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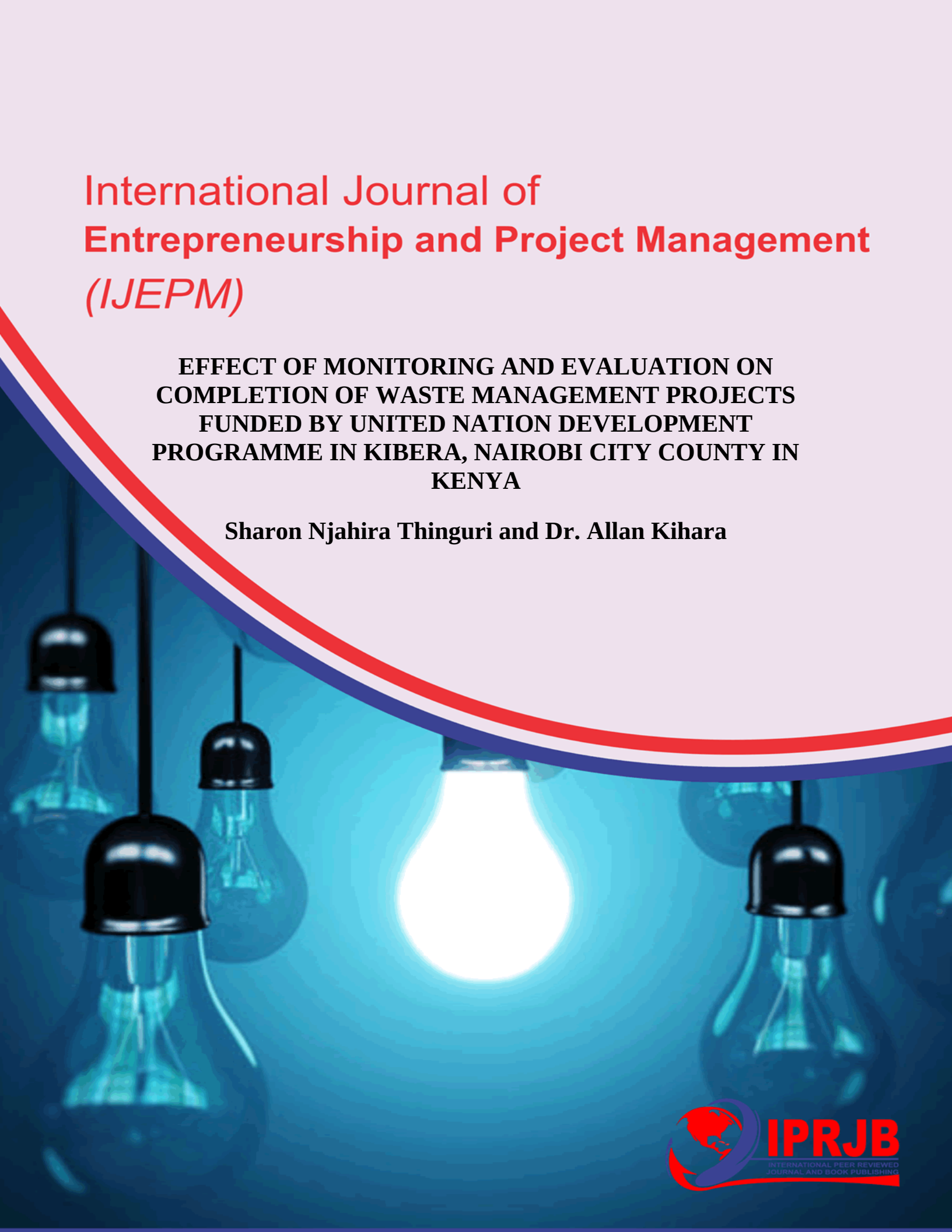

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EFFECT OF MONITORING AND EVALUATION ON COMPLETION OF WASTE MANAGEMENT PROJECTS FUNDED BY UNITED NATION DEVELOPMENT PROGRAMME IN KIBERA, NAIROBI CITY COUNTY IN KENYA

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Abstract

Purpose: Project monitoring is an on-going process while evaluation is occasional and aims at addressing relevance, effectiveness and impact of projects. The study main objective was to establish effect of monitoring and evaluation on successful completion of waste management projects funded by United Nation Development Programme in Kibera, Nairobi City County in Kenya. The study was guided by the following objectives; to establish the effect of project need assessment on successful completion of UNDP projects in Kenya, to determine the effect of project intervention design on successful completion of UNDP projects in Kenya, to assess the effect of project impact evaluation on successful completion of UNDP projects in Kenya and to examine the effects of project sustainability on successful completion of UNDP projects in Kenya.

Methodology: The study used a descriptive survey research design. The study target population was program directors (10), project managers (10), and field extension supervisors (50). The study sample size was program directors 10, project managers 10, and field extension supervisors 50 who were sampled using census. The study used questionnaires for data collection that contained both open ended and close ended questions from the program directors, project managers, and field extension supervisors. Statistical package for social science (SPSS) version 22 was used for descriptive and inferential data analysis. The study used the multiple regression analysis models. The data presentation was done using charts, graph and tables. The 63% of (Program Directors, Project Managers and Project field extension supervisors) filled and returned the questionnaires.

Results: The study found that monitoring and evaluation process influences successful completion of waste management projects funded by United Nation Development Programme in Kibera, Nairobi City County in Kenya. The study also found that Project Intervention Design and Project Impact Evaluation greatly influence successful completion of waste management projects

funded by United Nation Development Programme in Kibera, Nairobi City County in Kenya. **Conclusion and policy recommendation:** The study concludes that project need assessment influences on successful completion of UNDP projects in Kenya. The study concluded that project intervention design significantly influences on successful completion of UNDP projects in Kenya. The study recommended that monitoring and evaluation influences successful completion of waste management projects funded by United Nation Development Programme in Kibera, Nairobi City County in Kenya. The study recommended that project intervention design significantly influences on successful completion of UNDP projects in Kenya to a great extent followed by project impact evaluation significantly influences on successful completion of UNDP projects in Kenya. The study recommended further research to be conducted on effect of monitoring and evaluation on successful completion of waste management projects funded by Nairobi City County Government to cover the 31.8% of the other factors. The study recommended other areas of study like effect of monitoring and evaluation process on successful completion of waste management projects funded by public private partnership. Also the study recommended further research to be conducted on using different variables.

