DETERMINANTS OF IMPLEMENTATION OF AGRICULTURAL PROJECTS IN KENYA: A CASE OF AGRICULTURE AND FOOD AUTHORITY (AFA)

Fellistus Lotee
Jomo Kenyatta University of Agriculture and Technology (JRUAT), Kenya

Dr. Josphine Mutiso, PhD
Jomo Kenyatta University of Agriculture and Technology (JRUAT), Kenya

ABSTRACT

This study sought to establish the determinants of implementation of agricultural projects at the Agriculture and Food Authority in Kenya. The study specifically focused on capacity building, monitoring and evaluation, community participation and access to resources as the independent variables and their influence on implementation of agricultural projects at Agriculture and Food Authority in Kenya. The study adopted a descriptive research design. The target population for the study comprised of 135 rolled out agricultural projects between 2013 and 2018. The unit of observation was the project managers in charge of the 135 agricultural projects by AFA across the country. The study adopted a census technique with respect to the unit of analysis which is AFA therefore ruling out application of specific sampling design and sampling technique. The study used primary data that was obtained from the project managers by use of structured questionnaires. The study used descriptive statistics such as frequency distributions, percentages, frequency tables and pie charts to summarize and relate variables obtained from the administered questionnaires as well as inferential statistics of correlation and regression to capture the relationship between the independent and dependent variables. The study used SPSS to analyze the data. The study findings were then presented in form of tables, charts and graphs. The study established that community participation, monitoring and evaluation, access to resources and capacity building had a significant influence on the project implementation. The study concluded that project implementation was enhanced by access to resources, monitoring and evaluation and capacity building. Through community participation, the projects are effectively implemented. The study recommends that capacity building should be emphasized by creating awareness and training the farmers through which projects are effectively implemented. There should be adequate resources in terms of finances as well as involvement of the community members so as to enhance project implementation.

Key Words: Project Management, Monitoring and Evaluation, Project Implementation, capacity building, community participation, resource allocation, Agricultural and Food Authority
1.0 INTRODUCTION

1.1 Background of the Study

Agriculture is and has been the source of livelihood for a majority of the population in Africa where more than 75% of the population practices it in a subsistence or traditional form that does not rely on the purchase of inputs, (Lyons & Burch, 2007). According to Meredith and Mantel (2010), the project implementation phase takes 80-85% of all the project activities and resources utilization. However, the success of projects is subject to various determinants. Project success requires a combination of product successes and project management success that is the product (services, results or outcome) of the project if it is a success and if the project is well managed.

According to Hill and Jones (2010), the success of project implementation depends on both macro organizational issues such as technology, reward systems, decision processes, and structure; and micro-organizational issues such as organization culture and resistance to change. The macro-organizational issues are large-scale, system-wide issues that affect many people within the organization.

Agriculture is one of the under-funded sectors of the economy. According to the public agriculture expenditure review (2010 / 2011), the agricultural sector has a dubious record of dismally low absorptive capacity, which has hampered any meaningful improvements in the performance of the sector. This scenario clearly indicates that implementation of agricultural projects has been a challenge despite the support. Therefore there is a need to establish the determinants of implementation of agricultural projects at agriculture and food authority in Kenya. However, in order to improve small holder revenue, all levels of the agricultural projects must be strengthened. Production, processing, storage and marketing, all require upgrading so they can collectively sustain a growing food economy (Rutten, 2014).

Agriculture and Food Authority (AFA) was established by the AFA Act, 2013 formulated as a culmination of the Agriculture Sector Reforms that began in the year 2003. The purpose of the reforms was to consolidate numerous pieces of legislations within the agriculture sector to address the overlap of functions, obsolete legislations and to benefit from economies of scale.

