

## **INFLUENCE OF NGO-PRIVATE AND PUBLIC SECTOR COLLABORATION ON SUSTAINABILITY OF DONOR- SUPPORTED TREYL AGRICULTURE PROJECT IN KISUMU, KENYA**

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**Abstract:** *This study sought to find out how project management approaches influence sustainability of donor supported agriculture projects in Kenya with a reference to IKEA funded Transforming Rural Economies and Youth Livelihoods (TREYL) project implemented by Practical Action Organization in Kisumu County. The study focused on the assessment of how NGO- private and public-private sector collaboration influences sustainability of donor-supported TREYL agriculture project in Kisumu County.*

**Purpose:** *There is an approaching storm of hunger which could hit thousands of Kenyans citizens in the future and if this study is not carried out as many donor- supported agricultural projects would take longer to reach the level of self-sustaining risking food security.*

**Methodology:** *A descriptive study design was employed. The targeted population of the study were the 300 direct beneficiaries. A stratified and purposive sampling was used to select a sample of 158 respondents determined using Yamane's formula. A self-administered questionnaire was used to obtain primary data. A pilot study was conducted and through Cronbach alpha, reliability of the research instrument indicated a coefficient of 89%. Hardcopies were given to the participants using the drop-pick method. Response rate was 72%. The raw data was coded, validated, and entered into a statistical package for social sciences (SPSS version 25) for analysis by use of multiple regression to establish the relationship between variables.*

**Findings:** *The findings of this study indicated that NGO-private and public sector collaboration significantly influence the sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya. The direct beneficiaries confirmed through project engaging collaborative stakeholders they received capacity building on different agribusiness aspect, accessed extension services, inputs, and financial products, which improved competitiveness within a market chain.*

**Keywords:** *donor-supported, private and public-private, agriculture projects*

### **Background of the Study**

Globally, sustainability of donor funded agriculture projects has been a big challenge to international, national and local development agencies whose one of the key priority is addressing food security (USAID, 2018). Major donors such as the United Nations, World Bank, and USAID among other bilateral aid agencies cannot hide disappointment on agriculture project sustainability as there is no evidence on economic and social return on the project investment despite the millions of dollars injected through funding (Ika *et al.*, 2012; Hayward & Neuberger, 2010).

A study by Ellersiek (2018) in Germany on donor supported projects indicated that despite the continued donor support in the agriculture sector, little has been achieved in sustaining projects beyond donor's withdrawal due to lack of participatory based approaches to allow the community take on the processes diligently after donors exit. Islam (2007) study in Bagladesh discovered that many donors supported agriculture projects did not move beyond donor's support. The study closely attributed this to failure to develop beneficiary ownership at early project stages.

In Africa, agriculture initiatives have received significant government and development agencies support, but limited success has been seen when it comes to sustainability. Sub-Saharan African states, have reported operational failure rates between 30 and 60 percent after donor withdrawal (Sisaye, 2012; Gebrehiwot, 2006). Mosohlo (2016) study on sustainability of donor aided food security project in Lesotho revealed that though major objectives of the sponsors were realized, their impact seized day by day after donors exited. This is can be said to be the trend in developing countries like Kenya where new projects are launched without drawing any lessons from the previous ones (Wicander & Coad, 2015).

As explained by Businge (2008) a survey conducted in Uganda's Rwenzori highlands to investigate projects implemented with donor funding, shows that despite increased donor funding to African governments and donor agencies for poverty reduction programs, poverty is on the rise. The study shows there are gaps in project management approaches being implemented to promote continuity of socioeconomic impacts on beneficiaries after donors pull out. USAID, (2013) defines high sustainability as levels where project benefits are enjoyed for many years while in low sustainability levels, once the donor exits, everything comes to a standstill.

In Kenya, just like many least developing countries, agriculture projects have also been implemented by various donors not only to transform economies but also youth livelihoods (Atela *et al.*, 2017). Donor supported agriculture initiatives have a relatively low sustainability level and some stop their operations immediately the funding comes to an end (Abdi, 2020). As reasoned by Oino *et al.*, (2015) many donors supported initiatives highlight measures to ensure sustainability at proposal stage, but this is totally ignored during implementation. In the Lake Basin region where households continue to thrive in extreme hunger, the search for increased agricultural production and sustainability of donor-supported agriculture project solutions remains a challenge (Opiyo *et al.*, 2018).