Keywords: *Monitoring, evaluation, waste management projects, Unified Nation development Programme*

1.1 Background of the Study

Monitoring and evaluation (M&E) is described as a process that assists project managers in improving performance and achieving results. According to United Nations Development Programme (2012) the goal of M&E is to improve current and future management of outputs, outcomes and impact. Williams (2010) asserts that monitoring provides management and the main stakeholders of a development intervention with indications of the extent of progress and achievement of expected results and progress with respect to the use of allocated funds. Monitoring provides essential inputs for evaluation and therefore constitutes part of the overall evaluation procedure.

Evaluation is an organized and objective assessment of an ongoing or concluded policy, program/project, its design, execution and results. The aim is to provide timely assessments of the relevance, efficiency, effectiveness, impact and sustainability of interventions and overall progress against original objectives. According to Ballard (2010), monitoring and evaluation is a process that helps program implementers make informed decisions regarding program operations, service delivery and program effectiveness, using objective evidence.

1.2 Specific Objectives

1. To establish the effect of project need assessment on successful completion of UNDP projects in Kenya
2. To determine the effect of project intervention design on successful completion of UNDP projects in Kenya
3. To assess the effect of project impact evaluation on successful completion of UNDP projects in Kenya

4. To examine the effect of project sustainability evaluation on successful completion of UNDP projects in Kenya

2.1 Literature review

2.1.1 Program Theory

The program theory has been used to guide evaluation for many years, it shows the capability of the program to fix a problem by addressing the needs in the need assessment. It also gives tools to determine areas of impact in evaluation (Sethi & Philippines, 2012). Most NGO's deal with human service programs that are designed to improve the society, which are at times designed and redesigned in due course (Hosley, 2005). The concept of a program theory is similar to the one used in logical models. The program theory hence uses logical framework approach as its methodology (J-Pal, 2003). The logical model is used in guiding stakeholders engagement, the management and evaluation of outcomes (Hosley, 2009). The theory therefore supports effect of project need assessment on successful completion of UNDP projects in Kenya

2.1.2 Theory of Change

Theory of change is part of the program theory that emerged in the 1990s as an improvement to the evaluation theory (Stein & Valters, 2012). A theory of change is a tool used for developing solutions to complex social problems. It provides a comprehensive picture of early and intermediate term changes that are needed to reach a long term set goal (Anderson, 2005). It therefore provides a model of how a project should work, which can be tested and refined through monitoring and evaluation. A theory of change is also a specific and measurable description of change that forms the basis for planning, implementation and evaluation. Most projects have a theory of change although they are usually assumed. The theory of changes helps in developing comprehensible frameworks for monitoring and evaluation. It is mainly used by NGOs and donors to articulate long term impact on projects (James, 2011). The theory therefore supports effect of project intervention design on successful completion of UNDP projects in Kenya.

2.1.3 Evaluation Theory

Mark (2005), in his discussion on why a theory is important to evaluation practice, states that evaluation theory is a way of synthesizing prior experience. He also adds that lack of knowledge on theory of evaluation would lead to an evaluator repeating past mistakes as well as failing to build on past successes. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors (Musa, 2012). Evaluation is the objective assessment of a planned, ongoing, or completed project, program, or policy (Warah, 2013). This theory supports project impact evaluation on successful completion of UNDP projects in Kenya

