Enhancing sustainability of donor funded livelihood projects in Kilifi County through effective monitoring and evaluation

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ABSTRACT

Benefactor organizations have greatly funded livelihood projects and programs in Kilifi County. However, these projects grapple with sustainability. Some halt operations instantaneously the funding is withdrawn. The purpose of the study was to investigate the influence of monitoring and evaluation (participation; tools; and timing and frequency) on the sustainability of donor-funded livelihood projects in Kilifi County, Kenya. The descriptive correlational research design was used with a sample of 170 from a population of 295 from three livelihood projects. Seven interviews and three focus group discussions were carried out. Simple deviations, standard error of means, arithmetic means, and timing (p=0.024) had a significant influence on sustainability. This implies that the farmers had little knowledge of Likert items denoting tools in M&E. Therefore, simple and direct Likert items need to be chosen.

INTRODUCTION

Projects are often utilized as a conduit through which institutions attain their goals (PMI, 2004). They are seen as the ideal instruments of change in the society (Silvius & Schipper, 2014; Marcelino-Sadaba et al, 2015). The need to boost income base and branch out food sources and livelihood options has spurred governments across the globe and organizations to implement livelihood projects (Wicander & Coad, 2015; Lu & Lora-wainwright, 2014). Sustainability has enticed intense scholarly interest among academicians, researchers, development institutions and governments with between 5 and 10 articles published yearly in between 2009 and 2015 (Silvius & Schipper, 2014; Carvalho & Rabechini, 2017; Aarseth, 2017). There is an upturn of pressure and swelling sensitivity for organizations, donors and researchers to include sustainability issues in the projects (Marcelino-Sadaba et al, 2015). From Oina et al (2015) it can be deduced that sustainability refers to the degree to project persistence despite the withdrawal of donors while Chofreh, Goni, Shaharoun & Ismail (2015) describe sustainability as endurance of systems and processes. Bond et al (2014) outlined sustainability as long term programme continuation following implementation and or simply the maintained practice past the implementation phase. In this study the ability of projects to endure and regenerate benefits and continue implementation upon withdrawal of donor funding will be adapted.

Monitoring and evaluation (M&E) of the implementation of project exit strategy refers to the ongoing and regular or routine observation of the graduation or exit progress and its effectiveness and efficiency in reaching project goals. This process enables the...
project team and stakeholders make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). M&E is needed during the implementation of the exit strategy and after transition. Tracking progress of exit strategy requires indicators that facilitate M&E process and demonstrate the progress in achievement and promotion of sustainability. This monitoring aid in identifying project elements and exit strategies that are sustainable. The information gathered can then be utilized to adjust the design of graduation or exit in communities (Rogers & Macias, 2004). Bennett et al. (2015) asserts that there is a need to establish how M&E of exit strategies and transition process influence sustainability of programs.

M&E of an exit strategy can provide early warning on the problems that if addressed while reassuring the stakeholders that the benefits of the projects have been sustained. To evaluate the effectiveness of an exit strategy, require that an ex post assessment is carried out after some fixed time (1-2 years) after the project close out to determine whether sustainability was achieved. This should be followed by other longer-term evaluations (Simon & Ismail, 2008). These evaluations provide insights on the role of the exit strategy in the project sustainability; and success or failure factors. And give recommendations for a more effective and efficient exit strategy for future through the reviews. This current study will establish how stakeholder knowledge sharing, collaboration, and communication moderate the relationship between the implementation of combined exit strategy and project sustainability.

In Kenya, the national and county governments partner with external funding agencies such as World Bank, United Nations Children's Fund (UNICEF), Department for International Development (DFID), Canadian International Development Agency (CIDA), and United States Agency for International Development (USAID) and many others to enhance the living standards of its communities through implementation of a number of livelihood projects. This is pegged on the premise that projects are a means of attaining this goal (Silvius & Schipper, 2014; Marcelino-Sadaba et al, 2015).

Among the many bothering issues about these projects is quiescence or stalling immediately or shortly after the donors phase out or funding is withdrawn. As debated by Oino et al (2015) and Kimweli (2013) in Kenya a large sum of money is consumed in community-based projects. However, the majority of these projects have generally not made it in bringing sustainable benefits and profits to the target groups. Wabwoba & Wakhungu (2013) in their investigation on sustainability these food security and livelihood projects (in Kiambu) it was uncovered that these have little contribution when external funding comes to an end.

This is still analogous with livelihood projects in Kilifi County. In furtherance of this observation, Tang et al (2013) also noticed that the drift with sustainability of projects is dissatisfying, since only a smaller fraction of projects are sustainable. Karanja (2014) correspondingly noted that the costs experienced during execution do not match up with the benefits accrued in the colleague county of Murang’a. Largely, donor-funded livelihood projects are assuring towards closure but things change when donors pull out. These projects battle to endure the waves that come after termination. This gloomy sustainability keeps on depriving the communities of the anticipated returns from these projects. This experience is similar with the communities supported in Gandini livelihood; Dodosa high impact; and Uvumbuzi projects.

Oino et al (2015) further elucidates that though many projects emphasize elements of sustainability at their proposal stage, the actual execution appears to be short of emphasis on sustainability.

Not as much of these donor funded food security and livelihood projects is known regarding sustainability in Kilifi County through research. No rigorous study has been carried out as regards to how monitoring and evaluation influences project sustainability of donor funded livelihood projects. Other post-implementation, socio-economic aspects of livelihood projects have been studied by Harrison (2005), Wren & Speranza (2010), Kisengese (2012), Okoth (2012), and Mwamuye, (2014).

When a project ends and the external support is withdrawn, the benefits previously realized by project target groups are habitually lost (Ferris et al, 2014). It is against this context that this study sought to investigate the relationship between monitoring and evaluation and sustainability of donor funded livelihood projects in Kilifi County.

The purpose of the study was to investigate the influence of monitoring and evaluation on sustainability of donor funded livelihood projects in Kilifi County.

This study was guided by the following objectives:

a) Participation in Monitoring and evaluation influence sustainability of donor funded livelihood projects in Kilifi County.

b) Tools in M&E influence sustainability of donor funded livelihood projects in Kilifi County.

c) Frequency and timing in Monitoring and evaluation influence sustainability of donor funded livelihood projects in Kilifi County.

This study was guide by the hypothesis below

H0: Monitoring and evaluation does not significantly influence sustainability of donor funded livelihood projects in Kilifi County

H1: Monitoring and evaluation significantly influences sustainability of donor funded livelihood projects in Kilifi County

The paper is organized in 6 sections. Introduction gives the historical background to the study statement of the problem purpose and objectives of the study, hypotheses; significance of the study; limitations and delimitations. Literature review gives relevant
Theoretical, empirical and conceptual framework and research gaps. Methodology for the study outlines research design, target population, sampling size and sampling techniques, data collection instruments, data collection procedure, ethical consideration and data analysis techniques. Results section presents findings, data analysis, interpretation. In discussion section, the findings are explained in line with other studies. Section six presents the conclusions, recommendations and suggestions for further studies.

**Literature Review**

**Theoretical Background**

This study is anchored on the theoretical underpinning of the Theory of change and theory of stakeholder management theory.

*Theory of change (Carol Weiss, 1972)*

The theory was proposed by Carol Weiss in 1972 to describe the need for a theory to guide program evaluation. The theory describes how and why an initiative work in a systematic and cumulative way as regards the linkages between activities, outcomes, and contexts of the project or program. These linkages provide that during monitoring and evaluating an intervention its expected outcome must be established first then later determine the appropriate activities to be executed in order to achieve the outcomes and the contextual factors that may influence execution of such activities. The proponents of this theory such as Connell & Kubisch (1998) and O’Connor (1995) purport that knowledge of these building blocks: increases probability of stakeholder having clearly postulated outcomes, appropriate activities and contextual elements that can affect them; facilitate development of tools, measurement and data gathering the evaluation process; facilitate the doable, plausible and testable participatory planning on what activities should lead to what outcome. The application of this theory is drawn in the belief that outcomes and activities must be explained in observable measures in order to know the program happened and the sustainable results.