There is no documented study has been conducted in Kisumu county to find out why the benefits realized by target groups are not sustained when external support ends. Studies carried out in other health and water sectors reveal that incorporation of participatory related approaches can positively influence sustainability of donor funded projects.

### **Problem Statement**

Ellersiek (2018) agrees that foreign aid has continued to play a crucial role worldwide to promote the living standards of the people through launch and implementation of various development projects. Despite this support, the reality is that most projects do not proceed after the sponsor budget is exhausted. A UN joint monitoring assessment estimated that 50% of donor projects implemented in Africa by 2007 had failed as the sponsors focused on short-term, project-driven interests (Chauvet *et al.*, 2010).

Global studies focusing on development projects have shown the need for project sponsors to adopt project management approaches to ensure sustainability of agriculture projects (Rivera & Alex, 2005; Kidd, 2004). If this study is not carried out, there was a decline in number of donor-supported agricultural projects hence the targeted 50 % increase in agriculture output by 2030 will not be attained exposing the future generation to food

security crisis. It is due to this gap that this study tries to address with an interest on project management approaches and their influence on sustainable agriculture projects.

### **NGO- private and public- Private Sector Collaboration and DSAPs Sustainability**

For sustainability purposes, it is important for donor supported agriculture projects to create partnerships with the appropriate entities at the start of project cycle to enable transfer of roles to whoever is best suited gradually and with formal agreements where appropriate when the donor period expires (Kisang, 2019; Gwaya *et al.*, 2014). NGOs- private sector collaboration can help NGOs and businesses achieve their goals by synergizing on each other's complementary skills as well as resources. In this partnership NGOs gets an opportunity to increase social impact for the target groups by implementing sustainable and scalable solutions. On the other hand, businesses find new markets, develop new products and services (Larsson & Larsson, 2020; Kivila *et al.*, 2017). Stakeholders representing the supply and demand side should be brought in at project selection and prioritization stage to ensure that they entirely own the idea and accept full responsibility for something they own and support with implementation of project interventions (Ellersiek, 2018; Kuei & Lu, 2013). As noted by Fulgham and Shaughnessy (2013) one of the key aspects of project sustainability is collaborative partner's commitment that they will continue with project intervention even when the sponsor pulls out through long term investment to the community.

As per Ferris *et.al.*, (2014) engaging stakeholders in a meaningful way adds value to the project in the following ways: it facilitates information sharing through sensitization forums; capacity building; it promotes business partnership between beneficiaries and market actors; it provides platforms for market linkages as well as networking opportunities; continued provision of quality inputs and service (Morrow *et al.*, 2011). As recommended by Kusek and Rist (2004) involving the private sector is important because it allows it to learn how and when to adapt and make adjustments to interventions based on their strengths and weaknesses identified at all stages. As reported by Engels (2010) in many African countries sustainability of donor funded projects has been a gray area due to use of centered own strategy where collaborative stakeholders are left out leading to failure and neglected projects which could have been impactful.

### **NGO- Private and Public Sector Collaboration Influence on Project Sustainability**

Ndombi *et al.*, (2020) examined implementing specific project exit strategies such as linking the community to service providers' influences sustainability of donor-funded livelihood projects in Kilifi county. The study used pragmatic paradigm and descriptive correlational research design where a population of 295 provided a sample size of 170 using Slovin's formula. The data collection tools included focus group discussions, interviews and questionnaires. The findings indicated that involvement of stakeholders for support service linkages is one of the practices that significantly influence donor funded agriculture project sustainability.

Mutegi *et al.*, (2019) investigated the factors which enable the sustainability of agriculture projects supported by donors in the Tharaka South sub-county. An exploratory methodology in combination with a descriptive study was used. The study sought for feedback from 400 project beneficiaries using a combined methodology of simple random and purposive sampling. 90% of the target group took part in the study. Questionnaires, with open and closed responses formed part of the primary data collection tools. The raw data was coded and analyzed by using a descriptive method. Stakeholder engagement and the sustainability of donor-supported agriculture projects were found to be positively and significantly correlated. The financial contributions from stakeholders to support some project interventions was also reported to be a strong supporting factor to sustainability. This means that stakeholders form an important quorum in supporting the sustainability of the projects.