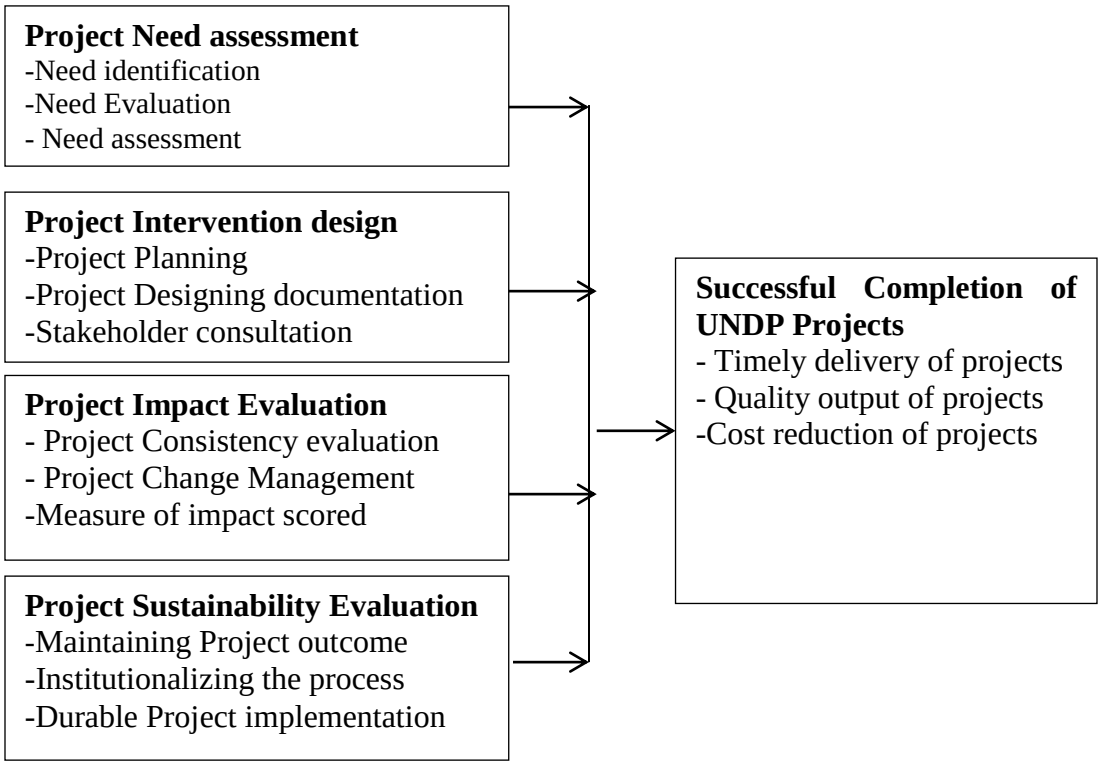
2.1.4 Resource Based Theory

Resource-based theory aspires to explain the internal sources of a firm's sustained competitive advantage (Kagendo, 2012). It was Penrose who established the foundations of the resource-based view as a theory (Kakwezi & Nyeko, 2010). Penrose first provides a logical explanation to the growth rate of the firm by clarifying the causal relationships among firm resources, production capability and performance. UNDP projects can be considered as expressions of sustainable development in any given sector of a country (Maina, 2013). There is therefore a need to integrate sustainable project concerns into-the activities of donor or international agencies. One of the main problems related to donor-supported projects in the developing world is their lack of sustainability once external assistance has ended (WB, 2014). This theory supports effects of project sustainability on successful completion of UNDP projects in Kenya

2.1.5 Stakeholder Theory

According to Freeman and Edward 1984, various groups of stakeholders of a corporation are identified and recommendations of methods by which management can give due regard to the interests of those groups are made (Freeman & Edward 1984). This theory also suggests that the relationships with stakeholders can be managed effectively and claims that successful business management is based on the relationships and collaboration practices with stakeholders. Stakeholder theory aims at increasing the efficiency of organizations by bringing new definitions to organizational responsibilities. This theory thus supports effects of monitoring and evaluation on successful completion of UNDP projects in Kenya.

Figure 1: Conceptual Framework



2.2 Project Need Assessment

Needs Assessment is Gathering of information about a specific work need that can be resolved by training (Gaba, 2013). The types of needs assessment include performance analysis, target population analysis, sorting training needs and wants, job analysis, and task analysis. A need is a discrepancy or gap between what is and what should be. A needs assessment is a systematic set of procedures that are used to determine needs, examine their nature and causes, and set priorities for future action (Ediau, 2012). A Needs Assessment is a systematic approach that progresses through a defined series of phases. Needs Assessment focus on the ends (outcomes) to be attained, rather than the means process (Kahilu, 2010). It gathers data by means of established procedures and methods designed for specific purposes. The kinds and scope of methods are selected to fit the purposes and context of the needs assessment. Needs assessment sets priorities and determines criteria for solutions so that planners and managers can make sound decisions. Needs assessment sets criteria for determining how best to allocate available money, people, facilities, and other resources (Gaitano, 2011).

Needs assessment is the process of identifying performance and then prioritizing those needs (Kikwasi, 2012). Once a practitioner identifies a need, he or she determines if the need has enough priority or impact to allocate resources for an analysis that will determine the root cause of the performance problem. Based on the root cause, the practitioner designs a solution to close

the performance gap (Kikwasi, 2012). Confusion and disagreement regarding assessment and analysis terms is a common occurrence in the needs assessment literature. Authors use the terms needs assessment and analysis interchangeably to mean one or both of the definitions presented in the definition of terms. This may stem from the fact that both assessment and analysis are vital to the design of performance improvement solutions that work.

Once the root cause of a performance gap is determined, the solution may or may not include training or instruction. If the solution is training, the instructional objectives derive from the organizational, operational, and individual needs identified in the assessment (Mackay, 2010). At times, the term training needs assessment is described as needs assessment, but according to Muse and Pichler, (2011) if the solution is training there is no need to do an assessment or analysis. A training needs assessment is more accurately described as a training requirements assessment that may follow a needs assessment and needs analysis. Despite this, many organizations conduct a training needs assessment and implement a training solution prior to conducting a needs assessment in the hope that performance problems will disappear (Kerzner, 2013). Without a needs assessment, however, there is no guarantee that the training solution will solve the performance problem.

Project planning on the other hand is the establishment of a predetermined course of action within a predicted environment (Nyamwaro, 2011). Nyamwaro further asserts that the planning process must be systematic, flexible, disciplined and capable of accommodating input from diverse functions. The planning process is most effective when it iterated and occurs throughout the life of the project. Indeed, every phase of the project processes require substantial planning. Subsidiary plans for each stage are integrated into the overall project plan. The final comprehensive plan will defines the project's execution, its monitoring and control and closure (PMI, 2013). Well prepared plans include subset that explains the management of scope, requirements, schedule, cost, quality, risk, resources, process improvement and stakeholders. The final aspect of planning is the element of communication that ensures stakeholders remain informed and updated on the project progress to facilitate their effective participation.

2.3 Project Intervention Design

M&E design during project preparation is a much broader exercise than just the development of indicators. Good design has five components, discussed in turn in what follows Clear statements of measurable objectives for the project and its components, for which indicators can be defined. A structured set of indicators, covering outputs of goods and services are generated by the project and their impact on beneficiaries (Gaitano, 2011).

The control of activities and their direct results or outputs is within the management of the project and can largely be dealt with by internal record-keeping and analysis. Indicators of inputs, process, and outputs are mostly generated from within project management. By contrast, the achievement of project objectives normally depends on how project beneficiaries respond to the goods or services delivered by the project (Maina, 2013). Evidence of their response and the benefits they derive requires consultation and data collection that may be outside the scope of management. It is important to identify how beneficiaries are expected to respond to project services, because managers will need evidence of that response if they are to modify their activities and strategy. Indications that beneficiaries have access to, are using, and are satisfied

with project services give early indication that the project is offering relevant services and that direct objectives are likely to be met. Such evidence market research-may be available sooner and more easily than statistics of impact such as changes in health status or improvements in income. Market research information is an example of a leading indicator of beneficiary perceptions that can act as a proxy for later, substantive impact (Mundia, 2010).

2.4 Project Impact Evaluation

Impact is defined as a marked effect or influence (Kerzner, 2013). Development Assistance Committee (DAC) According to the DAC impact comprises the positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators PMI (2010) defines evaluation as: an assessment, as systematic and objective as possible, of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.

Evaluation is the objective assessment of a planned, ongoing, or completed project, program, or policy (Warah, 2013).

