Project Beneficiary Selection Process and Sustainability of Dairy Goat Projects in Kenya

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Abstract:
The ultimate goal of dairy goat projects is to achieve sustainability. However, sustainability is often not achieved as there exists inadequate understanding of the critical drivers of sustainability. This paper advocates for authentic project beneficiary selection process for sustainability to be realized. The paper is based on a study conducted in Kenya that sought to establish the extent to which project beneficiary selection process influence the sustainability of dairy goat projects in Kenya. The study focused on the project beneficiary selection tools, beneficiary needs analysis and beneficiary composition as the indicators. As guided by the Structural-Functional Theory, Diffusion of innovations Theory and Theory of Collective Action, pragmatism paradigm, cross-sectional descriptive survey and correlational research design using mixed mode approach was used. Multiphase or sequential sampling and stratified random sampling technique was used to sample 188 dairy goat farmers. Key informants (12) and Focus Group Discussions (FGDs) 4 involving 8 participants purposively sampled. Five-point Likert type scale questionnaire was used for quantitative data while interview and FGDs guides used for qualitative data. Descriptive data was analysed using frequencies, percentages, arithmetic mean and standard deviation while inferential data was analysed using Pearson's Product Moment (r) and simple regression. Results indicates that the p-value = 0.002≤0.05. t=3.138, p=0.002<0.05, r= 0.224 and r square=0.050. Overall F statistics was F (1,186) = 9.850 Hence based on these findings we reject the null hypothesis that there is no significant relationship between project beneficiary selection and the sustainability of dairy goat projects and accept the alternative hypothesis at α=0.05 level of significance that there is a significant relationship between project beneficiary selection and the Sustainability of dairy goat projects. The study recommends that authentic beneficiary selection process to be incorporated in dairy goat development project designs to enhance their sustainability.

Keywords: Project beneficiary selection, Sustainability, Dairy goat projects

1. Introduction

Livestock production is very critical in the agricultural economy of developing countries. Among the livestock production systems, dairy goat production has gained popularity as an important contributor to this important sector. Innovations and adoption of new technologies such as promotion of dairy goat production, improvement of indigenous goats for better production is poised to make even bigger contribution to the newly adopted agenda for sustainable development that is focused to eliminate poverty, inequality, just as well as tackling climate change by the year 2030. Boyazoglu et al. (2005) observes that dairy goats contribute largely to the livelihoods of livestock keeping households of low- and medium-input farmers. Kavoi, Mwangi and Kamau (2014) observes that dairy goat productivity in subsaharani Africa is on the decline and that this becomes a major bottleneck to the continents agricultural development. To mitigate this worrying trend, it is paramount that dairy goat project is designed to integrate sustainability goal as the main focus. Proper understanding and considerate integration of project sustainability predictors is paramount for sustainability of dairy goat projects. Bebbington and Brown (2007) considers as critical to incorporate variables of sustainability in projects that Shenhar (2011) posits as a pre-requisite to project success.

Dairy goat projects established in Kenya have been implemented to realize goals around the aspirations of the project beneficiaries. This indicates that project beneficiaries should play a critical role in the project design and implementation process thus project beneficiary selection process must be well thought. Kilic, Whitney and Winters (2013) asserts that success of a project lies not in the fact that it is necessarily targeted, but rather in how it is targeted. Similarly, Werhane et al (2010) observes that project beneficiaries understand the processes that bring them together and the challenges affecting them and therefore have possible solutions to addressing these challenges. For instance, Farm Africa dairy goat project implemented in Kenya (Meru and Thaaka Nithi Counties) was beneficiary specific that only the poor of the poorest were targeted. The prime objective of the project was promoting dairy goat production and improvement of the East African native goats. The spread of the dairy goat ownership was based on pass on model where initial beneficiaries were expected to assist new beneficiaries to own and manage dairy goats on a predetermined arrangement. Based on this understanding, this study sought to establish the influence of project beneficiary selection process on the sustainability of dairy goats in Tharaka Nihti County, Kenya

1.1. Statement of the Problem

Livestock production systems in Kenya play a critical role in the support of livelihoods of many people. Yet Adejobi & Kassali (2013) observes that declining dairy goat's productivity in Kenya in particular remains a major concern. Kavoi, Mwangi and Kamau (2014) in their study identified major gaps in dairy goat development as poor documentation, inadequate knowledge and skills and poor decision making on dairy goat production. A study by Ngongoni (2013) on the viability differences in dairy goat farming found that access to markets, services, financial performance, enterprise viability, nutrition and breeding practices were the main constraints. These studies have pointed out critical gaps in the design of dairy goat project that Ogola & Kosgey (2012) advises that dairy goat projects need to take into consideration for sustainability to be achieved. Ahuya et al (2005) confirms that information on the performance of dairy goat breeds is scarce. For instance, dairy goat projects target a specific segment of the community that must be selected in a precise and authentic process. However, there are scenarios that these projects are hijacked by those not targeted thus compromising their sustainability. It is against this backdrop that this study sought to establish the influence of project beneficiary selection process on the sustainability of dairy goat projects in Kenya.

