African Journal of Emerging Issues
Peer reviewed | Double blind | Interdisciplinary

African Journal of Emerging Issues
(AJOEI)
Online ISSN: 2663 - 9335
Available at: https://ajoeijournals.org

FINANCE

EFFECT OF COMMUNITY PARTICIPATION ON FINANCIAL SUSTAINABILITY OF COMMUNITY CONSERVANCIES IN NORTHERN KENYA

[1*]Evans Riat Lekaldero, [2]Dr. James Ndegwa, and [3]Dr. Clemence Omanwa

[123]School of Business, Kenya Methodist University

***Corresponding author e-mail: riatevans2014@gmail.com**

Date of Publication: August 2022

ABSTRACT

Background: Financial sustainability is critical to the survival and growth of organizations all around the world. In Kenya, community conservancies face a significant financial problem to survive and flourish. This paper sought to determine the effect of community participation on financial sustainability of community conservancies in Northern Kenya.

Methodology: The study was anchored on the agency theory. It adopted the explanatory research design and a cross-sectional approach. Primary data was collected using a semi-structured questionnaire. Data was analyzed using descriptive and inferential statistics.

Findings: The findings indicated that community participation had a positive and significant effect on the financial sustainability of community conservancies in Kenya. The study concluded that community participation positively contributes to enhanced financial sustainability.

Recommendations: The study recommended that community conservancies' management should strengthen aspects related to community participation. In particular, the community should be involved in decision making process. The number of community members working in the conservancies should be increased. There should be workshops to train and create awareness to community members on the importance of conservation.

Keywords: *Community Participation, Financial Sustainability, Community Conservancies*

INTRODUCTION

The ability of a Non-Governmental Organization (NGO) to maintain financial performance over time is referred to as financial sustainability (Bowman, 2011). Financial sustainability, according to Renz and David (2010), is an NGO's ability to establish numerous resources so that it can continue to operate when donors withdraw their funding. Financial sustainability is said to be crucial, especially for the survival of all NGOs as well as its effectiveness (Dresner, 2002). The most difficult task for these non-profits is to attain financial sustainability. An NGO's ability to collect financing, particularly from donor organizations, is critical to its financial survival (Guruprasad et al., 2013).

In the United States, public conservation activities have become a popular tool for biodiversity conservation; based on the principle that biodiversity must be paid for by generating economic benefits, especially for local people. There are many examples of projects that generate income for local communities and improve local attitudes towards conservation, but the contribution of communities to conservation and local economic development is limited. The financial viability of these public nature conservation measures is declining. Factors such as small area and few people involved, limited income, a weak link between biodiversity gains and commercial success, and the competitive and special nature of the tourism industry are linked to the low financial sustainability of these conservation efforts (Humavindu & Stage, 2015).

In Namibia, protected areas cover about 14% of the country's total land area and the development of urban environmental protection leads to active management of natural resources. By the end of 2003, communal conservation associations covered 9% of Namibia and another 5% of the free protected zone. This resulted in the total area of conservation-managed state land reaching 27% (Nacso 2016). Resources in most rural areas are now better managed and wildlife populations, habitats, biodiversity, and the environment as a whole have increased under conservation management. Most community-registered protected areas are located around national parks, creating buffer zones that provide important corridors for wildlife movement between national parks (Skyer 2015). Thanks to the successful management of community wildlife resources, the government of Namibia is promoting integrated natural resource management that includes community forest management initiatives whose institutional arrangements are consistent with the conservation model (Skyer & Sarucher, 2015).

The establishment of a natural park in Kenya is the single most successful conservation initiative since the national park was founded in the 1940s. Conservation protects Kenya's wildlife lands and, more importantly, creates sanctuaries. In addition, conservation activities bring benefits in the form of direct payments and jobs for communities that share the land with wildlife (Mureithi et al., 2019). However, more than half of the wild habitats are outside protected areas and are scattered in private and communal areas. In this area, wildlife, humans, and livestock interact and compete for the same natural resources. Traditional pastoral approaches to animal husbandry are seen as appropriate and complementary to species conservation. The increase in human population is associated with the expansion of agriculture into marginal areas that were previously used as open communal grasslands. Therefore, this area has been converted into a high-density rural settlement by small farmers who raise and herd livestock (Blackburn et al., 2016).