1.2 Statement of the Problem

The implementation of the agricultural projects in Kenya especially those being financed by the government has been experiencing varying outcomes (Irungu, 2016). The National
Agriculture and Livestock Extension Programme being managed by the Ministries of Agriculture (MOA) and Livestock Development (MOLD) that sought to promote demand driven, pluralistic extension services to 3.7 million farmers, only managed a success rate of between 30% and 50% (National Agriculture and Livestock Extension Programme, 2012). The report further indicated that among the 59 agricultural projects that had been initiated in Ruiru, 18 of the projects were terminated due to overruns.

Agriculture has continued to play a major role in providing livelihoods to over 85% of the Kenya’s population and contributing to over 65% of Kenya’s foreign exchange. However, challenges in this sector have been encountered despite the developmental efforts (Kisengese, 2012). Hill and Jones (2010) argued that although project success is never guaranteed, projects are more likely to be successful when conventional project management processes are practiced.

The study also sought to bridge the knowledge gaps in the previous studies on the topic. Irungu (2016) in her study on the determinants of performance of agricultural projects in Kenya, found that project team and stakeholder involvement had a positive impact on the overall performance of agricultural projects, Githaiga (2011) on the other hand, focused on the effect of access to information in accessing credit, policy regulatory framework, cost of credit and human capital on agricultural projects financing to farm productivity while Kisengere (2012) focused on agricultural projects in Ruiru. These studies did not focus on the effect of monitoring an evaluation, capacity building, and implementation approach and community participation on the implementation of agricultural projects.

1.3 Objectives of the Study

i. To determine how capacity building influences implementation of agricultural projects at Agriculture and Food Authority in Kenya

ii. To establish how monitoring and evaluation influences implementation of agricultural projects at Agriculture and Food Authority in Kenya

iii. To examine how community participation influences implementation of agricultural projects at Agriculture and Food Authority in Kenya

iv. To find out how access to resources affects implementation of agricultural projects at Agriculture and Food Authority in Kenya

1.4 Research Questions
i. What is the effect of capacity building influences implementation of agricultural projects at agriculture and food authority in Kenya?

ii. How does monitoring and evaluation influences implementation of agricultural projects at agriculture and food authority in Kenya?

iii. How does community participation influence implementation of agricultural projects at agriculture and food authority in Kenya?

iv. What is the effect of access to resources affects implementation of agricultural projects at agriculture and food authority in Kenya?

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Community Participation Theory

This theory was propounded by Arnstein (1969) and explains different levels of participation and citizen control. Michener (1998) submitted that community participation has become a panacea. Chamala (1995) stated that community participation has been the hallmark of many successful development projects around the world. On the same note, Estrella and Gaventa (1997) contended that there has been a growing emphasis on participation at the front-end of development projects in appraisal and implementation and now there is recognition of the importance of participatory processes in monitoring and evaluation of development and other community-based initiatives.

Under this theory, people are expected to be responsible for themselves and should, therefore, be active in public service decision-making. The theory is relevant to this study since an entrusted and independent control of resources assures ownership and is always the sure indicator and factor for implementation of all the projects in communities. The theory is therefore relevant to the study as it underpins the role of community participation in implementation of agricultural projects and therefore covers community participation variable in this study.

2.1.2 Resource Based View

The Resource-Based View stemmed from realization that competitive advantage depends on doing things differently, rather than matching some prescriptive best practice (Armstrong & Taylor, 2014). The RBV framework combines the internal (core competence) and external
industry structure) perspectives on strategy. Like the frameworks of core competence and capabilities, firms have very different collections of physical and intangible assets and capabilities, collectively referred to as resources by the Resource-Based View theory.

The RBV utilizes firms' interior qualities to clarify firms' heterogeneity in procedure and execution. A firm is a sorted out, one of a kind arrangement of variables known as assets and capacities, and RBV hypothesis refers to two related wellsprings of points of interest: assets and abilities. Assets are an association's collected resources, including anything the firm can use to make, create, or potentially offer its items to a market. Assets are qualified for lawful assurance can work freely of firm individuals and mediate as components in the creation procedure to change over contribution to yield that fulfill needs (Kozlenkova et al., 2014). This theory reinforces capacity building variable of this study.

