



# PROJECT CYCLE MANAGEMENT AND SUCCESS OF DEVELOPMENT PARTNERS FUNDED PROJECTS

By

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## ABSTRACT

The work entitled “project cycle management and success of development partners funded projects. A Case of Electrification of Productive Users Project through World Bank Funds in Muhanga District, Rwanda (2019-2022)” was conducted for assessing the validity of three specific objectives such as: to determine the influence of project initiation on Success of Electrification of Productive Users Project, to explore the influence of project planning on Success of Electrification of Productive Users Project, and to establish the influence of monitoring & evaluation on Success of Electrification of Productive Users Project. This study is census, descriptive, qualitative, and quantitative design. The study was used both primary data and secondary data. 40 respondents as entire population was assessed (8 staff of EDCL and 32 project beneficiaries); the study has adopted census technique. Data was collected using questionnaire and documentation. Questionnaire was made for two different population categories and questions were different, however for analysis the population size was reduced to ensure that 8 respondents represent each side. Analysis of data was performed using SPSS (Statistical Package for Social Scientists) and results obtained were presented in form of descriptive statistics and inferential statistics. The results were presented as follows: Reference to the 1<sup>st</sup> study objective, findings of the study indicate that electrification of productive use project has effectively used risk management metrics, data collection plan, reporting feedback mechanisms, correctives action (project planning) toward success of the project means meet planned objectives and goals, time, budget and quality standards (an average of .33.3% Strongly Agreed, 66.7% Agreed, 4.34 Mean and 0.500 Standard Deviation and Strong Homogeneity). Reference to the 2<sup>nd</sup> study objective, results indicate that electrification of productive use project in Muhanga district has effectively used or ensured performance metrics, data collection plan, reporting, feedback mechanisms and corrective action (monitoring and evaluation) and this has supported to overcome all project implementation risks including these created by the COVID-19 pandemic and the project achieved its success (an average of 25 Strongly Agreed, 75% Agreed, 4.25 Mean, 0.414 Standard Deviation and Strong Homogeneity). And the 3<sup>rd</sup> study objective assessment, study results indicate that electrification of productive uses in Muhanga district has contributed to improvement of educational services delivery where students and teachers get access to electronic materials use and this led to quality education and easy courses preparation. Electrification of health facilities (health centers and health posts) has made great improvement in health services where now they can work during the night and use electronic medical test tools and use of electricity has made positive changes in hygiene of medical materials (an average of 42.7% Strongly Agreed, 57.3% Agreed, 4.43 Mean and 0.502 Standard Deviation and Strong Heterogeneity). Reference to the study findings, electrification of productive use project in Muhanga district has registered a good success level after several challenges including COVID-19 pandemic effects. The study recommends beneficiaries of this project to use efficiently the electricity connected to their institutions toward better services provision by applying measures of efficiency and use of efficient appliances.

**Keywords:** project cycle management; success; development; partners funded projects; Electrification of Productive Users Project; World Bank Funds.

## CHAPTER ONE

### GENERAL INTRODUCTION

#### 1.1. Background to the study

Project cycle management is a procedure that takes place in projects with a high level of impact during the implementation phase of project plans is also offered by program cycle management, which focuses on implementing actions, as Jeffrey2021 argues. In the project cycle this is the 3rd stage of four management stages in a project cycle, including initiation, planning, execution, and completion. The process by which project managers apply to achieve their vision, mission, strategies, and objectives a specific knowledge base that investigates various methods used by Project Managers and individuals in projects who are driving or directing the activities of others towards achieving those goals. Project cycle management may also be termed as a process to achieve the project's objectives, strategies, and goals by use of human resources and financial resources.

According to Daniel (2022), project cycle management all over the world including for example in USA, European countries like UK, France, German, Spain, etc., is taken as project manager's style of providing direction, implementing plans, and staff motivation. There are many different project cycle managements proposed by various authors that can be exhibited by project managers in business management or other fields Intellectual capacity of project managers is instrumental in developing solutions and acquiring knowledge to perform the task. The conceptual skills of the Project Manager apply to agility, judgment, innovation, interpersonal skills, tact and domain knowledge. Political and technological knowledge, as well as Cultural and Geopolitical awareness shall be covered by domain knowledge. The project cycle management leads to the significant project implementation (or project execution) and shows the phase where visions and plans become reality. After an evaluation, decision, visioning, planning, application for funding and identifying the financial means of a project this logical conclusion will be reached. Technical implementation is one of the activities that are part of a project, Project cycle managements play an important role for the success of any projects. In any successful project where it appeared to be done, the capabilities of it are the main factor for the implementation of small productive users. In addition, it is very important in the case of medium complexity, maintenance project and innovation process. The authors further explained project cycle management as lively communicator addresses others and win support then the project cycle management inspire staff and audience and accessibility. In addition, it has argued that project cycle management is a key competence for project leaders in much focused in information system and organizational change projects (Muller & Turner, 2021).

The project cycle management occurs and the cultural context for participation best practice, such as the early participation of stakeholders in the decision-making process, ensuring that the stakeholders can influence the end

results of the process and formulating clear objectives in the participatory process. Clearly, the process of stakeholder participation has an impact on the outcome of the process and therefore this current work is examining the process of stakeholder participation which is appropriate to integrate the top-down sustainable development indicators used at a European level with those bottom down indicators relevant at a regional level. It is suggested that this method would be of use to other city regions as they try to identify their own unifying set of sustainable development indicators (Reed, 2019).

In Africa, the institutions and group of companies in different countries including Tunisia, Kenya, Nigeria, Maroc, South Africa and Rwanda, can add project cycle management step to their project cycle management framework; project cycle management is about a continuous relationship maintained and strengthened over a period longer than a project, program or year. It is often about a relationship that continues until a definite decision brings it to an end. When institutions prepare their annual project planning, review all the key individuals and groups of stakeholders who institutions believe are likely to remain important to institutions over the longer term regardless of their relevance in the forthcoming year. It is harder for them to publicly criticize institutions when have gone to the effort of maintaining a direct dialogue with them, which is in effect a continuing relationship with them (Weber, 2020).

In Rwanda, the project cycle management for example in World Bank's projects includes the creating an environment conducive to implementation of small business and increasing region livelihood; setting of priorities; carrying out activities around prioritization. The World Bank's project cycle management in relation to different concepts such as projects management where project cycle management can be considered to be projects controllers' subset and is more commonly known as project planning and project scheduling for creating sustainable implementation. World Bank's project cycle management helps in the planning, identifying, and reaching long run implementation of its goals (World Bank, 2021).

Rwanda, a rapidly developing country situated in East Africa, has achieved remarkable success in attracting funds from development partners. These funds are intended to support a wide range of projects aimed at achieving sustainable development in the country. Among these initiatives is the Electrification of Productive Users Project in Muhanga District Rwanda's electricity access program began with a five-year investment plan designed to achieve the Government's stated targets set out in the Economic Development and Poverty Reduction Strategy (EDPRS). These targets called for the total number of electricity connections to increase from 130,000 in 2009 to 350,000 by 2013 and 1,700,000 by 2017 with a special emphasis on connecting social infrastructure, health facilities, schools, and administrative offices.

The EARP was kicked off during the national Electricity access program DP roundtable which was held in Kigali on the 23rd of March 2009. The Government of Rwanda has increased and stabilized the power production since the severe power shortages in 2004. However, infrastructure bottlenecks in the urban areas and limited access in the rural areas is still one of the major issues that the country is facing though there is a promising environment considering

the current electricity access rate of 56.7% at the end of 2020 and the (NST1) targets to achieve the universal access to all Rwandans by 2024 (100% to be connected). In connection with the mentioned strategy, the Government of Rwanda through Energy, Water and Sanitation Authority (EWSA) was embarked on a countrywide Electricity Access Program to realize the primary EDPRS target for the electricity sector. On the date of 11 September 2019 Energy Development Corporation Limited (EDCL) signed the EPC contract with Century Engineering Contractors Ltd (CEC) and MBH Power Ltd for Plant Design, Supply, and Installation of Low Voltage and Medium Voltage lines for Productive Users of Rwanda, funded by World Bank.

The initial contract amount was USD 2,528,591.69 and RWF 602,725,119.94 which was amended after design to USD 3,100,044.66 and RWF 121,234,958 all taxes inclusive. The initial execution period was Twelve (12) months from the contract effective but due to several reasons including change in scope that was discovered during design phase and the force majeure with outbreak of the Covid-19 pandemic worldwide and its negatively impacted the project and the contract was amended up to 3rd January 2022 and the completion of all Productive Users was 30th April 2022.

## **1.2. Statement of the problem**

Based on the study by the World Bank, ineffective project cycle management is a major cause of project failure in developing countries (World Bank, 2016). Projects funded by development partners often involve multiple stakeholders with different interests and priorities and may face political and economic instability, which can complicate implementation.

According to (OECD,2018), Managing a project cycle is a critical task that involves planning and execution that meets the needs of the community. To achieve this, it is important to engage with stakeholders efficiently and communicate effectively. A comprehensive understanding of the local context and culture is also necessary. Additionally, project managers must be able to adapt to changing circumstances and take a flexible approach to project implementation.

Another challenge according to (UNDP, 2018) is to ensure the project sustainability in long term, this requires careful consideration of elements such as capacity building, institutional strengthening, and ownership by local stakeholders. Without these, projects may fail to achieve their intended impact or sustain beyond the project life.

All the above-mentioned issues may cause incomplete deliverables, delays, cost overruns and failure to achieve the targeted impact.

## **1.3 Objectives of The Study**

The objectives of this study are divided into two parts which are general and specific objectives.

### 1.3.1. General objective

The study aims to evaluate the effectiveness of project cycle management in ensuring the success of the Electrification of Productive Users Project in Muhanga District, Rwanda. The project is funded by the World Bank from 2019 to 2022.

### 1.3.2. Specific objectives

1. To determine the influence of project initiation on Success of Electrification of Productive Users Project.
2. To explore the influence of project planning on Success of Electrification of Productive Users Project.
3. To establish the influence of monitoring & evaluation on Success of Electrification of Productive Users Project.

### 1.4. Research Hypothesis

H<sub>01</sub>: There is no significant influence of project initiation on Success of Electrification of Productive Users Project.

H<sub>02</sub>: There is no significant influence of project planning on Success of Electrification of Productive Users Project.

H<sub>03</sub>: There is no significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project.

H<sub>04</sub>: There is no significant influence of electricity access on services of delivered among productive uses.

### 1.5. Scope of the study

The study focuses on domain of project cycle management. It will be carried out in Muhanga District of Southern Province. This research focuses on the period from 2019 up to 2022.

### 1.6. Significance of the research

The findings support the researcher to acquire knowledge about the effectiveness of project cycle management in the direction of Success of Electrification of Productive Users Project and it help researcher to improve knowledge and skills through the theories learnt in class. Furthermore, this research contributes to the partial fulfillment of UoK's academic requirements for getting degree of master's in project management. A copy of this research approved must be submitted to the University of Kigali and serve as referral document for future generation of this University of Kigali.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

This chapter is concerned with literature related to the research topic, concept of the study variables, theoretical review, empirical review, conceptual framework as well as the research gap.

