Planning programs for adult learners: a practical guide for educators, trainers, and staff developers.. 2nd ed. Jossey-Bass (USA).
- 9. Cook, M., 1995. The Future of US Agricultural Cooperatives: A Neo-Institutional Approach. American Journal of Agricultural Economics. 77, 1153–1159.
- 10. Dabson, B., 2001. Exploring policy options for a New Rural America. Kansas city USA
- 11. Deininger K., 1995, Collective agricultural production: A solution for transition economies?, World Development Vol.23, No 8, p.1317-1334
- 12. Gielen, et al., 2003. Learning entrepreneurs: learning and innovation in small companies. European Educational Research Journal 2 (1), 90-06.
- Gray T. W. and Kraenzle C. A., 1998. Member Participation in Agricultural Cooperatives: A Regression and Scale Analysis, USDA, Rural Business-Cooperative Service, Research Report 165
- 14. Greve, H. R. 2003. Strategic entrepreneurship: Creating a new mindset. Administrative science quarterly Journal. VOL 48; PART 2, 348-351.
- 15. Hansen H.M., Morrow J.L, Batista J.C., 2002, The importance of trust on cooperative membership retention, performance, and satisfaction: an exploratory study, International Food and Agribusiness Management Review 5, p.41-59
- 16. Hayami. Y, 1998. Support Policies of Local Government. https://www.researchgate.net/author/Y.+Hayami (accessed on 21 Jun 2009)
- 17. Holmén H., 1990, State, Cooperative and Development in Africa, Research Report No 86, The Scandinavian Institute of African Studies, Uppsala
- 18. International Cooperative Alliance, 2009, What is a cooperative? http://www.ica.coop/coop/index.html, accessed 1-07-2009
- Kherallah M. and Kirsten J., 2001, The New Institutional Economics: Applications for Agricultural Policy Research in Developing Countries, International Food Policy Research Institute, Markets and Structural Studies Division, MSSD Discussion paper No 41.

- Klerkx, L. & Leeuwis, C. 2008. Matching demand and supply in the agricultural knowledge infrastructure. Experience with innovation intermediaries. In Food Policy, Vol. 33, 260-276.
- 21. Leeuwis, C., 1999. Integral technology design as process of learning and negociation. A social science percepective on interactive prototyping. In: Leeuwis, C. (Ed), Integral design: innovation in Agriculture and Natural Resource Management. Mansholt Institute, Wageningen, The Netherlands.
- 22. Ménard C., 1996, Why organizations matter. A journey away from the fairy tale, Atlantic Economic Journal, Vol. 24, p.281-300
- 23. Ménard C., 2004, The Economics of Hybrid Organizations, Journal of Institutional and Theoretical Economics, 160(2), p.345–376
- Ménard C., 2005, A New Institutional Approach to Organization, In Ménard C and Shirley M. M. (eds.), Handbook of New Institutional Economics, Springer, Dordrecht, Netherlands, p.281–318
- 25. Ministry of Finance and Economic Planning, 2002, A Profile of Poverty in Rwanda-A report based on the results of the Household Living Standards Survey (EICV), Republic of Rwanda, Kigali
- 26. Ministry of Agriculture and Animal Resources, 2006, Self Evaluation of the PRSP by the Agricultural sector working group of the Rural Cluster, Republic of Rwanda, Kigali
- 27. Nkezabahizi D., Shingiro E. and Rwamasirabo S., 2005, Agricultural, Livestock and Land Use Survey (ALUS-Saison B, 2005), Ministry of Agriculture, Republic of Rwanda, Kigali
- 28. Nyamwasa, J-D., Schrader, T., Tumukunde, A., Wennink, B., 2007. Evaluation de Performance d'Organisations de Producteurs Agricoles, Un outil pour le renforcement des capacités des Organisations Paysannes : expériences au Rwanda. KIT, Amsterdam
- Senker, J., Faulkner, W., 2001. Origins of public private knowledge flows and current state-of-the art: can agriculture learn from industry? In: Wolf, SA., Zilberman, D. Eds.), Knowledge Generation and Technology Change. Institutional Innovation in Agriculture. Kluwer Academic Publishers, Boston.
- 30. Shaffer, R., Deller, S., Marcouiller, D., 2000. Community economics. Linking theory and practices. 2 (Ed). Blackwell Publishing, USA
- 31. Smits, R., and kuhlmann, S., 2004. The rise of systemic instruments in innovation policy. International Journal of Foresight and Innovation Policy 1(1/2), 4 30).
- 32. Stephan, B., 2007. Climate Protection Programme for Developing Countries (CaPP). GTZ, Eschborn, Germany.
- 33. Trewin. R., (2004). Cooperatives: Issues and trends in developing countries. ACIAR Technical Report No. 53. Canberra, Australia
- 34. Tushar, S., 1996. Catalysing Cooperation: Design of Self-Governing Organisations. Sage: New Delhi.
- 35. Van der Ploeg, et al, 2000. Rural development: from practices and policies towards theories <u>www.ingentaconnect.com/content</u> (accessed on 21June 2009)
- 36. Verschuren, P; Doorewaard, H., 2005. Designing a Research project. LEMMA, Utrecht the Netherlands.
- 37. Walzer, N., 2003. The American Midwest: Managing Changes in Rural Transtion. Armonk, New York, USA.
- 38. Watkins, P., 1986. Co-operative Principles: Today and Tomorrow. NCBA: Washington
- 39. Wennink, B., Nederlof, S and W. Heemskerk., 2007. Access of the poor to agricultural services: the role of farmers' organizations in social inclusion. Bulletin 376. Amsterdam: KIT Publishers

40. Wortman, M., 1996. Rural entrepreneurship research: An integration into the entrepreneurship field. Iowa State University, Ames, Iowa, USA

ANNEXES

Annexes are available in the attached report