Unlike monitoring, which is a continuous process tracking what is happening during a program, evaluations are periodic, take place at a specific date and usually try to incorporate an objective perspective. Ultimately, the purpose of any evaluation is to provide information to decision makers to enable them to make better decisions about projects, programs, or policies. Evaluation should help decision makers understand what is likely to happen is happening, or has happened because of an intervention and identify ways to obtain more of the desired benefits (Imas & Rist, 2009). Nevertheless, depending on what the exact question is an organization wants to have answered evaluations can be designed in many different ways.

Impact evaluation is resource and data intensive it is a public good while the benefits are shared the costs are not. High quality impact evaluations generate learning relevant across the international community, yet they are typically paid for by one agency, country or project. While there is agreement that not every project or programme can be evaluated, many existing impact evaluations are motivated by a desire to prove the worth of a given intervention, meaning that external funding for evaluations is almost entirely demand driven. This process is likely to favour projects and policies that are expected to have benefits by their advocates. Why would someone commission an impact evaluation if the results are expected to be negative (Musa, 2012) An important counterbalance to this tendency for promotional impact evaluation is created when national government partners/borrowers become strong and intelligent customers of more and better evaluation. Impact evaluation investigates the changes brought about by an intervention. Impact evaluation can be undertaken on interventions at any scale: a small, local HIV-AIDS project; an entire civil society strengthening program of an NGO a sequence of natural resource management projects undertaken in a geographic area or a collection of

concurrent activities by different organizations aimed at improving a community's capacity (Muyia, 2012).

2.5 Project Sustainability Evaluation

Sustainable development is development that meets the needs of the present, without compromising on the future ability to meet the same needs. Sustain ability of UNDP projects is of great importance in today's world, due to concerns regarding the environmental, economic, and social equity impacts of a country. UNDP projects can be considered as expressions of sustainable development in any given sector of a country (Maina, 2013). There is therefore a need to integrate sustainable project concerns into-the activities of donor or international agencies. One of the main problems related to donor-supported projects in the developing world is their lack of sustainability once external assistance has ended (WB, 2014).

The process of translating strategic sustainability objectives into concrete action at project-specific levels is a difficult task. The multi-dimensional perspectives of sustainability such as economy, society, environment, combined with a lack of structured methodology and information at various hierarchical levels, further exacerbate the problem. Project managers, donor agencies and recipient countries need to be aware of the extent that their projects are likely to be sustained in the future and contribute to the viability of the whole health system (Nyamwaro, 2011).

2.6 Successful Completion of Projects

Isaac and Navon (2013) defines project Completion as Controlling process that ensures that project objectives are met by monitoring and measuring progress regularly to identify variances from Plan, so that corrective action can be taken when necessary and further identifies controlling process to have links with planning and executing process. Makone (2010) quotes the performance monitoring subsystem is charged with observing the transformation process and reporting deviations from the expectations to the decision making subsystem so that it can initiate corrective action where necessary.

According to Ganiyu and Zubairu (2010) the dimension of project success is centered on the impact of the project on customer. In their observation, meeting performance measures, functional requirements and technical specifications determines the level of customer satisfaction. Documents prepared throughout the project life are filed for future reference. The administrative closure involves obtaining formal acceptance of the product or service from clients. An official sign-off is required as an acknowledgement by the customer and is filed as part of the project documentation. This is stage where the project team evaluates the outcome of the project against the project objectives and reviews benefits achieved. Lessons learned are shared with those who might benefit from them (Gaba, 2013). The lessons learnt range from why certain corrective actions were taken, unforeseen risks occurred, and what mistakes were made that could have been avoided. The project closeout may involve activities such as closeout meetings, resource reallocation reports, compliance documents, supplier notifications, final payments and collection of receivables (Ediau, 2012). Project termination can lead adversely damage an organization's reputation, market devaluation, low employee productivity and

possible litigations for breach of contractual obligations (Muyia, 2012). Terminated projects may not only lead to direct loss of revenue, but can also attract contractual penalties for late delays, loss of market share and strategic advantage. However, in certain circumstances, termination of projects due to technology changes or changes in the competitive environment may cut down losses or ensure survival of an organization (Gaitano, 2011).

3.0 Research mmethodology

3.1 Introduction

The chapter highlights research design, target population, sample size and sampling technique, research instruments, pilot test, reliability and validity, data collection procedures and data analysis and presentation.

3.2 Research Design

The study used a descriptive research design. The descriptive research is a study designed to depict the participants in an accurate way (Mugenda & Mugenda, 2003). Orodho (2003) observes that a descriptive research design is used when data is collected to describe persons, organizations, settings or phenomena. The design also has enough provision for protection of bias and maximized reliability (Kothari, 2008). The descriptive research design was important to this study since it helped to describe things the way they are and it also helped in getting in-depth of information from the study (Kothari 2008).

3.3 Target Population

According to Orodho (2003) a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. The study target population was 10 UNDP funded waste management projects that have been running for the last five (5) years in Kibera. The study respondents in these projects were program directors, project managers, and project field extension supervisors of waste management projects in Kibera of these UNDP funded Projects. The study selected target populations were believed to have knowledge in the area of study and they were expected to give relevant information of the area of study.

3.4 Sample Size and Sampling Procedure

Sampling is where unit of study is selected from sampling frame of a population (Mugenda & Mugenda, 2003). MsCledon (2004) defines a sampling size as a list of all units or elements of the research population from which a sample is selected. Generally, the sampling frame incorporates a great deal more structure than one would expect to find in a simple list of elements (Ross, 1991). The study used census Israel (1992), Census is the procedure of systematically acquiring and recording information about the members of a given population where all the program directors 10, project managers 10, and project field extension supervisors 50 were sampled from all 5 sub-location as shown in appendix III.

3.5 Data Collection Instruments

The study used questionnaires that contained both open ended and close ended questions. Questionnaires are preferred because they are effective data collection instruments that allow respondents to give much of their opinions pertaining to the research problem (Kothari 2008).

