EMPIRICAL ANALYSIS OF THE MODERATING INFLUENCE OF COMMUNITY PARTICIPATION ON THE RELATIONSHIP BETWEEN TECHNICAL ASSISTANCE AND SUSTAINABILITY OF DONOR FUNDED PROJECTS IN SAMBURU COUNTY, KENYA

Lelegwe Ltumbesi S.  
PhD Candidate, University of Nairobi, Kenya  
slelegwe@gmail.com

Harriet Kidombo  
University of Nairobi, Kenya

Christopher Gakuu  
University of Nairobi, Kenya

Abstract
The purpose of the study was to examine the moderating influence of community participation on the relationship between technical assistance and the sustainability of donor funded projects (DFPs) in Samburu County. The study adopted a mixture of research designs targeting selected DFPs in Samburu County. Data on the unit of analysis was collected using questionnaire and document analysis. The questionnaire was pilot-tested before being used in collecting data. Data collected was cleaned, coded, refined and analyzed to obtain both descriptive and inferential statistics. The study established that the relationship between technical assistance and sustainability of DFPs depended on community participation implying that community participation and technical assistance are a valuable method of making lasting impact on sustainability of the projects. With technical assistance, the community’s attitudes, practices and economic status are likely to be influenced positively which in the process impact on sustainability of DFPs. The effectiveness of the community in participating in the projects requires technical assistance in terms of capacity building meant to enhance their skills in problem identification, design and finally implementation. In the process, this will ensure that the
community recognizes existence of a problem which they need to be involved in order to provide long term solutions. The study recommends empowering community members with project management skills ranging from proposal and grant writing, formulation of project idea, planning and budgeting, monitoring and evaluation. Further, the study recommends mentorship which must be looked at as a component for effective capacity building.

Keywords: Sustainability, Community Participation, Moderating influence, Technical Assistance

INTRODUCTION
Over the years, developing countries world-wide have continued to benefit from donor though projects earmarked towards complementing governments in the enhancement of the socioeconomic status of the populace (Delmon, 2011). The projects reach the communities through various institutions including government departments and agencies, International Financial Institutions, United Nations (UN) Agencies, Non-governmental organizations (NGOs), Community Based Organizations (CBOs) and Faith Based Organizations (FBOs), among others (Delmon, 2011; Lelegwe & Okech, 2016). The funding may be given bilaterally or multilaterally to an international organization, who on their part distribute them to implementers (WHO, 2011).

There has, however, been debate about the future funding of the projects in the recipient countries (Steen et al., 2006; USAID, 2011; Kabanda, 2011). For instance, with severe budgetary pressures in many industrialized countries, the flow of funds available to support the continued provision of the goods and services under the projects by donors is in doubt (USAID, 2011; Okech, 2013). Many development agencies continue to consider how best to deploy their resources efficiently with some planning to graduate some countries from their list of aid recipients (USAID, 2011; Okech & Lelegwe, 2016). In the process, there has been considerable interest in the question of how best to plan and implement the transition of donor-funded programs as part of project sustainability. This is informed by the fact that although donors have interest in uplifting the socio-economic well-being of a group of persons, the support is considered short term in nature (Heeks, 2004).

As donors provided finance to support governments’ efforts, they similarly poured in expatriate experts to fill the capacity gap (Lopes, 2002; Action Aid, 2005). In terms of finance, technical assistance was seen as a relatively mechanistic process since donors used their experts to impart knowledge to a population that was assumed to have little prior knowledge or expertise to improve their performance (Morgan, 2002). Over time, however, there has been a fundamental change in thinking within the development community on the role and function of
technical assistance, owing largely to the failure of ‘blueprint’ approaches that lacked local ownership with no lasting change. There is now a far greater emphasis on participation, local ownership and locally developed solutions. This shift is however considered to be incomplete since many donors continue to provide finance in ways that restrict, rather than promote, the ability of poor countries and poor people to make their own policy choices (Morgan, 2002). For some donors, this shift has led to fundamental changes in the way they provide aid. Donor practices have continued to increase incentives to provide donor-led technical assistance through enhancement of the capacity of the local community.