*Stakeholder management theory*

This theory was developed by Freeman (1984). It is one of the widely used theories in sustainability management. The theory emphasizes the relationship between the organizations and stakeholders. In this theory Freeman (2010) defines stakeholders as those groups and individuals who have potential to affect or can possibly be affected by the actions of an organization [project] or any individual or group who can affect or is affected by the achievement of an organization goal. In fostering sustainability, possible challenges that managers face would be affixing sustainability in the state of mind of all possibly identified stakeholders; and creating a mutual sustainability interests between different stakeholders (Hörisch, Freeman & Schaltegger, 2014) as different stakeholders have different and conflicting interests and powers (Stead & Stead, 1996).

**Empirical Studies**

*Sustainability of projects*

The distinction between successful and failed community-based projects is embedded in their sustainability (Oina et al, 2015) and because of this imperative interplay many institutions (70% of the respondents) in a study by Kiron et al (2012) were found to be indexing sustainability as an outline of items for discussion and consequently upping their commitments towards it and institutionalizing it. Although integration of sustainability in projects is gaining momentum, it is also at risk. Jenkins et al (2010) opined that some projects in low and middle earning countries experience challenges with sustainability because of other competing priorities.

There are many descriptions of project sustainability as a result of increased pressure by donors and organizations and increased scholarly interest (Pohl et al, 2010; Silvius & Schipper, 2014; Aarseth, 2017 and Carvalho & Rabechini, 2017). As such there is no one common definition of term sustainability (Karanja, 2014; Bond et al, 2014; Spaling, Brouwer & Njoka, 2014; Cheftreh, Goni, Shaharoun & Ismail, 2015; and Mattiuzzi, 2017). The definition by Perrini & Tencati (2006) seems to collectively refer project sustainability to the capability of an organization or an institution to continue its activities indefinitely, while taking into consideration the economic, social, and environmental dimensions of a project. The findings by Bond et al (2014) and Spaling, Brouwer & Njoka (2014) describe sustainability as a long term programme continuation following implementation and or simply the process of maintaining the practice beyond the implementation phase. Chirenje, Giliba & Musamba (2013) investigated the determinants of project sustainability in Indonesia; while Oina et al (2015) studied the community based project in Kenya and both found and categorized them into technical (appropriateness of technology and technical skills); economic aspects (cost efficiency, cost recovery and operational requirements); social aspects (participatory decision making and resistance or acceptance); and organizational factors (administrative or management support and legal support). While demystifying the dilemma facing sustainability Oina et al (2015) says that sustainability is exhibited when there is continued reaping of dividends, participation and ownership in the project. Projects are considered sustainable when the target community, without external support, is able to continue producing beneficial results provided that the problem subsists (Spaling, Brouwer & Njoka, 2014).

*Monitoring and evaluation of project exit strategies and sustainability of donor funded livelihood projects*

Long term success of a project is equivalent to project sustainability. Monitoring and evaluation is among the critical success factors of project sustainability (PMBOK, 2001) as found by various scholars such as Kamau & Mohamed (2014); Ochieng & Tubey (2012).
Most projects are funded on the basis that they portray a clear outline of how their interventions will be monitored and evaluated. M&E process enables the project team and stakeholders make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). Bennett et al. (2015) avers that there is a need to determine how M&E of exit strategies influences sustainability of projects or programs. According to Porter & Goldman (2013) M&E helps to understand whether plans (in this respect the sustainability plan or exit strategy plans) are implemented or followed as planned and whether there are any differences, lessons learned from the activities and how to strengthen the implementation. M&E can offer early warning on the problems that if addressed while reassuring the stakeholders that the benefits of the projects have been sustained.

An ex-post evaluation is required to evaluate the effectiveness of an exit strategy. This evaluation or assessment is carried out after some fixed time (1-2 years) after the project close out to establish whether sustainability was achieved. This should be followed by other longer-term evaluations (Simon & Ismail, 2008). These evaluations provide insights on the role of the exit strategy in the project sustainability; and success or failure factors. And give recommendations for a more effective and efficient exit strategy for future. Kamau & Mohamed (2014) concluded in their critical literature review that a well-supported monitoring and evaluation by the management influences project sustainability. Papke-Shields et al (2010) and Ochien & Tubey (2012) also observed that constant project progress monitoring enhanced increased the probability of achieving project success. In their regression analysis on the critical factors of project success, Ika et al (2012) found the monitoring and evaluation was a critical success factor among training, coordination, design and institutional environment.

Revisiting the meaning of M&E, monitoring is a management function that focuses on tracking progress whether or not what is intended in the plan is being done or achieved. Monitoring helps to know what evaluative questions to ask (Porter & Goldman, 2013). Evaluation is the systematic, logical and objective assessment of a completed or an ongoing project, program, or policy, usually including its design, implementation, and results (Kimweli, 2013) and understanding anticipated and unanticipated change. Evaluation helps find out the relevance, appropriateness and fulfillment of objectives; efficiency, effectiveness, impact, and sustainability of projects. There is need to balance between monitoring and evaluation as different aspects of the same. Porter & Goldman (2013) points out that the demand for M&E is occasioned by the need to use evidence to make decisions and this needs a match between capacity to supply (monitoring) and capacity to demand (evaluation). According to them (Porter & Goldman, 2013) there is high supply over demand when monitoring dominates or masquerades evaluation.

Undertaking unfailing monitoring and evaluation exercise affixes value to the overall efficiency of implementation of the exit strategies by offering remedial action to the variations from the expected results (Kamau & Mohamed, 2014). Robust M&E needs strengthened monitoring and evaluation team (comprising of the key stakeholders) which closely relates to frequency of M&E and extent to which M&E can detect variances in the expected results.

Understanding M&E practices is highly emphasized in project management especially in donor funded projects. Since project teams do not work in isolation (but rather work considering the different needs and expectation of stakeholders) there is need to ensure uphold participatory monitoring and evaluation. There is an increased emphasis on the participatory monitoring and evaluation by the funding agencies; and demand for accountability and inclusion by target community (Kimweli, 2013). As such there is a shared need for better understanding of M&E practices, objectives and procedures in order to contribute to sustainability of projects.

The productivity of the M&E teams can be enhanced with capacitating in terms of financial stability, M&E skills, frequency of monitoring, stakeholder representation, use of technology and team building and work (Gwadoya, 2012). An ideal monitoring team is one that has good stakeholders’ representation and embraces team work. In support of this notion, Magondu (2013) found out a clear link between relevant skills, resources and capacities (in terms of numbers, infrastructure and systems); and effectiveness in M&E skills are needed to know the rules of the game. Further, a case study of the donor funded food security projects in Kibwezi by Kimweli (2013) revealed that such projects suffered poor performance (failure) and absence of sustainability because of the failure to involve communities in the process of monitoring and evaluation. This hindrance to community participation seems to be protected by such legislation such as Official secret act that sometimes bars the community involvement in the monitoring and evaluation activities and open and transparent information sharing by the constituent development fund (CDF) committee and project management (PM) committee. The projects were later identified by CDF committees and not the community since the community felt that those projects were established, implemented and monitored by this external support. These findings revealed that community had less involvement in M&E activities. This discloses that participatory monitoring and evaluation throughout the project cycle contributes to success and sustainability of projects. However, it needs to be complemented and supplemented with other project management skills. Involving stakeholders in monitoring and evaluation allows for project team to get feedback on effectiveness, efficiency and appropriateness of initiatives at every step along the project cycle.

