

## Effect of Project Planning on Performance of Public Funded Projects in Rwanda; A Case of Rwanda Energy Group Rwamagana District

Umutoni Claudette

### ABSTRACT

*This project sought to assess project planning and performance of public funded projects in Rwanda with reference to Rwanda Electricity Sector Strengthening Project (RESSP). The study was built on both general and specific objectives. The general objective of this research was to assess the effect of project planning on the performance of public funded projects in Rwanda. Specific objectives included: to ascertain the effect of human resources planning on the performance of Rwanda Electricity Sector Strengthening Project; to assess the influence of financial resources planning on the performance of Rwanda Electricity Sector Strengthening Project ; to analyze the effect of communication channels on the performance of Rwanda Electricity Sector Strengthening Project ;to explore the influence of monitoring and control on the performance of Rwanda Electricity Sector Strengthening Project. The study did adopt both descriptive and correlational research designs. To collect data, questionnaires, interview and documentary review were all combined in the study. With the help of purposive research design, questionnaires were distributed to RESSP staff and REG branch manager in Rwamagana district. After the data collection is completed, the researcher analyzed the results using a Statistical Package for Social Science (SPSS). All the 65 respondents were able to have successful responses as the researcher expected whereby 63 RESSP staff filled questionnaires while 02 managers were interviewed. This represented a response rate of 100% which is good enough to draw conclusion from. Purposive sampling technique was applied in this study to determine the respondents. Data were analyzed using SPSS for descriptive statistics to test the effect of project planning strategies on the performance of public funded projects in Rwanda whereas correlation analysis was used to define the relationship that lied between the study variables. Findings revealed the following: Firstly, as regards to human resource planning, 71.4% of the respondents agreed that RESSP management hires human resources that have the required competences in running the project. Secondly, as regards to financial resource planning, the fact that RESSP management supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process was agreed by 47.6% of the respondents. Thirdly, findings about communication skills revealed that 81.0% of the respondents agreed that the management transmits information about goals, policies and procedures of the RESSP. In addition, the study results concerning the monitoring and control, 85.7% of the respondents agreed that with the assistance of monitoring and control, most errors have been minimized in accounting and reporting. Finally, the Spearman test results discovered that P Value stood at 0.001 which is less than alpha and this explains that there is a strong and positive correlation between project planning strategies and the performance of RESSP. Based on the findings, the following were recommendations; concerning the issue of unethical behaviors such as fraud and embezzlement, the top management should put in place strong measures to punish the culprits. This could be done through empowerment of the human resources. Regarding the lack of proper internal control processes in, the top management*

*should look into it and be made a culture by the responsible personnel at the district. As regards to untimely deliveries, officials who delay project activities and processes should also be handled individually so as other staff could avoid doing similar mistakes in future.*

## **GENERAL INTRODUCTION**

### **1.0 Introduction**

This research dissertation intended to assess the effect of project planning on performance of public funded projects in Rwanda. This chapter entailed the background of the study, statement of the problem, research objectives and questions; scope of the study, the research significance which is built around the variables of the study. This study chapter provides a general framework that helps to understand project planning in a comprehensive approach, linking operating decisions to their outcome implications and to the overall public project funded management strategies in line with improving performance of an institution.

### **1.1. Background to the study**

The concept of project planning has its roots to the time when modern project management was invented in the late 19th Century. Though, major improvements in project planning were seen at that time which particularly improved the project scheduling, allocation of different resources and management of project tasks and deliverables with addition of work breakdown structure. In addition, the Gantt Chart which was invented by Henry Gantt in early 20th Century became a key element in the interface of all modern project planning softwares like Primavera Project Management and Microsoft Project. Even communication got its pace during this era due to advance telecommunication framework which made planning of projects more effective. Before the emergence of project planning or its history, organizations run on the basis of relationships, connections and trust that build over years (Agbemabiese, 2018).

In the United States (US), the first large project that required planning was the transcontinental railroad, which began construction in the early 1870s. Suddenly, business leaders found themselves faced with the daunting task of organizing the manual labor of thousands of workers and the manufacturing and assembly of unprecedented quantities of raw material. It's not until the 1950s that organizations started to apply systematic project management tools and techniques to complex projects. The U.S. Navy greatly contributed to the formulation and documentation of principles of modern project management methodologies and techniques. There were also other noteworthy projects, such as the Manhattan project, that significantly contributed to advancement of standard practices in modern project management. In the 1970s technological advancement made the creation of project management software possible, via software companies such as Oracle (Caird, 2018).

In the European Union countries, the implementation of projects performance is inherently complex, partly due to the need to satisfy multiple project sponsors. Considering this, the diversity of knowledge and values of the community have to be taken into consideration and it is necessary to ensure that there is project planning in decision-making processes and implementation. In international projects, the participatory engagement of project sponsors occurs and the cultural context for participation best practice, such as the early involvement of project sponsors in the decision-making process, ensuring that the project sponsors can influence the end results of the process and formulating clear objectives in the participatory process. The method of project planning influences the end result of the process and participation procedures are appropriate to integrate the top-down sustainable development indicators

used at European scale with those bottom-up indicators relevant at a regional and city scale (Reed, 2018).

In Asian developed countries; project planning system is a designed combination of processes, tools, techniques, and methods. Project planning is usually a necessity in any project development as it determines the project completion time and scope. Project planning deals primarily with the oversight and management of materials and services inputs, management of the projects who provide inputs and support of the process of acquiring those inputs. The Asian States like Japan, China, Indonesia and India have improved project planning standards. Their project planning is always aided by a range of skills, tools, and techniques used to manage time when accomplishing specific goals of projects. In these countries, the project performance has been measured through project cost, quality, customer or project sponsor's satisfaction, timeliness and achieving of project objective are effective main indicators to measure project performance (Pretty, 2015).

In Sub Saharan Africa, an evaluation of a World Bank project, found out that during a ten-year period, activities carried out in an irrigation project funded in four countries that include Ethiopia, Kenya, Somalia and South Sudan shifted from a top down government approach. This led to heavy reliance on the local farmers in the design, operation and maintenance of local irrigation project systems. It was discovered that the canals and structures worked better, rice yields were 20% higher and the irrigated area 35% greater than in control groups without participation. It was discovered that public funded projects (PFP) initiatives in Sub Saharan Africa have reportedly failed due to poor project planning. As a result, it reveals that effective project planning is the key to project success and without an all-around input, the outcome may not be favorable (Alexandra, 2020).

In the last two decades, there have been a number of public funded projects in Rwanda and in particular infrastructure that has played great role in the effective and successful completion of some of key country's vision (MINECOFIN, 2019). The Government of Rwanda has undertaken reforms in the energy and water sector which have been concretized by the separation of energy from water operations (REG, 2022). It's for this reason the researcher was interested in carrying out a study to analyze the effect of project planning on performance of public funded projects in Rwanda, a Case of Rwanda Electricity Sector Strengthening Project (RESSP) in Rwamagana district. Rwamagana district is located 50 km North East of the capital Kigali and it's located in Eastern Province. Besides, Rwanda Electricity Sector Strengthening Project, the district plans to execute at least 16 mega projects in its plan 2021-2050 which are expected to play a significant role in the development of Rwamagana as a Satellite City (MININFRA, 2022).

It's for this reason the researcher was interested in carrying out a study to analyse project planning and the performance of public funded projects in Rwanda, a Case of Rwanda Electricity Sector Strengthening Project.

## **1.2. Statement of the Problem**

A performance orientated project in the public sector means that achievements matter, as well as integrity and economy; and that managers or agencies should pursue defined standards of the project. Successful projects are those that meet the set goals, are delivered and maintained on schedule, are delivered and maintained within budget, and deliver the expected business value. Projects are generally conducted to meet specific objectives (Kafle, 2014). According to Office of Auditor General (2020) report discovered that government incurred financial losses due to low levels of budget execution and stalled projects. It was discovered that between 2016/17 and 2018/19 financial years, 98 projects, worth

Rwf 95.67 billion, were either abandoned or significantly delayed. The abandoned projects were mostly in the areas of infrastructure, including water, electricity and roads, health, and agriculture.

