PROJECT MANAGEMENT PRACTICES AND PERFORMANCE OF AGRICULTURAL COOPERATIVES. THE CASE OF COTUMU COOPERATIVE IN GAKENKE DISTRICT, RWANDA

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Abstract

Rwanda’s economy is basically dependent on the performance of agriculture which contributes highly in the development of other sectors. However, the performance of many agricultural projects in Rwanda is still being low level in the sense that some projects remain hindered while others get accomplished late with low incomes. Indicate that a project performance is prejudiced by many management practices jointly then many studies fail to provide a holistic assessment of all the project management practices jointly that influence performance agricultural projects. This study, therefore, sought to investigate project management practices and performance of agricultural cooperative. The specific objectives of the study were; To explore the relationship between monitoring and evaluation and performance of agricultural cooperative in Gakenke district, To examine the relationship between the influence of stakeholders and performance of agricultural cooperative in Gakenke District and to analysis the relationship between project leadership experience and performance and agricultural cooperative in Gakenke District. The study was based on five theories which included the theory of constrains, management theory of project management, resource based theory. The study used descriptive research designs. It targeted 1122 of COTUMU. The study used Random sampling to COTUMU and Yamane method was used to select 295 respondents. Primary data was collected using a self-administered questionnaire. Interviews were also conducted on 10 staff members. Descriptive statistics such as frequency, percentages, mean and standard deviation were used to describe the characteristics of the variables whereas multiple correlation model was used to establish the relationships between the variables. All the analysis was done using SPSS version 22. Qualitative data were analyzed through content analysis. The results showed that all the variables, monitoring and evaluation, influence of stakeholders and project leadership experience were significant performance of agricultural cooperatives. The study recommended that in order to have the desired project performance the government should ensure that there is well outlined planning, implementation, monitoring and evaluation, and communication methods. The study also recommended that 1) Government and donors should improve the services to support in providing continuous professional development to the farmers in their society based institutions for good production, they must augment contact time with the cooperatives members and put them through baseline survey and situation of merchandise marketing by making advertisement apart from field trips and providing professional development. This will alarm farmers and expose them to learning for better cooperative learning.

Keywords: Cooperatives, COTUMU, monitoring, project management practices and stakeholders.
Project management was developed as the use of skills, knowledge, materials, and technology to attain the planned objectives (Project Management Institute, 2008). Worldwide, project management has become the most predominant strategy that is frequently used by many projects and cooperatives to achieve their planned activities or make a successful performance of their activities. Monitoring and evaluation, which is among the most important stages of project management, are highly recommended to be well done to evaluate if what the project is doing is highly matching with an objective, they have enumerated before starting the project (World Bank, 2008). Many other researchers such as Mwangi (2015) indicated that monitoring and evaluation are very important in any given activities of an organization or cooperatives because it indicates where the project is going and can also help in discovering gaps or other weaknesses which can hinder the organization to achieve its mission. This explains that after monitoring and evaluating, one can make a revision and bring a possible solution for released any issues. Cooperative can be explained as a venture that is managed and administered by the people who utilize its service and their income or profits are shared by the members basing on regulations they have decided while founding that business (USDA, 2002). Cooperatives are indeed like tools that bring people together and improve socio-economic living conditions for the people who are members. Cooperatives can generate employment opportunities, social welfare, and the reduction of hunger and the problem of food insecurity. But even if cooperatives benefit its members directly but also it has indirect benefits to the external world in terms of economy, it means that the people who are not the members of it can experience a major change in their life (United Nations, 2009). In the last decade, many countries of the world started putting more attention on the issue of food security, during that period countries developed strategies of abolishing hunger and food insecurity. The 1992 international conference and world food summit put more effort into the issue of world hunger and food insecurity (Babatunde, Omotesho & Sholotan, 2007). Cooperative has a long historical background which has a relationship with agriculture and non-urban community. Cooperative was expanded in the USA during the period of making a republic, and then it expanded all over the world especially in European countries but in northern Europe. On 21st December 1984 Rockdale pioneer which was a cooperative of weavers in England started a group of food cooperatives. This group of people becomes the source of what is called cooperation till now; they developed the principles that became the foundation stone for every successful cooperative. Nowadays all the cooperatives are benefiting from those principles (Barraket, 2001).