This aims at determining relevance, appropriateness and fulfillment of objectives. For the sole purpose of project exit strategy, to describe how the program intends to pull out its resources (or phase out or phase down or phase over) while ensuring that the attainment of the program or project goals is not endangered and that progress towards these goals will continue (Gardner, Greenblott & Joubert 2005; and Roger & Macias, 2004), participatory M&E enables the project team and stakeholders make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). Organizing many agencies to work jointly can reduce problems with decision-makers chasing their own scarcely defined interests and contribute more to sustainable management (Hjorth & Madani, 2014).
In order to satisfy diverse stakeholder needs, relief agencies are obligated to observe stringent project reporting procedures. Project monitoring and evaluation information systems (PMEIS) are a pre-requisite for most funding with donors emphasizing the use of well-established systems for the purposes of project appraisal and monitoring and evaluation. Putting in place a PMEIS enables the stakeholders get information about the project. PMEIS (a management information system) is designed to mitigate or alleviate poor project performance (and or sustainability), promote learning and accountability (Crawford & Bryce, 2003). When decision makers are required to use evidence to aid in decision making there is demand for M&E system. Various approaches or tools have been designed and employed in achieving this. Logframe approach, firstly conceived in 1969 by Practical Concepts Incorporated for the United States Agency for International Development (USAID) to support project design and appraisal, has been used widely represent project strategies (Bene, Frankenberger & Nelson, 2015). A logical framework is a tabular matrix that defines the project hierarchical objectives, targets, and means of verifying results, responsibilities, risks and assumptions (Crawford & Bryce, 2003). The logical framework has vertical and horizontal axis. The vertical axis represents the hierarchical movement of objectives based on the cause-and effect logic (that is, how one results into the other) and the assumptions and preconditions; while the horizontal axis represents how results can be verified.

Timing and frequency of data collection are key aspects of monitoring and evaluation (Bene, Frankenberger & Nelson, 2015). Based on timing, monitoring as it is defined, it is supposed to be objective, continuous and progressive to inform how outputs are being achieved and takes place during the implementation phase while evaluation should be periodical (Porter & Goldman, 2013). Marshall & Suarez (2014) defined M&E broadly as activities (of data collection, descriptive reporting, compliance) used to track and assess performance and meet the diverse needs of different stakeholders. A case study by Ochieng’ & Tubey (2012) on CDF projects revealed that frequent monitoring is required for optimum management to be observed. The timing and frequency of M&E depend on the nature and type of projects or intervention. For instance, livelihood projects and resilience projects require high frequency monitoring (quarterly based). The timing is also dependent on the phases along the project cycle. Based on the timing evaluation is classified as ex-ante evaluation, formative evaluation, summative evaluation and ex post evaluation (Marshall & Suarez, 2014).

Ex ante evaluations are those that take place before the project starts while formative evaluations are those that are undertaken at implementation and rely on feedback from project participants’ opinions. Summative evaluations take place at the end of the project with an aim of measuring outcome or impact of an intervention. Ex post evaluation are evaluation that are undertaken sometime after the project has been closed. Ex-post evaluation is required to evaluate the effectiveness of an exit strategy a few years after project exit to establish whether sustainability was achieved or whether the strategies put in place are still maintained for the long-term benefit to the project client.

Studies on sustainability failed to recognize M&E as a critical factor and thus this study bridged the gap by acting on the recommendations by Wabwoba & Wakhungu (2013) and Aarseth et al. (2017) to link M&E with sustainability. In as much as a number of recipes for project sustainability have been identified, the study by Martens & Carvalho (2017) fails to examine capacity building, support service linkages and monitoring and evaluation of the sustainability. This study focussed on the monitoring and evaluation in projects in Kilifi.

**Research and Methodology**

**Research design**

This study used descriptive correlational research design, a combination of descriptive research and correlational research techniques. Descriptive design was employed to make careful in-depth observations of the phenomenon of interest-project sustainability. In accordance with Creswell (2012) the correlational research design involved the measurement of monitoring and evaluation; and sustainability of donor funded livelihood projects. Later the degree to which these variables are related was determined. Descriptive design and correlational designs were used for the researcher to understand the features of the population and study the relationships or associations between variables under investigation.

**Target population**

295 farmers were targeted for quantitative data collection distributed as 140 farmers of Gandini livelihood and food security project; 95 farmers of the Dodosa High Impact project; and 60 farmers targeted by Uvumbuzi Project. The ward agricultural extension officer, ward livestock officer attached to the projects; irrigation officer, cooperative officer, 3 assistant chiefs from the area in which the projects were implemented were targeted for qualitative data collection. Thus, the target population was 295 farmers drawn from the tree projects and 7 individuals from the technical and administration class totaling to 302 members.

**Sample size and sampling procedure**

The sampling frame for the study was the farmers in Gandini food security and livelihood project, Dodosa High Impact project and Uvumbuzi project. The sample size of was obtained using Solvin’s formula (Singh & Masuku, 2014).

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\text{Sample Size } (n) = \frac{N}{1 + Ne^2}
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This study employed both probabilistic (random) and non-probabilistic (non-random) designs of sampling. Random sampling was adopted to give every member of the population an equivalent chance of appearing (or being included) in the sample (Bordens & Abbott, 2011).

Further, based on the use of quantitative and qualitative methods to research, this study used a nested-concurrent sampling design in which a large sample participates in both quantitative and qualitative methods and the small sample participates in the opposite simultaneously in a single research phase. Proportionate cluster and simple sampling for individual interviews (quantitative data) while purposive sampling used to select key informants and members of the population that constituted the focus group discussion.

In Gandini 80 farmers were sampled while 55 were sampled in Dodosa project. In Uvumbuzi project 35 were sampled. In addition, one agricultural extension officer, one livestock officer, one irrigation officer, one cooperative officer and three local administrators from the respective project sites were included. This made the total to 177 respondents taking part in data collection.

Data collection procedure

Pre-constructed questionnaires with pre-determined response categories were used to avoid free expression of thoughts and feelings of the subject. The questionnaire responses in sections B, C, D, E, and F were based on 5-point Likert scale. Semi-standardized one-on-one interviews were used to gather data from the 7 key informants. Three focus group discussions were carried out as one men FGD in Gandini, one women FGD in Dodosa and one project committee FGD.

Cronbach Coefficient was used to measure reliability. Kinyanjui (2014) points out that Cronbach Coefficient is applied to test internal consistencies of samples of a particular population.

Ethical considerations

The introductory letter was obtained from the University of Nairobi, School of open and distance learning introducing the study to the relevant authorities. The letter facilitated the acquisition of the permit for research from National Commission for Science Technology and Innovation (NACOSTI). The researcher also sought approvals from Kenya Red Cross Society, County commissioner’s office and the County Director of Education in Kilifi County. The Magarini sub-county and local leadership Gandini, Baricho and Singwaya sub-locations was also reached out for permission.

Five research assistants were trained in data collection with emphasis on the use of kobo collect application and research ethics. Seventeen questionnaires were pretested in Paziani in Paziani sub-location, Malindi division, and Malindi sub-county in Kilifi County.

Data analysis

Quantitative data was analysed using descriptive and inferential data analysis techniques. Descriptive analysis was undertaken using central tendency (mode, means and median), frequency distribution and percentages) and measures of dispersion (variance and standard deviation) to understand the characteristics of the respondents. The inferential analysis was carried out using correlation and regression model to test the hypothesis and test for associations among variables of interest under this study. ANOVA was used to test model fitness. The level of confidence was set at ninety-five percent (95%) while the level of significance alpha will be set at 0.05. Inferential and descriptive statistics were generated using Statistical package for social sciences version 25 (SPSS 25).