3.6 Data Collection Procedures

Data collection is the process of gathering and measuring information on targeted variables in an established answer relevant and evaluates outcomes (Mugenda & Mugenda, 2003). A self-administered questionnaire was used as data collection instruments to the Program directors, Project managers and field extension supervisors, it comprised of both open ended and closed ended questions.

3.7 Pilot Study

A pilot study was done to assess the capability of the research instruments to collect required data for the study. Pilot test is a method that is used to test the design and instrument before carrying out the main research (Cooper & Schindler, 2003). To represent all the categories in the sampling frame two respondents were selected from each area of Mathare slum which has 4 sub-divided areas making a total of 8 respondents. The sample of 1% -10 % helped in ascertaining the reliability and validity of the instrument (Mugenda & Mugenda, 2003).

3.8 Validity of Instruments

According to Kothari (2011) an instrument can be validated by proving that its items or Content and construct validity is established to determine if the items are a representative sample of the skills and traits that comprise the area to be measured. This is the criterion that indicates the extent to which an instrument will achieve intended measurement objectives (Kothari, 2004). Thus, validity refers to the appropriateness, meaningfulness and usefulness of inferences made by researchers (Gakuu, 2013).

3.9 Reliability of Instruments

Mugenda and Mugenda (2003) defined reliability of Instruments as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability analysis will be done using Cronbach's alpha (α) to determine whether the data gathered on each variable have a significant relationship (Cronbach, 1951). By using the split-half method (Gakuu, 2013), the study tested separately the 8 selected respondents from sample. SPSS was used to compute the reliability coefficients. The recommended reliability coefficient level of 0.7 was assumed to reflect the reliability of the instruments. The coefficient level of 0.7 indicates that the gathered data has a relatively high internal consistency and could be generalized to reflect opinions of all respondents in the target population.

3.10 Data Analysis and Presentation

Data analysis is the process of inspecting, cleaning transforming and modeling data with the goal of discovering useful information, suggesting conclusion, and supporting decision making (Cooper & Schindler, 2003). The questionnaires were sorted, cleaned and data was coded and edited for completeness and consistency. The data was analyzed by employing descriptive statistics and inferential statistics using statistical package for social for science (SPSS) version 22. Descriptive statistics involved computation of mean scores, standard deviation, percentages, and frequency distribution which described the demographic characteristics of the organization and the respondents. Inferential statistics were used to determine the relationships and significance between independent and dependent variable on successful completion of projects. The data presentation was done using charts, graph and tables. The study used the multiple regression analysis models to measure the relationship between independent and dependent variables and the significant of the study.

$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \acute{\varepsilon}$ Where,

Y = Successful Completion of projects

$\beta 0$ = constant (coefficient of intercept)
X_1 = Project Need assessment

X_2 = Project Intervention design

X_3 = Project Impact Evaluation

X_4 = Project Sustainability Evaluation

$\acute{\varepsilon}$ = error term

4.0 Results

4.1 Response Rate

This section represents the response rate of the respondents. The number of questionnaires that were administered were 70 to (Program Directors, Project Managers and Project field extension supervisors questionnaires. A total of 45 questionnaires were properly filled and returned from the respondents. This represented an overall successful response rate 63%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. A study by (Rear and Parker, 2011) indicated that higher response rates assured more accurate survey results.

Table 1: Response Rate

Response Rate	Frequency	Percent
Returned	45	63%
Unreturned	25	37%
Total	**70**	**100%**

4.2 Results of Pilot Test

The coefficient of the data gathered from the pilot study was computed with assistance of Statistical Package for Social Sciences (SPSS) version 22. A coefficient of above 0.7 was obtained and this indicated that the data collection instruments were valid (Kothari, 2005). The reliability of the questionnaires was determined using test retest method. A reliable measurement is one that if repeated a second time gives the same results as it did the first time (Mugenda & Mugenda, 2003).

Table 2: Reliability Analysis

Reliability Statistics	Cronbach's Alpha Value	Comments
Project Need assessment	0.733	Accepted
Project Intervention Design	0.711	Accepted
Project Impact Evaluation	0.729	Accepted
Project Sustainability	0.721	Accepted

4.3 Descriptive statistics

4.3.1 Project Need assessment

The study sought to establish the level at which the respondents agreed or disagreed on effect of project need assessment on successful completion of UNDP projects in Kenya.

Table 3: Project Need assessment

	N	Mean	Std. Deviation
1.to what extent do you involve the community in waste management project identification	45	4.3556	.71209
2. to what extent do you involve the residence in the initial stages of waste management projects planning	45	4.3778	.71633
3.to what extent do you assess the need and desired outcome of the project	45	4.0000	.90453
4. how is assessment done in conjunction with people in Kibera slum	45	4.3001	.78625
5.to what extent do you analyze the expected results of the projects	45	4.4667	.78625
6.to what extent do you finish project assessment within the stipulated time	45	3.9778	1.1963
7.the need identification of a project enables on timely project delivery	45	4.6444	.67942
8. the need identification increases on quality work delivery	45	3.2009	1.2321
9. project need evaluation influence on project cost reduction	45	3.9333	1.0313
Valid N (listwise)	45		

The study established that majority of the respondents agreed with the statement; the study established that majority of the respondents agreed with the statement that the community is involved in waste management project identification with a mean of 4.3556, involvement of the residence in the initial stages of waste management projects planning with a mean of 4.3778, to what extent do you assess the need and desired outcome of the project with a mean of 4.0000, does the assessment done in conjunction with people in kibera slum with a mean of 4.3001, to what extent do you analyze the expected results of the projects with a mean of 4.4667, to what extent do you complete project assessment within the stipulated time with a mean of 3.9778, does need identification of a project enables on timely project delivery with a mean of 4.6444, does need identification increases on quality work delivery with a mean of 3.2009, does project need evaluation influence on project cost reduction with a mean of 3.9333.

The study established that majority of the respondents agreed with the statement that project need assessment influences on successful completion of UNDP projects in Kenya. Majority of the respondent stated that wasted management project funded by UNDP in Kibera delivered services within the scheduled time. The respondents stated that residents were not actively participating to ensure the durability of wasted management projects. Also majority of the respondents stated that monitoring and evaluation of waste management projects were not carried out often.

