IJIRR

International Journal of Information Research and Review
Vol. 03, Issue, 09, pp. 2755-2763, September, 2016

Research Article

ASSESSMENT OF THE FACTORS INFLUENCING THE PERFOMANCE OF AGRICULTURAL COOPERATIVES IN GATSIBO DISTRICT, RWANDA

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ARTICLE INFO

Article History:

Received 16th June 2016
Received in revised form
24th July 2016
Accepted 20th August 2016
Published online 30th September 2016

Keywords:

Agricultural cooperative, Performance,
Cooperative structure,
Cooperative Governance,
Managerial skills,
Training and skills,
Government intervention.

ABSTRACT

The general objective of the present study was to assess the factors influencing the performance of agricultural cooperative members in Gatsibo District Rwanda. The study was conducted in 5 sectors of Gatsibo district and the population comprised of 244 registered agricultural cooperative members. The specific objectives of the study were to: examine the status of agricultural cooperative movement in Gatsibo district, and to assess the factors associated with agricultural cooperative performance.
The researcher used questionnaire, interview guide desk review and documentation to collect data from cooperative 71 cooperative members selected randomly from five agricultural cooperatives. The researcher used correlation and regression techniques together with the statistical package for social science (SPSS) and STATA to analyze and interpret data finding of the model $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \ldots\ldots\ldots \beta_t X_t + Ut$, that explained the factors influencing the performance of agricultural cooperatives. The research findings identified several factors that influence agricultural cooperative performance such as lack : shortage of youth in agricultural cooperatives, poor implementation of land use consolidation policy for cooperatives members, absence of input savings mechanism, lack of knowledge on the development of action plan and annual budget, low level of accountability and transparency in cooperatives, poor value addition and low level of quality checks, excessive reliance on external assistance as well as low replication of modern agricultural practices at household level to boost members productivity. However the researcher suggested possible remedial measures that may help in fostering the performance of agricultural cooperative such as: reduction of external assistance, improvement member's empowerment through trainings and education, and promotion of extension services programs as well as quality checks up of agricultural inputs and engagement of agricultural economics students and youth in cooperative.

INTRODUCTION

Agricultural cooperatives in Rwanda experience the problem of poor performance despite the fact that these cooperatives are promoted by two parallel tracks, an NGO track and a government track. Cooperatives have not been able to resuscitate their activities in the face of competition from the better-prepared private traders. They have been incapable of restructuring at a time when their economic activities have been dramatically shrinking. As a consequence they have been unable to provide adequate services to their members, who resorted to do business with private traders which affect strongly the sustainability of agricultural cooperatives (RCA, 2011). Even though cooperatives may have initially served a useful purpose, some authors hypothesize that, due to their inherent weaknesses, conventional cooperatives will have to exit or reorganize as the market evolves (Royer, 1999).

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Agricultural markets have been changing rapidly in recent years, with rising quality standards, growing demand for high-value products, new types of market arrangements, and the emergence of some new markets (*e.g.* environmental service markets) (Bryan *et al.*, 2008; Chapple, 2008). Small producers often face obstacles in accessing these markets, partly due to their higher requirements, and partly due to the often very asymmetrical power relations that characterize them **(**IFAD, 2012). According to EICV3, 84.9 % of Gatsibo population both men and women basically depend on agriculture whom, at least 80% use traditional agriculture practices and constrained by Inaccessibility of credit to small scale farmers, weak agricultural value chains and thus limit the production and value addition potentialities of crops and livestock products yet the majority of farmers are grouped in various agricultural cooperatives. Therefore the main problem of this study was about the low economic growth of agricultural cooperatives. Four main areas highlight the problem of agricultural cooperatives economic growth:

- Shortage of agricultural production;
- Lack of skills that can be used in the production of goods and services
- Profitability level,
- Sustainability level of agricultural cooperatives and
- Cooperative level of investment in long term assets.

Objectives of the study

General objective the study

The overall objective of the present study was to assess the factors influencing the performance of agricultural cooperative in Rwanda.

Specific objectives

- To examine the status of agricultural cooperative movement in Gatsibo district.
- To assess the factors associated with agricultural cooperative performance

Cooperative status has no significant effect on agricultural cooperative performance.

- Cooperative governance, management, training, government intervention and structure do not affect agricultural cooperative performance.