Results

Response rate

Questionnaires were administered to a sample of 170 farmers. 163 were returned complete. This represented 95.88% questionnaire response rate. In-depth interviews were conducted with 7 key informants that had been targeted.

Sustainability of donor funded projects

In this study sustainability of donor funded livelihood projects was identified and indicated by continued implementation, continued benefits, continued active participation. Individually, continued implementation (x̅=3.893), continued benefits (x̅=2.956), continued active participation (x̅=4.087). The 9 sustainability items had a composite mean (x̅) of 3.6462, standard error of mean of 0.04353 and standard deviation of 0.5557. According to Lantz (2013) range between 3.4 and 4.2 indicate agreeing to the perception. This connotes that the respondent perceived the donor funded livelihood projects were sustainable. It was established that the mean perception of sustainability did not differ significantly with projects (F(2,160) =1.670, p=0.192), gender (t(161)=0.428, p=0.669), age (F(4,158)=0.576, p=0.724), and marital status (F (2,160) =1.268, p=0.284). However, there was a significant difference in mean perception of sustainability of donor funded livelihood projects among the different groups based on highest level of education attained (F (3,159) =3.812, p=0.011) and duration of stay in the project (F(3,159) =7.188, p=0.00162).

Sample Size (n) = \frac{295}{1+295(0.05)^2} = 170 Respondents
Participation in Monitoring and evaluation and sustainability of donor funded livelihood projects in Kilifi county

The researcher pursued to establish the extent to which the respondents perceived their participation in M&E influenced sustainability of donor funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items are as shown in the table 1.

Table 1: Participation in Monitoring and evaluation and sustainability of donor funded livelihood projects in Kilifi county

|                | SD | D   | N   | A   | DA  | N   | Mean | S.E. | Std. Dev |
|----------------|----|-----|-----|-----|-----|-----|------|------|----------|
| **ME1**        |    |     |     |     |     |     | 163  | 3.96 | 0.076    |
|                | (%)| (%) | (%) | (%) | (%) |     |      |      |          |
|                | 0  | 22  | 14  | 76  | 51  | 163 |      |      | 0.971    |
| **ME2**        |    |     |     |     |     |     | 163  | 3.96 | 0.071    |
|                | (%)| (%) | (%) | (%) | (%) |     |      |      | 0.902    |
|                | 0  | 16  | 21  | 79  | 47  | 163 |      |      |          |
| **ME3**        |    |     |     |     |     |     | 163  | 4.28 | 0.044    |
|                | (%)| (%) | (%) | (%) | (%) |     |      |      | 0.561    |
|                | 0  | 2   | 3   | 105 | 53  | 163 |      |      |          |
| **Composite**  |    |     |     |     |     |     | 163  | 4.07 | 0.056    |
|                | (%)| (%) | (%) | (%) | (%) |     |      |      | 0.716    |

**ME1**: You regularly participated in monitoring the progress of this project before donor withdrew

**ME2**: You regularly participated in reviewing the progress of this project before donor withdrew

**ME3**: Your feedback informs the future implementation of this project

The findings in the Table 1 presents the responses on respondents’ participation in M&E. ItemI (ME1) sought to find out the extent to which the respondents perceived they participated in monitoring of the progress of the project before the donor withdrew. None of the respondents strongly disagreed. However, 22 (13.5%) disagreed; 14 (8.6%) were neutral; 76 (46.6%) agreed; and 51 (31.1%) strongly agreed. The majority (77.7%) agreed. The item scored mean of 3.96; a standard error of mean of 0.076; a standard deviation of 0.971. The mean perception lied between 2.989 and 4.931. As much as this range indicate some neutrality the perception tends more towards the positive and as such it was concluded that the sample perceived that they regularly participated in the monitoring of the progress of the project.

Item 2 (ME2) pursued to establish the extent to which the respondents viewed their participation in reviewing the project progress. None of the respondents strongly disagreed. 16 (9.8%) disagreed; 21 (12.9%) were neutral; 79 (48.5%) agreed; and 47 (28.8%) strongly agreed. The majority (77.3%) were positive. The item scored a mean of 3.96; standard error of mean of 0.071 and standard deviation of 0.902 with a mean perception ranging between 3.058 and 4.862.

The much tension toward the positive was concluded that the sample were regularly involved in reviewing the progress of the project. Item 3 (ME3) sought to find out the perception of the respondents on whether or not their feedback to the project leadership and management informed future implementation. None (0.0%) of the respondent strongly disagreed; 2 (1.2%) disagreed; 3 (1.8%) were neutral; 105 (64.4%) agreed; and 53 (32.5%) strongly agreed. The majority (97.9%) of the respondents were positive. The item had a perception mean score of 4.28; standard error of mean of 0.044 and standard deviation of 0.561.

The mean perception range of between 3.719 and 4.841 concluded that the respondent’s feedback informed future implementation of the project. The composite means of 4.07 for participation in M&E indicated that the respondents participated in the monitoring and evaluation of the project before the donor withdrew.

Tools in M&E and sustainability of donor funded livelihood projects in Kilifi County

The three Likert items of this indicator sought to determine the extent to which the respondents perceived the tools in M&E influenced sustainability of donor funded livelihood projects. The mean and the standard deviation findings for the three items are as shown in the table 2.
Table 2: Tools in Monitoring and evaluation and sustainability of DFLPs

| Item   | SD | D  | N  | A  | DA | N  | Mean  | S.E.  | Std. Dev |
|--------|----|----|----|----|----|----|-------|-------|----------|
|        | F  | (%)| F  | (%)| (%)| (%)| (%)   | (%)   |          |
| ME4    | 0  | 1  | 1  | 130| 25 | 163| 4.09  | 0.039 | 0.495    |
|        |    | (0.0%) | (0.6%) | (0.6%) | (79.8%) | (15.3%) | 100   |          |
| ME5    | 1  | 1  | 10| 124| 27 | 163| 4.07  | 0.043 | 0.551    |
|        |    | (0.6%) | (0.6%) | (6.1%) | (76.1%) | (16.6%) | 100   |          |
| ME6    | 0  | 32 | 14| 87 | 30 | 163| 3.71  | 0.077 | 0.987    |
|        |    | (0.0%) | (19.6%) | (8.6%) | (53.4%) | (18.4%) | 100   |          |
| Composite|    |      |     |    |    | 163| 3.96  | 0.041 | 0.520    |

ME4: The project has well outlined objectives
ME5: The project has well outlined targets
ME6: The project has a well spelt out means of measuring performance

Item 4 (ME4) collected responses to establish the views of the respondents on whether the project had well outlined objectives. None of the respondents strongly disagreed. One (0.6%) disagreed; 1 (0.6%) was neutral; 130 (79.8%) agreed; and 25 (15.3%) strongly agreed. The majority (95.1%) were positive. The item scored a mean of 4.09; standard error of mean of 0.039 and a standard deviation of 0.495 and a mean perception range between 3.595 and 4.585. Thus, it was concluded that the project had well outlined objectives.

Item 5 (ME5) collected data to establish the extent to which the respondents perceived that the project had well outlined targets. One (0.6%) strongly disagreed; 1 (0.6%) disagreed; 10 (6.1%) were neutral; 124 (76.1%) agreed; and 27 (16.6%) strongly agreed. The majority (92.7%) agreed. The item scored a mean of 4.07; a standard error of mean of 0.043 and a standard deviation of 0.551 with a mean perception range between 3.519 and 4.621. The conclusion was that the project had well outline targets.