Nthiga (2013) conducted a study on determinants of project schedule control during Project implementation in Kenya in non-governmental organizations' projects in Mbeere North District, Embu County. It was also established that donor policies, project complexity and project related risks affected projected schedule control during project implementation. Donor policies, project complexity and risks were identified as the main determinants of project schedule control during project implementation. It is recommended that project plans and designs should factor in these determinants at project formulation phase. The inclusion of these determinants in the initial project plan should be a participatory process for all project stakeholders. Further research is recommended to enable quantification of project loss when projects are over schedule (Kay, 2012).

4.3.2 Project Intervention Design

The study sought to establish the level at which the respondents agreed or disagree on effect of project Intervention Design on successful completion of UNDP projects in Kenya.

Table 4: Project Intervention Design

	N	Mean	Std. Deviation
1. the project planning influence on quality management in their projects	45	4.0444	1.1668
2. the UNDP ensure the quality checklist of the implemented projects	45	3.2444	.80214
3. the UNDP encourage on project design before implementation	45	3.1556	1.6645
4. the UNDP projects design help in cost reduction	45	3.2222	1.0200
5. UNDP projects involve the resident in Kibera	45	4.2222	.63564
6. UNDP projects designing helps in timely completion of projects	45	2.6667	.90453
7. UNDP Provide input build ability during design phase	45	3.1778	1.1925
8. UNDP Designed projects saves times during monitoring	45	4.6000	.8634
Valid N (listwise)	45		

The study established that majority of the respondents agreed with the statement that project planning influence on quality management in their projects with a mean of 4.0444, the UNDP ensure the quality checklist of the implemented projects with a mean of 3.2444, the UNDP encourage on project design before implementation with a mean of 3.1556, the UNDP projects design help in cost reduction with a mean of 3.2222, UNDP projects involve the resident in kibera with a mean of with a mean of 4.2222, the UNDP projects designing helps in timely completion of projects with a mean of 2.6667, the UNDP provide input build ability during design phase with a mean of 3.1778, the UNDP designed projects saves times during monitoring with a mean of 4.6000. Majority of the respondents stated that waste management project in Kibera takes 2-3 years before they collapse or fail to deliver. The respondents stated that waste management project funded by UNDP in Kibera offer quality services.

Hussein (2012) conducted a study on factors affecting the performance of projects in Hargeisa Somaliland in the United Nations Development Programme (UNDP). The study recommends that the concerned stakeholders should ensure that various aspects of budgeting such as prices and costs due to inflation, availability of resources within the area or within the time, cost constraints in project implementation, disbursement of cost forecast, work packages such as labor rates and indirect costs. The study also recommended that for the UNDP projects to realize their intended benefits to the citizens there are need to lay down proper strategies with regard to timing of the UNDP projects. The study further recommended that for UNDP projects to meet user requirements there is need for implementing proper guidelines with regard to process of deciding on formulating a project, final objectives should be documented and approved, how the beneficiary needs addressed in order of priority and involvement of the relevant Somaliland

authorities or beneficiary. The study finally recommends that there is need to equip the relevant stakeholders with the relevant skills and knowledge on the importance and sustain ability of UNDP projects in order to enhance their performance.

Project implementation is the realization of an application or execution of a plan or design. Implementation is the act of putting into effect. Project control is the last element in the implementation cycle of planning monitoring controlling process. Except for accounting control, according to Gray and Larson, (2,000) other project controls are not performed in most organizations. However for project success, control should be focused on three elements of the project time, cost and performance. According to Klastorin (2004), once project implementation starts, project managers must monitor every aspect of ongoing project in order to concentrate their efforts on identifying those tasks that are out-of-control and require corrective actions.

4.3.3 Project Impact Evaluation

The study sought to establish the level at which the respondents agreed or disagree on effect of project Impact Evaluation on successful completion of UNDP projects in Kenya.

Table 5: Project Impact Evaluation

	N	Mean	Std. Deviation
1. the project evaluation help in good project budget preparation	45	2.3333	.97701
2. the impact evaluation influence on cost reduction	45	2.8000	.62523
3. to what extent does consistent evaluation influence on cost reduction	45	1.6222	.71633
4. to what extent does consistent evaluation influence resources allocation	45	2.8222	.96032
5. project evaluation enable on timelines of services delivery	45	4.0889	.84805
6. project change management enable on timely project completion	45	2.8889	1.1720
7. project impact measurement increase ability of project performance	45	3.1111	1.1525
8. the improved evaluation and monitoring methods influence project completion	45	2.5556	.78496
Valid N (listwise)	45		

The study established that majority of the respondents agreed with the statement that the project evaluation help in good project budget preparation with a mean of 2.3333, the impact evaluation influence on cost reduction with a mean of 2.8000, Consistent evaluation influence on cost reduction with a mean of 1.6222, Consistent evaluation influence resources allocation with a mean of 2.8222, project evaluation Enable on timelines of services delivery with a mean of 4.0889, project change management enable on timely project completion with a mean of 2.8889, project impact measurement increase ability of project performance with a mean of 3.1111, the improved evaluation and monitoring methods influence project completion with a mean of 2.5556.

Monitoring and evaluation is increasingly recognized as an indispensable tool of both project and portfolio management. The acknowledged need to improve the performance of development assistance calls for close attention to the provision of management information both to support the implementation of projects and programs and to feed back into the design of new initiatives (Agumena, 2013). M&E also provides a basis for accountability in the use of development resources (Briceno, 2010).

According Perrin (2012) given the greater transparency now expected of the development community, non-government organizations and agencies carrying out projects need to respond to calls for more success on the ground with examples of development impact and with evidence that they have systems in place that support learning from experience. Used carefully at all stages of the project cycle, monitoring and evaluation can help to strengthen project design and implementation and stimulate partnership with project stakeholders. It can Influence sector assistance strategy. Relevant analysis from project and policy evaluation can highlight the outcomes of previous interventions, and the strengths and weaknesses of their implementation.