1.2. Objectives of the Study

The objective of this study was to establish the extent to which project beneficiary selection process influence the sustainability of dairy goat projects in Tharaka Nithi County, Kenya.

1.3. Research Hypothesis

The following hypothesis was tested:

H_0 Project beneficiary selection process has no significance influence on the sustainability of dairy goat projects in Tharaka Nithi County, Kenya

H_1 Project beneficiary selection process has a significance influence on the sustainability of dairy goat projects in Tharaka Nithi County, Kenya

2. Literature Review

Projects are designed, and implemented to achieve a predefined goal. Ideally, development projects are focused to bring positive and progressive change to the subject communities sharing common social economic attributes. Nevertheless, community diversity in social, political and economic alignment impede the smooth achievement of the anticipated outcomes of such projects. This is as a result of the divergent needs orientation that emerge as a result of involvement of different project beneficiaries with different priority needs. This therefore calls for a rigorous beneficiary assessment as a way of selecting the right group to be involved in the development project. In addition, Swanepoel & de Beer (2006) points out that different groups of people may be concerned about different needs or that may have different perceptions about the same needs and in this case grouping becomes necessary. In this front, Ravallion (2003) asserts that central to the identification of eligible program participants is the issue of asymmetric information. Beneficiary selection can be authentic if conducted within the democratic framework particularly through a participatory process. Conning & Kevane (2002) argues that appropriate selection is beneficial in the sense that it lowers the cost of administration and attracts the right project beneficiaries.

Targeting dynamics in project beneficiary selection revolving around beneficiary needs, gender inclusion and beneficiary composition, special needs consideration, capacity to sustain coupled with the attributes of motivation, self-drive and focus to sustain is critical in this process. Targeting is the processes of identifying the intended beneficiaries of a project and then ensuring that, as far as possible, the benefits actually reach those people and not others. The complexity of beneficiary selection necessitates well thought choice of appropriate tools, methods and processes that do not contravene the tenets of authentic project beneficiary selection. Sanders & Binder (2010), observes that use of appropriate beneficiary engagement tools and technics is key to project success. Therefore, project design experts, should modify the design tools to make them usable for in each step of the process. For instance, Booher & Innes (2002) asserts that seeking the opinion and

views of the project beneficiaries can greatly make easy the planning and design processes and bring understanding among beneficiaries. Design tools and processes involved are important elements in beneficiary selection that brings a universal understanding.

One of the essential consideration in project beneficiary selection is the beneficiary needs without which the beneficiary selection process may be meaningless. Importantly, participatory beneficiary needs analysis is required to be driven by the people who experience the need and not by outsiders. Matiwane & Terblanché (2012) observes that projects are motivated by a specific need that must be clearly outlined as a prerequisite to proper project designing. Swanepoel & de Beer (2006) shares similar sentiments that the success of a project is determined by the clarity of the need being addressed. A study done by Düvel (2002) on comparative evaluation of some participatory needs assessment methods in extension revealed that needs are time-specific, which emphasizes the importance of remaining sensitive to changing needs as situations change. Swanepoel & de Beer (2006) explains that needs identification exercise should be a participatory process because it is the beneficiaries who must identify their needs before they organize themselves to do something about their situation. However, Blackman (2003) observes that in spite of the clamor for 'bottom-up' approach to rural development projects approach; beneficiaries are still being deprived of their involvement in the project processes.

Community participation in need analysis is important as the needs are collectively conceived and prioritized paving the way for the process of addressing them (Barasa & Jelagat 2013). A study done by Düvel (2002) on comparative evaluation of some participatory needs assessment methods in extension revealed that needs are time-specific, which emphasizes the importance of remaining sensitive to changing needs as situations change. The importance of beneficiaries' participation is reinforced by Swanepoel & de Beer (2006) by saying that people are not going to rally together around needs that have been identified by some expert and that do not match or support their own needs. Therefore, needs identification is a prerequisite before any action; it should be the first undertaking before a project commences. However, Thwala (2010) observes that even when an element of 'participation' is built into projects, it is often largely in terms of local investment of labour and not necessarily participating in decision-making.

Participation in project design process may not be panacea if inclusiveness is not observed where men, women, youth are involved. This is of ultimate importance in enhancing democracy in development projects. FAO (2012) points out that men and women are challenged differently as relates to livestock production system, therefore, when deigning resource use plans, it is critical to consider the gender perspective in order to achieve optimal results. In this sense, gender issues in dairy goat production is crucial and need to be addressed. Nicola et al (2015) observes that context-specific, up-to-date knowledge of gender roles and power relations in daily life is critical to the design of livestock-focused development projects. A study by Narmatha et al (2015) on gender in sheep and dairy goat keeping in Namakkal district of Tamil Nadu – India reviewed that women participated in most of the animal care activities such as watering, care of pregnant does and ewes, grazing, identification of sick animals, cleaning shed, feeding of marketing stock, collecting fodder and feeding of breeding bucks. In another study conducted in Ethiopia, Mulugeta & Amsalu (2014) reviewed that the greatest percentage of rural women were involved in cleaning of livestock shelter, milking and related tasks, collecting manure, and selling of milk and milk products. These studies provide insights into the significance of gender in livestock development projects nevertheless, Nicola et al (2015) says that, livestock projects have failed to integrate a gender perspective, which has in turn affected their efficiency. Malyadri & Sumana (2013) points out that addressing gender issues goes beyond training and advancing loan facilities but rather recognizing the social construction of gender and appropriately assigning roles and responsibilities across the gender divide.