Item 6 (ME6) sought to establish the extent to which the respondents perceived the well spelt out means of measuring project performance. None of the respondents strongly disagreed. 32 (19.6%) disagreed; 14 (8.6%) were neutral; 87 (53.4%) agreed; and 30 (18.4%) strongly agreed. The item scored a mean of 3.71 with a standard error of mean of 0.077; standard deviation of 0.987; and mean perception range of between 2.723 and 4.697. There was an extent of mixed views but concluded that the sample perceive that the project had well spelt out means of measuring project performance. The indicator scored a composite mean score of 3.96 and standard deviation of 0.52. It was concluded that the respondents perceived that the tools used in monitoring and evaluation had influence on the sustainability of DFLPs.

Frequency and timing in M&E and sustainability of donor funded livelihood projects in Kilifi County

The three Likert items of this construct sought to determine the extent to which the respondents perceived the frequency and timing in M&E influenced sustainability of donor funded livelihood projects. The findings for the three items are as shown in the table 3.

Table 3: Frequency and timing in Monitoring and evaluation and sustainability of donor funded livelihood projects in Kilifi county

| Item   | SD | D  | N  | A  | DA | N  | Mean  | S.E.  | Std. Dev |
|--------|----|----|----|----|----|----|-------|-------|----------|
|        | F  | (%)| F  | (%)| (%)| (%)| (%)   | (%)   |          |
| ME7    | 0  | 22 | 8 | 86 | 47 | 163| 3.97  | 0.074 | 0.939    |
|        |    | (0.0%) | (13.5%) | (4.7%) | (52.8%) | (28.8%) | 100   |          |
| ME8    | 0  | 28 |13 | 67 | 55 | 163| 3.91  | 0.082 | 1.051    |
|        |    | (0.0%) | (17.2%) | (8.0%) | (41.1%) | (33.7%) | 100   |          |
| ME9    | 1  | 18 |19 | 76 | 49 | 163| 3.94  | 0.075 | 0.957    |
|        |    | (0.6%) | (11.0%) | (11.7%) | (46.6%) | (30.1%) | 100   |          |
| Composite|    |      |     |    |    | 163| 3.94  | 0.067 | 0.856    |

ME7: Frequent monitoring can contribute to project results
ME8: There has been frequent monitoring for the project
ME9: The project prepared time schedules to track progress
In Table 3 Item 7 (ME7) collected responses to establish the perception of respondent on the contribution of frequent monitoring on project results. None of the respondents strongly disagreed. 22 (13.5%) disagreed; 8 (4.7%) was neutral; 86 (52.8%) agreed; and 47 (28.8%) strongly agreed. The majority (81.6%) were positive. The item scored a mean of 3.97; standard error of mean of 0.074 and a standard deviation of 0.939 and a mean perception range between 3.031 and 4.909. Thus, it was concluded that the respondent perceived that frequent monitoring contributed to project results. Item 8 (ME8) collected data to establish the extent to which the respondents perceived that there had been frequent project monitoring.

None of the respondents strongly disagreed. 28 (17.2%) disagreed; 13 (8.0%) were neutral; 67 (41.1%) agreed; and 55 (33.7%) strongly agreed. The majority (74.8%) agreed. The item scored a mean of 3.91; a standard error of mean of 0.083 and a standard deviation of 1.051 with a mean perception range between 2.859 and 4.961. The conclusion was that the respondents perceived there was frequent project monitoring.

Item 9 (ME9) sought to establish the extent to which the respondents perceived the project prepared time schedules to track project progress. One (0.6%) of the respondents strongly disagreed; 18 (11.0%) disagreed; 19 (11.7%) were neutral; 76 (46.6%) agreed; and 49 (30.1%) strongly agreed. The majority score (76.7%) were positive. The item scored a mean of 3.94 with a standard error of mean of 0.075; standard deviation of 0.957; and mean perception range of between 2.983 and 4.897. There was an extent of mixed views but concluded that the sample perceived that project prepared time schedules to track project progress. The indicator scored a composite mean score of 3.94 and standard deviation of 0.86. It was reliably concluded (with Cronbach’s coefficient =0.786) that the respondents perceived that monitoring and evaluation had influence on the sustainability of donor funded livelihood projects.

Table 4: Composite descriptive findings for monitoring and evaluation and sustainability of donor funded livelihood projects

| Indicator                        | N    | Mean    | Std. Error | Std. Deviation | Cronbach’s coefficient |
|----------------------------------|------|---------|------------|----------------|------------------------|
| Participation in ME              | 163  | 4.0675  | 0.05611    | 0.71641        | 0.786                  |
| Tools used in ME                 | 163  | 3.9571  | 0.04073    | 0.52003        |                        |
| Frequency and timing in ME       | 163  | 3.9427  | 0.06695    | 0.85474        |                        |
| Valid N (listwise)               | 163  | 3.9891  | 0.04043    | 0.51619        |                        |

The table 4 shows respective composite means, standard deviations, and standard error of mean for the three (3) indicators under monitoring and evaluation as computed using SPSS. Participation in M&E had a composite mean of 4.07, standard deviation of 0.72 and standard error mean of 0.056. The mean perception of 3.35 and 4.79 agreement to the perception that the respondents participated in the M&E activities of the project. The perception on tools used in M&E had a mean of 3.96 and standard deviation of 0.52 and standard error of mean of 0.041 with a mean perception lying between 3.44 and 4.48.

This indicated that M&E tools were used in the project. The perception on the frequency and timing of M&E had a mean of 3.94 and a standard deviation of 0.86 and standard error of mean of 0.067 with mean perception range of between 3.08 and 4.00 implying that the neutrality extending most towards positive. Based on the Cronbach’s coefficient (α=0.786) and the composite statistics (mean =3.99, SE=0.040, SD=0.52) and mean range between 3.47 and 4.51 lead to the conclusion that M&E (participation, tools used, and frequency and timing) influenced sustainability of DFLPs in Kilifi County.

Hypothesis Testing

This study was guided by the following hypothesis.

**H0:** Monitoring and evaluation of project exit strategy does not significantly influence sustainability of donor funded livelihood projects in Kilifi County

**H1:** Monitoring and evaluation of project exit strategy significantly influence sustainability of donor funded livelihood projects in Kilifi County

**Correlation between monitoring and evaluation and sustainability of DFLPs**

Correlation test was carried out to test the null hypothesis that “There is no significant relationship between monitoring and evaluation and sustainability of donor funded livelihood projects in Kilifi County”. The findings of the correlational tests are as indicated in the table 5.
Table 5: Correlation results for monitoring and evaluation and sustainability of donor funded livelihood projects

| Variable/Indicator | Test                  | Monitoring and Evaluation | Sustainability of donor funded livelihood projects |
|--------------------|-----------------------|---------------------------|--------------------------------------------------|
| Monitoring and Evaluation | Pearson Correlation | 1                         | .458**                                             |
| Sig. (2-tailed) |                                      | .000                      |                                                   |
| N                  | 163                   |                           | 163                                               |
| Monitoring and Evaluation | Pearson Correlation | .458**                   | 1                                                 |
| Sig. (2-tailed) |                                      | .000                      |                                                   |
| N                  | 163                   |                           | 163                                               |

**. Correlation is significant at the 0.01 level (2-tailed).

The table 5 shows Pearson product moment correlation (r) =0.458; p=0.0000389<0.01. This was a moderate positive correlation. Based on the p-value method, the null hypothesis was rejected. This means that there was a (moderate) positive correlation between monitoring and evaluation and sustainability of DFLPs.

Regression analysis for monitoring and evaluation and sustainability of DFLPs in Kilifi County

The outputs of the regression test were used to determine the fitness of the model and the mathematical model for the variables under the objective.