In less developed countries, agriculture occupies a large portion of countries' GDP and this indicates how many people are employed in the agriculture sectors of those countries. In most less developed countries, their economy...
is based on the products that are from agriculture (Fulton & Ketilson, 1992). Many writers indicated that cooperatives play a big impact on the community's high development in rural areas such as socio-economic development, education development, and also in sharpening human capital working forces.

For adjusting harmonizing and putting into practice different actions that could take place in project management different strategies have been invented by associations like International Project Management Association (IPMA), Association for Project management (APM). A new movement of knowledge is rising that indicates principles, rules and regulations, standards that can enhance knowledge, seminars, and workshops for managing different projects (Morris et al., 2006). Projects in recent years are being tools for fighting against routine poverty, food insecurity, hunger, and the problem of high unemployment which are dominant challenges in rural areas in less developed countries. Many less developed countries are putting more effort into investing in agricultural projects (World Fisheries Trust, The World Bank, and International Development Research Centre, 2004).

Smallholder agriculture is among the important sector that plays a significant role in the economic development of less developed countries and minimization of poverty in those countries but they have many problems that hinder its development like insufficient use of technology, innovation and creativity, and failure to win market at the international level (Hazell, Poulton, Wiggins & Dorward, 2010). Government, stakeholders, and researchers as important organs are renovating smallholder agriculture so that it will become productive and this is being implemented by enhancing this sector to participate in markets (Bernard & Taffesse, 2012). According to Chandra & van Hillegersberg (2018) indicated that project management is an important discipline that enhances the development and the preferment improvement of any given project. In different sectors such as infrastructure development, rural and urban development. Project management practices have a significant effect on the performance of agricultural cooperatives around the world because every successful project requires different tools that are designed by good project managers. In previous years, Rwanda was making great progress in developing the agriculture sector. It contributes to 32.7% of the national GDP (2015). Agriculture contributes to the development of the national economy (7.6, 2000-2015). Agriculture plays a significant role in poverty reduction, this was indicated by different research, which means that agriculture contributes 35% to poverty reduction. This indicated that project management practices can be among the most important tools that can help to increase this contribution. Rwanda is making progress to develop project management practices through making monitoring and evaluating different cooperatives operating in different places because agriculture in Rwanda is
among the sectors which are developed, majority of Rwandans are engaged in that activity but a problem which is still in the agriculture sector is that they practice substance agriculture which can be on small scale.

**Management theory of project management**

This theory can be subdivided into three theories which are a theory of project and the theory of management. The project theory seems to transformational activities of the operation. It consists of transforming inputs into finished outputs that can generate profits for the owner of a project. They are severe rule and regulation which can explain how a project can be managed, which is transforming everything into smaller things like assigning works and minimizing tasks, making the system that can minimize the cost.

**Management Theory of project Management**

In 2002, Koskela & Howell (2002) brought a new theory that explains the management theory of project management which indicates that project management practice is made by three subsections: they are namely: planning theory, execution theory, and control theory. Planning theory consists management section which highly emphasis on human resources and their activity. Planning works as an organizing activity that management utilizes as tools to bring together all required resources for accomplishing assigned tasks in a project.

Conferring to (Koskela & Howell, 2002), the theory of execution stated that managerially, execution is a distribution of tasks to the workplace. So that everyone should have and know his/her assigned tasks. For execution to be successful, the classical communication theory should be combined with effective language that is mostly used to communicate tasks. This means that communication should be understandable by the workers. They must be feedback provision to the workplace. Explains that assigned activities should put into practice by informing the implementers of their tasks and responsibilities. It means that everything is ready, workers, tasks to be assigned to each and everyone and resource, finally people are authorized to start the activities.

