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# Project Management Practices and Performance of Agricultural Sector Development Support Projects in Kiambu County, Kenya

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## Abstract:

Globally, there is wide cognition that governments especially in emerging economies have been suffering mega losses in terms of money due to failure of development projects. In Kenya, most government projects being implemented in the counties have failed to attain their set objectives and or do not produce the desired results to the public. This question the project management practices being adopted in execution of the projects especially in the agricultural sector which is among the very critical sectors in the country's economy. Unfortunately, few studies in project management have focused on Agricultural Sector Development Support Projects (ASDSP). This study therefore sought to investigate the influence of project management practices on performance of ASDSP in Kiambu County. Descriptive research design was used. The target population entailed three major ASDSPs in the County including: indigenous chicken project, dairy cows project and bananas project whereby, officers in the County Coordinating Unit (CCU) in charge of ASDSP and members of the three projects' Value Chain Platforms (VCPs) were targeted. Content analysis, descriptive statistics and inferential statistics were used to analyzed the data collected for the study. Findings indicated that in ASDSP in Kiambu County, there is high stakeholders' involvement, resources allocation is not well done, project planning is well done and there is good monitoring and evaluation. Findings also revealed that stakeholders' involvement, resources allocation, project planning and monitoring and evaluation were all positively correlated with performance of ASDSP. The study concluded that, each of the project management practice assessed (stakeholders' involvement, resources allocation, planning, and monitoring and evaluation) has a significant positive influence on performance of ASDSP.

Keywords: Performance, project management practices, project planning, project performance

### 1. Introduction

Project performance is the capacity to accomplish the objectives of the project, time objectives and within the budget to significantly impact on the firm's success (Muthoka, 2014). A project is therefore considered failing to meet expectations if its delivery of desired output and outcome is not accomplished in accordance with what was expected in terms of time, cost and quality. This makes project management practices fundamental for enhanced project performance. Project management practices refer to the various strategies and mechanisms that organizations apply or use in executing their projects (Fernandes, Ward & Araujo, 2013). The rate of project failure in general is quite high and government hosted projects under the Agricultural Sector Development Support Projects (ASDSP) are no exception (Amponsah, 2014). This is even worse especially where international development partners are involved where they sponsor the projects that are hosted by the government of the host state, where such projects according to Ahsan and Gunawan (2010) are after improvement of the life of the citizenry. Most of the projects often fail or are unable to accomplish the objective of cost, scope and or time. In Kenya, most government projects being implemented in the counties have failed to attain their set objectives and or do not produce the desired results to the public. This question the project management practices being adopted in execution of these projects. Given that projects in different sectors have different uniqueness due to the fundamental differences existing across projects (Mir & Pinnington, 2014), the dilemma therefore is: how does project management practices influence projects' performance across different government sectors?A review of the existing studies thus makes it apparent that there is inadequate research on how different practices in project management influences ASDSP performance hence little knowledge about the same. This research therefore assessed the influence of project management practices on ASDSP performance in Kiambu County. The objectives were:

- To assess the influence of stakeholders' involvement on performance of agricultural sector development support projects in Kiambu County, Kenya
- To establish the influence of resources allocation on performance of agricultural sector development support projects in Kiambu County, Kenya
- To evaluate the influence of project planning on performance of agricultural sector development support projects in Kiambu County, Kenya

• To determine the influence of monitoring and evaluation on performance of agricultural sector development support projects in Kiambu County, Kenya

#### 2. Materials and Methods

The study was conducted on three major ASDSPs in Kiambu County, Kenya including: indigenous chicken project, dairy cows project and bananas project. A total population of 127County Coordinating Unit (CCU) officers comprising of 10 project officers in CCU in the County and 117 members in the three Value Chain Platforms (VCP) members were targeted.

#### 2.1. Study Design

Descriptive research design was applied.

#### 2.2. Study Duration

March 2018 to July 2019

#### 2.3. Sample Size Calculation

Since the CCU officers they were only 10 officers, all of them were included in the sample. The sample size for VCPs members was computed through the Slovin's formula suggested by Ariola (2006):  $n = N / (1 + Ne^2)$ ; Where n, N and e are the sample size, the total population and error tolerance (significance level) respectively. Thus, the sample size was:n= 117/ (1+117(0.05)<sup>2</sup>) = approximately 91respondents. Thus, the total sample size for the study was 101 respondents (10 CCU officers + 91 VCPs members).