Table 6: Regression Model summary for monitoring and evaluation; and sustainability of DFLPs

| Model | R       | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---------|----------|-------------------|---------------------------|
| 1     | .458*   | .210     | .205              | .496                      |

a. Predictors: (Constant), Monitoring and Evaluation

The model in table 6 above points that monitoring and evaluation explains 21% of sustainability of donor funded livelihood projects. When adjusted it predicts 20.5%. This means that 79% of sustainability was explained by other factors. The fitness of the model was tested using ANOVA with a null hypothesis, “The model for monitoring and evaluation predicting sustainability of DFLPs is not fit”. The results of the fitness test are as shown in the table 7.

Table 7: Test of model fitness for predicting monitoring and evaluation and sustainability of donor funded livelihood projects

| Model         | Sum of Squares | df | Mean Square | F       | Sig.          |
|---------------|----------------|----|-------------|---------|---------------|
| 1Regression   | 10.495         | 1  | 10.495      | 42.740  | 0.0000389*    |
| Residual      | 39.535         | 161| .246        |         |               |
| Total         | 50.031         | 162|             |         |               |

a. Dependent Variable: Sustainability of donor funded livelihood projects

b. Predictors: (Constant), Monitoring and Evaluation

The model fitness p-value test showed F(1,161) =42.740; P=0.0000389<0.05. The null hypothesis was therefore rejected. The model was there concluded to be fit and that M&E predicted 21% of sustainability of donor funded livelihood projects in Kilifi County.

To determine the extent to which M&E influenced sustainability of DFLPs, a mathematical model was established by the SPSS generated coefficients as shown in the table 4.40 below. The mathematical model followed the pattern as:

Y= β₀+ β₁X₁+ ε; where ε is the random error

Table 8: Mathematical model for Monitoring and evaluation and sustainability of donor funded livelihood projects

| Model                  | Unstandardized Coefficients | Standardized Coefficients | t       | Sig.          |
|------------------------|-----------------------------|---------------------------|---------|---------------|
| (Constant)             | 1.679                       | .303                      | 5.535   | 0.0000389*    |
| Monitoring and Evaluation | .493                        | .075                      | .458    | 6.538         | 0.0000389 |

a. Dependent Variable: Sustainability of donor funded livelihood projects

From the model above β₀=1.679; β₁=0.493 therefore the model looked as

Y=1.679+.493X₁+ ε; where; ε is error and X₁ is the monitoring and evaluation.

The model indicates that an increase in monitoring and evaluation by one (1) unit automatically results in an increase in sustainability by 0.493 and a reduction in sustainability by one unit it would result into a decrease in sustainability by the same margin. The p=0.000<0.05 made the null hypothesis “Monitoring and evaluation of project exit strategy does not significantly influence
“sustainability of donor funded livelihood projects in Kilifi County” be rejected. Therefore, the conclusion was that Monitoring and evaluation of project exit strategy significantly influences sustainability of donor funded livelihood projects in Kilifi County.

The Likert scale value can be computed as:

\[ Y = 1.874 + 0.25P + 0.057TL + 0.133FT + \varepsilon \]

where \( P = \) community participation in M&E, \( TL = \) tools used in M&E and \( FT = \) frequency and timing in M&E.

The model shows that an increase by one (1) unit of community participation in M&E, tools used in M&E and frequency and timing in M&E would increase sustainability of DFLPs by 0.25, 0.057 and 0.133 units respectively.

**Discussion**

The descriptive and inferential analysis indicated that M&E influenced sustainability of DFLPs in Kilifi County. The mean perception scores for participation in M&E (\( \bar{x} = 4.0675 \)); Tools used in M&E (\( \bar{x} = 3.9571 \)) and frequency and timing of M&E (\( \bar{x} = 3.9429 \)) all fell in the affirmative area. Inferentially it was found that M&E had a positive moderate correlation with sustainability of DFLPs in Kilifi County. This study found out that M&E significantly influenced sustainability of these projects. This concurred with what Kamau & Mohamed (2014); Ika et al (2012) and Ochieng & Tubey (2012) found in their studies that M&E was a critical success factor for project sustainability as a well-supported monitoring and evaluation by the management influences project sustainability. Collectively M&E significantly influenced sustainability by \( p = 0.0000389 < 0.005 \). This level of significance outrightly explained how critical this function is in the success of any project as found out by Kamau & Mohamed (2014); and Ochieng & Tubey (2012).

Further analysis of the M&E constructs under this study revealed that participation (with \( p = 0.000 < 0.05 \)) of the communities in the M&E processes of the project contributed significantly to the sustainability. This finding agreed with a case study of the donor funded food security projects in Kirwa by Kimweli (2013) which disclosed that donor funded projects suffered poor performance and absence of sustainability because of the failure to involve communities in the process of monitoring and evaluation. Another similar finding by Ochieng & Tubey (2012) in their case study of constituent development fund (CDF) projects in Ainamoi constituency in Kericho County uncovered that failure of those projects was occasioned by the failure to involve the local community in the M&E process. The respondents agreed that they had participated in M&E processes by frequently taking part in tracking performance, reviewing progress and giving feedback that informed future project implementation.

From the qualitative data collection methods (FGDs and interviews) it was established that much of the monitoring in irrigation agriculture in Gandini project was led by a team of trainers of trainers (TOTs). From the discussion, the TOT concept had been adopted because of the county staffing challenges in the department of agriculture since the extensive Garashi ward only had one ward agricultural officer to cover the whole area. During the visits (by the ward agricultural officers, TOTs and the officers in charge of the respective projects) the farmers themselves were to be present at their respective plots to receive feedback, thus their participation in M&E activities. Through the discussion it was determined that the operations of the project and the work of the field officers was the reason why the monitoring activity was not being fulfilled.

On project reviews it was established through the FGDs that farmers had monthly meetings through which they would share views on existence of well outlined objectives; well outlined target; and well spelt out means of measuring the performance which had means (4.09, 4.07 and 3.71 respectively) indicating positive stand. However, on

\[ \text{Table 9: Participation, tools, frequency and timing in M&E and sustainability of donor funded livelihood projects} \]

| Model                      | Unstandardized Coefficients | Standardized Coefficients | t    | Sig. |
|----------------------------|----------------------------|---------------------------|------|------|
| (Constant)                 | 1.874                      | .373                      | 5.020| .000 |
| Participation in ME        | .251                       | .068                      | .324 | 3.711| .000 |
| Tools used in ME           | .057                       | .077                      | .054 | .743 | .459 |
| Frequency and timing in ME | .133                       | .058                      | .204 | 2.285| .024 |

a. Dependent Variable: Sustainability of donor funded livelihood projects

In the table 9 coefficients indicate the independent contribution of community participation in M&E, tools used in M&E and frequency and timing in M&E. The table indicates that community participation in M&E and frequency and timing in M&E had significant influence whereas tools used in M&E did not have a significant influence on the sustainability of DFLPs in Kilifi County. Therefore, the expanded mathematical model for Monitoring and evaluation looked as:

\[ Y = 1.874 + 0.25P + 0.057TL + 0.133FT + \varepsilon \]

where \( P = \) community participation in M&E, \( TL = \) tools used in M&E and \( FT = \) frequency and timing in M&E.

The model shows that an increase by one (1) unit of community participation in M&E, tools used in M&E and frequency and timing in M&E would increase sustainability of DFLPs by 0.25, 0.057 and 0.133 units respectively.
further analysis the tools constructs did not have a significant contribution on sustainability as indicated by p=0.459>0.05. Most of the members in the FGDs and the key informant identified themselves with the group constitution which had objectives and targets. It was established that some objectives had not been reached because of the 2018 floods that set them aback. There were mixed reactions on the extent to which the respondents perceived the existence of well spelt out means of measuring performance. Some members in the FGDs claimed that performance was relative and identified with crop yield, increase in income and increase in the number of poultry and goats and that only ad hoc methods were existing. It was found out that the programming project objectives and targets had not been disseminated to the farmers. The project monitoring and evaluation tools such as logframes (Bene, Frankenberger & Nelson, 2015 and Crawford & Bryce, 2003) were only understood by the implementing agencies.