Having been launched in 2016, Rwanda Electricity Sector Strengthening Project (RESSP) is one of the significant public funded projects of Rwanda Energy Group funded by the Government of Rwanda and World Bank (MININFRA, 2022). Like any projects' objectives, the Government of Rwanda through its power sector has very ambitious targets to achieve 512 MW installed power generation capacity, from 216 MW power generation and have 100% access by financial year, 2023/24. It is also determined to achieve 52% on-grid connections and 48% off-grid connections by 2023/24. Furthermore, the potential to generate electricity economically with local resources including, hydropower, peat, lake gas methane and geothermal energy. The country is therefore, utilizing less than 10% of its local electricity potential, excluding a substantial solar resource, while incurring a large foreign outflow. The reports of Electricity Access Roll-out Program (EARP) also show that the number of new customer connections increased triggering to the electricity access by 68.48% of Rwandan households as of January, 2022 (REG, 2022).

However, according to Public Accounts Committee (2021), their report faulted authorities in the Eastern province for failure to follow up on the implementation and supervision of some public funded projects. The report revealed that some projects in 4 districts in Eastern Province of Rwamagana, Kayonza Ngoma and Kirehe had either stalled or remained idle causing failure to timely completion, others were incompetently accomplished leading to poor quality; and hence causing lots of financial losses to the taxpayers. OAG (2021) cited that in Rwamagana district, the Rwanda Electricity Sector Strengthening Project could not account for Rwf387 million. In addition, the report also disclosed that at least Rwf3.7 billion projects under the rural electrification program.

This study, therefore, assessed project planning and performance of public funded projects in Rwanda with reference to Rwanda Electricity Sector Strengthening Project.

### **1.3. Objectives of the study**

The objectives of this study are divided into general objective and the specific objectives, and they are stated as follows:

#### **1.3.1. General objective**

The general objective of this study was to assess the effect of project planning on performance of public funded projects in Rwanda.

#### **1.3.2. Specific objectives**

1. To ascertain the effect of human resources planning on the performance of Rwanda Electricity Sector Strengthening Project;
2. To assess the influence of financial resources planning on the performance of Rwanda Electricity Sector Strengthening Project ;
3. To analyse the effect of communication channels on the performance of Rwanda Electricity Sector Strengthening Project ;
4. To explore the influence of monitoring and control on the performance of Rwanda Electricity Sector Strengthening Project.

#### **1.4. Research questions**

1. What is the effect of human resources planning on the performance of Rwanda Electricity Sector Strengthening Project ?
2. How does financial resources planning influence the performance of Rwanda Electricity Sector Strengthening Project ?
3. What is the effect of communication channels on the performance of Rwanda Electricity Sector Strengthening Project ?
4. How do monitoring and control affect the performance of Rwanda Electricity Sector Strengthening Project ?

#### **1.5. Research hypotheses**

**H<sub>0</sub>:** There is no significant relationship between human resources planning and the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>1</sub>:** There is a significant relationship between human resources planning and the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>0</sub>:** There is no significant relationship between financial resources planning and the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>1</sub>:** Financial resources planning is significantly related to the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>0</sub>:** There is no significant relationship between communication channels and the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>1</sub>:** Communication channels are much related to the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>0</sub>:** There is no significant relationship between monitoring and control; and the performance of Rwanda Electricity Sector Strengthening Project;

**H<sub>1</sub>:** Monitoring and control strongly correlate the performance of Rwanda Electricity Sector Strengthening Project

#### **1.6. Scope of study**

The scope of the study includes the limits or the borders of the study. Thus, the following give light on the domain scope, geographical scope and time scope.

##### **1.6.1. Scope in the domain**

This study consisted of two variables that include an independent variable which is project planning and performance which is the dependent variable. Each of these variables is divided into the sub-variables that include human resource planning, financial resource planning, communication skills and monitoring and control; and timely completion, cost management, quality management and achieving set goals.

##### **1.6.2. Geographical scope**

The application of this research was done from Rwanda Electricity Sector Strengthening Project which is managed by Rwanda Energy Group, Rwamagana district branch in Eastern Province of Rwanda.

### **1.6.3. Time scope**

This study considered a reference dating with effect from the year 2017 to 2021; this is because the chosen period fell under the period in which Rwanda Electricity Sector Strengthening Project was being implemented in the area and had acquired the funding from the government of Rwanda and the government's partners. Hence, the chosen period best fits our study.

### **1.7 Significance of the study**

Given the context of the study the research will be useful from the community level, to the company and owner but most importantly the researcher, herself.

#### **1.7.1. Personal interest**

This work was conducted to fulfil academic requirements for the award of Masters of Business Administration, Project Management Option. Furthermore, the study will help the researcher to get knowledge related to project planning and she analyses and assessed how it affects the public funded project performance.

#### **1.7.2 Community and society interest**

The research clarified the effect of project planning on performance of public funded projects in Rwanda and will stand to serve as the reference for public project managers, associations in order to implement and ensure successful of the projects. This particular study will assist students of UOK since after the accomplishment and compilation; it will be submitted to the universities library. Other students that would need to carry out the similar topic or domain of the study in future shall use it as a reference.

### **1.7.3. Rwanda Electricity Sector Strengthening Project**

Based on the study findings, the researcher believes that the study will contribute to the documentation, success and sustainability of the project sponsored by public institutions and the government of Rwanda in general. This will help those involved in conducting projects sponsored by the government and Rwanda Electricity Sector Strengthening Project in particular. The study will be significant to the existing knowledge in project performance and will contribute to increasing project planning standards amongst the project management professionals and the entire project industry. The study will provide information to the policy makers and planners in both governmental and non-governmental projects on areas of focus on interventions of related services.

## **LITERATURE REVIEW**

### **2.0 Introduction**

This chapter reviews the related literature on the main factors influencing performance of projects, especially by basing on project where the researcher presents the theoretical review; related literature review; empirical review; research gap and conceptual framework.

### **2.1. Conceptual Review**

This sub section titled conceptual review is the most important and vital stage of the entire study. It attempts to throw some light on the process and important aspects of the already existing studies of different authors and scholars concerning the conceptual framework. It discusses project planning and performance of the public funded projects.

### **2.1.1. Literature on project planning**

In broad terms, project planning is at the heart of the project life cycle, and tells everyone involved where you're going and how you're going to get there. The project plan describes the cost, scope, and schedule for the project. It lays out exactly what activities and tasks will be required, as well as the how a project will be carried out. However, all these can be ensured by engaging stakeholders, by being professional and being accountable. The discussed areas include.

#### **2.1.1.1 Human resources planning**

Though we currently term it as Human Resource Planning (HRP), prior to late 1970s, it used to be called manpower planning. HRP is one the first steps in the public funded projects processes and procedures. It is the process of analyzing and identifying the need for, and availability of human resources so that the organization can meet its objectives. The focus of HRP is to ensure that the project has got the right number of human resources, with the right capabilities, at the right times, and in the right places. In HRP, an organization must consider the availability and allocation of people to jobs over long periods of time, not just the next month or even the next year. Additionally, as part of the analyses, HR plans can include several approaches. Actions may include shifting employees to some projects in the organization, laying off employees or otherwise cutting back the number of employees, retraining present employees and/or increasing the number of employees in certain areas (Farías and Pimenta, 2012).

Human resources planning is crucial during project planning. In order to have a competent human resources to run public funded project, the management should bring on board the personnel who already have the required accepted competences, resolve what additional competences are required, and decide how these additional competences are to be obtained through training. Institutions consider human resource planning as one of the key aspect during project planning process. They hire workforce to ensure economy, efficiency and effectiveness of the processes that are critical to meeting their strategic objectives of the projects. These professionals are required to examine, monitor and analyze activities related to the project structure, and like in most professions there is a certain set of skills that can aid them in their work (Muga, 2012).

Human resources planning in public funded projects or project-based organizations is such an important tool and it's should be paid attention to. The reason for this is partly to be found in the vast literature on project-based organizations. According to Hobday (2018), the effectiveness of public funded projects and the project-based organizations in managing complex products and systems gives example of arguments from a top-down-perspective. In the public funded projects there is always "high pressured work environment that leaves little space for formal training or staff development", and a "lack of incentives for human resource development". He also argues that project-based organizations can breed insecurity over career development because of the dispersion of technical leadership across projects.