THEORETICAL FRAME WORK

Agriculture is crucial for Rwanda's growth and reduction of poverty, as the backbone of the economy, it accounts for 39 percent of gross domestic product (GDP), 80 percent of employment, 63 percent of foreign exchange earnings, and 90 percent of the country's food needs. The sector is challenged by land constraints due to population pressure, poor water management, small average land holdings, lack of public and private capacity, and limited commercialization constrained by poor access to output and financial markets. The country's average annual income of $550 per capita reflects a rural poverty rate of 49 percent, a figure that soars to 76 percent for families whose main source of income is agriculture, the promotion of cooperative is crucial to tackle these challenges (MINAGRI 2013).

The development of farm cooperatives in Rwanda has suffered historical obstacles. Traditionally, Rwanda had its own forms of food self-assistance. Some of these forms have survived until now, like Ubudehe, Umubyizi and Umuganda. However, nothing was done to consolidate this traditional philosophy of mutual assistance in the economically oriented initiatives. The modern cooperative movement started as a promotion tool of the colonial government policies. After the independence, cooperatives been used as tools of implementing the Government policies and plans, becoming, thus a political tool (MINICOM, 2006). Due to 1994 Tutsi genocide, all sectors of Rwandan economy have been paralyzed. For recovering its economy, the government of Rwanda has set many policies. Promotion of cooperatives especially in rural areas has been selected as one of the priorities. The emphasis has been put in agricultural cooperatives in order to assist the lower income earners to develop themselves (IPAR 2012). Rwandan cooperative law defines a cooperative as associations of natural or legal persons operating together in activities aiming at promoting their members in accordance with values of mutual responsibility and self-help, democracy, equity and equal rights to its assets, honesty, openness and common interests of members (Republic of Rwanda-Official Gazette, 2007:21, art.2). According to USAID (2013), the number of agricultural cooperatives in the country has expanded very rapidly during the past couple of years, from 645 in 2008 to 2,400 in 2013. Agricultural cooperatives include production cooperatives, where land is cultivated communally as well as service cooperative such as land cooperatives, where access to agricultural land is arranged communally, and marketing cooperatives, where marketing of farm produce is done communally or a mixture of these. Agricultural cooperatives also play a role in distributing subsidized inputs, especially mineral fertilizer (MINAGRI 2013). According to RCA (2011) the 1994 Tutsi genocide had fatal consequences on the already faltering cooperatives, on the human, material and financial resources levels. The Government and the donors have introduced a culture of dependence by conditioning external assistance to the establishment of cooperatives or other forms of associations. Indeed, many members have come to consider a cooperative as a means of receiving financial assistance from donors rather than as a productive enterprise. However, the Government of Rwanda considers now the cooperatives as full partners in efforts for alleviating poverty. To harmonize and coordinate the interventions in that sector, it has been decided to design a national policy for promoting the cooperative

Despite the above mentioned socio and economic contribution, several factors have hindered the performance of smallholder cooperatives in developing countries. Research by Machethe (1990) on poor performing and failed cooperatives in the former homelands of South Africa suggests that members did not clearly understand the purpose of a cooperative, their obligations and rights, or how to manage their business. Cooperatives' failure to provide transport for delivery of members' purchases, lack of membership identity with their cooperatives, and lack of understanding of members' roles were contributory factors. This could have resulted from members' ignorance, a lack of education and skills training and/or poor extension advice (Machethe, 1990).

According to Musahara (2011) the most pertinent problems facing cooperatives in Rwanda are external and internal, Governance structures are weak (levels of member ownership, leadership, management skills, poor financial management and reporting and controls. Weaknesses seem more abundant, these are cited as, unsystematic functioning, non adherence to cooperative principles, weak structure and poor resources, member apathy, lack of professionalism, lack of innovation and entrepreneurship approach, lack of horizontal and vertical linkages , weak cooperative support from apex and use of absolute technology and low value addition.Therefore this study focused on factors hindering the economic growth of agricultural cooperatives in Gatsibo district of the eastern province of Rwanda, where most cooperatives are active in various agricultural activities such as livestock, farming and processing. The study examined on several internal and external pitfalls and shortcomings like: Cooperative structure,

governance structure, managerial skills, training and skills, as well as impact of government policies.