On monitoring frequency and timing the researcher focused on the project implementation phase and after the project life to establish how the culture of monitoring was practiced while the project was still ongoing and after the projects were closed. This construct had a mean perception in the agreement area (x̅=3.9429). Expanded analysis through regression showed that the construct contributed significantly (p=0.024<0.05) to the sustainability of the projects in Kilifi County through frequent monitoring and sticking to the prepared monitoring schedules. It was established in the FGDs that monitoring frequency was high during the life of the project but reduced drastically afterwards. One member of the FGDs related this observation to facilitation by the implementing agencies in terms of transport and allowances for the agricultural officers as he reasoned out by saying:

"May be it was because of our inability to support the officers that they reduced the monitoring [extension] frequency."

However, the views converged that frequency and timing of the project improved the project results. This corresponded with Bene, Frankenberger & Nelson (2015) who found out that timing and frequency of data collection are key aspects of monitoring and evaluation. It was pointed out the increased monitoring kept the track on check while holding the farmers accountable and avenue for sharing new information. In view of this a case study by Ochieng’ & Tubey (2012) on CDF projects revealed that frequent monitoring is required for optimum management to be observed. The productivity of the M&E teams can be enhanced with capacitating in terms of frequency of monitoring, stakeholder representation, use of technology and team building and work (Gwadoya, 2012).

**Conclusions**

Null hypothesis $H_0$, r=0.458, p=0.000389<0.05 was rejected and concluded that monitoring and evaluation significantly influenced sustainability of donor funded livelihood projects. In as much as the correlation of monitoring and evaluation and sustainability was moderately positive, participation in M&E, tools used in M&E and frequency and timing of M&E were examined further. Participation in M&E and frequency (p=0.000) and timing (p=0.024) had a significant influence on the sustainability of donor funded livelihood projects. However, tools used in M&E (p=0.459) in these projects did have a significant influence on the sustainability of donor funded livelihood projects in Kilifi County.

Participation in M&E and frequency and timing of M&E were very critical to the sustainability of these projects. The involvement of the farmers in the M&E processes, review and feedback saw continued participation in planning and decision making. The periodic monitoring by the implementing agency and line department contributed to sustainability. In spite tools used in M&E being descriptively influencing sustainability of DFLPs, the influence was insignificant. This imply that corporate and individual knowledge of the project objectives, targets and means of measuring project results were still critical in ensuring sustainability is attained.

Giving more attention to the community (farmers) understanding of project objectives, targets and means of measuring the performance can significantly influence project sustainability. Each factor has an incremental contribution to the dependent variable when other elements are constant. The boardroom goal setting should change to participatory goal setting where the community is at forefront in the setting the scorecard. Simple templates of logical framework should be used for the farmers to understand the theory of change, that is, how inputs are converted into activities, to outputs, outcomes and goals.

Whereas it was expected that because there was participation in M&E the farmers in the projects under study ought to have equally understood M&E in terms of project objectives, targets and means of measuring performance; the findings indicated that this was not so. Inferential analysis showed that participation significantly contributed to sustainability but tools used did not. The implication is that the farmers did not understand the Likert items denoting tools in M&E. Therefore, simple and direct Likert items need to be chosen.

This study was limited by time and cost. Donor funded livelihood projects (DFLPs) are implemented in different contexts as such a wide scope of contextual factors that would require the researcher to study a number of them so as to generalize the findings. Assured participation and by the target population is another anticipated limitation. This area is used to developmental project-oriented surveys in which in return there are almost immediate tangible benefits in terms of initiatives or interventions.

The study was delimitated to Gandini food security and livelihood project, Dodosa High Impact Project and Uvumbuzi Project in Garashi ward in Magarini in Kilifi County because of the context and nature of the projects being studied. The study focused on donor funded projects working towards strengthening the economic base and bio-diversity of the target population. The other
delimitation was on the establishment of the influence of support service linkage strategy on sustainability of donor funded alternative livelihood projects as moderated by stakeholder management in Kenya.

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**References**

Aarseth, W., Ahola, T., Aaltonen, K., Økland, A., & Andersen, B. (2017). Project sustainability strategies: A systematic literature review. *International Journal of Project Management, 35*(6), 1071-1083. http://dx.doi.org/10.1016/j.ijproman.2016.11.006

Béné, C., Frankenberger, T., & Nelson, S. (2015). Design, monitoring and evaluation of resilience interventions: conceptual and empirical considerations. https://openedsocs.ids.ac.uk/openedsocs/handle/20.500.12413/6556

Bennett, S., Ozawa, S., Rodriguez, D., Paul, A., Singh, K., & Singh, S. (2015). Monitoring and evaluating transition and sustainability of donor-funded programs: Reflections on the Avahan experience. *Evaluation and Program Planning, 52*, 148-158. https://doi.org/10.1016/j.evalprogplan.2015.05.003

Bond, G. R., Drake, R. E., McHugo, G. J., Peterson, A. E., Jones, A. M., & Williams, J. (2014). Long-term sustainability of evidence-based practices in community mental health agencies. *Administration and Policy in Mental Health and Mental Health Services Research, 41*(2), 228-236. https://doi.org/10.1007/s10488-012-0461-5

Bordens, K. S., & Abbott, B. B. (2011). *Research Design and Methods: A Process Approach* (8th ed.). Mountain View, CA: Mayfield Carvalho, M. M., & Rabechini, R. (2017). Can project sustainability management impact project success? An empirical study applying a contingent approach. *International Journal of Project Management, 35*(6), 1120-1132. https://doi.org/10.1016/j.ijproman.2017.02.018

Chirenje, L.I., Giliba R. A., & Musamba, E.B. (2013). Local communities’ participation in decision-making processes through planning and budgeting in African countries, *Chinese Journal of Population Resources and Environment, 11*(1), 10-16, https://doi.org/10.1080/10042857.2013.777198

Chofreh, A. G., Goni, F., Shaharoun, A. M., & Ismail, S. (2015). A review on sustainability transformation roadmaps using project management methodology. *Advanced Science Letters, 21*(2), 133-136. https://doi.org/10.1166/asl.2015.5841

Connell, J. P., & Kubisch, A. C. (1998). Applying a theory of change approach to the evaluation of comprehensive community initiatives: progress, prospects, and problems. *New Approaches to Evaluating Community Initiatives, 2*(15-44), 1-16.
Crawford, P., & Bryce, P. (2003). Project monitoring and evaluation: a method for enhancing the efficiency and effectiveness of aid project implementation. *International Journal of Project Management*, 21(5), 363-373. https://doi.org/10.1016/S0263-7863(02)00060-1

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education, Inc. https://doi.org/10.1002/j.1556-6676.2013.00085.x

Ferris, S., Robbins, P., Best, R., Seville, D., Buxton, A., Shriver, J., & Wei, E. (2014). Linking smallholder farmers to markets and the implications for extension and advisory services. *MEAS Brief*, 4(10), 13-14.

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. New York, NY: Cambridge University Press. www.books.google.com

Gardner, A., Greenblott, K., & Joubert, E. (2005). What we know about exit strategies: practical guidance for developing exit strategies in the field. *Lusaka, Zambia.*

Guide, A. (2001). Project management body of knowledge (pmbok® guide). In *Project Management Institute.*

Gwadoya, R. A. (2012). Factors influencing effective implementation of monitoring and evaluation practices in donor funded projects in Kenya: a case of Turkana District (Masters dissertation). Kenyatta University, Nairobi, Kenya

Harrison, P. (2005). A socio-economic assessment of sustainable livelihood opportunities for communities of Kuruwitu and Vipingo, Kilifi District, Kenya.