#### **2.1.1.2 Financial resources planning**

Financial resources planning and allocation in a project is a complex decision-making process that is influenced by multiple and very often conflicting objectives. Furthermore, institutions are coming under strong social pressure to integrate elements of sustainability into their decision-making process, which makes this process even more complex. Nowadays, the concept of sustainability is widely applied by many projects through their objectives statement and strategy. It is also one of the most

popular research fields for scholars. Despite the fact that sustainability is considered one of the most important challenges of our time, the integration of sustainability into project or project portfolio management especially in financial resources planning is not fully recognized (Borchgrevilko & Hambarg, 2012).

From the public funded projects performance point of view, after the public sector attempted to implement the effective financial resources planning, it has helped decision-makers to review their existing activities so as to justify and detail them as those activities would not likely have reviewed before. Whereas, the computerized financial systems had introduced as a system that categorizes activities under programs which enable decision-makers to have program and specified objectives in order to meet public needs and projects altogether. The first benefit of implementing the computerized financial systems is the use of program analysis in budgetary decision-making in public sector. The second benefit of implementing the computerized financial systems would be to enable decision-makers to find out whether they are fulfilling their responsibilities in a way that was decided in their budgetary policies (Schmitt & Jankowitsch, 2015).

Effective financial resources planning procedures must be conducted professionally. Preparations should include an assessment of the past to see if actual and estimated revenue resulted in favorable or unfavorable results. There should also be projections based on past experiences as well as future expectations such as new program needs, taxable property projects, new businesses and industry, anticipated enrollment trends, inflation, etc. This analysis may require personnel officers, transportation coordinators, food service managers, plant managers, federal program coordinators and at times assistance from outside consultants. The budget preparation and analysis are followed by board review and adoption of the budget. The remainder of the year is devoted to budget control, which is comprised of comparing estimated revenues and appropriations with actual transactions and evaluating budget adjustment requests. Budget preparation and administration are important aspects of overall institution operations (Lee, 2017).

As budgeted funds are expended, periodic monitoring of the budget should be conducted. The school's accounting system normally generates expenditure and encumbrance information at least on a monthly basis. To review budget performance, this information is compared with spending plans. Annualized budget summaries which project the impact of current expenditures on year-end results are useful in this effort. In most schools, reviews of budget-to-actual comparisons are done monthly. Reporting periodic budget / actual results to the school board is customary in most districts. This reporting relationship should not be interpreted to mean that the board manages budget implementation. That responsibility is ultimately the chief school administrative officer's; however, school board members should be given periodic updates on budget results and be informed of significant budgetary issues (Farías & Pimenta, 2012).

### **2.1.1.3 Communications channels**

To use proper communication channels during project management is important. Effective communication includes a course of action of aptitudes including mindful listening, the capacity to administer a worry at the time, and the ability to see and comprehend one's estimations and those of the individual one is chatting with. It's that persuading and able communication results in better performance. Achievement of an organization is an impression of the sufficiency of its communication. Standard bungles in an organization, for example, misfortunes, abuse, reproduced work and lacking work is a delayed consequence of poor communication. A cross sectional survey conducted in India found that intense communication both inside and without the organization is an obligation in regards to heads. Insufficient communication causes colossal issues including poor laborer confirmation,



nonattendance of advancement, lessened performance and a powerlessness to respond to new threats or openings in the earth (Daft et al., 2017).

Armstrong (2019) states that convincing communication is a basic bit of any change organization programs and projects. If any change is proposed in wording and conditions of business, for instance, unforeseen pay, working methodologies, advancement, things and organizations or organization (mergers and acquisitions) delegates need to grasp what is proposed and how it will impact them. Guarantee to the organization is enhanced if specialists perceive what the organization is trying to achieve or has achieved and how this focal points them. Convincing communication makes trust as organizations take the bother to illuminate what they are doing and why. It is observed that powerful organization depends upon Organization's ability to aggregate and assimilate information it gets and what's more passing on clear rules to its staff. Intense Communication process is a foundation for each and every social relationship. Through fruitful communication, people exchange and offer information with each other, affect perspectives, direct and perception.

Downward communication includes gathering guidelines, organization flyers and companions reports and spill out of best down. In upward communication, information spill out of agents upwards to the upper levels of organization. Systems include: audits and staff proposition designs. Indeed, even Communication or sidelong communication incorporates individuals on a comparable level of the organization sharing learning. Organization need to make new data, developing to a restricted degree out of the deduced learning controlled by individuals. All perspectives to great communication in the organization, it presumes that channels of communication are a champion among the best way in a relationship, and qualified bosses ought to be all around arranged on the same. It is the key instrument for achieving consolidation and coordination of activities specifically units at different levels in the organization (Armstrong, 2019).

Definitive communication can be even, upward, and plunging: Horizontal (parallel) communication goes for interfacing related endeavors, work units and divisions in the organization. The hugeness of even communication increases with undertaking specialization and assortment in legitimate structure. The prerequisite for sidelong or even communication was first stressed, when he suggested a 'pack board' between tantamount dynamic positions. Diving communication gives information from bigger adding up to cut down levels. Being predominant subordinate communication, it takes after the progression of authority through. Plummeting communication can be of four sorts specifically: Communication planned to give work technique for thinking to convey appreciation of the endeavor and its organization with other definitive errands; Communication about progressive frameworks and practices; Feedback to the subordinate about his or her performance; and Communication to support educating of legitimate goals. Upward communication fills in as a control system for the organization (Munir, 2014).

#### **2.1.1.4 Monitoring and control**

Monitoring and control in the project evaluation is an assessment, as systematic and objective as possible, of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, developmental efficiency, effectiveness, impact and sustainability. Involvement of beneficiaries in a project evaluation should provide makes the process credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors. Monitoring and evaluations are interactive and mutually supportive processes. Monitoring and evaluation of development activities therefore provides government officials, development managers, and civil society with better means for learning from past experience, improving service delivery, planning and allocating resources, and demonstrating results as

part of accountability to key stakeholders. In order to fully understand the role of monitoring in development projects, some revision of project planning and management is necessary (Sekaran, 2013). Every individual within the project has some role in affecting internal control and monitoring roles vary in responsibility and involvement. The top management is directly responsible for all activities of an entity, including its internal audit processes. The project coordinator has the existence of a positive control environment more than any other individual he or she sets the "tone at the top" that affects control environment factors and other components of internal control. With the help of effective project planning, the project management provides leadership and direction to senior managers and shapes the values, principles and major operating policies that form the foundation of the entity's internal auditing. Senior managers assign responsibility for the establishment of more specific internal control procedures to personnel responsible for the unit's particular departments (Farías & Pimenta, 2012).

The project supervisors provide governance, guidance and oversight. They have major role in defining what expecting in integrity and ethical values and can confirm its expectations through its oversight. Activities that play a role in high level objective setting and strategic planning by reserving authority in certain key decision are performed by the board of directors. Effective board members are objective, capable and inquisitive and environment needs to commit the time necessary to fulfill their board responsibilities. A strong active board particularly when coupled with effective upward communication channels and capable financial, legal and internal audit functions is often best able to identify and correct such a problem (Reeds, 2018).

The researcher holds that various new public management initiatives are based on the assumption that enhanced accountability would improve performance. The relationship between accountability and performance is characterized by tensions, ambiguities and contradictions, and more responsibility for performance does not lead to more accountability for performance.

### **2.1.2. Literature on the performance of public funded projects**

Performance of public funded projects is an achievement of efforts and duties planned, organized, and managed from the top, to increase project effectiveness through planned interventions in the project's rules and regulation "processes", using behavioral-science knowledge. The performance of public funded projects is the study of successful project change and performance which realized that project structures and processes influence workers behavior and motivation. Performance of public funded projects comprises the actual output or results of project as measured against its intended outputs (or goals and objectives achievement). The term performance of public funded projects is broader; specialists in many fields are concerned with project effectiveness including strategic planners, operations, finance, legal, and project development (Martinot, 2014).