2.1.3 Stakeholder Theory

Stakeholder theory holds that maximizing the value of one's stakeholders will also maximize social responsibility and performance of individuals. So far the evidence linking stakeholder theory with improved performance is limited, and only few have attempted a thorough analysis of the relationship. The theory argues that every legitimate person or group participating in the activities of a firm or organization, do so obtain benefits, and that the priority of the interest of all legitimate stakeholders is not self-evident (Donaldson, & Preston, 1995).

This theory also emphasizes that the community members also benefit from their participations. Community groups need to ensure the community members also participate in the decision making, their staffs are trained on handling the community members and also the community members’ interests are considered. This theory will therefore assist in the better understanding of the importance of community participation in the implementation of agricultural projects at Agriculture and Food Authority in Kenya.

2.1.4 Theory of Change

The theory of Change emerged in the 1990s at the Aspen Institute Roundtable on Community change as a means to model and evaluate comprehensive community initiatives. The theory of change explains how activities are understood to produce a series of results that contribute to achieving the final intended impacts that need to be scrutinized now and again. It can be developed for any level of intervention— an event, a project, a programme, a policy, a strategy or an organization.
The theory can be used for strategic planning or programme/policy planning to identify the current situation (in terms of needs and opportunities), the intended situation and what needs to be done to move from one to the other. The theory of change is relevant to this study as it informs on the role of monitoring and evaluation in project implementation.

2.2 Conceptual Framework

![Conceptual Framework Diagram]

**Independent Variables**

- Capacity Building
  - Farmers trainings
  - Partnerships
  - Public sensitization

- Monitoring and Evaluation
  - Monitoring schedule
  - Monitoring agents
  - Mode of evaluation

- Community Participation
  - Participation in planning
  - Participation decision making
  - Participation in maintenance

- Access to Resources
  - Adequate budgeting
  - Timely allocation
  - Accountability of resource usage

**Projects Implementation**

- Timely completion of the projects
- Completion within the set budget
- Sustainable flow of net benefits

**Dependent Variable**

**Figure 2.1: Conceptual Framework**

3.0 RESEARCH METHODOLOGY

The study used a descriptive research design for the purposes of data collection and analysis. According to Kothari (2004), a descriptive research design is suitable in describing a phenomenon. The target population for this study comprised of the project personnel at the launched agricultural projects by the Agricultural and Food Authority (AFA). According to the authority, a total of 135 agricultural projects have been launched across the country between January 2018 and December 2018 and there are a total of 135 project managers in charge of these projects.
The sampling frame of the study comprised of a list of 135 project managers in charge of agricultural projects at AFA directly involved with implementation of the agricultural projects. The study adopted a census technique with respect to the unit of analysis which is Agricultural and Food Authority. This therefore ruled out application of specific sampling design and sampling technique. The study used a census since the population of 135 project managers is small.

The study used primary data that was obtained from project managers in charge of agricultural projects at AFA. The primary data was gathered by use of structured questionnaires and captured through a 5-point likert scale type.

The busy nature of the study respondents necessitated the use of drop and pick method whereby the questionnaires was dropped and picked later to enable project managers have enough time to respond to the questionnaires.

The data collected in the research was subjected to the necessary process of cleaning through editing, coded, classified on the basis of similarity and then tabulated. Being a descriptive study, descriptive statistics such frequency distributions, percentages, frequency tables and pie charts were used to summarize and relate variables obtained from the administered questionnaires. SPSS software was used to analyze closed-ended questions. To quantify the strength of the relationship between the variables, the study used both correlation and multiple regression analysis. The regression model that was used for the purpose of establishing the relationship between dependent and independent variables of the study is as follows:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \]