4.3.4 Project Sustainability

The study sought to establish the level at which the respondents agreed or disagree on effect of project Sustainability on successful completion of UNDP projects in Kenya.

Table 6: Project Sustainability

	N	Mean	Std. Deviation
1. the project evaluation help in project sustainability	45	2.1778	.93636
2. the continuous of project evaluation help in project cost reduction	45	2.9111	.59628
3. project progress report monitoring influence on project quality	45	1.7333	.93905
4. UNDP ensure information flow between the various project stakeholders	45	3.0667	.93905
5. the project Monitoring influence on project performance	45	4.1333	.78625
6. UNDP assure on project sustainability after the project completion	45	2.8444	.99899
7. the project need assessment help in project permanence	45	3.1778	1.1925
8. the project design enable on Project Sustainability	45	2.6000	.86340
Valid N (listwise)	45		

The study established that majority of the respondents agreed with the statement that the project evaluation help in project sustainability 2.1778, the continuous of project evaluation help in project cost reduction 2.9111, project progress report monitoring influence on project quality 1.7333, UNDP ensure information flow between the various project stakeholders 3.0667, the project Monitoring influence on project performance 4.1333, UNDP assure on project sustainability after the project completion 2.8444, the project need assessment help in project permanence 3.1778 and the project design enable on Project Sustainability 2.6000.

Monitoring and evaluation is increasingly recognized as an indispensable tool of both project and portfolio management. The acknowledged need to improve the performance of development assistance calls for close attention to the provision of management information both to support the implementation of projects and programs and to feed back into the design of new initiatives

(Agumena, 2013). M&E also provides a basis for accountability in the use of development resources (Briceno, 2010). According Perrin (2012) given the greater transparency now expected of the development community, non-government organizations and agencies carrying out projects need to respond to calls for more success on the ground with examples of development impact and with evidence that they have systems in place that support learning from experience. Used carefully at all stages of the project cycle, monitoring and evaluation can help to strengthen project design and implementation and stimulate partnership with project stakeholders. It can Influence sector assistance strategy. Relevant analysis from project and policy evaluation can highlight the outcomes of previous interventions, and the strengths and weaknesses of their implementation.

4.4 Inferential Statistics

4.4.1 Correlations Analysis

Correlation is a term that refers to the strength of a relationship between two variables. A strong or high correlation means that two or more variables have a strong relationship with each other while a weak or low, correlation means that the variables are hardly related. Correlation coefficient can range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A value of 0.00 means that there is no relationship between variables being tested (Orodho, 2003). The most widely used types of correlation coefficient is the Pearson R which is also referred to as linear or product-moment correlation. This analysis assumes that the two variables being analyzed are measured on at least interval scales. The coefficient is calculated by taking the covariance of the two variables and dividing it by the product of their standard deviations. A value of +1.00 implies that the relationship between two variables X and Y is perfectly linear, with all data points lying on a line for which Y increases and X increases. Conversely a negative value implies that all data points lie on a line for which Y decreases as X increases (Orodho, 2003). In this study pearson correlation is carried out to determine how the research variables related to each other. Pearson's correlation reflects the degree of linear relationships between two variables. It ranges from+1 to -1. A correlation of +1 means there is a perfect positive linear relationship between variables (Young, 2009).

Table 7: Correlations

		Successful Completion of UNDP Projects	Project Need assessment	Project Intervention Design	Project Impact Evaluation	Project Sustainability
Successful Completion of UNDP Projects	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	45				
Project Need assessment	Pearson Correlation	.295*	1			
	Sig. (2-tailed)	.049				
	N	45	45			
Project Intervention Design	Pearson Correlation	.487**	.450**	1		
	Sig. (2-tailed)	.001	.002			
	N	45	45	45		
Project Impact Evaluation	Pearson Correlation	.059	.531**	.090	1	
	Sig. (2-tailed)	.700	.000	.557		
	N	45	45	45	45	
Project Sustainability	Pearson Correlation	-.220	.503**	.141	.741**	1
	Sig. (2-tailed)	.146	.000	.355	.000	
	N	45	45	45	45	45

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

The study from the finding in table 7 show that majority of the predictor variables were shown to have a positive association between them at 0.05 significance level. The findings of the study were illustrated with a strong positive relationship. The study established that there was a positive association between variables as shown; Project Need assessment and Successful Completion of UNDP Projects with Pearson correlation of 0.295, Project Intervention Design and Successful Completion of UNDP Projects with Pearson correlation of 0.487**, Project Impact Evaluation and Successful Completion of UNDP Projects with Pearson correlation of 0.059 and Project Sustainability and Successful Completion of UNDP Projects with Pearson correlation of -0.220.

The correlation matrix implies that the independent variables: Project Sustainability, Project Intervention Design, Project Need assessment, Project Impact Evaluation are crucial determinants of Successful Completion of UNDP Projects as shown by their strong and positive relationship with the dependent variable.

4.4.2 Model Summary

R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determination for multiple regression. The definition of R-squared is fairly straight-forward; it is the percentage of the response variable variation that is explained by a linear model. Or: R-squared = Explained variation / Total variation R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean.100% indicates that the model explains all the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits your data (Cameron & Windmeijer, 1997).

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725[a]	.526	.478	.71568

a. Predictors: (Constant), Project Sustainability , Project Intervention Design, Project Need assessment, Project Impact Evaluation

As can be observed in table 8, the regression model of Successful Completion of UNDP Projects coefficient of determination R was at 0.725. The coefficient of determination R Square indicated that 52.6% of the variation on Successful Completion of UNDP Projects can be explained by the set of independent variables, namely; X_1 = Project Sustainability, X_2 = Project Intervention Design, X_3 = Project Need assessment, X_4 Project Impact Evaluation. The remaining 47.4% of variation in Successful Completion of UNDP Projects can be explained by other variables not included in this model. This shows that the model has a good fit since the value is above 50%. This concurs with Kothari (2004) that R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. The adjusted R square is slightly lower than the R square which implies that the regression model may be over fitted by including too many independent variables. Dropping one independent variable will reduce the R square to the value of the adjusted R square. The study further used Analysis of Variance (ANOVA) in order to test the significance of the overall regression model. Green and Salkind (2003) posit that Analysis of Variance helps in determining the significance of relationship between the research variables.