Public institutions that includes budget formulation and program planning, a project performance orientation rests on the robust use of performance organizational communication information at key decision points, combined with a budget structure in which the costs and benefits of major programs can be identified. In budget execution and program implementation, a project performance orientation has been associated with a range of tools for using performance information in managing money, people and organizations, in employing alternative service delivery mechanisms, and in demand-side reforms - institutional and individual (Wolfgang, 2014).

A performance project orientated in the public sector means that achievements matter, as well as probity and economy and that managers or agencies should pursue defined standards. Success of a project in public institutions means that public sector outputs efficiently contribute to policy objectives. Performance measurements focus on outcomes and outputs, not merely inputs. The Public Sector

Performance Global Expert Team consists of a group of World Bank Experts on issues ranging from performance pay to tools designed to enhance performance in planning, Monitoring & Evaluation and budgeting. The team functions as a knowledge center and consulting service, serving internal and external clients directly, and also as the technical leader shaping the Bank's strategic position in public sector performance (Lee, 2017).

### **2.1.2.1 Timely completion**

Project completion is often the most neglected phase of the project life cycle though this study targets tackling it. The key activities in project completion are gathering project records; disseminating information to formalize acceptance of the product, service, or project; and performing project closure. Wolfgang (2014) to maximize the output of project investment suggests the elimination of six losses, which are: reduced yield from start up to stable production; process defects; reduced speed; idling and minor stoppages; set-up and adjustment; and equipment failure. The fewer the inputs used to generate outputs, the greater the efficiency. There is a difference between business efficiency and organizational efficiency. Business efficiency reveals the performance of input and output ratio, while organizational efficiency reflects the improvement of internal processes of the organization, such as organizational structure, culture and timing.

The provision of quality public institutions projects such as electricity, criminal justice, health care, education and sanitation is a key task for government. People care about public projects and depend on them being delivered well. Public services provide the most common interface between people and the state, and their functioning shapes people's sense of trust and expectations of government. According to Pretty (2015), at a national level, public services underpin human welfare and economic growth. Public services need to be delivered with integrity, centered around citizens, and responsive to their needs, particularly the needs of the most vulnerable. Promoting greater transparency and enabling ordinary citizens to assess the quality, adequacy and effectiveness of basic services, to voice their needs and preferences and to become involved in innovation offers an opportunity to enable better use of public funds, and improve service delivery.

Public services are traditionally organized in a way that puts the public in a passive role, as the recipient of a standardized service. This contrasts with innovations in other areas of life such as retail, travel and media where people are used to giving feedback on the goods and services they receive, and playing an active role in making choices. Citizens are connected like never before and have the skill sets and passion to solve problems. Local people often know what the solutions to problems in their area, but are rarely empowered by bureaucratic processes, instead facing public services which may be impersonal, irrelevant, and inefficient. Governments are experimenting with redesigning parts of the system so that citizens can play a more active role as user community for public services. This can mean participative processes and forums, community monitoring and citizens' budgets, or new forms of commissioning. Technology and open data enable different kind of participation (Lee, 2017).

Timely completion of the projects funded by public institutions is a problem which most governments have to face, and which is determined, mainly, by the existence of some major deficits, a bureaucracy that makes it hard to collect money to the budget and their redistribution as soon as possible, but also as a result of implementing some public programs which are based on some performance objectives. Thus, the optimal dimensioning of the public sector's management and staff is the starting point for obtaining real performances that have an impact over the private sector which also contributes to the state budget with taxes and may lead to increasing the state's revenue. First, this optimum sizing should be done by

considering the performance criteria given by various models and methods to measure project success (Hendriks, 2012).

The researcher holds that translating information into action is a difficult challenge in the public sector. The relationships between citizens, policy-makers, program managers, and service providers are complicated and are not easily altered through a single intervention, such as an information campaign or scorecard exercise. Particular attention needs to be given to human motivation and incentives to ensure quality and timely services. Formal information sources were not seen as particularly influential and citizens are often either too afraid to act, do not consider it their responsibility or do not know what to do.

### **2.1.2.2 Meeting estimated cost**

Project cost management is primarily concerned with the cost of the resources needed to complete project activities. However, project cost management should also consider the effect of project decisions on the cost of using the project product. For example, limiting the number of design reviews may reduce the cost of the project at the expense of an increase in the customer's operating costs. In others e.g., capital facilities projects, project cost management also includes this work. When such predictions and analysis are included, project cost management will include additional processes and numerous general management techniques such as return on investment, discounted cash flow, payback analysis, and others. Project cost management should consider the information needs of the project stakeholders—different stakeholders may measure project costs in different ways and at different times. For example, the cost of a project management item may be measured when committed, ordered, delivered, incurred, or recorded for accounting purposes (Egbide, 2015).

There is a difference between business efficiency and organizational efficiency. Business efficiency reveals the performance of input and output ratio, while organizational efficiency reflects the improvement of internal processes of the organization, such as organizational structure, culture and community. Excellent organizational efficiency could improve entities performance in terms of management, productivity and quality. In most cases, poor institutional efficiency is as a result of management of the institution with no clear customer oriented policy set in place, which leads to lack of constant focus on efficiency. Such organization fails to use all its efforts to implement strict resource allocation policy, which translates to lack of strict staff cost control, training on cost reduction or even elimination (Beuningen et al, 2013).

Inefficient and ineffective project is set for an expensive failure. In such case there is no proper resources allocation policy and there is no organizational perspective of their future. Organization has leadership issues, high employee turnover rate and no clear vision where the organization will be standing tomorrow. If the organization is able to manage its resources effectively, yet it does not realize its long term goals, it will bankrupt slowly. This strategy is cost efficient but it is not innovative and creates no value. These actions lead to low morale of the organization, high turnover rate of the employees and low customer satisfaction. Efficient but ineffective organization cannot be competitive and it will bankrupt eventually (Egbide, 2015).

The researcher believes that the overall performance of a project can be measured how cost management was done. The current study considers efficiency as all about resource allocation across alternative uses. It is important to understand that efficiency doesn't mean that the organization is achieving excellent performance in the market, although it reveals its operational excellence in the

process of source utilization. Organizations can be managed effectively, yet, due to the poor operational management, the entity will be performing inefficiently.

### **2.1.2.3 Meeting expected quality**

Project quality includes the processes required to ensure that the project will satisfy the needs for which it was undertaken. It includes “all activities of the overall management function that determine the quality policy, objectives, and responsibilities and implements them by means such as quality planning, quality control, quality assurance, and quality improvement, within the quality system. With the birth of information technology which has raised the different inventions, project quality stimulation has always been a priority in public institutions, since it is directly associated with the value creation of the entity. Public institutions are constantly striving for better results, influence and better service delivery. However, most institutions are struggling to get it right. Management is not always aware of the adequate assessment of their organizational effectiveness. Plethora of models, frameworks or methods for conducting entities valuation creates unnecessary stress for management to select the path that is congruent with organizations believes and cultural philosophy (Paxton, 2012).

In project planning, quality and effectiveness determine the policy objectives of the organization or the degree to which an organization realizes its own goals. Commitment in the workplace may take various forms, such as relationship between leader and staff, employee’s identification with the organization, involvement in the decision-making process, psychological attachment felt by an individual. Superior performance is possible by transforming staff attitudes towards organization from lower to a higher plane of maturity, therefore human capital management should be closely bound with the concepts of the effectiveness (Egbide, 2015).

In a similar way, the commonest measure of the public funded project performance is effectiveness. For managers, suppliers and investors this term might look synonymous with efficiency. Each of these terms has its own distinct meaning. Most organizations assess their performance in terms of effectiveness. Their main focus is to achieve their mission, goals and vision. The question is, whether there is a difference if the organization is effective yet inefficient and visas versa. Organizational effectiveness oriented companies are concerned with output, sales, quality, creation of value added, innovation, cost reduction. It measures the degree to which a business achieves its goals or the way outputs interact with the economic and social environment (Gordon, 2021).