Whereby

- \( Y \) = Implementation of Agricultural Projects
- \( X_1 \) = Capacity Building
- \( X_2 \) = Monitoring and Evaluation
- \( X_3 \) = Community Participation
- \( X_4 \) = Access to Resources
- \( \beta_1, \beta_2, \beta_3, \beta_4 \) = Unknown parameters to be determined
- \( \epsilon \) = Error term
4.0 FINDINGS

4.1 Descriptive Analysis of the Findings

The first objective of the study was to assess the influence of capacity building on implementation of agricultural projects at Agriculture and Food Authority of Kenya. The findings revealed that majority of the respondents agreed that the authority conducts training to boost the farmers knowledge on projects, as evidenced by a mean of 3.84 and a standard deviation of 0.71 while on the statement that the authority often partners with the farmers, most of the respondents disagreed as shown by a mean of 2.59 and a standard deviation of 1.69. The findings concur with those by Diaz-Saenz (2011) who found that a capacity building plays a significant role in promoting the implementation of government projects. According to Merino and de los Ríos Carmenado (2012), capacity building enables the stakeholders in a project to focus the project operations through enabling to realize their roles and how they can perform them adequately for better project implementation and performance.

The second objective of the study was to determine the influence of monitoring evaluation on implementation of agricultural projects at Agriculture and Food Authority in Kenya. As the findings portray, majority of the respondents agreed that authority follows project monitoring schedule during implementation as shown by a mean of 3.96 and a standard deviation of 0.91. The findings go hand in hand with the argument by Ouma (2012) that monitoring progress of the project enables the resources allocated to the projects to be used effectively as well as enabling the management to identify and mitigate any risks early enough before they become too concrete to a point of derailing the project progress.

The third objective of the study was to examine how community participation influences implementation of agricultural projects at Agriculture and Food Authority of Kenya. As portrayed in the findings, majority of the respondents agreed that the authority involves farmers during project planning as evidenced by a mean of 4.07 and a standard deviation of 0.74. The findings compare with those by Williams (2013) who indicated that through community participation in projects that are affecting the community members creates more awareness and attracts the support of the community thus promoting execution and success of the projects. According to Green and Haines (2015), involving the community means translating and tuning them to understand that the projects are their own and meant to enhance their own development thus they embrace and support the implementation of such projects.
The fourth objective of the study was to find out how access to resources affects implementation of agricultural projects at Agriculture and Food Authority in Kenya. The findings revealed that majority of the respondents agreed that the Budget allocated to the corporation from the national government through the ministry was adequate for running the operations of the corporation as portrayed by a mean of 3.93 and a standard deviation of 0.70. The findings are analogous with those by Ullah (2013) who found that allocating adequate resources especially human resources play a key role in promoting project success. Through proper skills in project management and well-motivated employees, proper decisions and commitment towards the project by the employees is enhanced thus promoting project success.

On the project Implementation, the findings revealed that majority of the respondents agreed that there was an increase in the number of projects completed as evidenced by a mean of 4.06 and a standard deviation of 0.79 while on the statement that there was a sustainable flow of net benefits at the Agriculture and Food Authority, majority of the respondents disagreed with the statement as evidenced by a mean of 2.64 and a standard deviation of 1.08. The findings compare with those by Benin and Yu (2012) who found that project implementation is key to the success of the projects and calls for the commitment of the project managers and the entire organizational management for the projects to be implemented effectively.

4.2 Inferential Analysis of the Study Model

The study adopted a regression model to help in establishing the statistical relationship between the independent variables and the dependent variable. The model was of the form:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \]

The results for the model summary are as presented in table 4.1 where \( R^2 \) (coefficient of multiple determinants) is shown. As the model depicts, the \( R^2 \) is 0.815, an indication that there is a strong relationship between independent variables (Capacity building, Monitoring and Evaluation, Community participation and access to resources) and the Project implementation. This means that a proportion of 81.5% of project implementation can be explained by the combined effect of Capacity building, Monitoring and Evaluation, Community participation and access to resources.