#### 2.2. Conceptual review

This section reviews the key concepts of the study and provides their meaning.

##### 2.2.1. Project cycle management

Managing a project from start to finish involves using different processes, methods, skills, knowledge, and experience to achieve specific objectives within agreed parameters and according to project acceptance criteria. The main goal is to plan and manage the project to achieve its listed goals and deliverables successfully. This includes identifying and managing risks, resource management, budgeting, and communication among various teams and stakeholders. Project cycle management is responsible for organizing all the components of a project, whether it is launching a new service, a marketing campaign, or developing a new product. Even planning a wedding can be considered a project that requires management. The project life cycle consists of five stages: initiating, planning, executing, monitoring and evaluation/controlling, and closing. (Ljusnan Dal, 2019)

##### 2.2.2. Project initiation

At the beginning of the project cycle management life cycle, the first step is project initiation. This is when companies decide if the project is necessary and if it will be beneficial for them. There are two methods used to evaluate the proposed project and set expectations: the business case and feasibility study. The project team determines the purpose of the project and the value it will bring to the business. They use this information to gain support from important stakeholders. To guide the project in the right direction, gain approval from decision-makers and stakeholders, and establish a clear plan for project delivery, a project initiation document is created to gather important planning information. (Ljusnan Dal, 2019)

##### 2.2.3. Project planning

Planning a project involves a systematic approach to completing it within a specific timeframe, using designated resources and defined stages. This process entails setting measurable objectives, identifying deliverables, and creating a schedule. Constant monitoring of the budget and schedule is necessary at every step of the project to ensure the plan is on track. The schedule helps team members complete their tasks by identifying which tools they require and when. Additionally, project planning helps keep the team engaged for improved project performance. (Ljusnan Dal, 2019)

#### 2.2.4. Monitoring and Evaluation

Collecting data on specific indicators is a continuous process known as monitoring. It aims to provide management and stakeholders with insights on progress and achievement of objectives, and the use of funds. Monitoring involves tracking inputs, activities, outputs, outcomes, and impacts of development activities at various levels. It also includes keeping track of a country's progress towards achieving the millennium development goals (MDGs) and other national measures of development success. (Ljusnan Dal, 2019)

On the other hand, evaluation is the process of determining the worth or significance of a development activity, policy, or program. It assesses the relevance of objectives, the efficacy of design and implementation, the efficiency of resource use, and the sustainability of results. The goal of evaluation is to incorporate lessons learned into the decision-making process of both project partners and donors, as stated by the World Bank in 2023

It is important to understand that monitoring and evaluation are two interrelated processes that are crucial for conducting rigorous evaluations. While monitoring provides ongoing management information, relying solely on it can lead to biases as it only covers certain aspects of a project or program. Therefore, careful consideration is required to avoid unintended consequences. Evaluation, on the other hand, offers a more comprehensive and balanced interpretation of performance. However, it is a more time-consuming and costly process, which is why it should be used sparingly. One effective approach is to use monitoring information to identify areas that require further evaluation.

Monitoring and evaluation (M&E) can be carried out through various tools, methods, and approaches. Some examples are performance monitoring indicators, the logical framework, theory-based evaluation, formal surveys (e.g., service delivery surveys, citizen report cards, living standards measurement surveys (LSMS), and core welfare indicators questionnaires (CWIQ)), rapid appraisal methods (e.g., key informant interviews, focus group discussions, and facilitated brainstorming sessions with staff and officials), participatory methods like participatory M&E, public expenditure tracking surveys, rigorous impact evaluation, and cost-benefit and cost-effectiveness analysis..

#### 2.2.5. Success of projects

Project success is an effort planned project wide and managed from the top, to increase project effectiveness and health through planned interventions in the projects processes, using behavioral science knowledge. The project success is the study of successful project change and performance which realized that project structures and processes influence worker behavior and motivation (Zweney, 2018).

Project success comprises the actual output or results of projects as measured against its intended outputs (or goals and objectives). According to Richard (2014) project success encompasses three specific areas of firm outcomes including financial performance (profits, return on assets, return on investment, etc.); product market performance (sales, market share, etc.) and shareholder return (total shareholder return, economic value added, etc.). The term

project effectiveness is broader; specialists in many fields are concerned with project success including strategic planners, operations, finance, legal, and project development. In recent years, many projects have attempted to manage project success using the balanced scorecard methodology where performance is tracked and measured in multiple dimensions such as: financial performance (e.g. shareholder return); customer service; social responsibility (e.g. stakeholders citizenship, community outreach); employee stewardship; project success; performance measurement systems; performance improvement and project performance (Zweney, 2018).

### **2.3. Theoretical review**

The theoretical literature helps to establish the degree of existing theories to develop new hypotheses to be tested. This section reviews theories of Agency Theory on project cycle management and project cycle management theory of change.

#### **2.3.1. Diffusion of Innovation (DOI) Theory**

In this review of literature, the Diffusion of Innovation (DOI) theory is utilized in the context of electrification endeavors in rural regions of developing nations. These projects frequently encounter challenges when introducing novel technologies and methods. The review highlights the importance of comprehending the traits of the intended audience, including their educational background, income, and information accessibility. This knowledge is critical in devising successful tactics to encourage the acceptance of electrification technologies.

In 1962, E.M. Rogers introduced the theory of Diffusion of Innovation (DOI), which is a social science theory that explains how an idea or product spreads within a specific population or social system. According to this theory, people gradually adopt new ideas, behaviors, or products, leading to diffusion. Adopting involves changing one's previous ways of doing things, such as purchasing or using a new product, learning, or performing a new behavior. For adoption to take place, the person must perceive the idea, behavior, or product as new or innovative. New information technologies are seen as innovations by potential adopters, and they consider them new when they adopt them. (Simon-Oke & Olayemi, 2012).

#### **2.3.2. Agency theory**

One among theories related to leadership styles is the Agency Theory on project cycle management that is a specific type of methodology for organizational controlling, participation and evaluation that is used in the organizations in governance of budgets to promote social change. Agency Theory on project cycle management defines long-term goals and then organizations' maps control backward to identify necessary preconditions (Egan, 2021).



Agency Theory on project cycle management explains the process of change by outlining causal linkages in an initiative, i.e., its shorter-term, intermediate, and longer-term of organizations' outcomes. The identified changes are mapped as the "outcomes pathway" showing each outcome in logical leadership relationship to all the others, as well as chronological flow. The links between outcomes are explained by "rationales" or statements of why one outcome is thought to be a prerequisite for another (Egan, 2021).

The innovation of Agency Theory on project cycle management lies (1) in making the distinction between desired and actual outcomes and (2) in requiring stakeholders to model their desired outcomes before they decide on forms of intervention to achieve those outcomes. A common error in describing Agency Theory on project cycle management is the belief that it is simply a methodology for planning and evaluation (Merchant, 2017).

Agency Theory on project cycle management is instead a form of critical theory that ensures a transparent distribution of power dynamics. Further, the process is necessarily inclusive of many perspectives and participants in achieving solutions. Agency Theory on project cycle management can begin at any stage of an initiative, depending on the intended use (Merchant, 2017).

A theory developed at the outset is best at informing the planning of an initiative. Having worked out a change model, practitioners can make more informed decisions about strategy and tactics. As monitoring and evaluation of data become available, stakeholders can periodically refine the Agency Theory on project cycle management as the evidence indicates. An Agency Theory on project cycle management can be developed by reading leadership documents, talking to stakeholders, and analyzing data (Merchant, 2017).

As the origins of Agency Theory on project cycle management lie in the field of control in organizations, developments over the years have ensured that Agency Theory on project cycle management continues to be an invaluable method to conduct evaluations of many different types of leadership management projects and organizations. Posing theory-based evaluation questions helps to focus evaluation efforts on key concerns. As well, there may be a need to pick the right indicators from among the many available, and one can use "monitoring questions" to select the indicators that will be most helpful (Otley, 2022).

The monitoring questions take the form of "What do we really need to know to manage grant-making directed to the achievement of this outcome? It is important to understand success beyond just knowing "what works". Experience has shown that blindly copying or scaling an intervention hardly ever works. An important task for monitoring and evaluation is to gather enough knowledge and understanding so as to be able to predict with some degree of confidence how an initiative and set of activities might work in a different situation, or how it needs to be adjusted to get similar or better results (Egan, 2021).

Just as development Agency Theory on project cycle management is a participatory process, a theory of based monitoring and evaluation system can be designed in a participatory way of organizations. For example, grant managers can be involved in choosing the outcomes of greatest interest to them in their decision-making. Similarly, people on the ground can have input into which indicators to use and how to operationalize them, choices of instruments and methods of data collection, and which existing sources of data may be used in tracking indicators (Egan, 2021).

### 2.3.3. Theory of change

A theory of change is a diagram or written description of the strategies, actions, conditions, and resources that facilitate change and achieve outcomes. It has 'explanatory power' (Anderson, 2021) in that it should explain why you think activities or actions will lead to outcomes. Theory of Change is essentially a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It is focused on mapping out or “filling in” what has been described as the “missing middle” between what a program or change initiative does (its activities or interventions) and how these lead to desired goals being achieved. It does this by first identifying the desired long-term goals and then works back from these to identify all the conditions (outcomes) that must be in place (and how these related to one another causally) for the goals to occur. These are all mapped out in an Outcomes Framework (Anderson, 2021).

The project cycle management theory of change is part of the program theory that emerged in the 1990s as an improvement to the evaluation theory. The project cycle management theory of change is a tool used for developing solutions to complex financial problems. It provides a comprehensive management picture of early and intermediate term changes that are needed to reach a long-term set goal (Anderson, 2021).

It therefore provides a model of how organization should work, which can be tested and refined through leadership management. The project cycle management theory of change is also a specific and measurable description of change that forms the basis for financial planning, financial implementation, and financial evaluation in institution (Valters, 2018).

Most entities use the project cycle management theory of change although they are usually assumed. The project cycle management theory of changes helps in developing comprehensible frameworks for internal and external leadership. Therefore, it is based on the program theory advanced by Suchman in the 1960's (Valters, 2018).

## 2.4. Empirical review

Kariuki, *et al.* (2016), did the study not specifically on Power Distribution Unit (PDU) but on the rural Electrification and Microenterprises Performance: Some Lessons from Muranga County Kenya. The purpose of this study was to assess rural electrification adoption by microenterprises in Muranga County Kenya. The study was guided by two specific objectives which are to establish the determinants of rural electrification adoption by Micro and Small

enterprises in Murang'a County, Kenya and to determine the effect of adoption of rural electrification on the performance of rural micro and small enterprises in Murang'a County, Kenya. The study adopted two stages least squares in case of violation of endogeneity.

The population of this research consists of the 650 small and medium enterprises in Murang'a. The study used primary data. Results revealed that, amount of capital invested, nature of business activity and distance from market significantly influenced the predicted probability of electricity adoption. Results also revealed that electricity adoption was positive and significantly related with business performance. The results also indicated that gender, capital invested, and workforce were positively and significantly related to business performance. It is recommended that Murang'a County should conduct business incubation programmes for businesses to boost the business performance/turnover as well as the capital invested. This will have positive effect on electricity adoption since well performing businesses are likely to adopt electricity.