A third theory is a theory of control which consists of two theories: they are namely: thermostat model and scientific experimental model (Koskela & Howell, 2002) theorized that in the production stage, there is a process of control, Performance measurement, performance standard while another model which complement this one is a scientific experimental model as it was explained by Shewhart and Deming (1983) quoted in Koskela and Howell (2002) emphasis on discovering the reason for the deviation and trying to work on that cause of deviation.

**Hypothesis**

There is no significant relation between monitoring and evaluation and performance of agricultural cooperatives in Gakenke District 2014/2019
and there is no relationship between project stakeholders and performance of agriculture cooperatives in Gakenke District.

**Research methodology**

This study used quantitative approach for making analysis and during the journey of search collecting the information. These approaches were used while investigating relationship between project management practices and performance of agriculture cooperatives. A descriptive research design was used to study the relationship between the independent variable (project management practices) and dependent variables (performance of agricultural cooperatives). Population study refers to a group of people that research is going to target. This means that the study population is a set of people from who sample size were taken from research (Bertram and Christiansen, 2014). This study was targeting COTUMU (Cooperative Twihangire Umurimo) agriculture cooperatives that locate in Gakenke District. Researcher decides to use these respondents from this cooperative because of the information they have that were related to the research objectives. Especially helpful information that was relevant to project management practices and agriculture cooperatives. The sample size was a group of people who were selected to represent others in the study and the information provided by selected people represented others population (McMillan & Schumacher, 2014). The selection of COTUMU was made by using simple random sampling. A sample size of members of the cooperative was using Yamane sample size determination as it is a scientific method that is always used in research (Louangrath, 2014).

\[
n = \frac{N}{1 + (0.05)^2}
\]

Sample size \(n = \frac{1122}{1+1122(0.05)^2} = 295\)

During this study, the researcher used stratified sampling techniques while selecting cooperatives members. Through this technique, the researcher stratifies the population into subgroups according to the people who share something in common. Then after each subgroup particular sample was taken randomly. The researcher selected a sample from each group according to the years of members (Creswell, 2012). For presidents, vice presidents and accountants by using the census technique (total enumeration), this was where the entire population is taken as sample because it is too small in number (Creswell, 2012).

**Findings**

This part consists of interpretation of the findings which was from field every variable is interpreted statistically while interpreting the results the researcher used percentage, mean, and standard deviation. The variable are statistically interpreted and analyzed as follow:
Table 1: descriptive statistics on Monitoring and evaluation and performance of agricultural cooperatives

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cooperative has a well-documented plan for evaluating and tracking</td>
<td>295</td>
<td>3.8983</td>
<td>1.35896</td>
</tr>
<tr>
<td>projects/service delivery.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal and external audit are done frequently in your cooperatives.</td>
<td>295</td>
<td>4.2339</td>
<td>1.11096</td>
</tr>
<tr>
<td>Feedback from stakeholders are considered to make some of change in production of your product.</td>
<td>295</td>
<td>4.2203</td>
<td>1.21593</td>
</tr>
<tr>
<td>Your project managers make regular evaluation of project improvement</td>
<td>295</td>
<td>4.1525</td>
<td>1.23461</td>
</tr>
<tr>
<td>Processes are documented and data is used to inform management decisions.</td>
<td>295</td>
<td>4.2102</td>
<td>1.20792</td>
</tr>
<tr>
<td>There are clear records on farming activities kept in the project group</td>
<td>295</td>
<td>4.2373</td>
<td>1.09325</td>
</tr>
<tr>
<td>Any member who miss appropriate funds or farm materials is reported to management for disciplinary action to be taken against him/her as given in the constitution.</td>
<td>295</td>
<td>4.2373</td>
<td>1.09636</td>
</tr>
<tr>
<td>There are always ways in which the management saves on expenditure e.g.</td>
<td>295</td>
<td>4.1864</td>
<td>1.16459</td>
</tr>
<tr>
<td>bringing management offices closer to farmers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The supervisors ensure that the planned farming activities are all done at the planned time.</td>
<td>295</td>
<td>4.5119</td>
<td>.86053</td>
</tr>
<tr>
<td>The project coordinators regularly report the progress of the</td>
<td>295</td>
<td>4.3898</td>
<td>.94791</td>
</tr>
<tr>
<td>project to senior management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>295</td>
<td>4.22779</td>
<td>1.129102</td>
</tr>
</tbody>
</table>