2.1. Theoretical Framework
This study is grounded by the three theories namely Structural-Functional Theory, Diffusion of innovations theory, and Theory of collective action.

2.2. Structural-Functional Theory
Structural Functionalism advanced by Herbert Spencer 1968 explains how society functions focusing more on the linkages between different social institutions that form the society. This theory posits that a society is similar to a human body where different parts of the body perform different assigned functions and healthy body is determined by how well the organs function. Spencer argues that society's existence relies upon tasks performed by similar 'organ-type' institutions. For example, in a modern community, access to clean water, food, infrastructure, and healthcare may well be essential to survival of its citizens. Thus, we could view institutions engaged in such activities as 'functional' organs serving a need. Therefore, Spencer's argument would imply that a community, being a self-contained system, has needs of its own; separate from the needs of individuals. Structural functional theory views society as a complex, but interconnected system, where each part works together as a functional whole to promote solidarity and stability. This theory becomes relevant to this study in the sense that institutions in a society serve a certain purpose but they are interlinked and well connected with each other to perform optimally.

2.3. Diffusion of Innovations Theory

This theory by Rogers (1962) remains relevant for this study in the investigation of the behavior and practices of users in adopting new technological innovation. Rogers says that an innovation is any knowledge or anything seen as new by an individual. When the paramount decision is absolute utilization of an innovation, adoption is said to have taken place. Rogers see diffusion when different channels are involved in propagating the innovation within a social set up. In a societal set up, different institutions and structures aid this diffusion of innovation.

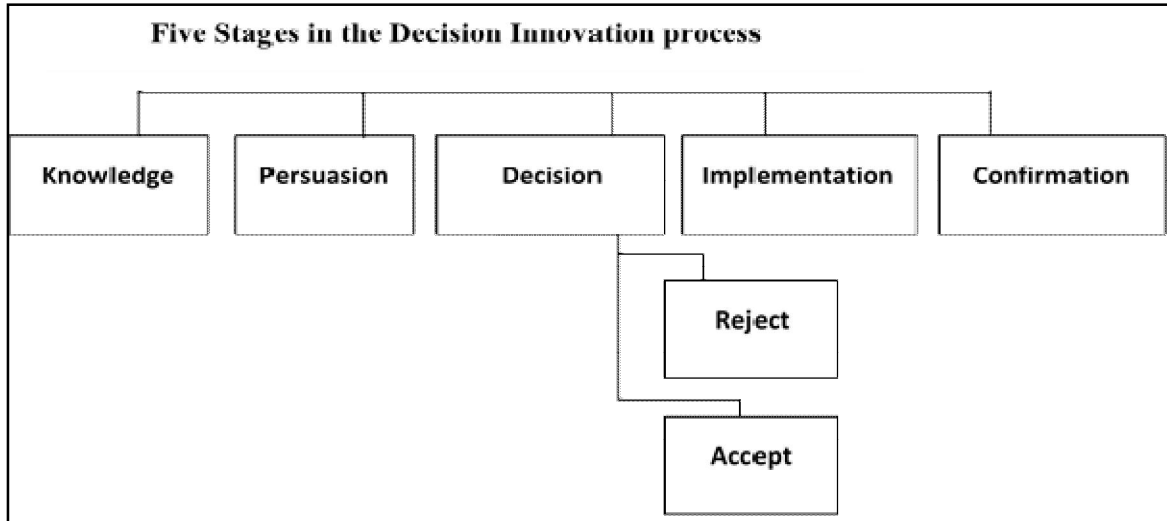This theory gives five stages in the decision innovation process.

Figure 1: A Model of Five Stages in the Innovation-Decision Process

According to Rodgers (2003) an innovation may not be new since it was invented long time ago however, if it is new to an individual, it remains an innovation. Knowledge, Persuasion, and Decision process are the three main steps related to innovation which are threatened by uncertainty. Accepting or rejecting an innovation may bring along unexpected outcomes leading to uncertainty (Rogers, 2003). To reduce the uncertainty, Rodgers advises that individuals must seek the right information about the innovation so that they make informed decisions.