MATERIALS AND METHODS

Introduction

This study was carried out in Gatsibo district of the eastern province of Rwanda. The rationale behind this study was to assess the factors hindering the economic growth of agricultural cooperative. In this chapter the researcher describes the procedures followed in the research process. Specific aspects covered include the research design, population, sampling frame, sample and sampling techniques, instrument, data collection procedures, pilot test, data processing and analysis.

Research design

This study was a qualitative study and employed descriptive and correlation research designs; correlation research design helped to determine whether and to what degree a relationship existed between two or more variables of interest, descriptive design were used in describing situations as they were. Descriptive design was chosen because it leads to proper profile development of the situation under investigation. This is because using such a design helped to capture all the representatives of each stratum and it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004).

Study Population

The population included cooperative members, cooperative staff, local leaders and other control agencies such as RCA staff and NGOs that empower agricultural cooperatives in Gatsibo district. The total target population comprised of 244 registered agricultural cooperative members from five agricultural cooperatives selected randomly.

Sample size determination

The sample size was calculated using Slovin formula:

$$n = \frac{N}{1+N\,(r2)}$$

Where

e = sampling error (0.1%)
N= Total target population
n = sample size

Using the formula

$$n = \frac{N}{1+N\,(e2)}.$$

$$\frac{244}{1+244(0.1)^2}.$$

$$= 71$$

The sample size was made up of 71 respondents from 5 agricultural cooperatives selected randomly from 5 sectors in Gatsibo district.

Sampling techniques

In carrying out this study, probabilistic sampling technique and purposive sampling were adopted. This is to imply that all the members of the population stand a chance of being selected (Panneerselvan, 2007; Kothari, 2004, and Mugenda & Mugenda, 2003). A sub population of cooperative members was integrated in the assessment of cooperative economic growth in Gatsibo mainly for evaluating cooperative governance, training and management. The ordinary members of cooperative were the targeted population to respond on cooperative effectiveness indicators and later, the researcher correlated response from cooperative's manager and those of from ordinary members.

Sources of data collection

Primary data

Questionnaire

The assessment of cooperative performance applied qualitative methods under different characteristics of respondents. Therefore, a cooperative performance questionnaire was administered to the main respondents considered as cooperative members and leaders to assess their performance. An assessment of cooperative performance questionnaire was comprehensive with different components among them; organization type and structure, governance, management, training and skills and the impact of government policy.

Key Informants' Interviews

The main purpose of using Key Informants Interview was to complement the main instrument (questionnaire). In total, 11 In-depth Interviews (IDI) were conducted from the following categories: Cooperative Focal Points at District level, non-governmental Organization representatives, and cooperative focal points at national level. The selection of key Informants at both Sector and District level was based on the concentration of large number of cooperatives in the respective areas. For the other categories, the selection procedure was carried out on a random basis approach according to their roles in collaboration with cooperatives at both national and local level.

Secondary data

Desk Review

This technique enabled the Researcher to gather and make use of various specialized reports, scientific work as well as activity reports specifically dealing with issues related or associated to cooperatives. In the same way, it helped to analyse legal, regulation texts and public policies related to the theme of the study.

Documentation

The document analysis were used for secondary data collection to obtain unobtrusive information data covering cooperative structure, governance, management and government intervention in various cooperative activities.

Pilot test: Conducting such a sensitive study helped the researcher to a set of measures to ensure quality data and information. A pilot survey was conducted to test the quality of research tools, mainly the questionnaire as well as their understanding by the respondents and promoted the use of a participatory approach in developing research instruments.

Data Processing and analysis

Qualitative data analysis is the range of processes and procedures whereby the researchers moved from the qualitative data that were collected into some form of explanation, understanding or interpretation of the people and situations under investigation. A specific qualitative data analysis was done; the researcher used SPSS and STATA software for data interpretation and analysis of model. The economic model specification of the variables was:

$$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \ldots\ldots\ldots \beta_t + Ut.$$

Where:

Y: Dependent variable (Cooperative economic growth)
β_0: Intercept

β_1, ... β_t : Vectors of estimated coefficient of the explanatory variables (parameters)

X_1, ……X_5: Vectors of explanatory variables (independent variables)

X_1= Cooperative structure
X_2= Cooperative Governance structure
X_3 = Managerial skills
X_4 = Training and skills
X_5 = Government policies
Ut = Basket of remaining variables and errors linked to usage of data (error term).