#### **2.4.1. Project initiation and project success**

The project initiation and project success are linked by Logical Framework Approaches (LFA) including activities inputs, process, outputs, outcomes and impacts that the projects should be involved as much as possible into planning, interactions, and contextual factors. Furthermore, the projects should address problems faced by beneficiaries and meet their needs and interests. It is important to identify any stakeholder, who may have a relation to the projects; that is individuals, groups of people, institutions, or projects. The project initiation should be done very early in the identification and appraisal phase of the project success (Anderson, 2021).

The stakeholders' analysis is a very important phase, where planners identify biases, expectations, and concerns of the different interest groups, which helps to guarantee a more cohesive and sustainable projects. Many projects have not been a success because of inherent conflicts between the projects, which all may have different views on the problems, the wanted results and technical concepts. During the process of analyses there must be decided on, which objectives to pursue in the projects and which area to focus on, and thereby whose interests and views to give priority (Anderson, 2021).

The counter argument is that the 'lack of something' implies that the solution is the provision of 'something', and that in many cases there can be several different ways of finding a solution to a particular problem, which means that focusing on problems encourage creativity. The focus of the objective analysis is to transform the problem tree into a tree of objectives that suggests future solutions to the problem. This means that the trees cause-effect relationship is changed into a means-end relationship. Now the roots on the tree are means that the group can achieve its objective through and hereby have positive changes on the branches (Valters, 2018).

First the projects should identify objectives that are not desirable, feasible or pursued by other projects. Then each mean is looked at as possible means of strategy for achieving the core objective of the projects. The different strategies that are found should then be assessed to find the most feasible strategy. Depending on what the scope of the

intervention is the selected strategies can result in either projects-sized intervention or a programme that consists of several projects in institution (Anderson, 2021).

#### **2.4.2. Project planning and project success**

The project planning and project success relationship are a set of standards for a project's operations that socially conscious investors use to screen potential investments. Environmental relationship considers how a project performs as a steward of nature. Social relationship examines how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance deals with a project's leadership, executive pay, audits, internal controls, and shareholder rights. The relationship can also be used in evaluating any environmental risks a project might face and how the project is managing risks (Kenton, 2019).

Project planning covers the practices of how companies are managed and interact with shareholders. An overriding goal of project planning, according to the Organization for Economic Cooperation and Development (OECD), is to create an environment of market and business confidence in individual companies and their ability to put capital to use for long-term productive investments (Kenton, 2019). Project planning addresses issues ranging from concentrated ownership and executive compensation to workplace diversity and independence of a project's board of directors. Market-based project planning is one of several approaches to ensuring proper protections to shareholders and project adherence to existing regulations (Naughton, 2017).

The success of a project is not only dependent on efficiency, innovation, and quality management but also on compliance of project planning principles. Implementation of project planning standards improves project success of the project as well as positively impacts internal efficiency of the projects (Tadesse, 2022). Project planning aims at facilitating effective monitoring and efficient control of business or a project. Its essence lies in fairness and transparency in operations and enhanced disclosures for protecting interest of different stakeholders (Arora and Bodhanwala, 2018).

Project planning identifies the role of directors and leaders towards shareholders and other stakeholders. Project planning is significant for shareholders as it increases confidence in the project for better return on investment. For other stakeholders like employees, customers, suppliers, community and environment, project planning assure that project behave in a responsible manner towards society and environment. Thus, project planning is also presenting the relationship among board accountability and environment responsibility (Kolk and Pinkse, 2016).

Numerous evaluation research (studies) and reports have shown the effectiveness and problems of project planning. It is therefore one of the key ideas behind most versions of the Logical Framework Approaches (LFA) including activities inputs, process, outputs, outcomes and impacts that the companies should be involved as much as possible into planning, interactions, and contextual factors. Furthermore, the companies should address problems faced by beneficiaries and meet their needs and interests. It is important to identify any stakeholder, who may have a relation

to the companies; that is individuals, groups of people, institutions, or firms. This should be done very early in the identification and appraisal phase of the companies (Anderson, 2021).

During the process of analyses there has to be made a decision on, which objectives to pursue in the companies and which area to focus on, and thereby whose interests and views to give priority.

First the projects should identify objectives that are not desirable, feasible or pursued by other companies. Then each mean is looked at as possible means of strategy for achieving the core objective of the companies. The different strategies that are found should then be assessed to find the most feasible strategy. Depending on what the scope of the intervention is the selected strategy can result in either companies-sized intervention or a programme that consists of several companies (Maier, 2021). Therefore, the project planning and project success are positively correlated.

### **2.4.3. Monitoring & evaluation and project success**

The relationship between monitoring & evaluation and project success is affected by several factors. The legal system and project structure of a country may have significant impacts on this relationship. Anderson and Gupta (2020) performed cross-country analysis to analyze whether project structure and legal system matter. Berthelot (2016) pointed out the attention of capital market participants to monitoring & evaluation, particularly their need to identify situations that may cause earnings management and opportunistic behavior.

Arnstein (2019) developed a ladder of participation, which is a hierarchy of different monitoring & evaluation methods ordered from participatory to stakeholder-driven methods. This ladder was then adapted by Pretty (2021). These authors agree that implementing the levels of monitoring & evaluation further up the ladder leads to greater cooperation and Cohesive Result Guidelines (CRG) for the Greater Dublin Area (Dublin Regional Authority, 2016) guide the development of the whole region and are also informed by the challenges that come under the umbrella of project success. These CRGs are informed by a set of provisional project success indicators that are still being developed and will be informed by this current research. Throughout this research it was observed that the efforts to improve and measure the project success of the Dublin region are often disjointed. Frequently, the local authorities appear to have quite different understandings of what is meant by the term project success, and this issue is exacerbated by the recommendation of diverse and often incompatible indicators.

International project success policies such as Europe 2020 and the European project success strategy are often supported by suites of project success indicators that can be used to baseline current performance, develop targets for future development and measure progress. Likewise, there are a growing number of indicator studies that compare international cities in terms of their project success, such as 'Informed cities', the Global City Indicator Facility, the 'CDP Cities Global Report', Siemens' European Green City Index' and two EU framework programme projects, Status (Sustainability tools and targets for the urban thematic strategy) and tissue (Trends and indicator for monitoring the EU thematic strategy on project success of urban environment) (Tissue, 2016). However, such internationally focused top-down projects can often miss the key issues that affect project success at the local scale (Fraser, 2016),

since they take a necessarily formula approach to development to permit comparison across different geographical locations.

Reed (2018) provides a comprehensive review of monitoring & evaluation methods and concludes that there is a need to focus on the process of monitoring & evaluation rather than the tools of participation utilized, such as interviews or focus groups. The specific method of participation is dependent on the scale at which the engagement occurs and the cultural context. However, Reed (2018) makes recommendations for participation best practice, such as the early involvement of stakeholders in the decision-making process, ensuring that the stakeholders can influence the end results of the process and formulating clear objectives in the participatory process.

The method of monitoring & evaluation influences the end result of the process and therefore this current work set out to examine a participation process appropriate to integrate the top-down project success indicators used at European scale with those bottom-up indicators relevant at a regional and city scale. It is suggested that this method would be of use to other city regions as they try to identify their own unifying set of project success indicators. Arnstein (2019) developed a ladder of participation, which is a hierarchy of different monitoring & evaluation methods ordered from non-participatory to stakeholder-driven methods.

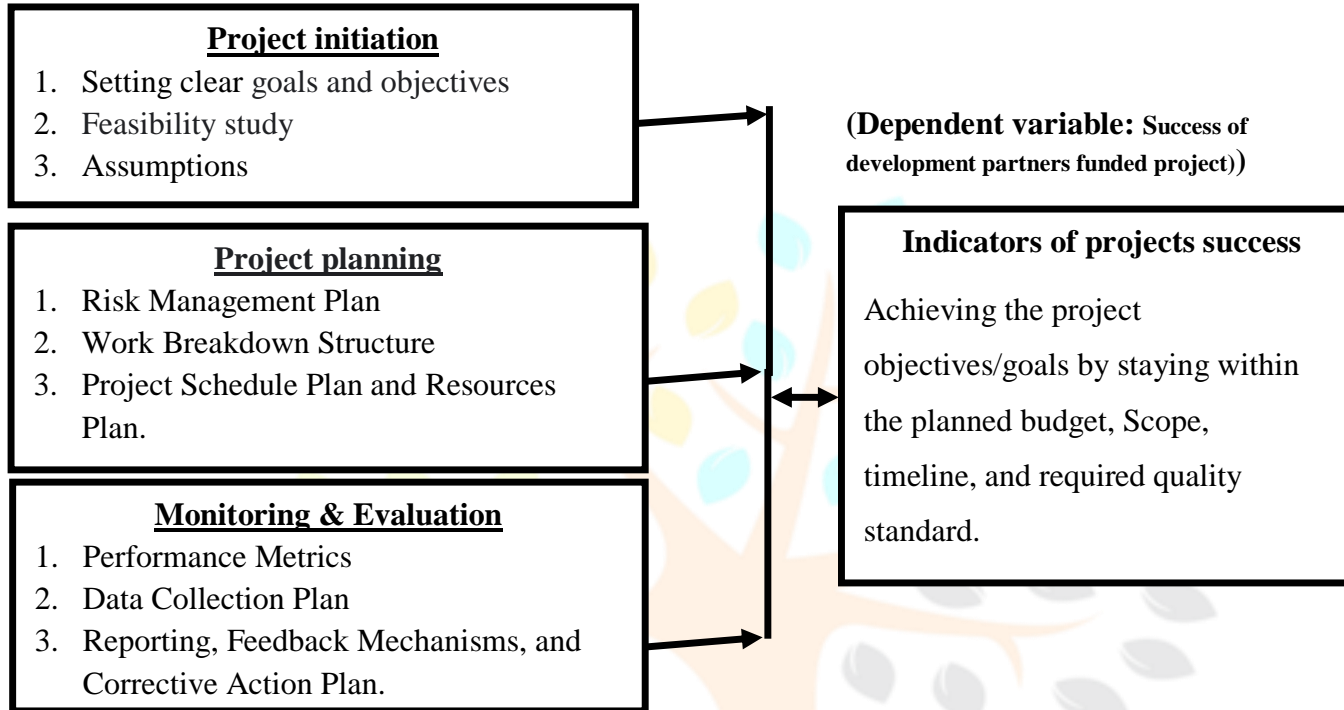
Fraser (2016) demonstrated the effectiveness of monitoring & evaluation in developing a regionally cohesive approach to project success was examined by the research team in the context of the Dublin city region in Ireland. The objectives of the project were to improve communication and to agree a vision for project success in each of the participating local authorities, and between the local authorities in the Dublin region, thus creating a regionally cohesive approach to project success.



## 2.5. Conceptual framework

In this section, the conceptual framework composed by variables of the study with their indicators, as follows:

**(Independent variables)**



**Figure 2.1: Conceptual framework of the study**

## 2.6. Research gap analysis

According to the different World Bank Projects' reports and other books (papers & journals) written by other scholars), read by the researcher; it was established that there are only few studies done on project cycle management and its components, and they present mixed results. Research findings show that the project cycle management content towards the project success is often described into too many details; the achievement of goals for project cycle management development are including advancements in projects performance.