2.4. Theory of Collective Action

Theory of collective action advanced by Mancur (1965) says that efficient provision of public goods comes along with many challenges. He argues that provision of public good requires a large size of a group which is difficult to optimally mobilize and also notes that there are those individuals who do not want to participate but look forward to take advantage of others. Mancur (1965) clearly explains that, when the decision to provide the collective good is analyzed from the individual point of view, there is a high incentive to free-ride on the efforts of the others and to provide a sub-optimal level of the good oneself. It is this collective action orientation that make groups successful in the provision of goods and services. This theory argues that the key to the existence of an intermediate group is that the group is not big enough so that the actions of an individual can considerably affect the utility of the other members. If this is the case then a combination of strategic interaction and institutions might be enough to facilitate an adequate provision of the collective good.
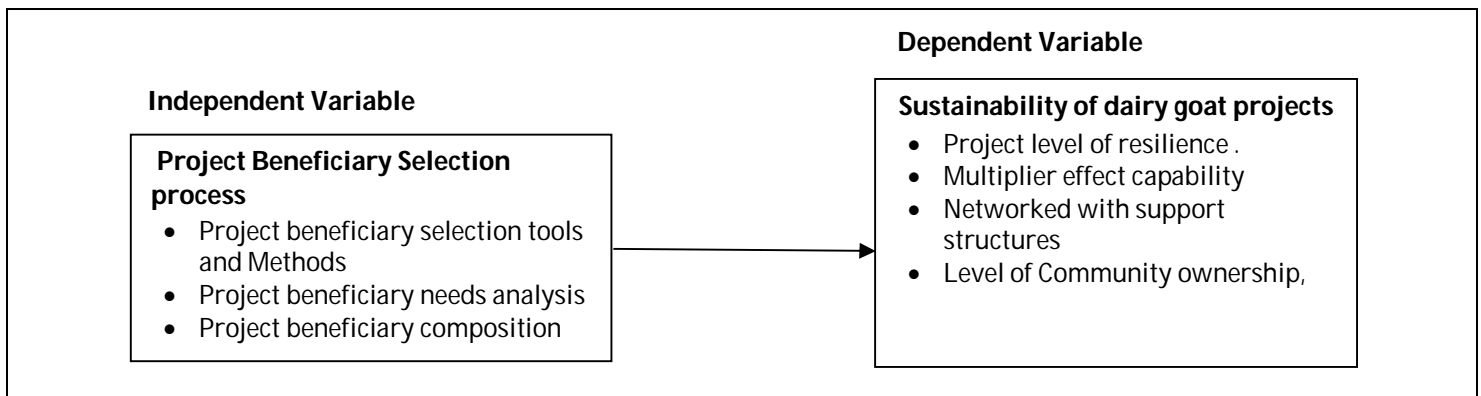

Figure 2: Conceptual Framework

3. Research Methodology

This study adopted a pragmatic paradigm. Consequently, descriptive cross-sectional survey and correlational research designs were used using mixed mode approach. This complementarity capability of mixed mode builds the strength of this study by allowing descriptive explanation of study variables while showing relationship among variable through inferential analysis. A sample size of 188 dairy goat farmers was sampled using a combination of multiphase or sequential sampling, stratified random sampling technique. 12 key informants were sampled purposively from department of veterinary (3), Livestock production (3), Social services (3), and project leaders (4). In addition, four focus group discussions were conducted involving 8 participants each.

Validity was enhanced through experts opinion, and conducting a pilot study. Based on the result of the pilot test, Content validity was achieved according to representativeness by examining objectives and comparing them to content of instrument. To ensure reliability, the researcher used test and retest method at an interval of three weeks. A Cronbach α (Alpha) reliability coefficient that ranges between 0 and 1 was generated to measure the reliability for the purposes of this study, where $α < 0.7$, the research instrument was revised.

This study used a mixture of descriptive and inferential data analysis techniques. Descriptive statistics such as measures of central tendency, dispersion, percentages and frequency distributions was used to analyze the scores distribution, while inferential statistics tested the hypotheses. Simple linear regression was adopted in establishing the nature of relationship between variable under study. The following correlation and regression models guided the data analysis with the variables and the indicators denoted as follows:

Sustainability of dairy goat projects = f (Project beneficiary selection)
$$Y = β_0 + β_1X_1 + ε$$

4. Findings of the Study

Questionnaires were administered to 188 dairy goat farmers with a response rate of 80%.

4.1. Demographic Information of the Respondents

The demographic profiles in terms of gender, age, duration in groups and experience in dairy goat keeping was tabulated in table 1.