#### 2.4. Subjects and Selection Method

Apart from the CCU officers where the entire 10 officers were selected, the VCP members were selected proportionately from the three different ASDSPs whereby equal proportions were selected from each of the ASDSP. The proportion was given by  $n \div N$  (91÷117) which was approximately 0.7778. The respondents selected for the sample size were thus distributed as illustrated in Table 1.

| Category                               | Population(N) | Proportion(P) | Sample Size (P x N) |
|--|---------------|---------------|---------------------|
| CCU officers                           | 10            | N/A           | 10                  |
| Indigenous chicken project VCP members | 46            | 0.7778        | 36                  |
| Dairy cows project VCP members         | 45            | 0.7778        | 35                  |
| Bananas project VCP members            | 26            | 0.7778        | 20                  |
| Total                                  | 127           |               | 101                 |

Table 1: Sample Size Distribution

#### 3. Data Collection Procedure/Methodology

A questionnaire was used to collect quantitative data from the VCP members while an interview guide was used to collect data from the CCU officers. The researcher arranged with the institutions involved, on the date and time of data collection. On the agreed date, the researcher administered the questionnaires throughdrop-and-pick method and a register of administered questionnaires maintained to help in following up and collecting the questionnaires administered. The interview guides were administered through face-face interview.

#### 4. Data Analysis

Qualitative data relating to each of the variables was analysedby organizing the qualitative data into themes in accordance to the study objectives. Quantitative datawas coded and entered into Statistical Program for Social Sciences (SPSS) version 22. Descriptive statistics were first computed including the frequency, percentage, mean and standard deviation. Inferential statistics were then computed including Pearson's Correlation analysis and regression analysis.

#### 5. Results

#### 5.1. Response Rate

Out of 91 questionnaires administered, 65 (71.4%) of them were duly filled and returned. For the interview's guides, out of the 10 targeted CCU officers, 7 (70%) of them consented and participated in the study. Consequently, the overall response rate was 72 (65+7) out of the targeted 101 which is equivalent to 71.3% response rate.

These aspects pertaining to the different objectives were assessed on a 5-point Likert scale whereby: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The mean scores as per the responses were then computed based on the scale. High mean (those closer to 5) indicated a high prevalence of the subject aspect as expressed and vice versa. Standard deviation (Std. dev) measured the degree of unanimity in responses, where lower standard deviation was interpreted to express similar or close to similar opinions with the mean rating among the respondents.

| oizi otakonolaolo initolitolitolitalia i ojooti olitoliinanoo | 5.2. | Stakeholders' | Involvement | and Project | Performance |
|---|------|---------------|-------------|-------------|-------------|
|---|------|---------------|-------------|-------------|-------------|

| Statement  | 5     | 4     | 3     | 2     | 1    | Mean | Std dev |
|--|-------|-------|-------|-------|------|------|---------|
| In ASDSP, farmers are  | 23.1% | 38.5% | 20.0% | 10.8% | 7.7% | 3.6  | 1.2     |
| planning of the activities   |       |       |       |       |      |      |         |
| In ASDSP, farmers are  | 36.9% | 50.8% | 7.7%  | 3.1%  | 1.5% | 4.2  | 0.8     |
| implementation of the activities   |       |       |       |       |      |      |         |
| Local authorities are adequately<br>involved in the planning stage of<br>ASDSP       | 32.3% | 46.2% | 15.4% | 3.1%  | 3.1% | 4.0  | 0.9     |
| Local authorities are adequately<br>involved in the implementation<br>stage of ASDSP | 35.4% | 47.7% | 13.8% | 1.5%  | 1.5% | 4.1  | 0.8     |
| Average  |       |       |       |       |      | 4.0  | 0.9     |

Table 2: Stakeholders' involvement in ASDSP in Kiambu County

The overall stakeholders' involvement was rated at a mean of 4.0 with a standard deviation of 0.9. There is high farmers involvement in implementation of activities in ASDSP (mean = 4.2; Std dev = 0.8). Local authorities are also largely involved in the implementation stage of ASDSP (mean = 4.1; Std dev = 0.8) as well as in the planning stage (mean = 4.0; Std dev = 0.9). The CCU officers unanimously expressed that stakeholders' engagement has an important role in the performance of ASDSP. One of them expressly stated that, 'Through effective stakeholders' engagement, we have managed to achieve various goals for the projects.'