There are limited studies those their authors did researches on project cycle management and project success on the side of Rwanda, especially for the case of World Bank Projects in Rwanda as well as specific to Electrification of Productive Users Project; therefore, it is from that biased gap where current researcher was motivated to do research on "The contribution of project cycle management on project success with reference of Electrification of Productive Users Project".

Then researcher wants to fulfill that gap and provide academic contribution by showing how project initiation; project planning and monitoring & evaluation affect Success of Electrification of Productive Users Project.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter explains how the researcher collected the data. It presents the population, sample size, techniques and methods that were applied in data collection.

#### **3.2. Research design**

Saunders and Miller (2019) state that the research design plays a crucial role in providing a suitable framework for a study. One of the most important decisions in the research design process is to choose a research approach as it determines the method for obtaining relevant information. However, the research design process involves numerous interrelated decisions.

In this research, a descriptive research design and statistical analysis were utilized to present field results. This design offers the researcher a comprehensive understanding of essential aspects of the phenomena of interest from both an individual and organizational perspective. By collecting data from a diverse group of respondents, the study aims to determine the effect of project cycle management on the success of the Electrification of Productive Users Project.

#### **3.3. Study population**

Population refers to larger group from which the sample is taken (Kombo and Tromp, 2006). In this study the population is made into two categories, the EDCL management team/implementers of Electrification of Productive Users Project through World Bank Funds in Muhanga District and project beneficiaries. The total population is made with 40 respondents. The beneficiaries were selected from the electrified productive users (1 cell office, 4 health centers, 2 health posts, 7 schools, 2 sector office) and from each institution 2 staff members were selected as respondents (Head of institutions and employees) and from the side of project management team 8 respondents were selected (Director of Construction, Project manager, Contract manager, Project Engineer, Design Engineer, Site Engineer, environmentalist, social safeguard). As the populations seem to be small, there is no need for sampling methods and sample size calculation, the study adopts census techniques.



**Table 3.1: Distribution of the population, sample, and sampling technique**

Category of Population	Targeted Population	Sample size	Sampling technique
<b>Beneficiaries of the project (2 staff per each connected productive use)</b>			
Cell Office (1)	2	2	<b>Census</b>
Health Center (4)	8	8	
Health Post (2)	4	4	
School (7)	14	14	
Sector Office (2)	4	4	
<b>Sub-Total</b>	<b>32</b>	<b>32</b>	
<b>Project management staff of EDCL</b>			
Director of Construction	1	1	<b>Census</b>
Project manager	1	1	
Contract manager	1	1	
Project Engineer	1	1	
Design Engineer	1	1	
Site Engineer	1	1	
Environmentalist	1	1	
Social safeguard	1	1	
<b>Sub-Total</b>	<b>8</b>	<b>8</b>	
<b>Grand Total</b>	<b>40</b>	<b>40</b>	

Source: EDCL, 2023

### 3.4. Data collection tools

The study used quantitative and qualitative research of data gathered from the respondents. Therefore, questionnaire and interviews research techniques were used.

#### 3.4.1. Questionnaire tool

In Kendall's (2019) view, a questionnaire is a useful way to collect information from various individuals in an organization. The questionnaire usually contains queries about the participants' beliefs, behavior, attitudes, and traits that are affected by specific occurrences or structures. The respondents are expected to provide truthful and impartial responses, and their answers were kept confidential. A closed questionnaire were utilized and distributed among the participants.

### 3.4.2. Documentation tool

According to Paige in 2021, the documentation system formally acknowledges the sources consulted during research. One of the main advantages of document studies is that they provide more comprehensive exploration of sources, which can help to obtain additional information on a particular aspect of the topic. Document studies involve an extensive review of published documents, reports, magazines, journals, and policy reports relevant to the topic. This is important because it enables the literature to be reviewed and global perspectives to be identified, which can be used to create a comparative framework for analysis and evaluation for readers. Therefore, the researcher use this documentary technique to obtain secondary data and conduct their research.

### 3.4.3 Interview

This is a method for gathering primary data for qualitative research, which involves requesting individuals' opinions on a topic. this approach offers researchers the opportunity to obtain comprehensive information that may not be obtainable through other research methods.

### 3.5. Validity and reliability of the study

This sub-section presents the way this research use pilot study through validity and reliability of the study.

Pilot studies allowed the researcher to identify potential problems in the proposed study. A pilot study is the process of carrying out a preliminary study, going through the entire research procedure with a small sample of interview questions. The aims are to test whether the designed questions are logical and contextual, if questions are clear and easy to understand, whether the stated responses are exhaustive and how long to complete the interview questions.

This includes item analysis that is carried out with the aid of the supervisor, research experts knowledgeable about the themes of the study. The process involves examining and assessing each item in each of the instruments to establish whether the item brings out what it is expected to do.

To ensure the accuracy and reliability of the research data, the researcher conduct pilot test the methodology multiple times and verify consistent outcomes. To select appropriate respondents, the researcher developed a targeted questionnaire centered around the core topic. The questionnaire was carefully crafted to make respondents feel comfortable and confident in providing accurate information.

### 3.6. Data processing

Data processing and analysis were used to transform the respondent's views into meaningful test and then to interpret the collected data. For some unclear responses which required the editing, the researcher went back to the respondents to make them clarify their responses. The coding process were used to summarize data by classifying different responses, which was made into categories for easy interpretation and analysis.

In this section the researcher presents the steps that were surveyed after collecting the information. On this note, editing, coding, and tabulating of data were applied in order to be able to handle it easily.

### 3.7 Data analysis

Data analysis was made using both descriptive statistics and inferential statistics. Descriptive statistics is made with descriptive parameters such as frequency, percentage, mean and standard deviation. Inferential statistics was made with nonparametric test with independent samples which occur with the use of One-Sample Chi-Square Test; One-Sample Binomial Test and One-Sample Runs Test and linear regression model.

The statistical, analytical, descriptive, and synthetically research methods for data analysis offered the opportunity to measure and quantifies the results of research; therefore, these research analyses have facilitated in quantifying and numbering the results of the research and presenting information in the tables. Therefore, after data collection, researcher analyzed and interpreted them by using SPSS (Statistical Package for the Social Sciences).

To test validity of hypotheses was performed using nonparametric test with independent samples which occur with the use of One-Sample Chi-Square Test; One-Sample Binomial Test and One-Sample Runs Test.

A chi-squared test shows the degree of responsiveness from one respondent to another and show the correlation level form each independent variable or statement tested to ensure that is accepted or rejected. This was chosen by the study as it adopts independent t-test and conclude for each individual statement made rather than comparing two groups response. Each was assessed also.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

$\chi^2$  = chi squared

$O_i$  = observed value

$E_i$  = expected value

The study also has used linear regression model for assessing the validity of research questions of the study. Here below is the linear model function:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where:

Y: Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard)

X<sub>1</sub>: Project initiation.

X<sub>2</sub>: Project Planning.

X<sub>3</sub>: Monitoring and Evaluation.

$\beta_1$ .  $\beta_4$ : Slope or coefficient of estimates.

$\beta_0$ : Constant and  $\epsilon_0$ : Error term

### 3.8. Ethical considerations

When conducting research, it is crucial to uphold research ethics and establish a positive rapport with the participants. Prior to commencing the study, the researcher obtained consent from each respondent. To ensure compliance with the necessary protocols, the researcher intends to request an authority letter from the organization's management, granting permission for its members to participate in answering questionnaires. Of utmost importance is maintaining confidentiality and privacy throughout the data collection process, which was strictly observed by the researcher. To prevent coercion, the respondents were permitted to share their information freely, without divulging their identities.

### 3.9. Limitations of the study

The study may face limitations due to non-response from some expected participants and the busy schedules of the main respondents. To account for their extensive work commitments and frequent travel, the researcher and research assistants have allowed up to one week for completion of the questionnaire. Follow-up phone calls were also made to ensure participants have sufficient time to provide their responses.



## CHAPTER FOUR

### DATA PRESENTATION, INTERPRETATION, AND DISCUSSION

Detailed information on data presentation, interpretation and analysis of study outcomes is provided in this Chapter 4 with reference to major variables associated with studies. The primary data were collected from 40 populations, including 32 beneficiaries of productive use and 8 EDCL staff responsible for project management. All findings are presented as a summary in the form of descriptive and analytical statistics.

#### 4.1 Descriptive statistics

Findings presentation in form of descriptive statistics was made using parameters such as total sample (N), frequency, percentage, mean, mean of the mean, standard deviation, and the comment. They are important to analyze or assess the perception of respondents on each item assessed either from independent or dependent variables. The mean was analyzed and classified with reference to the codes assumed to the perception level (see chapter three and questionnaire). This means that when reading mean, it gives an insight into how respondents felt about the same sentence or its meaning. Statistical deviations explain how respondent perception differs from the general view or average. A higher standard deviation (greater than 0.5) means that some respondents chose perception far from the general mean. For example, if the mean is between 4 to 5 (agree to strongly agree) and standard deviation is greater than 0.5 means that not all agreed some disagreed or strongly disagreed on a specific statement or item assessed.

##### 4.1.1 Background of respondents

The background of respondents was defined with reference to the gender, educational level, age, and experience in the current functions. The next table gives summary of respondent's background in details (N=8 and N=32).

**Table 4.2: Background of respondents**

Characteristics of Respondents	Project Staff		Project Beneficiaries	
	Frequency	Percent	Frequency	Percent
<b>Gender of respondent</b>				
Male	6	75.0	19	59.4
Female	2	25.0	13	40.6
<b>Total</b>	<b>8</b>	<b>100.0</b>	<b>32</b>	<b>100.0</b>
<b>Education level of respondent</b>				
Diploma level	0	0.0	4	12.5
Bachelor level	6	75.0	26	81.3
Master level	2	25.0	2	6.3
<b>Total</b>	<b>8</b>	<b>100.0</b>	<b>32</b>	<b>100.0</b>
<b>Age of respondent</b>				
Between 21-30 years old	0	0.0	4	12.5
Between 31-40 years old	3	37.5	16	50.0
Between 41-50 years old	5	62.5	10	31.3
51 and above years old	0	0.0	2	6.3
<b>Total</b>	<b>8</b>	<b>100.0</b>	<b>32</b>	<b>100.0</b>
<b>Years of Experience</b>				
Below 3 years	1	12.5	3	9.4
Between 3-5 years	3	37.5	10	31.3
Between 5-10 years	4	50.0	12	37.5

Characteristics of Respondents	Project Staff		Project Beneficiaries	
	Frequency	Percent	Frequency	Percent
Above 10 years	0	0.0	7	21.9
<b>Total</b>	<b>8</b>	<b>100.0</b>	<b>32</b>	<b>100.0</b>

Source: Primary data, October 2023

As defined in the table 4.2 in addition to the explanations in Chapter 3, a total of 40 populations was considered in this study. Among 8 respondents from EDCL 6 were males representing 75% and 2 were females representing 25%, while Among 32 respondents from beneficiaries 19 are males representing 59.4% and 13 were females representing 40.6%.

By educational level, among 8 respondents from EDCL 6 representing 75% have bachelor's degree representing 75%, 2 have master's degree representing 25%.