Technical assistance in terms of capacity building earmarked towards empowering the locals to initiate, manage and control their own self-development in addition to promotion of good governance is important (AfDB, 2001; DFID, 2002). Identification of relevant stakeholders, sharing information with them, while listening to their views is considered key in project sustainability (Wiebe, 2011). Sustainability of projects in marginalized communities continues to raise concerns with cases of many beneficiaries becoming more vulnerable and marginalized (GoK, 2009; GoK, 2012; Lelegwe & Okech, 2016). For instance, following the reduction in support by Clinton Foundation, PEPFAR, and Global Fund, many beneficiaries were left more vulnerable. With sustainable strategies such as enhanced community participation, the situation would have however, been contained and the gains expanded to other deserving cases (Lelegwe & Okech, 2016).

Limited studies on sustainability focusing on the marginalized communities in general and Samburu in particular to examine the empirical influence of the moderating influence of community participation on the relationship between technical assistance and sustainability of donor funded projects in Samburu County. Whereas in some cases efforts have been directed towards evaluating the influence of community participation on sustainability in general, its moderating influence on the relationship between technical assistance and sustainability has largely been omitted altogether. Although a few like Oino et al (2015), Lelegwe & Okech (2016) have attempted to link community participation and project sustainability, they are not only limited in scope but also in methodology. The studies simply document community participation without necessarily examining the significance of the moderating influence of community participation on the relationship between technical assistance and sustainability. There was therefore, need to empirically investigate how technical assistance moderated by community participation influence sustainability of DFPs in Samburu County. This would give evidence necessary for strategic direction in enhancing sustainability of donor funded projects in the county given that most of the projects are short term in nature despite their significant role at the community level.
Limitations of the Study
In the process of undertaking the study, various limitations were encountered. First, there were differences in the understanding of sustainability of DFPs by various stakeholders in the county with some respondents considering the subject very sensitive. Secondly, the targeted population in the study including the government and community representatives and a few project implementers were not properly incorporated in the activities fully, although the ideal is that they should. The area of coverage was also wide and with employees being mobile since the projects covers a vast area and they have to conduct projects activities therefore getting a number of them was cumbersome. This in a way affected the provision of timely responses. At the time of data collection, cases of insecurity were reported in most parts of the county which affected accessing some respondents. The data collecting process took long given the accompanying costs. The limitations may however not affect the validity and reliability of the findings.

METHODOLOGY
The study combined a cross sectional descriptive survey and correlational research design. The use of the two designs was suitable because the study used both descriptive and inferential analysis of data. Cross-sectional survey was considered appropriate due to its ability to elicit a diverse range of information as well as its ability to minimize bias and maximize reliability. Correlational research design on the other hand allows the use of inferential statistics for measurement of two or more variables to determine the extent to which they are related or influence each other. Considering that in this study the moderating influence of community participation on the relationship between technical assistance and sustainability, correlational research design was considered suitable. Therefore, a combination of the two research designs enabled the researcher to conduct both descriptive and inferential analysis effectively.

The unit of analysis in the study constituted stakeholders in donor funded projects including employees, community and activity managers in the donor organization in Samburu County. The target population thus comprised of donors directly, Non-Governmental organizations and community based organizations in the county. These institutions were targeted because were perceived to be actively involved in project implementation and therefore directly affected by the sustainability of the projects. Given the nature of the study objectives, pragmatism approach where various instruments were used to collect both primary and secondary data that were qualitative and quantitative in nature. Testing of the research instruments on a pilot sample was done to allow for the examination on whether respondents
understood the questions and instructions, and whether the meanings of questions were the same for all respondents.

Data generated was first edited to detect errors and omissions, while documents were read through to determine the data and which ones would be chunked into smaller meaningful parts. Similarly coding was done by developing a code book where numerals were assigned to ensure that data is put into a limited number of categories or classes. Correlation analysis was conducted to examine the direction and strength of the variables to determine the amount of correlation between them. Given the large volume of data collected, classification was done to reduce the data into homogeneous groups to enable the researcher to get meaningful relationships and interpretation qualitatively. In the study, regression analysis was conducted to study the influence of technical assistance, community participation and socioeconomic environment on the sustainability of donor funded projects, while correlation analysis was conducted to study the direction and strength of the variables to determine the amount of correlation between them.