Table 4.1: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
</table>

http://www.ijsse.org
ISSN 2307-6305  Page | 30
The regression coefficients are as presented in Table 4.2. The results indicate that Capacity building, Monitoring and Evaluation, Community participation and access to resources had a significant and positive effect on project implementation. This is as shown by the P-values of the variables which are 0.000 that is less than the standard p-value of 0.05. The implication herein is that when other factors are held constant, each of the four variables (Capacity building, Monitoring and Evaluation, Community participation and access to resources) singularly has a significant effect on project implementation.

The findings compare with those by Oino, Towett, Kirui and Luvega (2015) who found that community based projects required adequate resources and involvement of the community members for them to be implemented effectively. Agricultural projects by Agricultural and Food Authority (AFA) are intended to raise the status of the community through provision of food and farming inputs hence they are as well community based. Their implementation therefore will require participation of the community members as the main stakeholders as well as enhancing their skills and competencies through capacity building.

Table 4.2: Regression Model coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.081</td>
<td>.177</td>
<td>.456</td>
<td>.648</td>
</tr>
<tr>
<td>Capacity Building</td>
<td>.283</td>
<td>.069</td>
<td>4.078</td>
<td>.000</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>.347</td>
<td>.076</td>
<td>4.556</td>
<td>.000</td>
</tr>
<tr>
<td>Community Participation</td>
<td>.230</td>
<td>.048</td>
<td>4.836</td>
<td>.001</td>
</tr>
<tr>
<td>Access to Resources</td>
<td>.386</td>
<td>.069</td>
<td>5.594</td>
<td>.000</td>
</tr>
</tbody>
</table>

CONCLUSIONS

The study concluded that monitoring and evaluation had a significant influence on implementation of the agricultural projects. Through effective monitoring on the progress of the projects, any defaults are identified early enough thus corrected before they become unbearable or too defective for the project. Evaluating the project ensures that the project
managers are aware of the ongoing of the project and whether the project is progressing in line with the timeline.

On the community participation, the study concluded that as a result of effective involvement of the community members the implementation of the Agricultural projects was enhanced. The study concluded that awareness programmes, involving the community members in decision making and the seeking their opinion on the projects from the community members influenced their support to the projects which on the other hand was critical to the implementation of the projects.

Finally, the study concluded that access to resources was key to implementation of the agricultural projects by AFA. Through availing the right resources and in the required quantity and timely, the operations of the project are kept running effectively hence successful implementation of the projects. The financial resources are critical to implementation of the projects hence budgeting them appropriately and ensuring they are used effectively is essential.

**RECOMMENDATIONS**

The study recommends that the project managers should focus on building the capacity of the farmers where they carry out agricultural projects so as to influence their support in the success of the projects. The managers should ensure that the farmers are adequately trained and that they are benchmarked while at the same time supporting their smaller projects as well. This contributes to the overall implementation of the projects.

The project managers should ensure that they carry out effective and frequent site visits to the projects so as to assess the situation at the ground level. Effective monitoring of the projects should be emphasized and any defaults established ought to be corrected timely to prevent their severity. Evaluating the progress of the projects should be emphasized as a way of enhancing the follow-up and thus completing the projects on time.

The project managers and the entire management of the agricultural projects should embrace involvement of the main stakeholders in the projects who as the community members. They should ensure that the community members are aware of the progress and intention of the projects and how the implementation ought to benefit them. Through this, they solicit for their support thus enhancing success of the projects.

The Agricultural and Food Authority through the management should ensure that adequate resources are allocated to the projects in terms of funding and human resources so as to enable
continuity and effective running of the projects. Accountability should be encouraged as well as proper monitoring of the use of the resources through which value for money is achieved.

REFERENCES


Amade, B., Ogbonna, A. C., & Kaduru, C. C. (2012). Determinants of successful project implementation in Nigeria.


Otieno, F. A. O. (2000, November). The roles of monitoring and evaluation in projects. In 2nd International Conference on Construction in Developing Countries: Challenges facing the construction industry in developing countries (pp. 15-17).