Hjorth, P., & Madani, K. (2014). Sustainability monitoring and assessment: new challenges require new thinking. *Journal of Water Resources Planning and Management* 140, 133-135

Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework. *Organization & Environment*, 27(4), 328-346. https://doi.org/10.1177/1086026614535786

Ika, L. A., Diallo, A., & Thuillier, D. (2012). Critical success factors for World Bank projects: An empirical investigation. *International Journal of Project Management*, 30(1), 105-116. https://doi.org/10.1016/j.ijiproan.2011.03.005

Jenkins, R., Kim, D., Okonji, M., Njenga, F., Kingora, J., & Lock, S. (2010). Integration of mental health into primary care and community health working in Kenya: context, rationale, coverage and sustainability. *Mental Health in Family Medicine*, 7(1), 37. https://doi.org/10.1002/j.2051-5545.2010.tb00289.x

Kamau, C. G., & Mohamed, H. B. (2014). Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Survey of County Government’s Projects. http://www.managementjournal.info

Karanja G.M. (2014). Influence of management practices on sustainability of youth income generating projects in Kangema District, Murang’a County, Kenya. *International Journal of Education and Research* 2 (2) 1-12

Kimweli, J. M. (2013). The Role of Monitoring and Evaluation Practices to the Success of Donor Funded Food Security Intervention Projects A Case Study Of Kibwezi District. *International Journal of Academic Research in Business and Social Sciences*, 3(6), 9.

Kiron, D., Kruschwitz, N., Haanaes, K., & von Streng Velken, I. (2012). Sustainability nears a tipping point. *MIT Sloan Management Review*, 53(2), 69-74.

Kisengese, R. N. (2012). *Factors influencing implementation of agricultural projects in Kilifi county, Kenya* (Doctoral dissertation, University of Nairobi, Kenya).

Krantz, B. (2013). Equidistance of Likert-type scales and validation of inferential methods using experiments and simulations. *The Electronic Journal of Business Research Methods*, 1(1), 16-28. www.ejbrm.com

Liu, J., & Lora, A. (2014). Historicizing sustainable livelihoods: a pathways approach to lead mining in rural central China. *World Development*, 62, 189-200. https://doi.org/10.1016/j.worlddev.2014.05.006

Magondu, A. (2014). Factors Influencing Implementation Of Monitoring And Evaluation In HIV Research Projects, A Case Of Kenya Aids Vaccine Initiative (Kavi) (Masters dissertation). University of Nairobi, Kenya.

Marcelino-Sádaba, S., González-Jaen, L. F., & Pérez-Eczurdia, A. (2015). Using project management as a way to sustainability. From a comprehensive review to a framework definition. *Journal of Cleaner Production*, 99, 1-16. https://doi.org/10.1016/j.jclepro.2015.03.020

Marshall, J. H., & Suárez, D. (2014). The flow of monitoring and evaluation practices: An analysis of NGO monitoring and evaluation dynamics. *Nonprofit and Voluntary Sector Quarterly*, 43(6), 1033-1051. https://doi.org/10.1177/0899764013494117

Mwamuye, M. K. (2014). Poverty definition” and its contribution to projects failure in Kilifi County, Kenya. *Global Journal of Politics and Law Research*, 2(2), 27-38.

Nyandika, O. F., & Ngui, K. (2014). Influence of Stakeholders’ Participation on Performance of Road Projects at Kenya National Highways Authority. *European Journal of Business Management*, 1(11), 384-404.

Ochig, M. F., & Tubey, D. (2013). Effectiveness of Monitoring and Evaluation of CDF Projects in Kenya: A case of Ainamoi Constituency. *International Journal of Arts and Commerce.*

O’Connor, A. (1995). *Evaluating Comprehensive Community Initiatives: A View from History. In New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*, ed. James Connell et al. Washington, DC: Aspen Institute.

Oino, P. G., Towett, G., Kirui, K. K., & Luvega, C. (2015). The dilemma in sustainability of community-based projects in Kenya. *Global Journal of Advanced Research*, 2.
Okoth, J. A. (2012). Factors influencing sustainability of community-based projects: the case of Arid Lands Resource Management Project II in Ganze constituency. Kilifi County, Kenya

Papke-Shields, K. E., Beise, C., & Quan, J. (2010). Do project managers practice what they preach, and does it matter to project success? International Journal of Project Management, 28(7), 650-662.

Perrini, F., & Tencati, A. (2006). Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems. Business Strategy and the Environment, 15(5), 296-308. https://doi.org/10.1002/bse.538

PMI Standards Committee, (2004). A Guide to the Project Management Body of Knowledge, 3rd ed; Project Management Institute (PMI): Pennsylvania, PA, USA; pp. 81–86.

Pohl, C., Zimmermann, A., Fry, P., Gurung, G. S., Schneider, F., & Hadorn, G. H. (2010). Researchers' roles in knowledge co-production: experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal. Science and Public Policy, 37(4), 267-281. https://doi.org/10.3152/030234210X496628

Porter, S., & Goldman, I. (2013). A growing demand for monitoring and evaluation in Africa. African Evaluation Journal, 1(1), 9.

Rogers, B., & Macias, K. (2004). Program graduation and exit strategies: a focus on title II food aid development programs. Washington, DC: FANTA Project, AED.

Silvius, A. G., & Schipper, R. P. (2014). Sustainability in project management competencies: analyzing the competence gap of project managers. Journal of Human Resource and Sustainability Studies, 2(02), 40. https://doi.org/10.4236/jhrs.2014.22005

Simon, L. D., & Ismail, H. (2008). Southern African AIDS Trust: An evaluation of the process and outcomes of community-based partner graduation. Canadian journal of public health, 99(1), 535-541. https://doi.org/10.1007/BF03403795

Singh, A.S.; Masuku, M.B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. International Journal of Economics, Commerce and Management, 2, 1–22.

Spaling, H., Brouwer, G., & Njoka, J. (2014). Factors affecting the sustainability of a community water supply project in Kenya. Development in Practice, 24(7), 797-811.

Stead, J.G., Stead, E. (2000). Eco-Enterprise Strategy: Standing for Sustainability. Journal of Business Ethics 24, 313–329. https://doi.org/10.1023/A:1006188725928

Stead, W. E., & Stead, J. G. (1996). Management for a small planet. Thousand Oaks, CA: Sage. https://books.google.co.ke/

Stevens, M. R., & Mody, A. Z. (2013). Sustainability Plans in British Columbia: Instruments of Change or Token Gestures? Canadian Journal of Urban Research, 22(1), 46-71. https://www.jstor.org/stable/26193937

Tang, Q., Bennett, S. J., Xu, Y., & Li, Y. (2013). Agricultural practices and sustainable livelihoods: Rural transformation within the Loess Plateau, China. Applied Geography, 41, 15-23. https://doi.org/10.1016/j.apgeog.2013.03.007

Wabwoba, M. S. N., & Wakhungu, J. W. (2013). Factors affecting sustainability of community food security projects in Kiambu County, Kenya. Agric & Food Security 2, 9. https://doi.org/10.1186/2048-7010-2-9

Weiss, Carol Hirschon. 1972. Evaluation Research: Methods of Assessing Program Effectiveness. Englewood Cliffs, NJ: Prentice-Hall.

Wicander, S., & Coad, L. (2015). Learning our lessons: a review of alternative livelihood projects in Central Africa. IUCN. https://books.google.co.ke/

Wren, S., & Speranza, C. I. (2010). The struggle to diversify rural livelihoods: bio-enterprise initiatives and their impacts on agropastoralists and pastoralists communities in the drylands of Kenya. The European Journal of Development Research, 22(5), 751-769. https://doi.org/10.1057/ejdr.2010.42