Section I: Descriptive statistics

Table 1. Characteristics of respondents

Variable	Frequency	Percentage
Gender		
Male	27	38.0
Female	44	62.0
Age of Members		
18 – 30 Years	11	15.5
30 – 45 Years	46	64.4
Above 45 years	14	19.7
House hold Size		
Above or equal to five	49	69.0
Below five	22	31.0
Education		
Primary	49	69.0
Secondary	4	5.6
Vocational	7	9.9
Illiterate	11	15.5

Source: Primary data

RESULTS AND DISCUSSIONS

The overall results of the research indicated that 62.0% of respondents were females, while 38.0 % were male. This gender disparity is caused by the active participation of female in collective action than men as a result of social protection. Women play an integral part in agricultural production, as subsistence farmers, cash crop growers, food processors, and livestock owners. Another reason is that mainly women were doing most of the farming while men (traditionally head of the household), use to work as migrants some-where else. It strongly contradicts with that of United republic of Tanzania (2005) that it makes difficult for women to participate as equal partners in membership and leadership positions in the cooperatives.The above table shows the group age of respondents where 64.4% were between the age of 30 – 45 years, 19.7 % were above 45 years, while 15.5 were between 18 -30 years. Youth membership continues to be a significant problem among the cooperatives. Cooperatives has difficulty attracting youth into agricultural activities as increasing numbers of young people become resistant to continue working in agricultural. This indicates that the participation of youth in agricultural cooperatives is still low, this is explained by the fact that the majority of the youth prefer off farm activities that generates quick income. The lower bound is also explained by the fact that the young people are pursuing their studies.

Household size of respondents where by 67.5 % of respondents comprised of the family size of above or equal to 5 children while 31.0 % comprised less than five members. Among the interviewed cooperative members, 15.5% were illiterate and 69.0 % had only attended the primary school. The proportion of farmers who have attended technical schools is quite small, only 9.9 % of the respondents interviewed. The low academic level of agricultural cooperative members is explained by the fact that educated people are employed in other sectors and not interested in joining agricultural cooperatives.

Impact of cooperative structure on the performance of agricultural cooperatives

As highlighted in table 2 (P 0.001) < (P 0.05) saving for inputs are significant and strongly affect the performance of agricultural cooperatives. This is explained by the fact that members join cooperatives with different intentions such as working together for development, benefit from trainings, marketing of their product. Therefore this diversion of objectives contribute to free ride and lack of cooperative specification which is a major challenge that hinders the performance of agricultural cooperatives because members are not fully integrated and committed in the specific agricultural production and supply chain. This finding is consistent with that of Banishree and Kumar (2006) that People are not well informed about the objectives of the movement. People look upon these institutions as means for obtaining facilities and concessions from the government. So long as people expect to get something from the government, agricultural cooperative will not perform. The same table further indicated that the performance of agricultural cooperatives is constrained by poor implementation of the policy of land use consolidation for cooperative members (P 0.000 < P 0.05) statistically significant. Because they lack incentives to pool together their limited land size to expand agricultural production. The findings evokes similar results with the empirical findings of MINAGRI (2013) that as Rwanda's experience has shown, cooperatives can be effective in consolidating land for the

Table 2. Regression analysis on the impact of cooperative structure on cooperative performance

Explanatory variables	Coef.	Std. Err	t	P-value
Membership structure	.1730799	.1621136	1.07	0.290
Provision of inputs	.3368021	.1975501	1.71	0.091
Cooperative activities (saving for inputs, Extension services, etc)	-.7535568	.2095223	-3.60	0.001*
Land use consolidation	-1.04313	.2059176	-5.07	0.000*
Duties and responsibilities	.1646684	.2787159	0.59	0.557
Cons	4.795529	.2514588	19.07	0.000

Number of Obs = 71 Prob > F = 0.0000 R-squared = 0.7882

Table 3. Regression analysis on the impact of cooperative governance on cooperative performance

Explanatory variables	Coef.	Std. Err	p	P-value
Accountability and transparency	-.3403269	.1433502	-2.37	0.021**
Action plan and annual budget	.4430356	.1635679	2.71	0.009*
Disloyalty and conflict	.2555246	.1509566	1.69	0.095
Ethical standards code of conduct	.1769912	.1510241	1.17	0.245
Leadership style and decision	.0762863	.1044639	0.73	0.468
Cons	1.366712	.1378857	9.91	0.000