The findings from the table above indicated that majority of respondents strongly agreed that the following factors influence performance of agricultural cooperatives, include: Internal and external audit are done frequently in your cooperatives ($\mu=4.2339$ and $\sigma=1.11096$), Feedback from stakeholders are considered to make some of change in production of your product ($\mu=4.2203$ and $\sigma=1.21593$), Your project managers make regular evaluation of project improvement ($\mu=4.1525$ and $\sigma=1.23461$), Processes are documented and data is used to inform management decisions ($\mu=4.2102$ and $\sigma=1.20792$), There are clear records on farming activities kept in the project group ($\mu=4.2373$ and $\sigma=1.09325$), Any member who miss appropriate funds or farm materials is reported to management for disciplinary action to be taken against him/her as given in the constitution ($\mu=4.2373$ and $\sigma=1.09636$), There are always ways in which the management saves on expenditure e.g. bringing management offices closer to farmers ($\mu=4.1864$ and $\sigma=1.16459$), The supervisors ensure that the planned farming activities are all done at the planned time ($\mu=4.5119$ and $\sigma=.86053$), The project coordinators regularly report the progress of the project to senior management ($\mu=4.3898$ and $\sigma=.94791$), while the remaining one respondents agreed that this factor influence learners academic performance: it is namely: The cooperative has a well-documented plan for evaluating and tracking projects/service delivery.
Performance of Agricultural Cooperatives

(μ=3.8983 and σ=1.35896). Final decision that there is very high mean and strong evidence of the existence of the fact (μ=44.22779 and σ=1.129102).

Table 2: Descriptive statistics: Involvement of Project stakeholders and performance of agriculture cooperative

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>295</td>
<td>4.3254</td>
<td>1.09538</td>
</tr>
<tr>
<td>295</td>
<td>4.1661</td>
<td>1.28421</td>
</tr>
<tr>
<td>295</td>
<td>4.2644</td>
<td>1.10868</td>
</tr>
<tr>
<td>295</td>
<td>4.4068</td>
<td>.92800</td>
</tr>
<tr>
<td>295</td>
<td>4.4339</td>
<td>1.01093</td>
</tr>
<tr>
<td>295</td>
<td>4.1763</td>
<td>1.24381</td>
</tr>
<tr>
<td>295</td>
<td>4.0068</td>
<td>1.23441</td>
</tr>
<tr>
<td>295</td>
<td>4.1797</td>
<td>1.15981</td>
</tr>
<tr>
<td>295</td>
<td>3.9356</td>
<td>1.33220</td>
</tr>
<tr>
<td>295</td>
<td>4.2034</td>
<td>1.24785</td>
</tr>
<tr>
<td>295</td>
<td>4.2098</td>
<td>1.16452</td>
</tr>
</tbody>
</table>


The findings from table above indicated that majority of respondents strongly agreed that the following variables influence performance of agricultural cooperatives: Stakeholders are actively engaged in brainstorming challenges and way forward (μ=4.3254 and σ=1.09538), there is constant and effective communication between cooperatives and stakeholders (μ=4.1661and σ=1.28421), Stakeholders always are informed about cooperative performance regularly (μ=4.2644 and σ=1.10868), Involvement of stakeholders promotes their satisfaction, ownership and sustainability of outcomes (μ=4.4068 and σ=.92800), The management team of cooperatives involve stakeholder in decision making process (μ=4.4339 and σ=1.01093), The government help in giving regular information from metrological department to alert farmers on weather conditions (μ=4.1763 and σ=1.24381), The Country government has helped to promote projects through use of community policing like and erecting security lights in centers to ensure security (μ=4.0068 and σ=1.23441), The stakeholders like residents help to donate land for growing crops as the sponsors provide farm inputs like seeds and fertilizers (μ=4.1797 and σ=1.15981), Stakeholders provide regular training to the members of cooperatives (μ=4.2034and σ=4.2034), while remaining one respondents agreed that it influence performance of agricultural.
PERFORMANCE OF AGRICULTURAL COOPERATIVES