FINDINGS
Moderating influence of Community participation on the relationship Technical Assistance and Sustainability of Donor funded projects

Moderated influence in a regression model shows the influence of an independent variable on the dependent variable as a function of a third variable. The aim was to examine how the influence of the explanatory variables changes when the moderator variable is introduced in the model. The moderate variable in the study was community participation. The moderating influence was measured in terms of how the influence of the explanatory variables changes when the moderator variable is introduced. Sustainability was used as the criterion and the composite index of technical assistance was the independent variable with community participation as the moderator. This was expressed in a regression model as:

\[ y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_2 (X_1 \times X_2) + \epsilon_1 \]

Where:
- \( y \)= Sustainability of donor funded projects
- \( \beta \)=Coefficient
- \( X_1 \)=Technical assistance
- \( X_2 \)=Community participation
- \( (X_1 \times X_2) \)= Interaction term (Product of \( X_1 \) and \( X_2 \))
- \( \epsilon_1 \)=Error term
Stepwise regression technique, consisting of three models, was used in order to test the moderating influence of community participation on the relationship between technical assistance and sustainability of donor funded project. Table 1 presents the result of the stepwise regression generated models. The variables in Regression model 1 were technical assistance as the predictor variable and sustainability as the repressor labeled A in the legend below the model. In the second model, technical assistance and community participation as the independent variable aimed at explaining their joint influence on sustainability. This is shown in the legend below the model as B. Finally, in the third model, technical assistance, community participation and the interaction term (representing both technical and community participation) were introduced to capture the moderating influence of community participation on the relationship between technical assistance and sustainability. This is shown in the legend below the model indicated as C. The interaction term is the product of the independent variables (the product of technical assistance and community participation).

**Step One: Influence of Technical Assistance on Sustainability**

In the first model, technical assistance influence on sustainability of donor funded project was tested, with the equation adopted as:

\[ y = \beta_0 + \beta_1 X_1 + \epsilon_1 \]

Where:

- \( y \) = Sustainability of donor funded projects
- \( \beta \) = Coefficient
- \( X_1 \) = Technical assistance
- \( \epsilon_1 \) = Error term

As illustrated in Table 1 of the model summary, model 1 fits the data, meaning that the strength of the correlation between technical assistance and project sustainability of 0.511 and coefficient of determination of 0.261 with Sig F Change \( p<0.05 \) of 16.940 was significant. Based on the model, 26.1% of sustainability of donor funded projects in Samburu County was accounted for by technical assistance extended to the projects, while the remaining 73.9% of project sustainability are influenced by other variables outside the model.

**Step Two: Joint Influence of Technical Assistance and Community Participation on Sustainability**

In the second model, community participation was introduced to the model, with the equation adopted as:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon_1 \]
Where:
Y = Sustainability of donor funded projects
B = Coefficient
X₁ = Technical assistance
X₂ = Community participation
ε₁ = Error term

The change statistics in the model as illustrated in Table 1 show an increase in R² by 16.6%, from 26.1% to 42.7%. The increase of 16.6% is accounted by the moderating variable introduced in the second model, which also shows a statistically significant figure with p< 0.05.

**Step Three: Joint Influence of Technical Assistance, Community Participation and interactive term on Sustainability**

In the third model, the interaction term was introduced in the model and specified as:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 X_2) + \epsilon_1 \]

Where:
Y = Sustainability of donor funded projects
B = Coefficient
X₁ = Technical assistance
X₂ = Community participation
(X₁X₂) = Interaction term (Product of X₁ and X₂)
ε₁ = Error term

With the introduction of the interactive term, there was some improvement in the value of R² of 3.3%, which was statistically significant [p=0.006 <0.05] The model demonstrates that community participation had an influence on the relationship between technical assistance and sustainability of donor funded projects and the change statistics indicate that this influence was statistically significant.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.511a</td>
<td>.261</td>
<td>.40719</td>
<td>.261</td>
<td>16.940</td>
<td>1</td>
<td>120</td>
<td>.000</td>
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<tr>
<td>2</td>
<td>.671b</td>
<td>.427</td>
<td>.39279</td>
<td>.166</td>
<td>4.584</td>
<td>1</td>
<td>119</td>
<td>.037</td>
</tr>
<tr>
<td>3</td>
<td>.704c</td>
<td>.460</td>
<td>.39624</td>
<td>.033</td>
<td>.185</td>
<td>1</td>
<td>118</td>
<td>.069</td>
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</table>
The regression results of the coefficient of the moderating influence of community participation on technical assistance and sustainability are presented in Table 2. The results show positive and significant moderating effect of community participation on technical assistance and sustainability.