From 32 beneficiary's respondents 26 have bachelor's degree representing 81.3%, 4 have diploma educational level representing 12.5% and 2 have master's degree level representing 6.3%.

By age, among 8 respondents from EDCL 5 were aged between 41 to 50 years old representing 62.5% and 3 were between 31 to 40 years old representing 37.5%.

Among 32 respondents from beneficiaries 16 were aged between 31 to 40 years old representing 50%, 10 were between 41 to 50 years old representing 31.3%, 4 were between 21 to 30 years old representing 12.5% and 2 were 51 and above years old 6.3%.

By experience, among 8 respondents from EDCL 4 have the experience of 5 to 10 years representing 50%, 3 have the experience of 3 to 5 years representing 37.5% and 1 has the experience of less than 3 years representing 12.5%.

Among 32 respondents from beneficiaries, 12 have the experience between 5 to 10 years representing 37.5%, 10 have the experience of 3 to 5 years representing 31.3%, 7 have the experience of 10 years and above representing 21.9% and 3 have the experience of less than 3 years representing 9.4%.

#### 4.1.2 Influence of project initiation on Success of Electrification of Productive Users Project

In this sub-section, the study evaluates whether project initiation (clear goals and objectives, feasibility study or study design and assumptions) ensured the success of electrification of productive use project in Muhanga by achieving its objectives/goals, efficiently use planned budget and completed in planned time as well as success with quality standards:

**Table 4.3: Perception of EDCL staff on the influence of project initiation on Success of Electrification of Productive Users Project**

Views of respondents	N	SA		A		Mean	Stdv.	Comment
		Fi	%	Fi	%			
Through project initiation, the setting of clear goals and objectives influenced the completion of productive users project within the planned budget, scope timeline, and required quality standard.	8	3	37.5	5	62.5	4.38	0.518	Strong Heterogeneity
Through project initiation, the feasibility study influenced the completion of productive users project within the planned budget, scope timeline, and required quality standard.	8	0	0.0	8	100.0	4.00	0.000	Strong homogeneity
Through project initiation, Assumptions influenced the completion of productive users project within the planned budget, scope timeline, and required quality standard.	8	4	50.0	4	50.0	4.50	0.535	Strong Heterogeneity
<b>Valid N (listwise)/ Average</b>	<b>8</b>	<b>2</b>	<b>29.2</b>	<b>6</b>	<b>70.8</b>	<b>4.29</b>	<b>0.351</b>	<b>Strong Homogeneity</b>

Source: Primary data, October 2023

**Keys:** Strongly agree (SA) was coded 5, Agree (A) coded 4, Neutral (N) coded 3, Disagree (D) coded 2, and Strongly Disagree (SD) coded 1. The mean classification was into 3 categories such as weak (1.00-2.49), moderate (2.50-3.49) and strong (3.50-5.00) and standard deviation was into two categories such as homogeneity (Stdv. <0.5) and heterogeneity (Stdv. >0.5). N: Total population (respondents), mean: Average of perception from all 8 or 32 perceptions as coded in numbers and Stdv: Standard deviation which signify gap between individual perception from the general perception or mean. Comment is the name or appellation of mean category and standard deviation category. Fi: Frequency, %: Percentage.

As seen from the table 4.3, both 8 respondents have confirmed that, through project initiation, the setting of clear goals and objectives influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (37.5% Strongly Agreed, 62.5% Agreed with 4.38 Mean, 0.518 Standard deviation and Strong Heterogeneity).

Through project initiation, the feasibility study influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (100% Agreed with 4.00 Mean, 0 Standard deviation and Strong Homogeneity).

Through project initiation, Assumptions influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (50% Strongly Agreed, 50% Agreed with 4.50 Mean, 0.535 Standard deviation and Strong Heterogeneity).

Electrification of productive user's project in Muhanga district has effectively ensured project imitations requirements and these have led to its success (average of 29.2% Strongly Agreed, 70.8% Agreed with 4.29 Mean,

0.351 Standard Deviation and Strong Homogeneity). This means that, before the beginning of the project implementation the setting of clear goals, feasibility study and assumptions were conducted, mainly related to planned budget, scope, timeline, and required quality standard and collaboration between beneficiaries and the EDCL and this led to the success of the project in terms however during the project planning, monitoring and evaluation stages there has been some changes, we shall see the details in 4.1.4.

#### 4.1.3 Influence of project planning on Success of Electrification of Productive Users Project

The study has evaluated the extent to which electrification of productive use project implemented in Muhanga district effectively respected and ensured project planning (risk management plan, work breakdown structure and project schedule plan, resources plan, time plan and supervision plan) and how it affected the success of the project (achieving the project objectives/goals by staying within the planned budget, timeline, and required quality standard):

**Table 4.4: Perception of EDCL staff on the influence of project planning on Success of Electrification of Productive Users Project.**

Views of respondents	N	SA		A		Mean	Stdv.	Comment
		Fi	%	Fi	%			
Through project planning, the risk management plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	8	2	25.0	6	75.0	4.25	0.463	Strong Homogeneity
Through project planning, the work breakdown structure the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	8	3	37.5	5	62.5	4.38	0.518	Strong Heterogeneity
Through project planning, the project schedule and resources plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	8	3	37.5	5	62.5	4.38	0.518	Strong Heterogeneity
<b>Valid N (listwise)/ Average</b>	<b>8</b>	<b>2</b>	<b>33.3</b>	<b>6</b>	<b>66.7</b>	<b>4.34</b>	<b>0.500</b>	<b>Strong Homogeneity</b>

Source: Primary data, October 2023

As seen from the table 4.4, 8 EDCL staff for electrification of productive use project confirm that, through project planning, the risk management plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard (25% Strongly Agreed, 75% Agreed with 4.25 Mean, 0.463 Standard deviation and Strong Homogeneity),

Through project planning, the work breakdown structure influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (37.5% Strongly Agreed, 62.5% Agreed with 4.38 Mean, 0.518 Standard deviation and Strong Heterogeneity).



Through project planning, the project schedule and resources plan influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (37.5% Strongly Agreed, 62.5% Agreed with 4.38 Mean, 0.518 Standard deviation and Strong Heterogeneity).

The findings of the study indicate that electrification of productive use project has effectively used risk management metrics, data collection plan, reporting feedback mechanisms, correctives action (project planning) toward success of the project means meet planned objectives and goals, time, budget, and quality standards (an average of .33.3% Strongly Agreed, 66.7% Agreed with 4.34 Mean, 0.500 Standard Deviation and Strong Homogeneity). However, this was achieved after change and modification in detailed design, this change was due expropriation issues and change of scope, we shall see the details in 4.1.4.

#### 4.1.4 Influence of monitoring & evaluation on Success of Electrification of Productive Users Project

The study assessed whether the electrification of productive use project in Muhanga district effectively used or considered monitoring and evaluation (performance metrics, data collection plan, reporting, feedback mechanisms and corrective action) toward project success.

**Table 4.5: Perception of EDCL Staff on the influence of monitoring & evaluation on Success of Electrification of Productive Users Project.**

Views of respondents	N	SA		A		Mean	Stdv.	Comment
		Fi	%	Fi	%			
Through monitoring & evaluation, the performance metrics influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	8	1	12.5	7	87.5	4.13	0.354	Strong Homogeneity
Through monitoring & evaluation, the data collection influenced the completion of productive users project within the planned budget, scope timeline, and required quality standard.	8	1	12.5	7	87.5	4.13	0.354	Strong Homogeneity
Through monitoring & evaluation, the reporting, feedback, and corrective action plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	8	4	50.0	4	50.0	4.50	0.535	Strong Heterogeneity
<b>Valid N (listwise)/ Average</b>	<b>8</b>	<b>2</b>	<b>25.0</b>	<b>6</b>	<b>75.0</b>	<b>4.25</b>	<b>0.414</b>	<b>Strong Homogeneity</b>

Source: Primary data, October 2023

As seen from the table 4.5, results indicate that through monitoring & evaluation, the performance metrics influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (12.5% Strongly Agreed, 87.5% Agreed, with 4.13 Mean, 0.354 Standard deviation and Strong Homogeneity).

Through monitoring & evaluation, the data collection influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (12.5% Strongly Agreed, 87.5% Agreed with 4.13 Mean, 0.354 Standard deviation and Strong Homogeneity).

Through monitoring & evaluation, the reporting, feedback, and corrective action plan influenced the completion of productive user's project within the planned budget, scope, timeline, and required quality standard (50% Strongly Agreed, 50% Agreed, 4.50 Mean, 0.535 Standard deviation and Strong Heterogeneity).

The study results indicate that electrification of productive use project in Muhanga district has effectively used or ensured performance metrics, data collection plan, reporting, feedback mechanisms and corrective action (monitoring and evaluation) and this has supported to overcome all project challenges to make it a success (an average of 25 Strongly Agreed, 75% Agreed with 4.25 Mean, 0.414 Standard Deviation and Strong Homogeneity) However, this was achieved after several changes during the implementation period, this was made due to the technical issues and other challenges.

#### 4.1.4.1 Technical Issues

There were changes made due to different problems like horizontal clearances, vertical clearances, and Expropriation issues. There are productive users which were removed from the scope since they were no longer relevant during the construction period.

Those problems also affected the project as shown in the table below:

**Table 4.6: Technical Issues**

S/N	District	Productive User	Main Changes
1	MUHANGA	GASOVU HC&GS KIRWA	1. Line routes change
		CATHOLIC	2. Structure changes
2		GS GIFUMBA	3. Introduction of new added structure

#### 4.1.4.2 Other Issues

COVID-19 Pandemics, due to the Pandemic COVID-19, there were lockdowns all over the world and most of project electrical materials were supplied from overseas with difficulties in manufacturing and shipping this affected the supply of electrical materials.

All the above-mentioned issues affected the project scope, timeline and budget which led to amendments on the contract document mainly after detail design approval and two contract extension, but it was all done in accordance with accepted procedure manual for contract extension and amendments.

**Table 4.7: Perception of beneficiaries on the factors that provide and prove the Success of Electrification of Productive Users Project.**

Views of respondents	N	SA		A		Mean	Stdv.	Comment
		Fi	%	Fi	%			
Electrification of Productive users project has increased the education level in Muhanga District.	32	14	43.8	18	56.3	4.438	0.504	Strong Heterogeneity
Electrification of Productive users project has increased the medical services level in Muhanga District.	32	13	40.6	19	59.4	4.41	0.499	Strong Homogeneity
Electrification of Productive users project increase the local government services level in Muhanga District.	32	14	43.8	18	56.3	4.44	0.504	Strong Heterogeneity
<b>Valid N (listwise)/ Average</b>	<b>32</b>	<b>2</b>	<b>42.7</b>	<b>6</b>	<b>57.3</b>	<b>4.43</b>	<b>0.502</b>	<b>Strong Heterogeneity</b>

Source: Primary data, October 2023

As seen from the table 4.7, among 32 project beneficiaries assessed they all confirmed that electrification of Productive user's project has increased the education level in Muhanga District (43.8% Strongly Agree, 56.3% Agree with 4.438 Mean and 0.504 Standard Deviation and Strong Heterogeneity).