Demographic profile	F	%
Gender	**F**	**%**
Male	107	56.9
Female	81	43.1
Total	**188**	**100**
Age bracket	**F**	**%**
Below 30 years	2	1.1
30-39 years	27	14.4
40-49 years	79	42.0
50 years and above	80	42.6
Total	**188**	**100.0**
Duration in the group	**F**	**%**
1 and below years	14	7.4
1-2 years	2	1.1
2-3 years	11	5.9
3-4 years	17	9.0
4-5 years	12	6.4
5 years and above	132	70.2
Total	**188**	**100.0**
Duration of keeping goats	**F**	**%**
1 and below years	16	8.5
1-2 years	5	2.7
2-3 years	19	10.1
3-4 years	8	4.3
4-5 years	10	5.3
5 years and above	130	69.1
Total	**188**	**100.0**

Table 1: Demographic Profile of the respondents

Results from the table shows that majority are male with 56.9% while female at 42.1%, 42.6% of respondent were aged above 50 years. Only a small percentage of 1.1% were youth below 30 years. The age bracket of 30 years and 49 years had the majority of 56.4%. 70.2% of the respondents have over 5 years experience in groups with only 21.3% having been in self help groups for between 2 to 5 years. 8.5% were in groups for less than 2 years and that 69.1% of the respondents had kept dairy goat for over 5 years, 5.3% between 4 and 5 years, 8.5% below one year.

4.2. Likert-Type Data

In this study the following Likert Scale was used: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; and 5=Strongly Agree. The following scoring was also used: Strongly Disagree (SD) 1<SD<1.5; Disagree (D) 1.5<D<2.5; Neutral (N) 2.5<N<3.5; Agree (A) 3.5<A<4.5; and Strongly Agree (SA) 4.5<SA<5.0. The mentioned scales give an equidistance of 0.5.

4.3. Descriptive Analysis of Sustainability of Dairy Goat Projects

Sustainability of dairy goats was measured by providing respondents with statements rated on a five-point Likert scale ranging from Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A); and Strongly Agree (SA) from which to choose.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Sustainability of dairy goats	188	2.50	1.90	4.40	3.2521	.03072	.42116	.177
Valid N (listwise)	188							
Composite mean = 3.25 Composite standard deviation = 0.764 Cronbach Alpha Coefficient = 0.645								

Table 2: Descriptive analysis for Sustainability of dairy goat's projects

From table 2 above, the mean score for sustainability was 3.2521 and standard error 0.3072. The measure for sustainability was therefore 3.25 which was tending towards the neutral level in the Likert scale implying that there was moderate sustainability of dairy goat projects. This variable was then correlated with the independent variable (project beneficiary selection process). The Cronbach Alpha coefficient of the 10 item statements was 0.645 indicating existence of moderately good internal consistencies of the items that were used for measuring this variable.

4.4. Descriptive Analysis of Project Beneficiary Selection Tools and Methods

Project beneficiary selection tools and methods was measured by providing respondents with statements rated on a five-point Likert scale ranging from: ranging from Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A); and Strongly Agree (SA) from which to choose The findings are presented in Table 3.

Statement		SD	D	N	A	SA	Mean	STDV	Total
		F %	F %	F %	F %	F %			F %
A1	Project beneficiaries selection is fair and transparent	3 1.6	7 3.7	23 12.2	116 61.7	20.7 39	3.96	.790	100
A2	Project beneficiaries are involved in selection process	2 1.1	10 5.3	28 14.9	126 67.0	22 11.7	3.83	.741	100
A3	Beneficiary selection tools are clear and well understood	4 2.1	9 4.8	86 45.7	79 42.0	10 5.3	3.44	.761	100
	Composite mean = 3.74 Composite standard deviation = 0.764 Cronbach Alpha Coefficient = 0.793								

Table 3: Descriptive analysis for Project beneficiary selection tools and Methods

Findings in Table 3 shows that 61.7%, and 67% of the 188 respondents agrees with statement A1 and A2 respectively while majority 45.7% where neutral about statement A3. The study reviews that the respondents agreed (M = 3.96 with STDV 0.790) that dairy goat beneficiaries where selected through fair and transparent manner and also agreed that project beneficiaries were involved in the selection process (M = 3.83 with STDV = 0.741). Respondents were neutral that beneficiary selection tools and methods are clear and well understood (M = 3.44, SDV 0.761). Overall, respondents agreed that project beneficiary selection tools and methods are important in project beneficiary selection (M = 3.74, SDV 0.764). The Cronbach

Alpha coefficient of the 3 item statements was 0.793 indicating existence of good internal consistencies of the items that were used for measuring this variable.

4.5. Descriptive Analysis of Project Beneficiary Need Analysis

Project beneficiary selection tools and methods was measured by providing respondents with statements rated on a five-point Likert scale ranging from: ranging from Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A); and Strongly Agree (SA) from which to choose the findings are presented in Table 4

Statement		SD	D	N	A	SA	Mean	SDV	Total
		F %	F %	F %	F %	F %			F %
B1	Project beneficiaries are involved in need analysis	3 1.6	13 6.9	26 13.8	129 68.6	17 9.0	3.77	.773	100
B2	Project addressed priority needs	4 2.1	24 12.8	68 36.2	78 41.5	14 7.4	3.39	.880	100
B3	Beneficiary needs are reviewed periodically	4 2.1	37 19.7	38 20.2	91 48.4	18 9.6	3.44	.982	100
	Composite mean = 3.53 Composite standard deviation = 0.878 Cronbach Alpha Coefficient = 0.704								