Number of Obs = 71 Prob > F = 0.0000 R-squared= 0.7962

Table 4. Regression analysis on impact of cooperative managerial skills

Explanatory variables	Coef.	Std. Err	t	P-value
Marketing committee	-.0221647	.0470926	-0.47	0.640
Risk assessment	-.0342031	.0683635	-0.50	0.619
Horizontal and vertical linkages	-.0105437	.0575389	-0.18	0.045
Long term assets	.7863183	.0724718	10.85	0.000*
Crop insurance and contract	-.0199644	.0784399	-0.25	0.800
Mismanagement of funds	-.0157812	.030622	-0.52	0.608
Surplus income, value addition and quality awareness	.2457996	.0908403	2.71	0.009*
promotional strategies	.0578618	.049322	1.17	0.245
Cons	-.024703	.104405	-0.24	0.814

Number of obs = 71 Prob > F= 0.0000 R-squared= 0.9776

Table 5. Regression analysis on the impact of training and skills on cooperative performance

Explanatory variables	Coef.	Std. Err	p	P-value
Agricultural practices	.8372526	.0499138	16.77	0.000*
Diseases and pest control	.1558233	.1412869	1.10	0.274
Financial literacy and savings	-.0981302	.0968917	-1.01	0.315
ICT application in agriculture	.0668006	.0874724	0.76	0.448
Cons	.057108	.2199167	0.26	0.796

Number of Obs = 71 Prob > F = 0.0000 R-squared = 0.8893

Table 6. Regression analysis on impact of government intervention on cooperative performance

Explanatory variables	Coef.	Std. Err	t	P-value
Regulatory frame work	.0635586	.156353	0.41	0.686
Enabling environment	-.0761201	.1793672	-0.42	0.673
Subsidies Provision	-554365	.1020445	5.43	0.000*
Technical support	.3054235	.0824423	3.70	0.000*
Cons	3.549336	1.05856	3.35	0.001

Number of Obs = 71 Prob > F= 0.0000R-squared = 0.6020

purpose of cultivating larger areas of the same crop but it is important to recognize that under this model each farmer tills his or her own land, instead of working land collectively,which has not proven effective wherever tried in the world. The correlation coefficient is strongly positive and was correlated (0.7882) and significant at 5% which explain that cooperative structure influence the performance of agricultural cooperatives.

Impact of cooperative governance structure on the performance of agricultural cooperatives: Accountability is the capacity to call cooperative leaders to account for their actions. The regression analysis results according to table 10 clearly indicated that accountability and transparency was significant ($P < 0.05$), the implementation of the system of accountability and transparency in agricultural cooperatives cooperative is not effective and strongly affect the performance

of agricultural cooperatives. From the focus group interview this was explained by the lack of regular financial appraisal and general assembly meetings which help cooperative creates some common value for its members. The findings of the study are consistent with that of Akwabi-Ameyaw (1997) which suggests that in Africa farmer cooperatives have often failed because of problems in holding management accountable to the members (i.e., moral hazard), leading to inappropriate political activities or financial irregularities in management. Another factor evidenced in table 2 is that the majority of cooperative leaders lack knowledge on the development of strategic plan and annual budget ($P < 0.05$) as shown in the above table. This is why many cooperatives hire external planners which affect strongly the long term objectives of the cooperatives because cooperatives spend resources. The findings are in line with that of Chambo (2009) that education and training did not avail to the members, the opportunities for them to develop action programs to bring about change they needed. To the contrary, traditional member education was conceptualized and carried out in a framework that was outside the change process needed by the members. The correlation test showed high positive coefficient (0.7962) between cooperative governance and performance which explain that, the performance of agricultural cooperatives is strongly affected by the governance structure.