Electrification of Productive user's project has increased the medical services level in Muhanga District (40.6% Strongly Agree, 59.4% Agree, with 4.41 Mean and 0.499 Standard Deviation and Strong Homogeneity).

Electrification of Productive user's project increase the local government services level in Muhanga District (43.8% Strongly Agree, 56.3% Agree with 4.44 Mean and 0.504 Standard Deviation and Strong Heterogeneity).

Generally speaking, from the study results it indicates that electrification of productive uses in Muhanga district has contributed in improvement of educational services delivery where students and teachers get access to electronic materials use and this lead to quality education and easy courses preparation, electrification of health facilities (health centers and health posts) has made great improvement in health services where now they can work during the night and use electronic medical test tools and also use of electricity has made positive changes in hygiene of medical materials (an average of 42.7% Strongly Agreed, 57.3% Agreed, 4.43 Mean and 0.502 Standard Deviation and Strong Heterogeneity). In other case the access to electricity has facilitated administrative offices for services delivery to the people mainly delivering reports, access to Irembo services and other online communication as sector offices and cell officers can use computers and telephone regular as an outcome of access to power.

## 4.2 Inferential statistics

In this section, inferential statistics was made for testing the hypotheses such as H01: There is no significant influence of project initiation on Success of Electrification of Productive Users Project; H02: There is no significant influence of project planning on Success of Electrification of Productive Users Project; H03: There is no significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project and H04: There is no significant

influence of electricity access on services of delivered among productive uses. For test of all these hypotheses independent sample test was used from Nonparametric Tests: Two or More independent samples.

**Table 4.8: Test of Hypothesis One**

<b>Hypothesis Test Summary</b>			
<b>Null Hypothesis</b>	<b>Test</b>	<b>Sig.</b>	<b>Decision</b>
The Category of Through project initiation, the setting of clear goals and objectives influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.044	Reject the Null Hypothesis
The Category of Through project initiation, the feasibility study influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.044	Reject the Null Hypothesis
The Category of Through project initiation, Assumptions influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.044	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is 0.05

Null hypothesis one state that, “there is no significant influence of project initiation on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test, p-value or Sig. is equal to 0.044 for all 3 items assessed such as “Through project initiation, the setting of clear goals and objectives influenced the completion of productive user’s project within the planned budget, scope, timeline, and required quality standard; Through project initiation, the feasibility study influenced the completion of productive user’s project within the planned budget, timeline, and required quality standard and Through project initiation, Assumptions influenced the completion of productive users project within the planned budget, timeline, and required quality standard”. This confirm that, there is statistical significance correlation between project initiation on Success of Electrification of Productive Users Project. In other words, the null hypothesis 1 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of project initiation on Success of Electrification of Productive Users Project”.

**Table 4.9: Test of Hypothesis Two**

<b>Hypothesis Test Summary</b>			
<b>Null Hypothesis</b>	<b>Test</b>	<b>Sig.</b>	<b>Decision</b>
The Category of Through project planning, the risk management plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis
The Category of Through project planning, the work breakdown structure the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis
The Category of Through project planning, the project schedule and resources plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is 0.05

Null hypothesis two state that, “there is no significant influence of project planning on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test and One Sample Binomial Test, p-value or Sig. is equal to 0.000 for all 3 items assessed such as “Through project planning, the risk management plan influenced the completion of productive users project within the planned budget, timeline, and required quality standard; Through project planning, the work breakdown structure the completion of productive users project within the planned budget, timeline, and required quality standard; and Through project planning, the project schedule and resources plan influenced the completion of productive users project within the planned budget, timeline, and required quality standard”. This confirm that, there is statistical significance correlation between project planning on Success of Electrification of Productive Users Project. In other words, the null hypothesis 2 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of project planning on Success of Electrification of Productive Users Project”.

**Table 4.10: Test of Hypothesis Three**

<b>Hypothesis Test Summary</b>			
<b>Null Hypothesis</b>	<b>Test</b>	<b>Sig.</b>	<b>Decision</b>
The Category of Through monitoring & evaluation, the performance metrics influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis
The Category of Through monitoring & evaluation, the data collection influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis
The Category of Through monitoring & evaluation, the reporting, feedback, and corrective action plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is 0.05

Null hypothesis three state that, “there is no significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test, p-value or Sig. is equal to 0.000 for all 3 items assessed such as “Through monitoring & evaluation, the performance metrics influenced the completion of productive user’s project within the planned budget, timeline, and required quality standard; Through monitoring & evaluation, the data collection influenced the completion of productive users project within the planned budget, timeline, and required quality standard; and Through monitoring & evaluation, the reporting, feedback, and corrective action plan influenced the completion of productive users project within the planned budget, timeline, and required quality standard”. This confirm that, there is statistical significance correlation between project monitoring & evaluation on Success of Electrification of Productive Users Project. In other words, the null hypothesis 3 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project”.

**Table 4.11: Test of Hypothesis four**

<b>Hypothesis Test Summary</b>			
<b>Null Hypothesis</b>	<b>Test</b>	<b>Sig.</b>	<b>Decision</b>
The sequence of values defined by Electrification of Productive users project has increased the education level in Muhanga District $\leq 4.00$ runs test and $> 4.00$ is random	One-Sample Chi-Square Test	.028	Reject the Null Hypothesis
The sequence of values defined by Electrification of Productive users project has increased the medical services level in Muhanga District $\leq 4.00$ runs test and $> 4.00$ is random	One-Sample Chi-Square Test	.030	Reject the Null Hypothesis
The sequence of values defined by Electrification of Productive users project increase the local government services level in Muhanga District $\leq 4.00$ runs test and $> 4.00$ is random	One-Sample Chi-Square Test	.030	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is 0.05

Null hypothesis four state that, “there is no significant influence of electricity access on services of delivered among productive uses”. Study results indicate that using One-Sample Runs-Test, P-Value or Sig. is equal to 0.028; 0.030 and 0.030 respectively to all 3 items assessed such as “Electrification of Productive user’s project has increased the education level in Muhanga District; Electrification of Productive user’s project has increased the medical services level in Muhanga District; and Electrification of Productive user’s project increase the local government services level in Muhanga District”. This confirm that, there is statistical significance correlation between electricity access on services of delivered among productive uses. In other words, the null hypothesis 4 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of electricity access on services of delivered among productive uses”.

Regression model test was made using data from an average perception (mean) from respondents for each statement specific to each indicator (project initiation, planning, Monitoring and Evaluation). And all these was analyzed to a single indicator as an average of statements assessed on the side of dependent variable. Here below are the results as presented in table 4.10 to table 4.12. To obtain this analysis the researcher has applied by equalizing the number of respondents. Due to that as the first questionnaire was attended by 8 respondents the second by 32 respondents, these 32 respondents were reduced to 8 respondents meaning that an average of answers was taken from 4 respondents to form value for one variable and 32 responses are reduced to 8 responses and equal to the variables on the side of independent variable (4 indicators assessed).

**Table 4.12: Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.521 <sup>a</sup>	.271	.247	.1727720

a. Predictors: (Constant), Project initiation, Project Planning, Monitoring and Evaluation.

Source: Primary data, October 2023

As seen from table 4.12, the model had Adjusted R<sup>2</sup> of 0.271, implies that ensuring Project Cycle Management (Project initiation (X1), Project Planning (X2), Monitoring and Evaluation (X3)), indicate that the model is perfectly feet. R-squared is a measure of how closely the data in a regression line fit the data in the sample. The closer the r-squared value is to 1, the better the fit. An r-squared value of 0 indicates that the regression line does not fit the data at all, while an r-squared value of 1 indicates a perfect fit. This imply that, for the above model, the model fit at 27.1% which is a positive level but not strong.

**Table 4.13: Analysis of Variance (ANOVA)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.334	3	.333	11.172	.000 <sup>b</sup>
	Residual	3.582	4	.030		
	Total	4.916	7			

a. Dependent Variable: Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard

b. Predictors: (Constant), Project initiation, Project Planning, Monitoring and Evaluation.

Source: Primary data, October 2023

As seen from table 4.13, the results show that the model had an F ratio of 11.172 and the P value was 0.000<0.05, signifying that the F ratio was statistically significant, therefore the overall regression model for all the variables tested were statistically significant and can be used for prediction at 5% significant level. This further indicate that the predictors variables (Project initiation (X1), Project Planning (X2), Monitoring and Evaluation (X3)) used in this study are statistically significant to Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard (Y). Therefore, it is confirmed that there is a significant and positive impact of Project Cycle Management (Project initiation (X1), Project Planning (X2), Monitoring and Evaluation (X3)) on Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard) (Y).



**Table 4.14: Summary of coefficients**

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	1.1255	.391		5.100	.000
1 Project initiation (X1)	.059	.030	.157	1.955	.003
Project Planning (X2)	.122	.079	.135	1.541	.026
Monitoring and Evaluation (X3)	.162	.029	.457	5.676	.000

a. Dependent Variable: Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard)

Source: Primary data, October 2023

As seen from table 4.14, the beta ( $\beta$ ) sign shows the positive correlation of the independent variable's coefficients over the dependent variable. Table 4.12 shows that, beta values for all independent variable indicators are positive meaning positive impact or correlations on the predicted dependent variable.  $\beta_1=0.009$ ,  $t=1.955$ ,  $p=0.053>0.05$ ;  $\beta_2=0.122$ ,  $t=1.541$ ,  $p=0.026>0.05$  and  $\beta_3=0.162$ ,  $t=5.676$ ,  $p=0.000<0.05$ . That means, any increase in the independent variables lead to increase in the dependent variable and vice versa. The regression model become as follows:

Y or Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard) =  $0.1.995 + 0.059X1 + 0.122X2 + 0.094X3$ . Thus, the study concluded that ensuring best practices in Predictors: (Constant), Project initiation (X1), Project Planning (X2), Monitoring and Evaluation (X3) have positive impact or correlation on Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard). In other words, if these determinants are not available, Projects success (Achieving the project objectives/goals by staying within the planned budget, Scope, timeline, and required quality standard) will be equivalent to 1.995 units.

### 4.3 General views of respondents and discussion of findings

In this section, the study highlights major comments from both sides management staff and beneficiaries of electrification of productive use project in Muhanga. As a result, here are the study indications:

**Influence of project initiation on the success of electrification of productive user's project:** There was a clear set of objectives and goals project before the start of the project, feasibility was conducted, and assumptions was made. The project goal was clear and communicated to all stakeholders; The project has achieved goals as planned however there were some challenges, but they got solved correctly.

**Influence of project planning on the success of electrification of productive user's project:** Before the start of the project, project plan was made in accordance with its goals and objectives as per today all productive use are connected and all challenges faced were solved; Now the project; The plan was achieved but in mid-time the review was made and this is the role of planning and now the project has registered good success; The project has been completed as studied and even some changes were also adjusted; The project implementation has revealed unplanned circumstances, and also the COVID-19 has affected the project time, budget scope and due to that, review of plan

and activity monitoring and evaluation led to the current registered success of Productive use electrification project; The project had a skilled team in terms of engineering and project management; The support which made the project to succeed even if the changes were more and risk assessment .