Table 4: Descriptive analysis for Project beneficiary needs analysis

Findings in Table 4 show that 68.6 %, and 41.5 % of the 188 respondents agrees with statement B1 and B2 respectively while majority 48% where neutral about statement B3. Respondents agreed that Project beneficiaries are involved in need analysis (M = 3.77, SDV 0.773) but were neutral that Project addressed their priority needs (M = 3.39, SDV = 0.880) and that the project addressed their priority needs (M = 3.44, SDV 0.982) respectively. Overall, respondents agreed that project beneficiary needs analysis is important in project beneficiary selection (M = 3.53, SDV 0.878). The Cronbach Alpha coefficient of the 3 item statements was 0.704 indicating existence of good internal consistencies of the items that were used for measuring this variable.

4.6. Descriptive Analysis of Project Beneficiary Composition

Project beneficiary selection tools and methods was measured by providing respondents with statements rated on a five-point Likert scale ranging from: ranging from Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A); and Strongly Agree (SA) from which to choose the findings are presented in Table 5.

	Statement	SD	D	N	A	SA	Mean	STDV	Total
		F%	F%	F%	F%	F%			F %
C1	Dairy goat project beneficiary composition is gender inclusive	3 1.6	42 22.3	62 33.0	70 37.2	11 5.9	3.23	.918	100
C2	Dairy goat project beneficiary integrates people with special needs	8 4.3	71 37.8	38 20.2	63 33.5	8 4.3	2.96	1.028	100
C3	Dairy goat project beneficiary is sensitive to social economic class	9 4.8	77 41.0	32 17	57 30.3	13 6.9	2.94	1.088	100
C4	Dairy goat project beneficiary composition is age sensitive	19 10.1	37 19.7	74 39.4	55 29.3	3 1.6	2.93	.978	100
	Composite mean = 3.015 Composite standard deviation = 1.003 Cronbach Alpha Coefficient = 0.859								

Table 5: Descriptive analysis for Project beneficiary composition

The research findings in Table 5 shows that the majority 37.2 % agreed with the statement C1, 37.8% disagree with statement C2, majority 41% disagreed with statement C3 and majority 39.4% were neutral about statement C4. Respondents were neutral that Dairy goat project beneficiary composition is gender inclusive (M = 3.23 with SDV 0.918), that Dairy goat project beneficiary integrates people with special needs (M = 2.96, SDV = 1.028), that Dairy goat project beneficiary is sensitive to social economic class (M = 2.94, SDV 1.088) and also neutral that Dairy goat project beneficiary composition is age sensitive

(M = 2.93, SDV 0.978). Overall, the study reviews that project beneficiary composition is moderately important in dairy goat projects. The Cronbach Alpha coefficient of the 4 item statements was 0.859 indicating existence of good internal consistencies of the items that were used for measuring this variable.

4.7. Overall Descriptive Analysis on Project beneficiary selection

The overall findings on the extent to which the project beneficiary selection influence the sustainability of dairy goat's projects is shown in table 6 below.

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Project beneficiary selection tools and methods	188	1.00	5.00	3.7429	.04687	.64269
Project beneficiary needs analysis	188	1.00	5.00	3.5319	.05101	.69941
Project beneficiary composition	188	1.25	5.00	3.0133	.06147	.84284
Valid N (list wise)	188					

Table 6: Overall Descriptive Analysis on Project beneficiary selection

Research findings indicates that overall mean for project beneficiary selection tools was 3.74 with a standard deviation of 0.64269, project beneficiary needs analysis with 3.53 with standard deviation of 0.69941and project beneficiary composition with 3.0133 and standard deviation of 0.84284. The most dominant indicator is project beneficiary selection tools and methods (M= 3.7429, SDV = 0.64269) followed by project beneficiary needs (M=3.5319, SDV=0.69941) project beneficiary composition (M= 3.0133, SDV = 0.84284) respectively.

Findings from the key informants indicated that the dairy goat projects in Tharaka Nithi targeted the poor of the poorest members of the community. The project implementing agency worked closely with the line departments including the department of livestock production, department of veterinary services and the department of social services. Dairy goat project is largely involved in the breeding, production and husbandry practices thus the livestock production was very key in these aspects while sustainable health service delivery to the dairy goats is very necessary thus the key role of the veterinary department. Project beneficiaries were drawn from the community, organized in common interest self help groups. The role of the social services was to organize these group, register them and ensure that they remain vibrant and focused to the success of the project.