To the researcher of this study, lack of accountability in the public sector creates opportunities for ineffectiveness and corruption with its attendant negative consequences. For instance, through corruption the wealth of most African countries is being diverted by a few, leaving the nation at a loss. Due to ineffectiveness, corruption has become a way of life among African leaders; to the extent that it is trite to say that officials are not only corrupt, but corruption is official. The scandalous revelations of large scale corruption and mismanagement of public funds by government officials contained in the audit reports. Hence, quality is a paramount indicator of performance of public funded projects.

### **2.1.2.4 Achieving set goals**

To achieve the set goals of a project, the management has to ensure a number of things has been put into implementation. Achieving project goals, one has to ensure good time management results in improved productivity and effectiveness. Effective employee management is one of the key aspects of effective task management. Assigning available employees to the tasks is important for achieving the

project's set goals and success accomplishment and completion of the project. This means breaking down the project into different tasks is so key and vital in realizing the set goals. An institution's achievement-motivated people not only think about what they want to accomplish, but they also give attention to processes and take action to accomplish their goals. They are continuously thinking about what obstacles or blocks they might encounter where they can get help, and how they will feel if they succeed or fail in reaching the institution's set goals (Lee, 2017).

Achieving the set goals is one of the key symbols of project success and team members' professional development depends on each person taking responsibility for their own actions and developing appropriate change and improvement goals. Goal setting is a critical part of preparing for personal change and accomplishing project objectives. Well written goals provide motivation, focus attention, serve as a basis for managing performance, and evaluating change. In most institutions, motives lead people to have recurrent thoughts that are often in the form of concerns about what is needed, how to obtain it, and about the feelings that would accompany reaching or not reaching the goal. Achieving goals illustrates basic set of thoughts and actions that achievement motivated people consider as they plan and set goals to move from the current state to the desired state (Agbemabiese, 2018).

Throughout this process there are specific elements that need to be considered. In this process not only does the person express what they want to accomplish, but they need to clearly understand why it is important to accomplish the goal. They will generally anticipate their likelihood of achieving or not achieving the stated goal, as well as, how they will feel if they are successful or unsuccessful at the end and while accomplishing intermediate steps. Achievement thinkers identify obstacles that can prevent them from being successful. These obstacles might be within themselves or due to some external force. In both cases, help may be required to overcome the obstacles. The way in which projects are planned and carried out follows a sequence beginning with an agreed strategy, which leads to an idea for a specific action, oriented towards achieving a set of objectives, which then is formulated, implemented, and evaluated with a view to improving the strategy and further action (Egbide, 2015).

In order to realize achievement of the set goals, an institution has to ensure that the entire project cycle is well managed from the start to the end. In many instances, Project Cycle Management is an approach to managing projects. It determines particular phases of the Project, and outlines specific actions and approaches to be taken within these phases. The PCM approach provides for planning and review processes throughout a cycle, and allows for multiple project cycles to be supported. The project cycle also provides a structure to ensure that stakeholders are consulted and relevant information is available throughout the life of the project, so that informed decisions can be made at key stages in the life of a project. Professional development is a continuing cycle of setting goals, modifying behaviors to accomplish those goals, and evaluating progress (Caird, 2018).

The researcher of this study holds that critical success factors for project planning strategies in order to ensure effectiveness of the entire process, an upgrade revealed that implementation of these systems requires critical factors such as: business plan and direction, change management, communication, appropriate technical skills, project and implementation management, top management commitment and leadership and systems management.

## **2.2 Theoretical Review**

Bsides, Rwanda Electricity Sector Strengthening Porject, Rwanda Energy Group has had a number of projects especially in rural electrification, security, technology, human resource management and administration. These projects are meant to positively impact citizen's wellbeing, operations at REG

and those of stakeholders by improving service delivery, enhancing security and internal controls and facilitating real time data reporting. Hence, this study stems primarily on three theories; Agency Theory, Theory of Change and System Theory. These theories enhance understanding of innovative strategies for project planning that lead to the public funded projects.

### **2.2.1 Agency Theory**

Jensen and Meckling developed the Agency theory in 1976. Agency theory suggests that divergences will occur when principal, e.g. client, and agent for stance project manager interests are different in the execution of a project. The theory is concerned with resolving problems that can exist in agency relationships; that is, between principals (such as customers) and agents of the principals (for example, public institutions and management). The two problems that agency theory addresses are: the problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing and the problems that arise when the principal and agent have different attitudes towards risk (Rutherford, 2013).

Agency is the name given to the practice by which productive resources owned by one person or group are managed by another person or group of persons. At its simplest agency theory is the recognition that the inclination of agents, in this cases the directors or managers of an institution, is to act rather more in their own interest than those of their employers and shareholders. The institute of chartered Accountant in England and Wales, in November 2006, put it this way: - In principle, the agency model assumes that no agents are trustworthy and if they can make themselves richer at the expense of their principals they will. The poor principal, so the argument goes, has no alternative but to compensate the agent well for their endeavors so that they will not be tempted to go into business for them using the principal's assets to do so (Riley, 2012).

Agency theory may not only help to explain the existence of procedures in public project management but can also help explain some of the characteristics of the agency related departments, for example, its size, and the scope of its activities, such as officers' behavior and performance. Agency theory can be employed to test empirically whether cross-sectional variations between internal auditing practices reflect the different contracting relationships emanating from differences in organizational form (Riley, 2012).

To the researcher of this study, Agency theory provides for richer and more meaningful research in the issues related to project planning. Agency theory contends that public procurement, in common with other intervention mechanisms like following procurement guiding procedures and external audit, help to maintain cost-efficient contracting between the public and project planning in the public funded projects.

### **2.2.2. Theory of Change**

Theory of Change (ToC) is an approach to developing, implementing and evaluating projects of development, and has been applied across a wide range of programmatic contexts. The approach developed somewhat organically, beginning in the 1990s with work undertaken by the Aspen Institute Roundtable, who proposed ToC as an approach to evaluating community development programs. In addition, ToC is being used for impact evaluation at a programmatic level, providing an overview and evaluation tool to understand change within project portfolios by donors and research consortia. Broadly, ToC can support the development of interventions, bringing together key stakeholders within

the planning phase to scrutinize and address proposed approaches to achieving impact. It can also provide a rich process and impact framework to guide implementation and evaluation, addressing barriers to implementation, and incorporating the rationale behind approaches taken and contextual influences (Hendriks, 2012).

A theory of change is a tool that helps to describe the need you are trying to address, the changes one wants to make (your outcomes), and what you plan to do (your activities). The approach can be used for organizations of all shapes and sizes—from service-delivery charities, to campaigning organizations, to funders. A theory of change is often represented in a diagram or chart, but a full theory of change process involves more than this. It should help you consider and articulate the assumptions and enablers that surround your work and explain why you think your activities will lead to the outcomes you want. It should also challenge you to develop clear aims and strategies and explore whether your plans are supported by evidence. Theory of change is actually a very simple concept. Throughout our work and personal lives, we have aims, objectives and ideas about how to achieve our goals, but we rarely take the time to think these through, articulate and scrutinize them (Egbide, 2015). To develop a theory of change you begin by identifying the group you are working with, setting out their needs and characteristics, and clarifying the final goal that you want to achieve. The final goal should describe the change you want to see in service users or beneficiaries. It should be realistic and succinct; you should not set more than a few final goals, and it is often best to have just one. A final goal should be relatively long-term, obviously beneficial, and something that funders, commissioners or supporters would be interested in funding. It must be relevant to the needs of the target population, and plausibly linked to your project's activities. Your organization as a whole should articulate its final goal(s), which should be related to your charitable objects and aligned to the goals of individual projects. Thinking about final goals requires you to consider what your project or organization is accountable for and what is beyond its sphere of influence (Mayers, 2014).

### **2.2.3 System Theory**

The origination of systems theory is credited to Ludwig von Bertalanffy in the 1970s. According to Gramling (2013), systems theory can be defined as a set of unifying principles about the organization and function of systems; where systems are defined as meaningful wholes that are maintained by the interaction of their parts. A system functions by acquiring inputs from the external environment. In classical systems theory, bureaucracies are a complex web of interrelationships both organizational and individual. Public audit systems seek to give some transparency to bureaucracies' financial operations and acts to mitigate a natural tendency to pursue individual and organizational self-interest at the expense of public welfare. Its support for values such as probity, propriety and good stewardship may help to sustain these civil service cultures which are motivated by a concern for the proper use of public money.