#### 5.3. Resources Allocation and Project Performance

| Statement                   | 5     | 4     | 3     | 2     | 1     | Mean | Std dev |
|-----------------------------|-------|-------|-------|-------|-------|------|---------|
| In ASDSP, adequate finances | 29.2% | 40.0% | 15.4% | 10.8% | 4.6%  | 3.8  | 1.1     |
| are allocated for the       |       |       |       |       |       |      |         |
| different activities and    |       |       |       |       |       |      |         |
| events involved             |       |       |       |       |       |      |         |
| In ASDSP, there is adequate | 20.0% | 30.8% | 26.2% | 13.8% | 9.2%  | 3.4  | 1.2     |
| human resource allocated    |       |       |       |       |       |      |         |
| for the different tasks     |       |       |       |       |       |      |         |
| involved                    |       |       |       |       |       |      |         |
| There is transparency in    | 13.8% | 26.2% | 29.2% | 16.9% | 13.8% | 3.1  | 1.2     |
| allocation of financial     |       |       |       |       |       |      |         |
| resources in ASDSP          |       |       |       |       |       |      |         |
| Recruitment and allocation  | 16.9% | 29.2% | 29.2% | 13.8% | 10.8% | 3.3  | 1.2     |
| of human resource for       |       |       |       |       |       |      |         |
| different tasks in ASDSP is |       |       |       |       |       |      |         |
| based on competence         |       |       |       |       |       |      |         |
| Average                     |       |       |       |       |       | 3.4  | 1.2     |

 Table 3: Resources allocation in ASDSP in Kiambu County

On average, the overall resources allocation in ASDSP was rated at a mean of 3.4 with a standard deviation of 1.2. The members affirmed that adequate finances are allocated for the different activities and events involved (mean = 3.8; Std dev = 1.1), but were neutral on the transparency in allocation of financial resources in ASDSP (mean = 3.1; Std dev = 1.2) and on adequacy of human resource allocated for the different tasks involved (mean = 3.4; Std dev = 1.2). The CCU officers expressed that allocation of financial resources played a major role in enabling the provision of requisite inputs for ASDSP. One of them explained that, 'Finances are used to procure the inputs needed to be availed to the farmers.'Human resource was largely alleged to be used in the management and administration of the projects as well as training of the farmers. One of the them indicated that, 'The projects usually require adequate human resource to be run effectively especially in the management.'

Std dev

1.2

0.9

1.3

1.2

1.1

3.5

| Statement   | 5     | 4     | 3     | 2     | 1     | Mean |
|---|-------|-------|-------|-------|-------|------|
| In ASDSP, there is proper<br>planning for the<br>implementation of different<br>phases of the project | 26.2% | 32.3% | 20.0% | 13.8% | 7.7%  | 3.6  |
| In ASDSP, budgets are always<br>prepared and used to guide<br>the use of financial resources          | 33.8% | 44.6% | 16.9% | 3.1%  | 1.5%  | 4.1  |
| Integrity is observed while<br>preparing the budgets in<br>ASDSP                                      | 13.8% | 29.2% | 23.1% | 20.0% | 13.8% | 3.1  |
| Strategic plans are usually used to guide the   | 16.9% | 35.4% | 21.5% | 16.9% | 9.2%  | 3.3  |

5.4. Project Planning and Project Performance

implementation of different activities in ASDSP

Average

Table 4: Project planning in ASDSP in Kiambu County

On average, the overall project planning in ASDSP in Kiambu County was rated at a mean of 3.5 with a standard deviation of 1.1. The members asserted that in ASDSP, budgets are always prepared and used to guide the use of financial resources (mean = 4.1; Std dev = 0.9), and there is proper planning for implementation of different phases of the project (mean = 3.6; Std dev = 1.2). Even so, they were neutral on allegation that integrity is observed while preparing the budgets in ASDSP (mean = 3.1; Std dev = 1.3). The CCU officers indicated that through project planning, they have managed to minimize misappropriation of resources. One of them stated that, 'Project planning helps to minimize wastage in the projects.'