Dairy goat project implemented in Tharaka Nithi targeted the poor of the poorest beneficiaries regardless of their age, gender or religion. Focus group discussion arrived at a general agreement that the selection criteria was transparent, free and fair. For instance, one group indicated that they received enough goats for the 15 members while another group said that the first lot to received was supposed to pass on the off-springs to those who did not get and this was done successfully. However, participants indicated that the extent of involvement was not adequate since the decision to select the poor and the criteria was predetermined before they were involved. They further noted that the Focus group discussions reviewed that the target of the poor of the poorest was demeaning and made some farmers shy away from the project even though they qualified due to their low social economic status. All participants subjected to the FGDs agreed that the dairy goat project addresses very critical need of the community and should be promoted. However, some confirmed that the decision to introduce dairy goats was not discussed and agreed with the community. Key informant interviews reviewed that the project focus lacked gender and people with special needs consideration as the main criteria was the economic capability of the beneficiaries. Further, the youth segment of the community was not deliberately targeted for selection. This was confirmed by the result of FGD where all the participants agreed that the question of who to be involved in terms of their gender did not arise. Similarly, there was no deliberate decision to incorporate people living with disability or with special needs However, key informant interview confirmed that organized groups based on these aspects of genders and or disability were not barred from participating in the project. Even though the project targeted the poor of the poorest, well to do farmers hijacked the project - currently, the rich were keeping dairy goat not necessarily the poor. Brokers also interfered with the process in the sense that poor

4.8. Inferential Analysis on Project Beneficiary Selection s and the Sustainability of Dairy Goat Projects in Tharaka Nithi County.

Correlational analysis using Pearson's Product Moment technique was done to determine the relationship between Project beneficiary selection and sustainability of dairy goat's projects. The following hypothesis was tested:

Hypothesis H_0 Project beneficiary selection has no significance influence on the sustainability of dairy goat projects in Tharaka Nithi County

Hypothesis H_1 Project beneficiary selection has a significance influence on the sustainability of dairy goat projects in Tharaka Nithi County

The hypothesis was tested using the following linear regression model

Sustainability of dairy goat projects = f (Project beneficiary selection)

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where

Y = Sustainability of dairy goat projects

X_1 = Project beneficiary selection

β_0: = Constant term

ε = Error term

Results of linear regression analysis used to test the hypothesis are presented in Table 7:

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
	.224a	.050	.045	.41153	.050	9.850	1	186	.002

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1.668	1	1.668	9.850	.002b
	Residual	31.501	186	.169		
	Total	33.169	187			

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	2.719	.172		15.779	.000	2.379	3.059
	Project beneficiary Selection	.157	.050	.224	3.138	.002	.058	.256
a. Dependent Variable: Sustainability of dairy goats								
b. Predictors variable: Project beneficiary Selection								
t=3.138, at level of significance p=0.002<0.05, r= 0.224 and r square=0.050								

Table 7: Regression results of the influence of project beneficiary selection on the sustainability of dairy goat's projects

Table 7 presents the inferential analysis of the influence of project beneficiary selection on the sustainability of dairy goat projects. Results indicates that the p-value = $0.002 \leq 0.05$, t=3.138, p=0.002<0.05, r= 0.224 and r square=0.050. Overall F statistics was F (1,186) = 9.850 Hence based on these findings we reject the null hypothesis that there is no significant relationship between project beneficiary selection and the sustainability of dairy goat projects and accept the alternative hypothesis at α=0.05 level of significance that there is a significant relationship between project beneficiary selection and the Sustainability of dairy goat projects.

$Y = \beta_0 + \beta_1 X_1 + \varepsilon$

can then be substituted as follows; Y= 2.719+ 0.224 X_1

5. Discussions, Conclusion and Recommendation

The objective of this study was to investigate the extent to which project beneficiary selection process influence the sustainability of dairy goat projects in Kenya. The alternative hypothesis that; There is a significant relationship between Project beneficiary selection and the Sustainability of dairy goat projects in Tharaka Nithi County was accepted. Project beneficiary selection is explained in this study by measuring the project beneficiary selection tools, project beneficiary needs analysis and project beneficiary composition. This study reviewed that project beneficiary selection tools and methods are important factors in the sustainability of dairy goat projects. This finding agrees with Booher & Innes (2002) that seeking the opinion and views of the project beneficiaries can greatly make easy the planning and design processes and bring understanding among beneficiaries. Further, Sanders & Binder (2010), Muriithi & Crawford (2003) also observes that use of appropriate beneficiary engagement tools and technics is key to project success.

The study findings indicate that project beneficiary needs analysis is important in project beneficiary selection. While agreeing with this finding, Swanepoel and de Beer (2006) points out that different groups of people may be concerned about different needs or that may have different perceptions about the same needs and in this case grouping becomes necessary. Matiwane & Terblanché (2012) also agrees with this study that projects are motivated by a specific need that must be clearly outlined as a prerequisite to proper project designing. Community participation in need analysis is important as the needs are collectively conceived and prioritized paving the way for the process of addressing them (Barasa & Jelagat 2013). Study findings indicates that project beneficiary composition in terms of gender and people with special needs is important. This finding agrees with Nicola et al (2015) that, livestock projects have failed to integrate a gender perspective, which has in turn affected their efficiency.