cooperative: Government built the roads are accessible for quick transportation of crops ($\mu=3.9356$ and $\sigma=1.33220$). Final decision that there is very high mean and strong evidence of the existence of the fact ($\mu=4.2098$ and $\sigma=1.16452$).

**Discussion**
The first objective was to explore the relationship between monitoring and evaluation and performance of agricultural cooperative; the study through correlation revealed that monitoring and evaluation when jointly correlated influenced performance of agricultural cooperative in Rwanda. As indicated by indicated correlation analysis null hypothesis was rejected and alternative hypotheses is accepted According to Uitto, J. (2004) point out that monitoring and evaluation has significance impact on assessing the project performance, means that is the most important components of project management practices in any given cooperatives. Performance of agriculture cooperative is determined by management team, how they make monitoring and evaluation, their level of experience and expertise. M&E gives the information of how implementation of project is being done and at which level their planned goal and objectives are being approached. According to Claudia and Oleg (2011) indicated project managers are the one who are eligible and obliged to conduct monitoring and evaluation of project in term of making reports, progress of activities and measuring performance of cooperatives. This monitoring and evaluation must be done qualitatively and qualitatively to individual, group level and whole company in general (Claudia & Oleg, 2011).

Second objective was to examine the relationship between the influence of stakeholders and performance of agricultural cooperative. This objective was approved by correlation analysis which was made by the researcher where null hypotheses was rejected and alternative hypotheses was accepted. According to Fontaine, Haarman and Schmid (2006) indicated that Participation of stakeholders in decision making have relationship with project activities and future planning strengthens them and make their awareness of project objectives. From this involvement, relationship and collaboration with stakeholder goal of cooperative become reality and the board of members should have capability to adopt the change with interchange between them and stakeholders (Chinyio & Akintoye,2008). Jeffry (2012) Brought methods of involving stakeholder that make the strategies of dealing with situation between stakeholder and institution or cooperative where information, comments and ideas might be from either side. As an outcome of this involvement, an institution or cooperative must modify its regular practice of controlling its project to adopt new modification that will enrich their performance.

**Conclusion**
As the above findings, the researcher concluded that project management practices has significant relationship with performance of agricultural
cooperatives in Gakenke district. Means that this is important topic which could be discussed by different organs such as government agencies, non-governmental organization, private sectors, and other important stakeholders who have where related with agricultural cooperatives. As disclosed in this researcher, Monitoring and evaluation is a very important variable which cannot be ignored by any cooperatives because it goes hands in hands with measurement of performance in every cooperatives. Making internal and external audit, asking repots of performance or assigned tasks and provision of feedback among employees and employers is an important activity which must be reinforced by each cooperative. As the researcher continued analyzing and interpreting the results which related to the influence of stakeholders in enhancing performance of agricultural cooperatives. Stakeholders was seemed to influential in any given cooperatives because stakeholders participate in decision making, provision of continuous professional development to the cooperative members, in case there is a problem of inputs such as capital, hiring the officials and other staffs the stakeholders can take in charge that problem. There is no hesitation that in influence of stakeholders has significant relationship with performance of agricultural cooperatives in Gakenke.

References
According to Obisi (2011), training and development of employees should be a continuous activity. Training helps employees to acquire skills needed to perform their work, which ultimately helps organizations to achieve their objectives.


Performance of Agricultural Cooperatives