Ochunga (2016) study focused on how engaging private sector influences sustainability of community based development in Homa Bay Town Sub-County as implemented by Plan International. Three respondents were targeted from each organization to represent the 51 partner organizations totaling to a 153 people who through Simple random sampling were narrowed to 113 respondents. Questioners provided the basis for data collection. From the findings, there was an evidence of weak private sector engagements thus lack of assurance on project sustainability. This provides a ground that private sector involvement could be considered as one approach to address the issue of problem of project sustainability.

The study by Ngatia (2018) on factors influencing sustainability of projects supported by donors in Garissa county used a descriptive methodology. The targeted respondents included funded project leads, implementing partners, and project beneficiaries. The study used stratified sampling to define the number of respondents from forming each category. Primary data was gathered through a semi-structured survey form and secondary data was obtained using desk search approaches from previous scholarly articles found on the website. Quantitative data was scrutinized using a multivariate regression analysis methodology and to comprehend the qualitative data the content analysis methodology was used. Indications from inferential results pointed towards stakeholder participation being one of the supporting factors for sustainability of community projects supported by the donors.

Migwi (2017) studied the effects of stakeholder involvement at different project stages on project sustainability. The target population included 200 people who had been engaged in JKUAT funded community projects. The study methodology that was used was the case study. Data was collected from the field through the use of a questionnaire given to the respondent while secondary data was collected from sponsor institution scholarly papers. To analyze data, the Statistical Package for Social Sciences software was used. Recommendations show that stakeholders should be fully engaged in all project stages to ensure they take on after donor funding withdrawn. It was also evident that before the donor agencies begin working on the project, there should be a detailed strategy to mainstream project sustainability in all the phases with actionable steps taken to ensure the project outputs are enjoyed by the beneficiaries.

### **Objective of the Study**

The general objective of the study was to assess project management approaches on sustainability of donor supported agriculture projects in Kenya with a specific objective to assess how the NGO- private and public sector collaboration influences sustainability of donor- supported TREYL agriculture project in Kisumu.

### **Research Methodology**

A descriptive study design was employed. The targeted population of the study were the 300 direct beneficiaries. A stratified and purposive sampling was used to select a sample of 158 respondents determined using Yamane's formula. A self-administered questionnaire was used to obtain primary data. A pilot study was conducted and through Cronbach alpha, reliability of the research instrument indicated a co-efficient of 89%. Hardcopies were given to the participants using the drop-pick method. Response rate was 72%. The raw data was coded, validated, and entered into a statistical package for social sciences (SPSS version 25) for analysis by use of multiple regression to establish the relationship between variables.

### **Research Findings and Discussion**

The objective of the study sought to investigate how the NGO-private sector collaboration influences on sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya. The respondents were supposed to indicate their level of agreement or disagreement with statements on the sub-construct of variable;

capacity building, access to quality inputs and services, linkage to finance and markets. This is presented on the 5-point Likert scale as 5= Strongly Agree 4= Agree 3= neither agree/disagree 2= Disagree 1= Strongly Disagree as shown in *Table 1* below:

*Table 1: Descriptive statistics on NGO-private and public sector collaboration*

| S/No                    | Indicators                   | N          | Mean         | Std. Deviation |
|-------------------------|------------------------------|------------|--------------|----------------|
| 1.                      | Capacity Building            | 141        | 2.23         | 1.432          |
| 2.                      | Access to quality inputs     | 141        | 4.34         | 1.088          |
| 3.                      | Access to extension services | 141        | 4.22         | 1.013          |
| 4.                      | Linkage to credit services   | 141        | 3.05         | 1.359          |
| 5.                      | Market Linkages              | 141        | 4.25         | .855           |
| <b>Aggregate scores</b> |                              | <b>141</b> | <b>3.618</b> | <b>1.1494</b>  |

The findings, as highlighted in *Table 1* above shows that respondents had a neutral opinion by a mean of 2.23 and a standard deviation of 1.432 that they had acquired adequate knowledge and skills through capacity building sessions on production, post-harvest, marketing, and business development skills facilitated by the project partners. The findings align with Ndombi *et al.*, (2020) that capacity building through training enhances knowledge and skills of project beneficiaries to make good use of available resources and generate income with minimum of external support. Mottaleb *et al.*, (2014) study concluded that providing basic training on production, modern agriculture technologies, and business development skills strengthens market linkages. Karanja (2014) study in Murang'a found out that capacity building had a positive influence on sustainability of income generating activities.