The conclusion is made in line with the study objective made to establish the extent to which the project beneficiary selection influences the sustainability of dairy goat projects in Kenya. The results indicate that project beneficiary selection has

a significant influence on the sustainability of dairy goat's projects. As such, this study advocates for authentic beneficiary selection process to be incorporated in dairy goat development project designs to enhance their sustainability. This will ensure that projects beneficiary selection process is acceptable by the beneficiary community, that the project addresses the needs of the beneficiaries and there is inclusivity in the project beneficiaries.

6. References

i. Adejobi, A. & Kassali, R. (2013). Markets and rural services as determinants of improved seeds usage by crop farmers I n Osun State, Nigeria. *African Crop Science Journal,* 21(2), 143 – 152.

ii. Ahuya, O. Okeyo, A. Njuru, M, and Peacock, C. (2005) *Developmental challenges and opportunities in the goat industry: the Kenyan experience.* Small Ruminant Research 60: 197-206.

iii. Bandiera, O. Barankay, I.& Rasul, I. (2005). *Cooperation in collective action Economics of Transition Volume* 13 (3) 2005, 473–498.

iv. Barasa, F. &Jelagat, T. (2013) Community Participation in Project Planning, Management and Implementation: Building the Foundation for Sustainable Development, International Journal of Current Research, Vol. 5, Issue, 02, pp.398-401.

v. Bebbington, J. Brown, B. (2007). Accounting technologies and sustainability assessment models. Ecological Economics, 61: 224–236.

vi. Blackman, R. (2003). *Community-base and–driven development: The World Bank Research Observer.* Vol.19, no.1.

vii. Booher, D. & Innes, J. (2002). Network Power in Collaborative Planning: *Journal of Planning Education and Research*, 21(3), 221–236.

viii. Boyazoglu, J. Hatziminaoglou, I. Morand-Fehr, P. (2005) *the role of the goat in society: past, present and perspectives for the future*, Small Ruminant Research 60, 13–23.

ix. Conning, J. & Kevane, M. (2002). "Community-based targeting mechanisms for social safety nets: a critical review." World Development, 30.3, pp. 375-394.

x. FAO (2012) Invisible Guardians; Women manage livestock diversity. FAO Animal Production and Health, 174.

xi. Kavoi, J. Mwangi, G. Kamau, G. (2014): challenges faced by small land holder farmer regarding decision making in innovative agricultural development, International Journal of Agricultural Extension, 2311-8547.

xii. Kilic, T. Whitney, E. Winters, P. (2013) Decentralized Beneficiary Targeting in Large-Scale Development Programs Insights from the Malawi Farm Input Subsidy Program, Policy Research Working Paper 6713.

xiii. Malyadri, P. Sumana, B. (2013) Gender issues in project management: A subtlety, International Journal of Research Studies in Management Volume 2 Number 1, 53-62

xiv. Mancur (1965), The logic of collective action, Harvard University Press, London

xv. Matiwane, M. & Terblanché, E. (2012) The influence of beneficiaries needs on project success or failure in the north-west province, south Africa, Journal of Agriculture, & Rural Development Vol. 40, 2012: 76 – 90.

xvi. Mulugeta, M. & Amsalu, T. (2014) Women's role and their decision making in livestock and household management, Journal of agricultural extension and rural development Vol 6 (11) ppg 347 – 353.

xvii. Ngongoni, T. Zvinorova, P. Halimani, E. Renneth, T. Nobbert, M. (2013): Viability of smallholder dairying in Wedza, Zimbabwe, Trop Anim Health Prod, 45:1007–1015.

xviii. Nicola, J. Chanamuto, G., Stephen, G. Hall, J. (2015) Gender equality, resilience to climate change, and the design of livestock projects for rural livelihoods, Gender & Development Vol. 23, No. 3, 2015

xix. Ogola, T. & Kosgey, S. (2012). *Breeding and development of dairy goats*: Eastern Africa experience Livestock Research for Rural Development.

xx. Ravallion, M. (2003). "Targeted transfers in poor countries: revisiting the trade-offs and policy options." World Bank Policy Research Working Paper No. 3048. http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-3048

xxi. Rogers, E. (2003). Diffusion of innovations (5th ed.). New York: Free Press.

xxii. Sanders, E. & Binder, T. (2010). *A Framework for Organizing the Tools and Techniques of Participatory Design*. Association for Computing Machinery (ACM), pp. 195-198, https://www.researchgate.net/publication/220030447

xxiii. Shenhar, A. (2011). Meeting Time, Cost, and Money-making Goals with Strategic Project Leadership: *The Art and Science of Project Management*. PMI Global Congress Proceeding.

xxiv. Swanepoel, H. & DeBeers, F. (2006). *Community development breaking the cycle of poverty 4th edition.* Cape South Africa: Formeset Printers.

xxv. Thwala, D. (2010). "*Community participation is a necessity for project success: African Journal of Agricultural research vol.5 (10) pp.970-979.*

xxvi. Werhane, P. Kelley, S. Hartman, L. Moberg, D. (2010), *Alleviating Poverty through Profitable Partnerships:* Globalization, Markets and Economic Well-being. New York: Rout ledge.