**Influence of project monitoring and evaluation on the success of electrification of productive users:** In project mid-term, the assessment was made and correctional measures has supported toward project completion; The electrification of productive use was made with clear data collection plan on both sides, design, engineering, environmental and GIS; The project has completely and now classified in well performed projects; The project has conducted a baseline survey which oriented the project activities; and The project was clearly defined with performance metric which later confirmed that, the project has successfully completed.

**Electrification of productive user's project increase the education level:** Access to electricity has play a role of security for schools; Due to the access to electricity schools can easily entertains students and use electronic materials for communication; Due to this project, now students can even learn during the night; Electricity access has facilitate to use teaching tools advanced using electricity like projectors and other materials in laboratory; Electrification of the schools has facilitated teachers to prepare their courses using electronic machines phones and computers; and The schools now have access to electricity and teaching mode was improved.

**Electrification of productive user's project increased the medical services level:** Access to electricity for health Posts and health centers has facilitated to improve living standards of patients and services are speeded up and hygiene of materials improved; Access to electricity has facilitate and promoted medical services providers for documentation and skills improvement with access to internet; Access to electricity has facilitate to use advanced electronic tools in medicine; Access to electricity has made health facilities to save fuel costs; Access to electricity has played a role of security guard in the health facilities; Access to electricity in health facilities has made patients and their guards easy to move during the night; and Health posts and health centers access to electricity has changed medical services by working in lightened area day and night.

**Electrification of productive user's project increase the local government services level:** Access to electricity has made local leaders to exchange information with their colleagues and knows the national policies; Access to electricity for local leaders has made them to know the information trending over the country which related to their usual functions; Access to electricity has made local leaders at cell and sector level improve their services to the citizens; Access to electricity has made local leaders easy to report and communicate with the population as well as with the superiors; Electricity access has made cells and sector to access on internet and provide services to the community; and The access to electricity has increased security level in and out of the local administration offices.

## CHAPTER FIVE

### SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of findings, discussion and conclusions drawn from the findings and recommendations made. The conclusions and recommendations drawn were focused on addressing the purpose of the study, which Project Cycle Management and Success of Development Partners Funded Projects, a case of electrification of productive user's project through world bank funds in Muhanga District, Rwanda (2019-2022).

#### 5.1 Summary of major findings

The work entitled “project cycle management and success of development partners funded projects. A Case of Electrification of Productive Users Project through World Bank Funds in Muhanga District, Rwanda (2019-2022)” was conducted for assessing the validity of three specific objectives such as: to determine the influence of project initiation on Success of Electrification of Productive Users Project, to explore the influence of project planning on Success of Electrification of Productive Users Project, and to establish the influence of monitoring & evaluation on Success of Electrification of Productive Users Project.

This study is census, descriptive, qualitative, and quantitative design. The study used both primary and secondary data. 40 respondents as entire population were assessed (8 staff of EDCL and 32 project beneficiaries); the study has adopted census technique. Data was collected using questionnaire and documentation. Analysis of data was performed using SPSS (Statistical Package for Social Scientists) and results obtained were presented in form of descriptive statistics and inferential statistics. The results were presented as follows:

Reference to the 1<sup>st</sup> study objective, findings of the study indicates that electrification of productive use project has effectively used risk management metrics, data collection plan, reporting feedback mechanisms, correctives action (project planning) toward success of the project means it has met the planned objectives and goals, scope, time, budget and quality standards (an average of .33.3% Strongly Agreed, 66.7% Agreed, 4.34 Mean and 0.500 Standard Deviation and Strong Homogeneity).

Reference to the 2<sup>nd</sup> study objective, results indicate that electrification of productive use project in Muhanga district has effectively used or ensured performance metrics, data collection plan, reporting, feedback mechanisms and corrective action (monitoring and evaluation) and this has supported to overcome all project implementation risks including the ones created by the COVID-19 pandemic and the project achieved its success (an average of 25 Strongly Agreed, 75% Agreed, 4.25 Mean, 0.414 Standard Deviation and Strong Homogeneity).

And the 3<sup>rd</sup> study objective assessment, study results indicate that electrification of productive uses in Muhanga district has contributed to improvement of educational services delivery where students and teachers get access to electronic materials use and this led to quality education and easy courses preparation. Electrification of health facilities (health centers and health posts) has made great improvement in health services where now they can work

during the night and use electronic medical test tools and use of electricity has made positive changes in hygiene of medical materials (an average of 42.7% Strongly Agreed, 57.3% Agreed, 4.43 Mean and 0.502 Standard Deviation and Strong Heterogeneity).

## 5.2 Conclusion

The study was conducted to assess the validity of four hypotheses. Null hypothesis one state that, “there is no significant influence of project initiation on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test, p-value or Sig. is equal to 0.044 for all 3 items assessed. This confirm that, the null hypothesis 1 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of project initiation on Success of Electrification of Productive Users Project”.

Null hypothesis two state that, “there is no significant influence of project planning on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test and One Sample Binomial Test, p-value or Sig. is equal to 0.000 for all 3 items assessed. This confirm that null hypothesis 2 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of project planning on Success of Electrification of Productive Users Project”.

Null hypothesis three state that, “there is no significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project”. Study results indicate that using One-Sample Chi-Square Test, p-value or Sig. is equal to 0.000 for all 3 items assessed. This confirm that the null hypothesis 3 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of monitoring & evaluation on Success of Electrification of Productive Users Project”.

Null hypothesis four state that, “there is no significant influence of electricity access on services of delivered among productive uses”. Study results indicate that using One-Sample Runs-Test, P-Value or Sig. is equal to 0.028; 0.030 and 0.030 respectively to all 3 items assessed. This confirm that the null hypothesis 4 is rejected in favor of the alternative hypothesis and the study results are confident to confirm that “there is a significant influence of electricity access on services of delivered among productive uses”.

## 5.3 Recommendations

Due to the study findings, the researcher suggests recommendations to the management and beneficiaries of electrification of productive use project in Muhanga District and countrywide, in other case recommendations also were oriented to future researchers.

### 5.3.1 To the management and beneficiaries of electrification of productive use project in Muhanga District and countrywide

Reference to the study findings, electrification of productive use project in Muhanga district has registered a good success level after several challenges including COVID-19 pandemic effects. Here in collaboration with project beneficiaries, project management team from EDCL has reviewed project assumptions, time and strengthened risk

management plan and ensured that all planned productive use were connected as planned however time was a little bit changed. Due to that, for all other electrification projects, we encourage project managers to ensure that all risks are well planned, also we encourage beneficiaries of this project to use efficiently the electricity connected to their institutions toward better services provision and this will be achieved by applying measures of efficiency in use of electricity and use of efficient appliances.

### 5.3.2 To other researchers

This study was limited on the project cycle management and success of development partners funded projects. A Case of Electrification of Productive Users Project through World Bank Funds in Muhanga District, Rwanda (2019-2022). The current study is limited in scope as it focusses on a single district only, while the project has covered a 17 districts of the country. Thus, other researchers are encouraged to go beyond this scope and evaluate a combination of more districts, so that, they will come up with comparison from which district or from which productive user's connection to the grid has made more changes in services delivery and from which district the was perfectly implemented.

## REFERENCES

- Andersen, T. B., & Dalgaard, C. J. (2013), "*Power outages and economic growth in Africa*". Energy Economics, 38, 19-23.
- Anderson, F., and Gupta, Y., (2020), "*Efficient Diversification of Projects*". New Haven: Yale University Press. Journal of public projects.
- Arnstein, K., (2019), "*Projects planning and process: A practical, systematic projects approach for community*". Sudbury, MA: Jones and Bartlett Publishers.
- Arora, J. and Bodhanwala, E., (2018), "*Rethinking evaluation capacity in project development programs: A new approach for engaging project workers in program evaluation*". In B. Kirshner and K. Pozzoboni (Eds.). The Changing Landscape of Project Workers.
- Baxter, V., (2022), "*Role of Project Resources Information Systems in Organization*". Journal of Advanced Management Science. Journal of project success. P56-62.
- Berthelot, N., (2016), "*Community programs to promote project development*". Washington, DC: National Research Council.
- Berthelot, N., (2016), "*Project relationship and integration: Towards a model of the investment promotion*". International Journal of Project cycle management.

Burby, R., (2018), “*Urban project planning and the Contracts of Monitoring & evaluation*”. Journal of the American Project Planning. New Jersey.

Daniel, G., (2021), “*The policy programs, economic and environmental gains to Africa’s short and medium term policy initiatives*”.

Daren, S., (2018), “*Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*”. Thousand Oaks, California: Sage Publications.

Dufe, E. M. (2015), “*Factors influencing accessibility of rural electrification in Kenya: a case of Naivasha constituency*”. University of Nairobi

Egan, C., (2021), “*Efficient Diversification of Projects*”. Journal of investment. New Haven: Yale University Press. Journal of public projects. P67-87.

REG (2019), “*Electrification of Productive Users Project: how to plan a baseline of monitoring & evaluation in developing countries?*”. Journal of Monitoring & evaluation guidelines. P34-56.

Fraser, D., (2016), “*Critical-Path for project Planning and Scheduling. Proceedings of the Eastern Joint Conference*”: New Jersey.

Gregory, E., (2017), “*Project development in community settings: Challenges to our field and approach*”. Philadelphia, PA: Institute for Reform in Education.

Jeffrey, N., (2016), “*The project planning-question and answer book*”. American Management Association, Philadelphia.

Kendall, H., (2019), “*Qualitative inquiry and research design: Choosing among five traditions*”.

Kenton, D., (2019), “*The positive development of project: Comprehensive findings from the 4-H study of positive project development*”. Washington, DC: National 4 H Council.

Kolk, H., and Pinkse, G., (2016), “*The future of project development: Multiple wisdoms, alternate pathways, and aligned accountability*”. Journal of Project Development, 6(3), 165-180.

Landoni, P., Corti, B., (2011), “*The management of international development projects: Moving toward a standard approach or differentiation?*”. Project Management Journal, 42, 45-61

Lawson, H., (2019), “*Role of project resources in project success*”. Journal of Advanced Management Science. P167-187.

Ljusnan, D., (2019), “*Essential Elements of positive project development. In Strengthening Positive Project Development Environments*”. Madison: University of Wisconsin Extension.

Maier, D., (2021), *“Finding out what matters for project: Testing key links in a community action framework for project development”*. Philadelphia: Project Development Strategies Inc.

Mannheim, D., and Rich, L., (2021), *“Appropriate Research Methodology: Tools, Choices, and Implications”*. New York: Academic Press.

Merchant, T., (2017), *“Introduction to Management Accounting and Measuring progress of project indicators of companies”*. Journal of Management. P45-67. New Jersey, Pearson.

Muller, B., and Turner, U., (2017), *“Sustainable project with the perspective world projects”*. Bruxelles Belgique.

Naughton, A., (2017), *“Evaluation capacity in complex organizations. Intentional project programs: Taking theory to practice”*. New Directions in Project Development, 112, 75-92.

Newton, P., (2017), *“Success prevention programs for children and adolescents”*. New York, NY: Plenum Press.

Otley, G., (2022), *“The implementation based on monitoring & evaluation and M&E in investment”*. Journal of identifying likely adopters via monitoring & evaluation and M&E process networks.

Prahinski, T., (2017), *“How to plan a baseline study of project and project success guidelines?”* New Delhi-India.