STATEMENT OF THE PROBLEM

Financial sustainability is critical to the survival and growth of organizations all around the world. According to the Conservancy Financial Sustainability Report (2015), the typical annual community conservancy budgetary needs are approximately $100,000 USD. The report further postulates that salaries increase at 10% per annum and that it is difficult to predict fuel price movements which in turn affect the fuel expenses which vary as per inflation and the number of vehicles used in the conservancy. Besides, each ranger receives a new uniform every year which amounts to approximately 100 USD per ranger and there are no indications that uniform prices should outpace inflation over the long run (Conservancy Financial Sustainability Report, 2015). All these requirements give rise to the need for community conservancies to be financially sustainable.

However, this has not been the case with most of the community conservancies in Northern Kenya. Opio and Kamande (2015) survey on the sustainability of community protection in Kenya found that of the 23 organizations surveyed, 18% said they were quite resilient, while 82% said they would hardly survive or move into a crisis. Sustainability is a priority for these organizations. This disclosure highlights the deep sustainability challenges faced by society in Kenya. This paper sought to determine the effect of community participation on financial sustainability of community conservancies in Northern Kenya.

RESEARCH HYPOTHESIS

H_0: Community participation does not have a significant effect on the financial sustainability of community conservancies in Northern Kenya.

THEORETICAL FRAMEWORK

In their seminar work, Jensen and Meckling (1976) proposed the agency theory, claiming that there is a conflict of interest between two people, one of them is the principal and the other is the agent. The principal contracts the agent who acts on his behalf and is expected to fulfill all mandates directed toward him. In community conservancy, the relationship is in two ways, first between the conservancy management and the employees in which case the employees are agents of the management and they expect a return in terms of salaries having been contracted to work for the conservancy.

This idea discusses how to maintain a relationship when one side does the work while the other does the job. This also explains the possible interest rate differential between management, shareholders, and creditors as a result of the asymmetry in profit distribution, which can lead to the company incurring a lot of risks and not even participating in the project (Wales, 2012). As a result, according to agency theory, certain hedging methods can have a large impact on firm value (Wollack, 2010).

The weakness of agency theory is related to the limitations of the behavioral assumptions and the focus of the theory. The fact that agency theory focuses solely on selfish and opportunistic human behavior means that it ignores broader human motives (Kivistö, 2008). It is critical to evaluate and carefully identify the problems that may develop throughout the life of conservation activity, from conception to implementation, and to assign the responsibilities listed above to the best people who can overcome them (Zou, Zhang & Wang, 2013). The current research examined the financial sustainability determinants among community conservancies in Northern Kenya. Some of the

determinants that are studied in this research such as community participation might be affected by conflicts of interests.

EMPIRICAL REVIEW

Community participation is explained as a means of countering capacity limitations and these include gaps or deficiencies in the current services which affect the service group or constituency of the organization. Indeed, shared visions such as social justice encourage collaboration, but it is challenged by political, environmental, and control challenges, as well as balancing disparities among organization participants (Smith et al., 2008).

Aupe (2017) assessed the effect of public participation on the sustainability of a water project in Trans Nzoia County. The research design used is descriptive. The research target group is 32,181 households in Kwanza sub-region, Trans Nzoia County. The researcher used the sample size formula from Sekaran (2003) to make a sample of 380 households. The researcher used a simple random sample to select households. There is a close link between project conceptualization and the long-term viability of water projects.

Haq et al. (2015) focused on community participation and sustainability of water supply programs in Faisalabad District, Pakistan. The survey was conducted by heads of households in two villages in the Faisalabad district. A sample of 100 respondents was selected from households selected through systematic random sampling. The results support the hypothesis that community involvement is significantly related to the sustainability of the rural water supply program in Faisalabad district. The results of this study justify the need for increased community involvement in the operation and maintenance of water utility programs. From the results of this study, it can be concluded that ensuring the quality of the water supply program is highly dependent on community involvement and project ownership.

Wanyera (2016) focused on the impact of community engagement on the sustainability of community-based projects: the case of a water and sanitation project in a slum area in Kiambu, Nairobi County, Kenya. This study used a descriptive research design. Questionnaires were used to collect quantitative and qualitative data from respondents. Regression analysis revealed that there is a significant relationship between community involvement and project sustainability. The study concludes that community involvement in community-based projects has a significant impact on project sustainability; Sustainability has a negative impact when community involvement is zero and increases with greater community involvement. Furthermore, a strong positive correlation between community participation and sustainability indicates that an increase or decrease in sustainability is significantly associated with an increase or decrease in community participation.