Impact of cooperative managerial skills on agricultural cooperative performance

Results from both cooperative members and key informants as noted in table 4 attributed the lack of horizontal and vertical linkages ($P< 0.05$) as the key challenge constrained by agricultural cooperatives management. Because they are currently poorly engaged in horizontal and vertical integration in order to increase production and reduction of related transaction. This finding match with that of NISR (2014) that cooperatives face weak agricultural supply chains and thus limit the production and value addition potentialities of crops and livestock products. This is related to the fact that cooperative members lack the ability and capacity to use local and international skills and knowledge to ensure a fair social and economical situation required in agricultural supply chain management with clear market orientation. As it can be seen vividly in the above table the majority of cooperatives return surplus income to members ($P< 0.05$) instead of investing in long term assets that could increase the cooperative productivity, such as post harvesting facilities and processing machines needed for agricultural value addition which is a challenge towards agricultural cooperative performance. The finding is in line with that of united republic of Tanzania (2005), that cooperatives have not been able to resuscitate their activities in the face of competition from the better-prepared private traders. They have been incapable of restructuring at a time when their economic activities have been dramatically shrinking. A consequence of this is that cooperatives tend to under-invest in assets with long-term Payoffs (e.g., research and development, and marketing).Boards of directors and managers are, therefore, under pressure to increase current payments to members instead of investing additional assets, and to accelerate equity redemptions at the expense of retained earnings (Cook, 1995; Royer, 1999). The table 4 above reveals the lack of value addition and quality ($P< 0.05$) constrains the performance of agricultural cooperative. This is because Cooperatives are constrained with enough resources and technology to add value to their produce. Respondents argued that, cooperatives have small working capital which cannot be invested into transforming their produces, besides; the loans from financial institutions often come with long time high interest and a very high collateral security which few cooperatives can be able to afford. The findings collaborates with that of Chapple (2008), that agricultural markets have been changing rapidly in recent years, with rising quality standards, growing demand for high-value products, new types of market arrangements, and the emergence of some new markets (*e.g.* environmental service markets). Small producers often face obstacles in accessing these markets, partly due to their higher requirements, and partly due to the often very asymmetrical power relations that characterize them. The results also match with that of Musahara (2011) that the most pertinent problems facing cooperatives in Rwanda are lack of professionalism, lack of innovation and entrepreneurship approach, lack of horizontal and vertical linkages, weak cooperative support from apex and use of absolute technology and low value addition. The coefficient of the regression model (0.9776) is strongly positive correlated which explains that managerial skills affect 97.7% the performance of agricultural cooperatives.

Impact of trainings and skills on agricultural cooperative performance

The aspect of cooperative providing training to its members for empowerment was also investigated in order to ascertain if the cooperatives are keen to improve the skills and knowledge of their members. The most serious problem indicated by cooperative members is about traditional agricultural practices that affect productivity (($P< 0.05$). Despite the training provided for agricultural cooperative members such as: method of fertilizer application, usage of improved seeds, and usage of agro-chemicals, etc. The level of replication and adoption of these training by cooperative members is still questionable.
The finding match with that of EICV3, which indicates that 84.9 % of Gatsibo district population both men and women basically depend on agriculture whom, at least 80% use traditional agriculture practices and constrained by Inaccessibility of credit to small scale farmers, which hinders the performance of agricultural cooperatives in the district. The regression analysis carried out at 95% confidence level showed (R-squared = 0.8893) which indicated training and skills strongly affect cooperative performance at 88.9%.

The impact of government intervention on the performance of agricultural cooperative

As displayed in table 6 respondents agreed that their cooperatives receive both subsidized inputs and technical support from external agencies. The technical support and subsidies provision are significant ($P< 0.05$). This reliance on external assistance is a challenge because it does not promote member driven model, where by some cooperatives members join cooperatives as a result of obtaining incentives that the government and donors provide for cooperatives, which in turn affect the sustainability of agricultural cooperatives in the long run. The findings are consistent with that of Chambo (2009), which urges that appropriate regulatory framework; need to go with a reviewed policy and legislation which creates more freedom of action from members of agricultural cooperatives than provision of external assistance. Computed R-squared

(0.6020) showed that 60% change or improvement in government policy affect strongly the sustainability of agricultural cooperatives. Therefore the study findings match with the estimated model $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \ldots\ldots\ldots \beta_t X_t + Ut$. That agricultural cooperative performance is influenced by cooperative structure, governance structure, managerial skills, training and skills as well as the level of government intervention.

Implication to research and practice

The objective of this research was to assess the factors hindering the economic growth of agricultural cooperatives in Gatsibo district Rwanda. This will provide policy makers in Rwanda, agricultural institutions, the extension service, non-governmental organizations (NGOs) and other advisors with a deeper insight into the issues involved. This study will also help to gain a better understanding of how the agricultural cooperatives can help small farmers to counteract the exploitation to which they are exposed, to modernize their agriculture, to increase their agricultural production, and to improve their living conditions regardless of their socioeconomic status. Moreover, the study will provide insights to development agencies, other developing countries, and those who are concerned with rural and agricultural development as to the potential of agricultural cooperatives in reaching poor farmers and increasing their agricultural production. Contributions may be made to the solution of the persistent problem of agricultural cooperative sustainability and performance, namely, how to set up cooperatives and leadership.