With regards to access to quality input and access to extension services statement, majority of the respondents agreed with the statement by a mean of 4.34 and 4.22 with standard deviations of 1.088 and 1.013 respectively. The findings align with Ndombi *et al.*, (2020) that linking farmers to inputs and service providers through project partnerships ensures that the beneficiaries have access supportive services even after the project terminates the support.

On the fourth indicator, the majority of the respondents were neutral with the statement that they have been to access quality inputs and extension services by a mean of 3.05 and a standard deviation of 1.359. The finding is backed up by Davis (2004) study findings that access to credit services has a positive influence on sustainability of donor supported projects in the rural set up.

The last indicator measured level of beneficiary's agreement to linkage to market through project partner and majority reported a positive feedback with a mean of 4.25 and a standard deviation of 0.855. This aligns with Davis (2004) study in Latin American which concluded that improving market linkages had a positive effect on project sustainability.

Therefore, the findings imply that TREYL project has engaged private sector on both demand and supply side for input and service linkages to the beneficiaries who have added value to the target group with evidence of

continued project output. This study agrees with a study finding as noted by Ndombi *et al.*, (2020) that one of the key aspects of project sustainability is collaborative partner's commitment that they will continue with project intervention especially provision of inputs and services even when the sponsor pulls out. The findings also align with Ndombi *et al.*, (2020) that linking farmers to inputs and service providers through project partnerships ensures that the beneficiaries have access supportive services even after the project terminates the support.

### Regression Model on influence of NGO-Private and Public Sector Collaboration

To explore the influence of NGO-private and public sector collaboration on sustainability of donor-supported TREYL agriculture project in Kisumu regression results are as shown in *Table 2* below:

*Table 2: NGO- Private and Public Sector Collaboration*

| <b>Model Summary<sup>b</sup></b> |                   |          |                   |                            |                   |          |     |     |             |   |
|----------------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|-------------|---|
| <b>Model</b>                     | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |             |   |
|                                  |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. Change | F |
| <b>1</b>                         | .647 <sup>a</sup> | .419     | .213              | 1.149                      | .218              | 38.796   | 1   | 139 | .000        |   |

| <b>ANOVA<sup>b</sup></b> |            |                |     |             |        |                   |
|--------------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model                    |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
| 1                        | Regression | 2077.468       | 1   | 2077.468    | 38.796 | .000 <sup>a</sup> |
|                          | Residual   | 1141.511       | 140 | 6.008       |        |                   |
|                          | Total      | 3218.979       | 141 |             |        |                   |

| <b>Coefficients<sup>a</sup></b> |                                           |                             |            |                           |       |      |
|---------------------------------|-------------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model                           |                                           | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|                                 |                                           | B                           | Std. Error | Beta                      |       |      |
| 1                               | (Constant)                                | .868                        | .287       |                           | 3.018 | .000 |
|                                 | NGO-private & public sector collaboration | .447                        | .072       | .647                      | 6.229 | .000 |

a. Dependent Variable: Sustainability

From the results of *Table 2* above,  $R^2 = 0.419$ , implying that 41.9 % variations in sustainability of donor supported agriculture project in Kenya is influenced by NGO-private and public sector collaboration while other factors not considered in the study accounts for 58.1%.

The ANOVA results shows that P value is 0.000 which is less than 0.05 confirming that NGO-private and public sector collaboration has positive significant influence on sustainability of donor supported agriculture projects in Kenya.

Co-efficient analysis indicates that the beta value 0.467 which means 1 unit change in NGO-private and public sector collaboration brings change in sustainability of donor supported agriculture projects by 0. 647 units. Furthermore, the positive beta value shows a positive relationship between NGO-private and public sector collaboration and sustainability of donor supported agriculture projects

Therefore, the linear regression equation is;

$$(i) Y = 0.868 + 0.447 X_1$$

Where;

Y = Sustainability of donor supported projects

X<sub>1</sub> = NGO-private and public sector collaboration.