Pretty, L., (2021), *“The factors determining the performance of project systems awareness and adoption in Nicaragua”*.

Reed, J., (2018), *“Measuring progress towards a more monitoring & evaluation Europe, monitoring & evaluation indicators”*. Luxembourg.

Richard, K., (2022), *“The contribution of the developmental assets framework to positive project development theory and practice”*. Advances in Child Development.

Saunders, M., and Miller F., (2019), *“Qualitative Research Methods for the Social Sciences”*. Seventh Edition. Boston MA: Pearson Education Inc.

Shivani, N., (2017), *“Project Development Program Framework. Davis”*. CA: University of California Agriculture and Natural Resources.

Simon-Oke, O. O. & Olayemi, S. O. (2012), *“Electricity Crisis and Manufacturing Productivity in Nigeria”*. Developing Country Studies, 2(4), 16-21.

Startling, F., (2022), *“Developing project curriculum using the targeting life skills model: Incorporating developmentally appropriate learning opportunities to assess impact of life skill development”*. Ames: Iowa State University.

Tadesse, U., (2022), “*Tracking evaluation capacity-building for project professionals*”. Journal of Project Development, 7(1), 24-34.

Tissue, H., (2016), “*Large scale project contracts and factors of project performance in Vietnam*”.

Tonnquist, H., (2018), “*Connecting the dots: Improving Extension program planning with program umbrella models*”. Journal of Human Sciences and Extension, 3(2), 48-67.

Tushman, D., and Katz, G., (2018), “*The various factors influencing monitoring & evaluation in socio-economic context*”. Kenya-Nairobi.

Twigg, J., (2019), “*Project Performance and International institutions, project planning Reports*”. Is the Firm's "John Hancock" Enough, Forbes Town.

Ueng, S., (2016), “*Dimensions of monitoring & evaluation, International development, department partnership study program*”. The University of Birmingham City.

Valters, L., (2018), “*Introduction to Management Accounting and Measuring progress of project indicators of companies*”. Journal of Project cycle management. New Jersey, Pearson.

Weber, F., (2016), “*Best Practices in project success and their management: Strategies for Optimizing Business Relationships*”. Aberdeen Group.

Zweney, L., (2018), “*Practical program evaluation: Assessing and improving planning, implementation, and effectiveness*”. Thousand Oaks, CA: Sage.

OECD (2018), “*Project Cycle Management*”. <https://www.oecd.org/dac/evaluation/dcdndep/40854047.pdf>

UNDP (2018), “*Project Cycle Management Guidelines*”. <https://www.undp.org/content/dam/undp/library/corporate/Project%20Management/Project%20Cycle%20Management%20Guidelines.pdf>.

World Bank (2016), (*Project Management: A Critical Skill for Development Project Success*). <https://openknowledge.worldbank.org/handle/10986/25130>



# APPENDICES

## APPENDIX 1: COVER LETTER

Dear respondent

I, UWITJE Yves; student at the University of Kigali; in postgraduate program, Master of Project management; for fulfilling the academic requirements, I have undertaken the study called project cycle management and Success of development partners funded projects; a Case of Electrification of Productive Users Project through World Bank Funds in Muhanga District, Rwanda (2019-2022)

With reference to this project, there are questions which have been designed for collecting information that will lead to the successful completion of the research. Therefore, I kindly request you to fill this questionnaire and you may feel free when answering the questions. I kindly respect your significant collaboration.

Thank you for your cooperation.

UWITJE Yves

Signature..... Date...../...../...



**APPENDIX 2:**

**QUESTIONS RELATED TO THE RESEARCH OBJECTIVES OF THE STUDY**

**QUESTIONNAIRE I: RESERVED FOR EDCL STAFF**

**Instructions: 1} Tick in brackets the answer for true information**

**2} So, kindly grade by order of importance form: Strongly Agree (SA); Agree (A); Neutral (N); Disagree (D) and Strongly Disagree (SD)**

**SECTION ONE: GENERAL IDENTIFICATION OF RESPONDENTS**

**Q1: Gender of respondent**

Male..... [ ]

Female..... [ ]

**Q2: Education level of respondent**

Diploma level..... [ ]

Bachelor level..... [ ]

Master level..... [ ]

PhD level..... [ ]

**Q3: Age of respondent**

Between 21-30 years old ..... [ ]

Between 31-40 years old.....[ ]

Between 41-50 years old .....[ ]

51 and above years old .....[ ]

**Q4: Years of Experience**

Below 3 years .....[ ]

Between 3-5 years .....[ ]

Between 5-10 years.....[ ]

Above 10 years .....[ ]



**SECTION TWO**

**Q5: The following aspects are the factors that assess the influence of project initiation on Success of Electrification of Productive Users Project:**

<b>Views of respondents</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Through project initiation, the setting of clear goals and objectives influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	5	4	3	2	1
Through project initiation, the feasibility study influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	5	4	3	2	1
Through project initiation, Assumptions influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	5	4	3	2	1

**Q6: The following aspects are the factors that assess the influence of project planning on Success of Electrification of Productive Users Project:**

<b>Views of respondents</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Through project planning, the risk management plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard	5	4	3	2	1
Through project planning, the work breakdown structure the completion of productive users project within the planned budget, scope, timeline, and required quality standard	5	4	3	2	1
Through project planning, the project schedule and resources plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard	5	4	3	2	1

**Q7: The following aspects are the factors that assess the influence of monitoring & evaluation on Success of Electrification of Productive Users Project:**

<b>Views of respondents</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Through monitoring & evaluation, the performance metrics influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard	5	4	3	2	1
Through monitoring & evaluation, the data collection influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard	5	4	3	2	1
Through monitoring & evaluation, the reporting, feedback, and corrective action plan influenced the completion of productive users project within the planned budget, scope, timeline, and required quality standard.	5	4	3	2	1

### **SECTION THREE**

#### **interview Questions**

- Q1. How did project initiation influence the success of electrification of productive user's project?
- Q2. How did project planning influence the success of electrification of productive user's project?
- Q3. How did project monitoring and evaluation influence the success of electrification of productive users?

**I really thank you for your time in answering these questions.**

## QUESTIONNAIRE II

**Instructions: 1} Tick in brackets the answer for true information**

**2} So, kindly Tick Yes or No**

### SECTION ONE: GENERAL IDENTIFICATION OF RESPONDENTS

#### Q1: Gender of respondent

Male..... [ ]

Female..... [ ]

#### Q2: Education level of respondent

Diploma level..... [ ]

Bachelor level..... [ ]

Master level..... [ ]

PhD level..... [ ]

#### Q3: Age of respondent

Between 21-30 years old ..... [ ]

Between 31-40 years old.....[ ]

Between 41-50 years old .....[ ]

51 and above years old .....[ ]

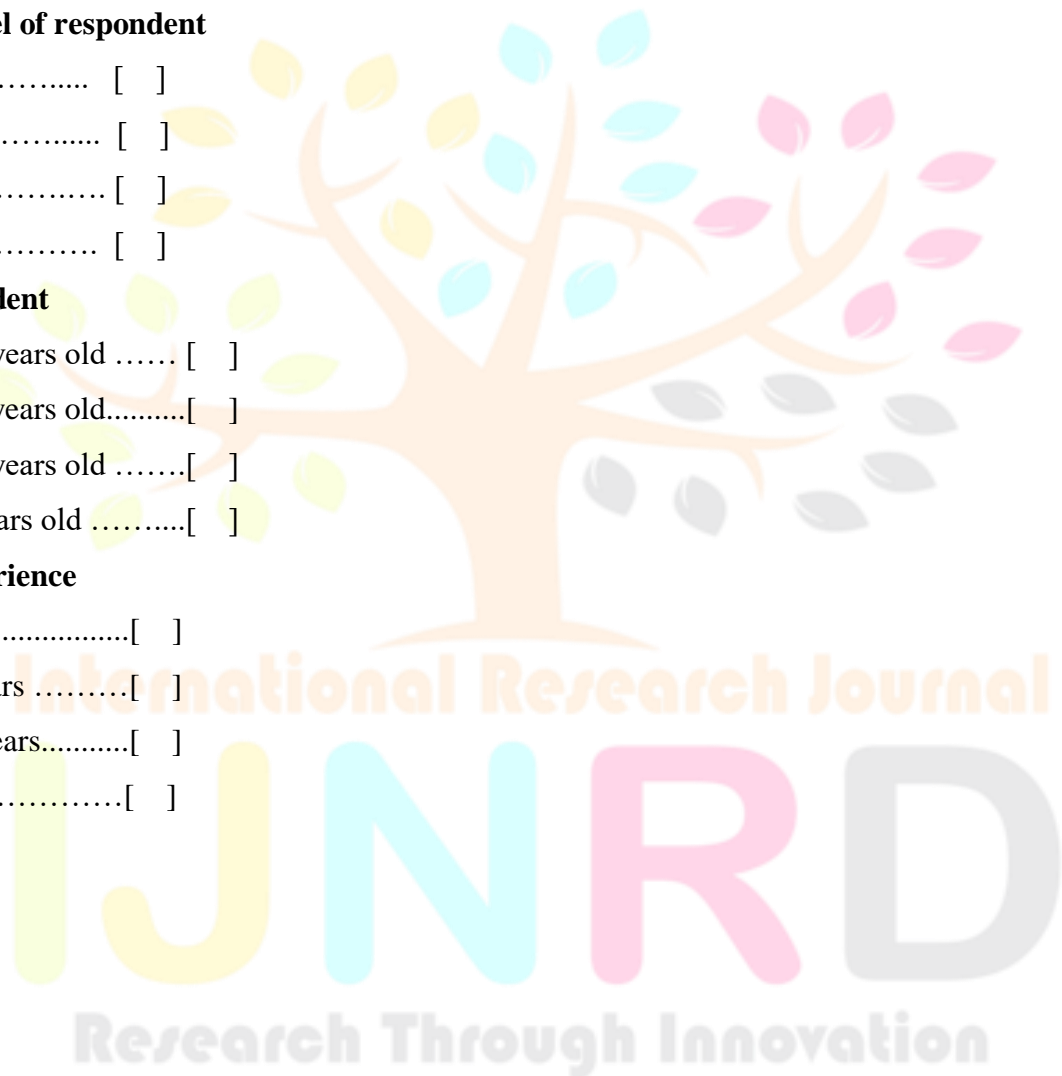
#### Q4: Years of Experience

Below 3 years .....[ ]

Between 3-5 years .....[ ]

Between 5-10 years.....[ ]

Above 10 years .....[ ]



**SECTION TWO**

**Q5: The following aspects are the factors that provide and prove the Success of Electrification of Productive Users Project**

<b>Views of respondents</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Electrification of Productive users project has increased the education level in Muhanga District.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Electrification of Productive users project has increased the medical services level in Muhanga District.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Electrification of Productive users project increase the local government services level in Muhanga District.	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

**SECTION THREE****Interview Questions**

- Q1. How did electrification of productive user's project increase the education level?  
 Q2. How did electrification of productive user's project increase the medical services level?  
 Q3. How did electrification of productive user's project increase the local government services level?

**I really thank you for your time in answering these questions.**