Kiio (2020) identified the impact of community involvement on the sustainability of a water project in Makueni County, Kenya. This study used a descriptive research design that accurately describes or describes the participants. The researcher focused on a population of 80,805 with a sample size of 384. Both open and closed questions/interviews were used in this study. The study findings indicate that country mechanisms, processes and structures used by County governments and other development partners directly affect project sustainability. The study concludes that country mechanisms, processes and structures affect project sustainability.

RESEARCH METHODOLOGY

The paper adopted the explanatory research design and a cross-sectional approach. Northern Kenya has 31 community conservancies. The respondents comprised of 199 managers. A census of all the community conservancies was conducted. Primary data was collected using a semi-structured questionnaire. Descriptive statistics such as percentages, means, and standard deviation were used to examine the data. Regression analysis was used to assess the effect of the predictor variable on the outcome variable.

RESULTS AND DISCUSSION

Descriptive Statistics on Community Participation

The study determined the effect of community participation on the financial sustainability of community conservancies in Kenya. The respondents were asked to state their agreement or disagreement with aspects measuring community participation. The scale used is; (1- strongly disagree, 2-disagree, 3-neutral, 4- agree, and 5- strongly agree). The descriptive results are shown in Table 1.

Table 1: Descriptive statistics on community participation

Statement	Mean	Std. Dev
There is involvement of the community in decision making process on matters that are likely to affect them	4.35	1.08
Community members attend regular meetings to discuss issues relating to the conservancy.	4.39	0.97
Community members form part of the organizations personnel and serve in various segments including security department.	4.46	0.97
Community members are trained on the importance of conservation.	4.48	0.89
The community has representatives in the management board of the organization.	4.61	0.80
Community members play the role of promoting the conservancy to non-locals.	4.25	1.10

The results in Table 1 show that majority of the respondents agreed with the following aspects: There is involvement of the community in decision making process on matters that are likely to affect them (M=4.35, SD=1.08), community members attend regular meetings to discuss issues relating to the conservancy (M=4.39, SD=0.97), and community members form part of the organizations personnel and serve in various segments including security department (M=4.46, SD=0.97).

The respondents further agreed that community members are trained on the importance of conservation (M=4.48, SD=0.89), the community has representatives in the management board of the organization (M=4.61, SD=0.8), and community members play the role of promoting the conservancy to non-locals (M=4.25, SD=1.1). The outcome suggested that the respondents

appreciated the importance of community participation, which is likely to boost financial sustainability of the community conservancies.

The findings mirrored those of Osman (2018) who found that there was a positive correlation between community participation and project sustainability. Similarly, the results supported Akumu and Onono (2017) view that the most widely used participation methods in this project are non-participation and partnership with tokenism.

The respondents were further asked to give their opinion on how community participation contribute towards the financial sustainability of the organization. Majority of the respondents noted that community participation helps organization to achieve its objectives, helps in creation of income generating activities, and ownership of the conservancy and well use of the limited resources. Furthermore, the conservancy plans are ratified at the annual general meeting, which includes community members, understanding the financial status of the organization, and communities hold the organization accountable for its actions or activities. This drives the organization to financial sustainability.

Descriptive Statistics on Financial Sustainability of Community Conservancies

The dependent variable in this study is financial sustainability of community conservancies. The respondents were asked to state their agreement or disagreement with aspects measuring financial sustainability. The scale used is; (1- strongly disagree, 2-disagree, 3-neutral, 4- agree, and 5-strongly agree). The descriptive results are shown in Table 2.

Table 2: Descriptive statistics on financial sustainability

Statement	Mean	Std. Dev
The organization is able to cover cash expenses and still retain sufficient funds.	2.41	1.36
The organization has available cash flow to pay current debt obligations.	2.35	1.27
There is available cash to fund capital and recurrent expenditure.	2.43	1.15
The management is able to source for funding especially from donor agencies and alternative sources of revenue.	4.03	0.84
The organization total current assets exceed the total current liabilities.	2.73	1.16
The organization asset value decreases due to depreciation and this poses financial risks.	2.99	1.11

The findings in Table 2 indicate that majority of the respondents disagreed with the following aspects: The organization is able to cover cash expenses and still retain sufficient funds (M=2.41, SD=1.36), the organization has available cash flow to pay current debt obligations (M=2.35, SD=1.27), and there is available cash to fund capital and recurrent expenditure (M=2.43, SD=1.15). Further, most of the respondents agreed with the assertion that the management is able to source for funding especially from donor agencies and alternative sources of revenue (M=4.03, SD=0.84). The findings suggested that financial sustainability of community conservancies is a serious challenge that needs attention.