Table 3: Coefficients

| Model                                     | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------------------------------------------|-----------------------------|------------|---------------------------|--------|------|
|                                           | B                           | Std. Error | Beta                      |        |      |
| (Constant)                                | -1.541                      | .276       |                           | -5.593 | .000 |
| NGO-private & public sector collaboration | .222                        | .051       | .233                      | 4.359  | .000 |

a. Dependent Variable: Sustainability of donor funded agriculture projects

b. Predictors: (Constant) NGO-private & public sector collaboration

The values of unstandardized regression coefficients with standard errors in parenthesis in Table 3 indicate that the study's independent variable NGO-private and public sector collaboration;  $\beta = 0.222$  (0.151) at  $p < 0.05$ , significantly influenced sustainability of donor supported TREYL agriculture project.

The study's final multiple regression equation is;

$$Y = -1.541 + 0.222 X_1$$

Where;

Y= sustainability of donor supported agriculture projects

X<sub>1</sub>= NGO- private and public sector collaboration

### Testing of study hypotheses

The first **hypothesis (H<sub>01</sub>)** of this study indicated that NGO-private and public sector collaboration has no significant influence on sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya. Multiple regression results indicate that NGO-private and public sector collaboration has a positive and significant influence donor- supported TREYL agriculture project in Kisumu, Kenya ( $\beta = 0.222$  (0.151)) at  $p < 0.05$ ). **Hypothesis is therefore rejected.** The findings show that 1-unit increase NGO-private and public

sector collaboration will lead to 0.222-unit increase in the sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya.

Engaging the private sector in a meaningful way adds value to the project in the following ways: it facilitates information sharing through sensitization forums; capacity building; it promotes business partnership between beneficiaries and market actors; it provides platforms for market linkages as well as networking opportunities; continued provision of quality inputs and service (Ferris *et al.*, 2014). Ndombi *et al.*, (2020) proved that that linking farmers to inputs and service providers through project partnerships ensures that the beneficiaries have access supportive services even after the project terminates the support. Kindornay *et al.*, (2012) justified that that to improve sustainability of agriculture projects, quality and supply of agricultural products which can be achieved by improving the production skills, access to markets and finance are key factors. Donors should engage partners on both demand and supply side who will still continue with the interventions even after funding has been withdrawn.

### Summary of the Findings

The study findings show that NGO-private and public sector collaboration significantly influence the sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya. This study agrees with study findings as noted by Ndombi, *et al.*, (2020) that one of the key aspects of project sustainability is project partners' commitment that they will continue with project intervention even when the sponsor pulls out through long term investment to the community. The direct beneficiaries confirmed through project engaging collaborative stakeholders they received capacity building on different agribusiness aspect, accessed extension services, inputs, and financial products, which improved competitiveness within a market chain.

The influence of NGO-private and public sector collaboration was able to predict 0.419 (41.9%) of the variation in sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya with p-value at 0.000 hence study rejected the null hypothesis NGO-private and public sector collaboration has no significant influence on sustainability of donor- supported TREYL agriculture project in Kisumu, Kenya. This result suggests that NGO-private and public sector collaboration has revolutionized sustainability of donor-supported TREYL agriculture project in Kisumu, Kenya. This finding buttresses with a study done by Ferris *et al.*, (2014) who noted that engaging the private sector as partners adds value to the project in the following ways: it facilitates information sharing through sensitization forums; capacity building; it promotes business partnership between beneficiaries and market actors; it provides platforms for market linkages as well as networking opportunities; continued provision of quality inputs and service.

Ali and Gitonga (2019) study on stakeholder's role on the performance of constituency development fund projects in Kenya collaborative stakeholders significantly influence the sustainability of project as they continue with provision of resources when the donor funding comes to an end. Ferris *et al.*, (2014) while investigating the effects of linking smallholder farmers to markets and extension and advisory services concluded that there is need for donor supported projects to strengthen partnerships with public and private sectors through co-investment to provide farmers with business services and strengthen extension systems to boost production and access to markets

Kindornay *et al.*, (2012) study supports this study by justifying that to improve sustainability of agriculture projects, quality and supply of agricultural products which can be achieved by improving the production skills, access to markets and finance are key factors. Donors should engage partners on both demand and supply side who will still continue with the interventions even after funding has been withdrawn.

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