According to Peurseem (2016), concepts and techniques of systems theory are important in financial management for a number of reasons. First, they are the bases for the development of computerized information systems, found in all types of organizations today. An organization systems analysis is an integral part of the planning and development of a computerized information system; and modern auditing today includes in its valuations a systems review. In order to meet today's operating challenges, regional and local governments are turning to technology to enhance the services for residents, businesses and visitors, and improve internal efficiencies by lowering costs and increasing productivity.



To the researcher of this study, a systems theory perspective allowed a deeper understanding of general nature, ethical values and society as a whole. This knowledge of elements, interconnections, and purposes of people, organizations, and communities helped the researcher in understanding the larger picture of the relationships and function of the society's ethical values and how they could be applied in project management.

### **2.3 Empirical Review**

A research was conducted by World Bank in 2018 titled Project Planning and Performance in Public Institutions in Europe and North Asia. The study used descriptive design and 5540 respondents. The findings revealed that project planning enabled federal government save over six million dollars by outsourcing the manual duplication and distribution documents. The study showed that implementation of project management itself is not a guarantee for project success in the public finance management operations. For this system to succeed there is a need for regulations and policies if the system is to succeed. The study also noted that a number of project planning programs fail because of poor technology and professionalism among the the institution's employees. Other factors that lead to such failures include: lack of awareness, resistance to change, poor coordination of functions and ineffective implementation programs.

In a study carried out by Lee (2017) on Essentials of Project Planning in Japan and China revealed that project planning can be used as a tool to reduce process time, generate sourcing savings and to drive incremental revenues. He further found out that implementation of project planning starts with selection of a tool to complement an organizational strength, followed by change in management and training of the staff and other stakeholders where possible. Similarly, Barahona and Elizondo (2012) conducted a study on the critical factors that influence successful implementation of project planning in the public sector in Asia and identified that end-user's uptake and training, supplier adoption, system integration, and authentication, re-engineering process, performance measurement, top management performance, change management program and communication systems as the critical factors that determine the success of implementation of project planning.

A Russian researcher named Wolfgang (2014) in his study; the impact of project planning on the performance of public institutions in East Russia; stated that project planning is a strategy widely used by most institutions that eases people's roles and responsibilities. Public institutions which may be powerless to encounter the predictable efficacy and consistency prospects may lose stakeholder assurance. Ibrahim and Dauda (2014) discussed that project planning aims in North Africa at enhancing services delivery to citizens, businesses, and other stakeholders, and that it encompasses internal and external dimensions and despite the challenges faced, most people would agree that the new information technologies hold vast potentials for improving public administrations, and better administrations in turn would have a positive influence on the economy and on society thereby improving stakeholder confidence. Like Lee (2017), they observed that the rapid diffusion of project planning in China and Japan particularly has placed existing norms and moral behavior under pressure and may affect the successful implementation of successive governments' visions.

From the point of view of the Muhumuza (2014), project planning in East Africa, Uganda in particular strengthens financial controls, facilitating a full and updated picture of commitments and expenditure on a continuous basis. Once a commitment is made, the system should be able to trace all the stages of the transaction processing from budget releases, commitment, purchase, payment request, reconciliation of bank statements, and accounting of expenditure. For example, through project

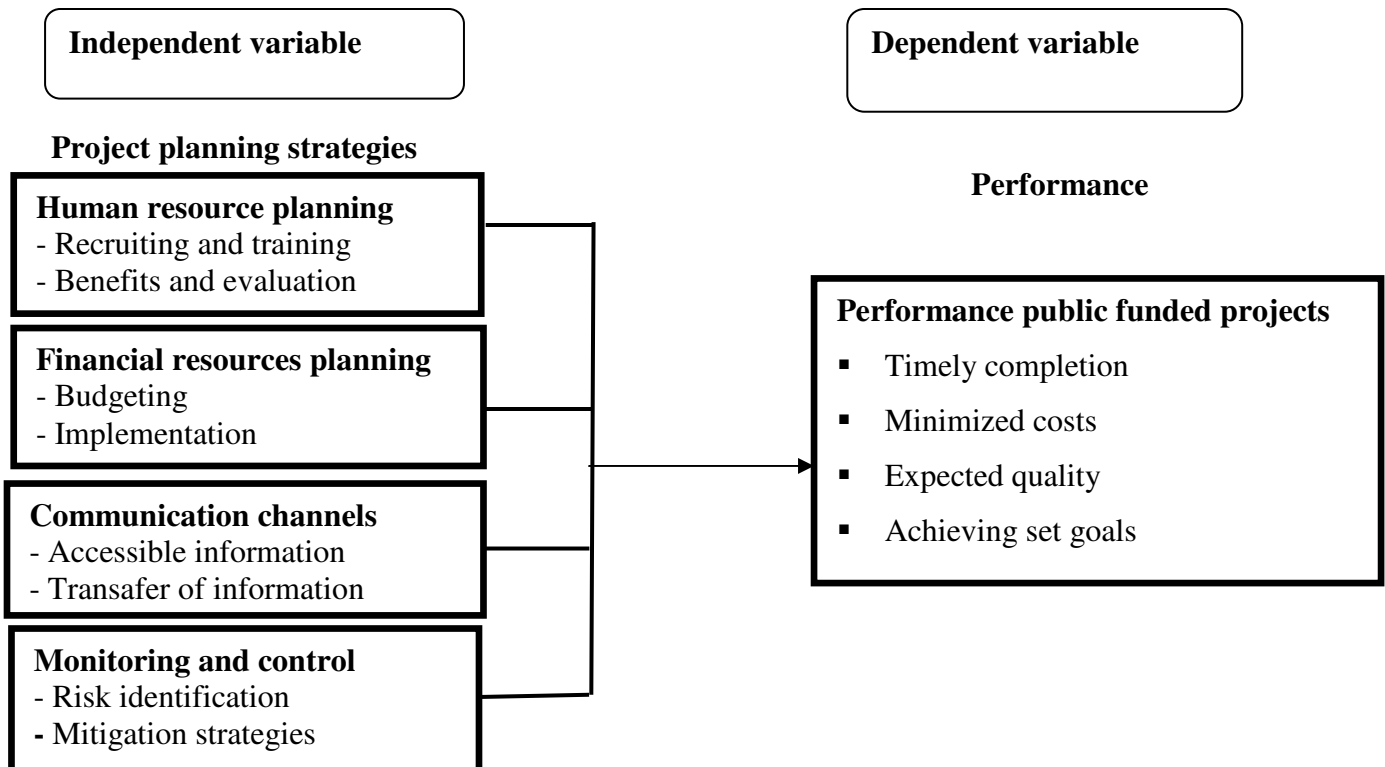
planning, a procurement plan is used to provide information about the purchase of goods and services, how vendors will be chosen, what type of contract (s) will be used, how vendors will be managed and who will be involved at each stage of the process.

Mayers (2014) submits that a well-designed project planning in Rwanda can provide a number of features that may help detect excessive payments, fraud and theft. These include, for example, automated identification of exceptions to normal operations, patterns of suspicious activities, automated cross-referencing of personal identification numbers for fraud, cross-referencing of asset inventories with equipment purchase to detect theft, automated cash disbursement rules and identification of ghost workers. For example, the aim of project planning Procure to Pay (P2P) system is to develop an efficient and streamlined procurement and payment system by fully automating the procurement and payment process to increase control and visibility over the entire life cycle of a procurement transaction, from procurement planning to payment. The end-to-end P2P automated process starts at development of procurement plans, to the actual procurement of goods and services, to payment of suppliers for goods or services delivered.

## 2.4 Conceptual framework

A conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Likewise, conceptual frameworks are abstract representations, connected to the research project’s goal that directs the collection and analysis of data. Therefore, the goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them.