Conclusion

The general objective of the present study was to assess the factors hindering the economic growth of agricultural cooperatives in Gatsibo district, Rwanda. Therefore the findings of the research revealed several factors that affect the economic growth of agricultural cooperatives which the researcher classified into: cooperative structure, governance structure, managerial skills training and skills as well as and the impact of government policy on sustainability of cooperatives.

Impact of Cooperative structures

Agricultural cooperatives in Gatsibo district are not fully integrated in a specific agricultural supply chain because members joined the cooperative with different intentions. This lack of specification and land use consolidation policy affects the extension services that may help to increase productivity.

Impact of Governance structure

The research findings showed that Transparency and accountability is the major challenge affecting governance of agricultural cooperatives, because the cooperative staff are not interested in promoting members interest which affects strongly cooperative activities. Another factor identified is that the majority of the management committee is not aware on the development of corporate action plan and annual budget which in turn also contribute to poor planning and wastage of cooperative resources.

Managerial Skills

Cooperatives engagement in horizontal and vertical integration is a big challenge because the level of cooperatives linkages with other firms to reduce transaction cost and expansion of agricultural productivity is still at the lowest scale. Cooperatives are not aware on the importance of integration towards cooperative economic growth. This affects the attempt to increase cooperatives bargaining strength, in order to achieve higher prices for their outputs, and to secure lower prices for their inputs which is the fundamental economic basis of cooperatives. Training on post harvest handling and value addition are not implanted in many cooperatives yet this is a key challenge on the economic growth of agricultural cooperatives, because most of their produce is wasted due to lack of post harvest handling and processing techniques. The majority of cooperatives are not engaged in value added processing activities but in traditional marketing of raw agricultural commodities which affect the economic growth. The findings also revealed that cooperative level of investment in long term asset for high production is also challenge because many cooperative return surplus income for members as patronage instead of investment.

Impact of Training and Skills

The members are not informed and taught all the best practices to create sustainable production, and to increase the quality of their produce. The farmer's level of replication of acquired modern agronomic practices is not effective which affects the productivity of agricultural

Impact of government policy

Although this study revealed that government support was very important for the establishment of farmer cooperatives, it also indicated that government over intervention could negatively affect these cooperatives. Government supported policies such as registration, free training, easy access to capital and financial support, provision of subsidized inputs, all aimed to foster the cooperative development, some farmers may joined without being fully committed to the cooperative and its operations which result in membership retention after support. Reliance on external support constrains the autonomy and independence of cooperatives, because excessive external support hinders the long-term objectives of financial sustainability and self-reliance of cooperatives. Dependence on external players, donors and governments affected strong the technical capacity for cooperative members and sustainability.

Recommendation

Based on the findings and conclusion of this research work, the following recommendations can be drawn

- Agricultural extensions agents should create more awareness on availability of extension services to the farmers and its impact in improving agricultural productivity. It is therefore crucial to encourage cooperative specification and increase the level of replication of modern agricultural practices through cooperatives.
- Promote the growth of agricultural cooperatives through land use consolidation, adoption of sustainable production techniques, investments in rural infrastructure and irrigation, and post harvest handling

to enhance agricultural value addition and quality standards.

- Encourage agricultural cooperatives to actively engage in various horizontal and vertical linkages in order to access market for their produce as well as reduction of transaction cost.
- Support in the trainings for the development of corporate action plan and annual budget for cooperative members and the community in general.
- Strengthen the level of youth participation in agricultural cooperatives because are very powerful vehicle for modernization of the agriculture sector. They should be sensitized on the benefits of cooperation and should be involved in the cooperative activities.
- Agribusiness and agricultural economics schools must promote student community attachment program in order to promote agricultural cooperatives empowerment.
- Reduction of government and NGOs external assistance on agricultural cooperatives, because it affects the professionalism of cooperatives.

Future Research

There are many challenging experiences faced by agricultural co-operatives, but this research was limited to assessment of the factors influencing the performance of agricultural cooperatives in Gatsibo district, there is a need to carry out further studies on quantitative analysis of agricultural cooperatives and apply the model in various districts of Rwanda.

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