Factor Analysis for Community Participation

To establish sample adequacy for factor analysis, the Kaiser Meyer-Olkin measure of sampling adequacy-KMO was used. Results are shown in Table 3.

Table 3: KMO and Bartlett's Test for Community Participation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.843
Bartlett's Test of Sphericity	Approx. Chi-Square	471.206
	df	15
	Sig.	.000

The findings in Table 3 show the KMO score of 0.843, which was appropriate for use with Bartlett's Test of Sphericity (Sig = .000<.05). This suggested that the community participation variable could be subjected to factor analysis.

The study measured community participation using six factors. Kaiser retention criterion was used to determine the number of components to retain. With this criterion, the eigenvalues for the components obtained should be greater than 1.

Table 4: Total Variance Explained results of Community Participation

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.802	63.371	63.371	3.802	63.371	63.371
2	0.705	11.758	75.129			
3	0.655	10.918	86.047			
4	0.353	5.886	91.933			
5	0.279	4.645	96.578			
6	0.205	3.422	100			

Extraction Method: Principal Component Analysis.

Table 4 indicates that one component was extracted. The one component accounted for 63.371% of the data matrix's variants. Varimax rotation was applied to the factors after factor extraction. The rotated factor loadings are indicated by the rotated component matrix. A factor loading of 0.3 or more is considered sufficient (Cohen et al., 2014). The factor loadings for the community participation items that correspond to components 1 and meet the minimum recommended criteria of 0.3 were selected for analysis.

Table 5: Component Matrix for Community Participation

	Component 1
There is involvement of the community in decision making process on matters that are likely to affect them	0.852
Community members attend regular meetings to discuss issues relating to the conservancy.	0.674
Community members form part of the organizations personnel and serve in various segments including security department.	0.855
Community members are trained on the importance of conservation.	0.786
The community has representatives in the management board of the organization.	0.845
Community members play the role of promoting the conservancy to non-locals.	0.748

Extraction Method: Principal Component Analysis.

a 1 components extracted.

The findings in Table 5 show that all the six items loaded on component 1. In this study, the pattern matrix loading for community participation after factor analysis ranged from 0.674 to 0.855 indicating that the sub-variables were well related to a factor pattern and hence were all adopted for further analysis.

Regression Analysis

The study sought to determine the effect of community participation on the financial sustainability of community conservancies in Northern Kenya. Regression results are shown in Table 6.

Table 6: Regression Results; Community participation and financial sustainability

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.161	.309		-.519	.605
	Community participation	.680	.069	.631	9.798	.000
	R Square	.398				
	Adjusted R Square	.394				
	F statistic	95.999				
	P value	.000				

a Dependent Financial sustainability

Model;

Financial Sustainability = -0.161+ *0*.680 *Community Participation*

The regressions result in Table 6 indicate that community participation explains 39.8% (R2= .398) of the total variations in financial sustainability of community conservancies. Results also reveal an F statistic of 95.999 and reported P value of 0.000. The *P* value being less than the critical value (*P* < .05); the proposed model is therefore statistically significant (good fit) in predicting the dependent variable.

The findings further indicate that community participation had a positive and significant effect on financial sustainability of community conservancies (β=0.68, P < .000). This implied that an increase in community participation by one unit would result to increase in financial sustainability of community conservancies by 0.68 units. The findings are consistent with those of Yusuf, Adekunmi, and Ayanda (2020) who established a positive link between community engagement, and financial sustainability. Similarly, the findings supported Ndege and Gichuki (2017) observation that community participation had an impact on firm performance. The findings suggested that financial sustainability of community conservancies is a serious challenge that needs attention.

The null hypothesis (H_0) predicted that community participation does not have a significant effect on the financial sustainability of community conservancies in Northern Kenya. The computed *P*-value was 0.000<0.05. This means that the null hypothesis was rejected. Therefore, community participation does have a significant effect on the financial sustainability of community conservancies in Northern Kenya.