**Figure 2.1: Conceptual framework**



This conceptual framework primarily is based on three theories namely, Agency Theory, Theory of Change and System Theory. The project planning strategies were described in terms of human resources planning, financial resources planning, communication channels and monitoring and control. They were measured through descriptive statistics by the help of SPSS whereby with the help of Likert Scale questionnaire, the research respondents were asked the level of agreement as regards to the above project planning in relation to the performance of public funded projects in Rwanda and in particular Rwanda Electricity Sector Strengthening Project. In addition to descriptive statistics, the study used multiple regressions.

## **2.5. Current review**

Empirically, researchers such as Barahona and Elizondo (2012), Ibrahim and Dauda (2014) and (Muigai, 2012), Lee (2017) urged that public institutions are assaulted by the pressure of globalization and competition from private institutions' new ways to add value to the services. The question of what drives performance is at the top in understanding superior performance and hence striving for it. Substantial research efforts have gone into addressing this question, starting from the strategic level and going down to operational details. However, for the present study, the researcher believes that government projects in Rwanda is still faced with some challenges which need to be addressed in order to promote effective and efficient project performance that lead to project performance and these are: the development of an efficient public fund management system in Rwanda has been hampered by some factors such as infrastructural deficiency, inadequate skilled personnel and requisite tools on end users and client systems, high charge or cost for the electronic transaction terminals. Hence, these factors are believed to be hampering project planning effectiveness in the country hence affecting project performance of most public funded projects.

## **RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Introduction**

This chapter is about the overall approach to the research process, from the rational foundation of the study to the collection and analysis of the data that were collected about influence of project planning on performance of public funded projects in Rwanda. The chapter explains how the researcher collected the data, the nature of data that were collected, where data were collected and how they were analyzed. It presents the methods and methodological techniques and approaches that were applied in data collection, sampling techniques as well as problems that were encountered in the study.

### **3.2. Research design**

Grinnell & William (2016) define research design as a conceptual structure within which research is conducted. It is a plan for collecting and utilizing data so as to obtain the desired information. This research adopted descriptive and correlational study design where descriptive statistics were used. Descriptive research is the investigation in which quantity data is collected and analyzed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time (Mugenda & Mugenda, 2013).

Through collection and analysis of the descriptive statistics, the researcher was able to assess the significance level of the effect of project planning and establishing whether there has been success of

public funded projects in particular Rwanda Electricity Sector Strengthening Project as a result. In addition to descriptive statistics, the study did adopt correlational design to measure the relationship between project planning and the range project performance of Rwanda electricity sector strengthening project using correlation analysis.

### 3.3. Population and sample size of the study

According to Cooper and Schindler (2013), a population is referred to as the total collection of elements about which the researcher wishes to make some inferences. The researcher went ahead to define a population as to all the particular type of entity either limited by geographical location or one or more characteristics. This study was conducted from Rwamagana district though with the focus on Kigabiro, Nzige and Rubona sectors. Kigabiro sector is located in the middle of the district and the capital of the district altogether while the other two sectors of Nzige and Rubona are located in the rural areas of the district. Kigabiro sector holds the headquarters of Eastern province, Eastern province headquarters and the provincial branch of REG in particular.

Hence, the target population in this study was both the project staff and the project administrators working in these three sectors who were ninety-eight (98) in total including 01 construction coordinator; 01 planning executive, 20 technical supervisors, 74 ordinary project staff; 01 project manager of Rwanda Electricity Sector Strengthening Project in Rwamagana district and 01 Rwamagana REG Branch manager. These respondents were required to identify their appreciation level on effectiveness of the project planning strategies; and the performance level of Rwanda Electricity Sector Strengthening Project. The researcher believes, these respondents are crucial since they have much information on how RESSP is progressing in line with project planning strategies.

**Table 3.1: Population distribution**

Category	Population
<b>1. Project staff</b>	
Construction coordinator	1
Planning executive	1
Technical supervisors in each sector	20
Ordinary project staff	74
<b>2. Administrators</b>	
RESSP Project Manager	1
Rwamagana REG Branch Manager	1
<b>Total</b>	<b>98</b>

**Source: RESSP (2022)**

### 3.4 Sampling design

In selecting the respondents, purposive sampling was considered. Purposive sampling is also called judgmental sampling or authoritative sampling, and it is a non-probability sampling technique since the sample members are chosen only on the basis of the researcher's knowledge and judgment. It is a method of sampling whereby the researcher uses his or her own judgment about which respondents to

choose, and picks only who best meet the purpose of the study (Mugenda & Mugenda, 2013). Also, according to Cooper & Schindler (2013) purposive sampling is a type of sampling whereby the researcher uses his/her own judgment or common sense regarding the participants from whom information is collected. This technique helped the researcher to only contact 65 respondents including 63 RESSP staff working in the selected sectors, 1 REG branch manager and 1 RESSP Project Manager since the researcher thought they are the ones more informed about the issue under the study.

**3.5 Data collection instruments**

This section intends to show the data collection techniques of the study which include questionnaire, interview, observation and documentation research techniques.

**3.5.1. Questionnaire**

A questionnaire is a research instrument consisting of a series of questions and other prompts for purpose of gathering information from respondent (Graham & Marshal, 2015). While collecting primary research data, the researcher involves questionnaires that are designed in accordance with study objectives. Using Likert Scale, the respondents indicated whether they strongly agree (SA), agree (A), neutral (N) disagree (D), or strongly disagree (SD). Following the design of the questionnaires, the researcher will be asking respondents to indicate their appreciation levels towards the effective of project planning strategies. Again, they helped to identify their levels of Rwanda electricity sector strengthening project success in terms of timely completion, cost management, quality management and achieving set goals.

As a professional way of choosing who to give questionnaires, the researcher gave an opportunity to each individual to fill and return the questionnaire.

The researcher made sure to avoid selecting the same people in order to shun conflict of interest and this means that all the respondents had a possibility of being selected once. The questionnaire was designed for 63 targeted staff at Rwanda Electricity Sector Strengthening Project. The researcher made sure she guided some of the respondents that had challenges in answering the questionnaires.

During the data collection, all the 63 respondents managed to fill questionnaires and hand them over to the researcher for processing and analysis.

**Table 3.2: Likert Point Scale**

<b>Weight scale</b>	<b>Interpretation</b>	<b>Description</b>
5	Strongly agree	Agreeing without doubt
4	Agree	Agreeing with some doubt
3	Undecided	Don't know
2	Disagree	Disagreeing with some doubt
1	Strongly disagree	Disagreeing without doubt

**Source:** Likert (1987)

**3.5.2. Interview**

According to Krlinger (2017), interview is a conversation from which the researchers try to get information to the interviewees. Qualitative questions were asked in relation with the research objectives and this helped the researcher to get direct information from respondents; therefore, this technique involved 01 REG branch Manager, and 01 project manager of RESSP. This allowed the researcher to collect information related to the significance level of the effect of project planning and establishing whether there has been an improvement in performance of RESSP due to project planning

strategies. Fortunately, both leaders – the branch and project managers were all available during the data collection process.

**Table 3.3. Recapitulative table of research population, sample size, sampling techniques and research instruments**

Respondents categories	Population	Sample size	sampling method	Research instrument
1. RESSP Staff	96	63	Purposive	questionnaire
2.REG Branch Manager	01	01	Purposive	questionnaire
3RESSP Project Manager	01	01	Purposive	interview
Total	98	65		

Source: *Field data 2022*

### 3.5.3 Documentary review

Documentary review is the use of outside sources, documents, to support the viewpoint or argument of an academic work. The process of documentary research often involves some or all of conceptualizing, using and assessing documents. The analysis of the documents in documentary research would be either quantitative or qualitative analysis (or both). The key issues surrounding types of documents and our ability to use them as reliable sources of evidence on the social world must be considered by all who use documents in their research (Graham & Marshal, 2015). The researcher used this technique to analyze projects reports and other documents that were involved in this study.

### 3.6 Validity and reliability of research instruments

In order to ensure that the end results of this study were successful and more especially effective, the researcher applied reliability and validity.