#### 5.5. Monitoring and Evaluation and Project Performance

| Statement  | 5     | 4     | 3     | 2     | 1    | Mean | Std dev |
|--|-------|-------|-------|-------|------|------|---------|
| In ASDSP, implementation of<br>different activities is<br>adequately supervised                                  | 29.2% | 43.1% | 15.4% | 4.6%  | 3.1% | 3.8  | 1.3     |
| In ASDSP, field visits are<br>regularly done to examine the<br>progress of the project                           | 26.2% | 32.3% | 29.2% | 7.7%  | 4.6% | 3.7  | 1.1     |
| Interim progress reports are<br>often prepared and used to<br>address the faults identified in<br>implementation | 20.0% | 35.4% | 21.5% | 13.8% | 9.2% | 3.4  | 1.2     |
| In ASDSP, there is a proper<br>framework for monitoring and<br>evaluation  | 23.1% | 33.8% | 24.6% | 10.8% | 7.7% | 3.5  | 1.2     |
| Average  |       |       |       |       |      | 3.6  | 1.2     |

Table 5: Monitoring and evaluation in ASDSP in Kiambu County

On average, the overall monitoring and evaluation practice was rated at a mean of 3.6 with a standard deviation of 1.2.1t was affirmed that implementation of different activities is adequately supervised (mean = 3.8; Std dev = 1.3). The members further attested that field visits are regularly done to examine the progress of the project (mean = 3.7; Std dev = 1.1). They however disputed that interim progress reports are often prepared and used to address the faults identified in implementation (mean = 3.4; Std dev = 1.2). Regarding monitoring and evaluation in ASDSP, one of the CCU officers interviewed explained that, 'We have field officers who monitor the implementation of different project activities.'

#### 5.6. Performance of ASDSP

| Statement  | 5     | 4     | 3     | 2     | 1     | Mean | Std Dev |
|--|-------|-------|-------|-------|-------|------|---------|
| The different phases of ASDSP are<br>usually completed within the set<br>time  | 24.6% | 38.5% | 23.1% | 7.7%  | 6.2%  | 3.7  | 1.1     |
| The various activities and events<br>involved in ASDSP are done at<br>reasonable cost within the budget<br>estimates | 16.9% | 41.5% | 16.9% | 13.8% | 10.8% | 3.4  | 1.2     |
| ASDSP has enhanced agribusiness<br>and improved the growth of the<br>overall agricultural sector                     | 33.8% | 44.6% | 15.4% | 3.1%  | 3.1%  | 4.0  | 0.9     |
| Farmers who are beneficiaries of<br>ASDSP are usually satisfied with<br>the services they get through<br>ASDSP.      | 30.8% | 43.1% | 13.8% | 9.2%  | 3.1%  | 3.9  | 1.0     |
| Average  |       |       |       |       |       | 3.8  | 1.1     |

Table 6: Performance of ASDSP in Kiambu County

The overall performance of ASDSP was rated at a mean of 3.8 with a standard deviation of 1.1. The members were categorical that ASDSP has enhanced agribusiness and improved the growth of the overall agricultural sector in the County (mean = 4.0; Std dev = 0.9). They also expressly affirmed that farmers who are beneficiaries of ASDSP are usually satisfied with the services they get through ASDSP (mean = 3.9; Std dev = 1.0). However, there were doubts that the various activities and events involved in ASDSP are done at reasonable cost within the budget estimates (mean = 3.4; Std dev = 1.2). The CCU officers unanimously alleged that performance of ASDSP in the county was good. One of them stated that, 'It is quite good. It has helped many farmers increase their household income.'

5.7. Inferential Statistics

|                           |                     | Performance of ASDSP |
|---------------------------|---------------------|----------------------|
| Stakeholders' involvement | Pearson correlation | 0.805(*)             |
|                           | Sig. (2-tailed)     | 0.01                 |
|                           | N                   | 65                   |
| Resources allocation      | Pearson correlation | 0.769(*)             |
|                           | Sig. (2-tailed)     | 0.01                 |
|                           | Ν                   | 65                   |
| Project planning          | Pearson correlation | 0.780(*)             |
|                           | Sig. (2-tailed)     | 0.01                 |
|                           | N                   | 65                   |
| Monitoring and evaluation | Pearson correlation | 0.755(*)             |
|                           | Sig. (2-tailed)     | 0.01                 |
|                           | N                   | 65                   |