CONCLUSION

The study concluded that community participation had a positive and statistically significant effect on financial sustainability of community conservancies in Northern Kenya. The implication is that community participation positively contributes to enhanced financial sustainability. The study identified involvement in decision making, organizations personnel and community members training as critical aspects of community participation.

RECOMMENDATIONS

The study established that community participation had a positive and statistically significant effect on financial sustainability of community conservancies in Northern Kenya. The study recommended that community conservancies' management should strengthen aspects related to community participation. In particular, the community should be involved in decision making process. The number of community members working in the conservancies should be increased. There should be workshops to train and create awareness to community members on the importance of conservation.

REFERENCES

Akumu, M., & Onono, P. (2017). Community participation and sustainability of the Kenya comprehensive school health program in Kajiado County, Kenya. *A Policy Oriented Research Project Conducted by financial support of the Cooperation and Development Network (CDN)*. http://www.cooperationdevelopment.org

Aupe, N. D. (2017). Effect of community participation on sustainability of water projects in Kwanza Sub- County, Trans Nzoia County, Kenya (Master's Project, University of Nairobi). http://erepository.uonbi.ac.ke

Blackburn, S., Hopcraft, J. G. C., Ogutu, J. O., Matthiopoulos, J., & Frank, L. (2016). Human–wildlife conflict, benefit sharing and the survival of lions in pastoralist community-based conservancies. *Journal of Applied Ecology*, *53*(4), 1195-1205. https://besjournals.onlinelibrary.wiley.com/doi/abs/10.1111/1365-2664.12632

Bowman, W. (2011). Financial capacity and sustainability of ordinary nonprofits. *Nonprofit Management & Leadership*, *22*(1), 37-51. https://onlinelibrary.wiley.com/doi/abs/10.1002/nml.20039

Cohen, P., West, S. G., & Aiken, L. S. (2014). *Applied multiple regression/correlation analysis for the behavioral sciences*. Psychology press.

Haq, M. A., Hassan, S. M., & Ahmad, K. (2015). Community participation and sustainability of water supply program in district Faisalabad, Pakistan. *Journal of Quality and Technology Management*, *10*(2), 125-137. https://www.researchgate.net

Humavindu, M. N., & Stage, J. (2015). Community-based wildlife management failing to link conservation and financial viability. *Animal Conservation*, *18*(1), 4-13.

Kiio, J. N. (2020). *Effects of Community Participation on Sustainability of Water Projects in Makueni County, Kenya*. Unpublished Thesis, Kenyatta University.

Kivistö, J. (2008). An assessment of agency theory as a framework for the government–university relationship. *Journal of Higher Education Policy and Management*, *30*(4), 339-350.

Mureithi, S. M., Verdoodt, A., Njoka, J. T., Olesarioyo, J. S., & Van Ranst, E. (2019). Community-Based Conservation: An Emerging Land Use at the Livestock-Wildlife Interface in Northern Kenya. *Wildlife Management-Failures, Successes and Prospects*.

Ndege, A. W., & Gichuki, N. N. (2016). Factors Influencing Performance of Wildlife Conservation Projects: A Case of Lion Rover Project in Meru National Park, Kenya. *Ann Wangui Ndege*, *50*, 84538.

Osman, M. A. (2018). *Effect Of Community Participation On Sustainability Of Development Projects By Non-Governmental Organizations In Kenya. A Case Of Shofco Organization In Mathare Informal Settlement* (Doctoral dissertation, University of Nairobi).

Roba, R., & Kikwatha, R. W. (2021). Effect of Women Participation on Sustainability of the Community Conservation Project Implemented by Jaldesa Community Conservancy in Marsabit County, Kenya. *European Journal of Business and Management Research*, *6*(3), 188-194.

Skyer, P., & Saruchera, M. (2015). Community conservancies in Namibia: An effective institutional model for commons management?.

Wanyera, L. A. (2016). *Effect of community participation on sustainability of community based projects: a case of kiambiu water and sanitation slum project, nairobi county, kenya* (Doctoral dissertation, University of Nairobi).

Yusuf, O. J., Adekunmi, A. O., & Ayanda, I. F. (2020). Community participation and sustainability of the community and social development projects in Kwara State, Nigeria. *Journal of Agricultural Extension*, *24*(1), 138-147.