4.4.3 ANOVA

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences among group means and their associated procedures (such as variation among and between groups), developed by statistician and evolutionary biologist Ronald Fisher (Anova, 2002).

Table 9: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.531	4	5.383	8.800	.000[b]
	Residual	24.469	40	.612		
	Total	46.000	44			

a. Dependent Variable: Successful Completion of UNDP Projects

b. Predictors: (Constant), Project Sustainability, Project Intervention Design, Project Need assessment, Project Impact Evaluation.

The results of Analysis of Variance (ANOVA) for regression coefficients in table reveals that the significance of the F statistics is 0.00 which is less than 0.05 and the value of F (8.800) being significant at 0.000 confidence level. The value of F is large enough to conclude that the set coefficients of the independent variables are not jointly equal to zero. This implies that at least one of the independent variables has an effect on the dependent variable. The F-value in the ANOVA table 9 as shown above was used to test the overall regression model of the goodness of fit. The value of the F statistic (8.800) indicates that the overall regression model is significant at the confidence level of 0.05 confidence level. The value of F is greater than the zero and it's enough to conclude that predictor; Project Sustainability , Project Intervention Design, Project Need assessment, Project Impact Evaluation influences on successful completion of waste management projects funded by United Nation Development project in Kibera, Nairobi County.

4.4.4 Regression Coefficients Results

Table 10: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		β	Std. Error	Beta	t	Sig.
1	(Constant)	2.086	.591		3.526	.001
	Project Need assessment	.187	.130	.225	1.431	.160
	Project Intervention Design	.472	.139	.449	3.405	.002
	Project Impact Evaluation	.501	.211	.430	2.373	.023
	Project Sustainability	-.777	.190	-.715	-4.085	.000

a. Dependent Variable: Successful Completion of UNDP Projects

The constant term is 2.086 dependent variable when all the independent variables are equal to zero. The constant term has a p-value of 0.001 which is less than 0.05. This implies that the constant term is significant. The multiple regression of Successful Completion of UNDP Projects

is thus an equation through the origin. From the findings it was established that, one unit change in Project Need assessment results to 0.187 increases Successful Completion of UNDP Projects, one unit change in Project Intervention Design results to 0.472 increases Successful Completion of UNDP Projects, one unit change in Project Impact Evaluation results to 0.501 increases Successful Completion of UNDP Projects, Project Sustainability results to -0.777 increases Successful Completion of UNDP Projects. The study established that the significant level of the variables was as follows; Project Sustainability 0 .000 less than P-value 0.05 this indicated strong significance level, Project Intervention Design 0.002 which is less than P-value 0.05 this indicated strong significance level, Project Impact Evaluation 0 .023 was less than P-value 0.05 this indicated strong significance level and finally project need assessment 0.160 was greater than P-value 0.05 this indicated weak significance level. The Regression Coefficient is the constant 'b' in the regression equation that tells about the change in the value of dependent variable corresponding to the unit change in the independent variable (Paternoster, Brame, & Piquero, 1998).

$$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

$$Y = 2.086 + 0.187X_1 + 0.472X_{2+} 0.501X_3 - 0.777X_4$$

5.0 Conclusion and recommendations

5.1 Conclusion of the Study

Based on the findings, the study concludes that project need assessment influences on successful completion of UNDP projects in Kenya. The study further concluded that there is involvement of the residence in the initial stages of waste management projects planning, project assessment is done in conjunction with people in Kibera slum, project assessment is finished within the stipulated time, need identification increases on quality work delivery and project need evaluation influence on project cost reduction. The study found out that the regression model of project need assessment coefficient determination of R^2 was significant at confident level.

The study concluded that project intervention design significantly influences on successful completion of UNDP projects in Kenya. The study also established that successful completion of UNDP projects in Kenya are influence by quality management in their projects, UNDP ensure the quality checklist of the implemented projects, UNDP encourage on project design before implementation, UNDP projects design help in cost reduction, UNDP projects designing helps in timely completion of projects, UNDP Provide input build ability during design phase, the UNDP Designed projects saves times during monitoring. The study also concluded that the regression model of project intervention design coefficient determination of R^2 was significant at confidence level. The study p-value confirmed the significance of the coefficient of project intervention design on successful completion of UNDP projects in Kenya is at the confidence level.

The study thus concluded that project sustainability influences on successful completion of UNDP projects in Kenya. The study also concluded that project sustainability has a significant strong positive correlation on successful completion of UNDP projects in Kenya.

The study concluded that project impact evaluation influences on successful completion of UNDP projects in Kenya. The study further concluded that project impact evaluation has a significant strong positive correlation on successful completion of UNDP projects in Kenya.

5.2 Recommendations of the study

The study recommended that monitoring and evaluation influences successful completion of waste management projects funded by United Nation Development Programme in Kibera, Nairobi City County. The study recommended that project need assessment influences on successful completion of UNDP projects in Kenya. The study also recommended that project need assessment had a strong significant positive correlation on successful completion of UNDP projects in Kenya.

The study recommended that project intervention design significantly influences on successful completion of UNDP projects in Kenya to a great extent. Also the study recommended projects designing helps in timely completion of projects and designed projects saves times during monitoring

The study recommended that project monitoring and evaluation process influences successful completion of waste management projects funded by United Nation Development Programme in Kibera, Nairobi County. The study recommended that UNDP should continue to encourage on project impact evaluation, also provide input build ability during design phase.

The study thus recommended that project sustainability evaluation influences on successful completion of UNDP projects in Kenya. The study recommended that project sustainability evaluation has a significant strong positive correlation on successful completion of UNDP projects in Kenya

5.3 Areas for further Research

The study recommended further research to be conducted on effect of monitoring and evaluation process on successful completion of waste management projects funded by Nairobi County Government to cover the 47.4% of the other factors affecting successful completion of waste management projects. Also the study recommend for other area of study like effect of monitoring and evaluation process on successful completion of waste management projects funded by public private partnership. Also the study recommends further research to be conducted on using different variables.

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