Table 7: Correlation Analysis Results

\* Correlation Is Significant at 0.05 Significance Level

A significant strong positive correlation was found between performance of ASDSP and each of the independent variables including stakeholders' involvement (r = 0.805, p < 0.05); project planning (r = 0.780, p < 0.05); resources allocation(r = 0.769, p < 0.05); and monitoring and evaluation(r = 0.755, p < 0.05).

| R     | R Square | Adjusted R Square |
|-------|----------|-------------------|
| 0.891 | 0.793    | 0.719             |

Table 8: Model Summary

Predictors: (Constant), Stakeholders' Involvement, Resources Allocation, Project Planning and Monitoring and Evaluation The value of R Square was 0.793 indicating that stakeholders' involvement, resources allocation, project planning and monitoring and evaluation jointly explain 79.3% of the changes in ASDSP performance.

|            | Sum of Squares | df | Mean Square | F      | Sig.  |
|------------|----------------|----|-------------|--------|-------|
| Regression | 21.720         | 4  | 5.430       | 57.572 | 0.001 |
| Residual   | 5.659          | 60 | 0.094       |        |       |
| Total      | 27.379         | 64 |             |        |       |

#### Table 9: ANOVA

Predictors: (Constant), Stakeholders' Involvement, Resources Allocation, Project Planning and Monitoring and Evaluation Dependent Variable: Performance of ASDSP

The F statistic was significant (p=0.001<0.05) indicating that the regression model estimated for the relationship between the dependent and independent variables was significant at the 5 percent level of significance.

|                           | Coefficients(a)                |            |       |      |
|---------------------------|--------------------------------|------------|-------|------|
|                           | Unstandardized<br>Coefficients |            | t     | Sig. |
|                           | В                              | Std. Error |       |      |
| (Constant)                | 0.493                          | 0.197      | 5.120 | .000 |
| Stakeholders' involvement | 0.621                          | 0.064      | 9.201 | .000 |
| Resources allocation      | 0.385                          | 0.047      | 3.559 | .000 |
| Project planning          | 0.447                          | 0.380      | 3.775 | .001 |
| Monitoring and evaluation | 0.322                          | 0.050      | 2.816 | .000 |

Table 10: Regression coefficients

Dependent Variable: Performance of ASDSP

From the regression coefficients, the estimated regression equation was expressed as:

 $Performance of ASDSP = 0.493 + 0.621 \ Stakeholders' \ involvement + 0.385 \ Resources \ allocation + 0.447 \ Project \ planning + 0.322 \ Monitoring \ and \ evaluation$ 

The regression coefficients indicated that improving stakeholder involvement; resources allocation, project planning; and monitoring and evaluation by one unit increases performance of ASDSP by 0.621, 0.385, 0.447 and 0.322 respectively. The influence by each of them was significant at 5 percent significance level sincep values (Sig.) were less than 0.05 for all the coefficients.

#### 6. Discussion

It is apparent from the findings that stakeholders' involvement greatly influences the performance of ASDSP in Kiambu County. The findings support the findings by Kobusingye, Mungatu and Mulyungi (2017) that stakeholders' involvement has a major influence on project performance.

Similarly, findings imply that resources allocation exerts a positive impact on performance of ASDSP in the County. The findings concur with Reddy, Nagaraju and Salman (2015) whose findings also revealed a significant positive effect of resources allocation on project performance.

A significant positive influence of project planning on performance of ASDSP was also evident in the findings. This is commensurate the findings by Serrador (2013) that project planning is a major determinant of performance in most projects.

It was apparent that interim progress reports for monitoring and evaluationare rarely used in ASDSP in Kiambu County. According to Kimweli (2013), despite monitoring and evaluation frameworks being existent for most projects, previous project reports are scarcely used to improve ongoing project activities. Its influence onperformance of ASDSP is relatively lower compared to other factors including stakeholders' involvement, resources allocation and project planning. Nevertheless, its positive impact on performance of ASDSP is also significant.

#### 7. Conclusion

In a nutshell, the study concludes that all the four project management practices investigated (stakeholders' involvement, resources allocation, project planning and monitoring and evaluation), are critical determinants of performance of ASDSPs.

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