Table 2: Regression Results of Coefficients of influence of Community Participation on the relationship between Technical Assistance and Sustainability

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.756</td>
<td>0.412</td>
<td></td>
<td>6.691</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>0.378</td>
<td>0.092</td>
<td>0.511</td>
<td>4.116</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>2.697</td>
<td>0.398</td>
<td></td>
<td>6.771</td>
</tr>
<tr>
<td>Technical assistance, Community Participation</td>
<td>0.26</td>
<td>0.104</td>
<td>0.351</td>
<td>2.487</td>
</tr>
<tr>
<td>Community Participation</td>
<td>0.157</td>
<td>0.074</td>
<td>0.302</td>
<td>2.141</td>
</tr>
<tr>
<td>3 (Constant)</td>
<td>2.152</td>
<td>1.327</td>
<td></td>
<td>1.622</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>0.387</td>
<td>0.314</td>
<td>0.523</td>
<td>1.233</td>
</tr>
<tr>
<td>Community Participation, Community Participation x Technical assistance</td>
<td>0.336</td>
<td>0.422</td>
<td>0.645</td>
<td>0.796</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sustainability

The results imply that with community participation, technical assistance is enhanced which in the process positively influence sustainability of the projects. The results provide an indication that a valuable method of making lasting impact on community projects is to involve the recipients in the interventions and seek their active participation, while incorporating their input for sustainability. This finding agrees with Ndege (2003) who reported the need to have a few community members in the task force group or organizing committee who will be able to justify the major needs of the community instead of making assumptions about the communities. This will ensure that the community recognizes existence of a problem and hence need for their effective involvement. Shikwati (2003) agrees with this findings when he opined that many community interventions often fail for the members do not even realize the magnitude of the problems they are facing for they have been in their midst for a very long time.

The effectiveness of the community to participate, technical assistance is necessary. This could be provided for by the donors in terms of capacity building meant to enhance their skills in problem identification, design and finally implementation. This therefore shows that
community participation and technical assistance are intertwined and therefore jointly affect sustainability of donor funded projects. The results also show that community participation moderates the influence of technical assistance in the sustainability of the projects. With community participation, donors are likely to spend minimal resources on certain aspects on organizational processes and capacity building and instead use the resources to expand the projects. Similarly, with community participation, resources are likely to be provided by the community towards the project which further facilitates the sustainability of the projects.

CONCLUSION
The moderating influence of community participation on the relationship between technical assistance and sustainability of donor funded projects indicated that technical assistance accounted for some variations in the sustainability of donor funded projects with a positive change statistics. Therefore community participation moderates the relationship between technical assistance and sustainability of donor funded projects. The results also showed a statistically significant relationship between technical assistance, and sustainability of donor funded projects with community participation as the moderating variable statistically significant. This demonstrates that community participation had an influence on the relationship between technical assistance and sustainability of donor funded projects. This could be attributed to the fact that with community participation in the project implementation, less resources could be spend on capacity building programs which in the process gives room for resources to be set aside for purposes of sustainability beyond the donor funding.

RECOMMENDATIONS
From the foregoing discussion, it is recommended that donors need to enhance technical assistance that will encourage effective community participation initiatives towards local ownership of the projects as one of the principles of effective development. This will ensure that adoption of bottom-up planning to determine priorities that genuinely reflect community needs in project design and implementation. Strategies must be initiated and developed within the implementing community that reflects the priorities of the beneficiaries. Facilitation in the formation of community social groups through technical support aimed at enabling the communities to play key role not only in delivering services but also in sustaining the demand for services and holding the project implementers accountable should be encouraged. These groups are better placed to protect the interests of members and lobby for projects that benefit their constituents, and function as a source or conduit of services and credit to the individual groups which if sustained will enhance sustainability.
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