#### 3.6.1 Validity

Validity refers to how well a test measures what it is purported to measure (Cooper & Schindler, 2013). For the researcher to ensure that the instrument measures what it would be supposed to measure, the instrument was checked to ensure validity. For further improvement, the questionnaires were presented to research supervisor and other research experts to solicit their opinions in order guarantee correctness and relevance of the instrument. For the validity of this instrument, the researcher used Cronbatch Alpha. Cronbach's Alpha coefficient and found that the score was 0.881 which falls into acceptable range.

#### 3.6.2 Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results (Cooper & Schindler, 2013). Concerning reliability of the instrument, a pilot study was conducted with 21 staffs of Rwanda Electricity Sector Strengthening Project in Kayonza district. The researcher's target in conducting pilot study is to ascertain the reliability of the instruments before distributing them to the respondents. This also aimed at ensuring that the instrument would give the same results when given the second time to the respondents, in other words to collect the same data consistently under similar conditions. The concept therefore deals with the accuracy of the instrument and the consistency of the

data collected by it. In other words, the researcher went by a general rule of thumb that a Cronbach's alpha of 0.7 and above is good, 0.8 and above is better, and 0.9 and above is best.

**Table 3.4: Reliability statistics**

Cronbach's Alpha	N of Items
.881	21

**Source:** Cronbach

Reliability of data collection instrument was tested using Cronbach's Alpha coefficient and discovered that the score was 0.881 which falls into acceptable range.

### 3.7 Data processing

After collecting data, the researcher embarked on processing, analyzing and interpreting the data. The researcher had to exercise good care for ensuring reliable data collection because all his efforts would end in vain. Thus, the following task envisions what was done during the data processing.

#### 3.7.1 Editing

Editing is the process of examining errors and omission in collected data and making necessary correction. This is desirable and helpful to the researcher in the case of some inconsistency in the responses as were entered in the questionnaires or when it contains only partial or unclear feedback (Grinnel & William, 2016). The researcher edited some of the responses herself after collecting the filled questionnaires. Through editing, the researcher was able to eliminate errors in the completed questionnaires and this was to ensure that answers are accurate and consistent. In addition, through editing, the researcher was able to deduce from answers given to see whether all questions are uniformly interpreted as regards to the questionnaires prepared. Under editing, the researcher made sure that consistency of responses was ensured.

#### 3.7.2 Coding

The researcher did undergo coding stage when she is done with editing. The researcher knows the task of establishing coding frames by use of her own code categories based on her research questions and responses. She then prepare a code sheet by writing down all the responses that had similar or closely related for open ended questions and gives those codes. For pre-coded questions, the relevant code categories were considered. The coding frame chosen had to match the respondent's themes of the study and the objectives of the study. Before coding is completed, the researcher did ensure that coding differences and ambiguous or irrelevant cases are eliminated at this stage.

#### 3.7.3 Tabulation

Tabulation consists of data categorization into different groups and calculating the number of cases that belong to each group. It was done with the help of the software known as Statistical Package for Social Sciences (SPSS) version 28.0 which is efficient for data processing.

### **3.8 Data Analysis**

This study's primary data were analyzed through not only descriptive but also correlation statistics. The researcher used SPSS in coming up with the statistical analysis for the study. Naale et al. (2016) urged that SPSS is one of the most widely used available and powerful statistical software packages that covers a broad range of statistical procedures, which allows a researcher to summarize data, determine whether there are significant differences between groups, examine relationships among variables, and graph results.

Hence, after obtaining information which the researcher believes that is so necessary and enough for preparation of research report, the researcher employed qualitative data analysis which is used to analyze data obtained from different sources mentioned above. With the help of SPSS, the researcher applied descriptive statistics. In addition to descriptive statistics, the study used multiple regressions.

#### **3.8.1 Description of descriptive statistics**

In addition, regression analysis was used. This analysis was used to measure the degree at which influencing factors as an independent variable.

##### **3.8.1.1 Description of regression analysis**

The model that was used in the study took the below regression equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = Project Performance

$\alpha$  = Constant Term

$\beta$  = Beta Coefficient – This measures how many standard deviations a dependent variable change, per standard deviation increase in the independent variable.

$X_1$  = Human resources planning

$X_2$  = Financial resources planning

$X_3$  = Communication channels

$X_4$  = Monitoring and control

The method on the field research is translated by concrete procedures in the preparation, organization and conduct of the research (Hajizadeh, 2017). Thus, the researcher was confident in the above methods of analysis in such a social science related study since both combined helped the researcher to interpret and verify the achievement of the study's objectives.

### **3.9 Ethical issues**

Any research must not contradict with ethical principles including the obligation to avoid embarrassing the respondents as well as respecting their confidentiality. Therefore, the researcher of this study ensured the ethical relevance of the research with reference to the values and actions to undertake in order to complete it. For this purpose, she observed a set of measures to comply with ethical standards during the whole process of research. These are: a recommendation letter justifying the relevance of the research which was provided by the Dean of School of Graduate to the researcher in order to get the information needed from RESSP, Rwamagana district.

A formal consent was requested from each interviewee before interviewing him/her or engaging in any kind of discussions; respondents are informed that they have a right to refuse any participation in the study; respondents were granted confidentiality regarding any information given and its use exclusively for the research purpose. Anonymity was guaranteed and no interview was carried out with children.

Confidentiality and privacy are the key issues to be observed where researcher observed the respondents' confidentiality during the interviewing process. Researcher will allow the respondents to



be free when collecting the data, mentioning names might look like coercing the respondents are avoided.

### 3.10 Limitations to the study

There are difficulties of timely availability of published data from various agencies such public or private, those doing this general related researches in country. The collection of primary data by using questionnaire and interview tools were complicated due to the pandemic of COVID-19 that caused the limitations of several activities and services.

## DATA PRESENTATION, ANALYSIS AND INTERPRETATION

### 4.1 Introduction

The chapter presents research findings, their interpretation and analysis based on the objectives that were set in chapter one. The first section is for the respondents' identification, followed by the appreciation level on the project planning strategies in Rwanda Electricity Sector Strengthening Project (RESSP) in Rwamagana district; and performance trend of Rwanda Electricity Sector Strengthening Project in Rwamagana. With the assistance of SPSS, research findings were presented in the tables in form of frequencies and percentages as ways of analysis while the interpretations were described below each table.

**Table 4.1: Response rate**

Category	Sample size	Data Instrument	Responses	Response rate
Project staff	63	Questionnaire	63	
Administrators	02	Interview	02	
<b>Total</b>	<b>65</b>	<b>N/A</b>	<b>65</b>	<b>100</b>

**Source: Researcher (2022)**

All the 65 respondents were able to have successful responses as the researcher expected. This brought the response to the rate of 100% of the total sampled number and it was so enough to consider the collected data.

### 4.2 Respondents' identification

In this study, respondents' identification considered age, gender, education level and duration as projects employees and administrator was considered. The required information that the respondents provided is important for understanding of the behavior and knowledge of the respondents.

#### 4.2.1 Age

The researcher enquired from the respondents to accurately provide the information about their age bracket. The results got from the respondents were presented in table 4.5 as shown below.

**Table 4.2: Distribution of respondents by age**

Age of respondents	Frequency	Percentage
20 and 30 years old	15	23.8
31 and 40 years old	27	42.9
41 and 50 years old	12	19.0

Above 50 years old	9	14.3
<b>Total</b>	<b>63</b>	<b>100.0</b>

**Source : Primary data (2022)**

Table 4.5 clearly indicated that a larger number of the respondents which was represented by 42.9% of the respondents encompassed those that ranged from the age of 31 and 40. This revealed that the research involved people that were mature enough to provide unbiased information. In addition, this age group was followed by 20-30, 41-50 and those above 50 with 23.8%, 19.0% and 14.3% respectively. These findings left the researcher with the knowledge about the competence of his research outcomes since the study involved mature respondents who are mostly respected as far as providing the trusted information is concerned hence unbiased findings.

**4.2.2 Gender**

The researcher tasked the respondents to state accurate information about their gender. All respondents were asked about their gender and the figures are shown below in table 4.6.

**Table 4.3: Distribution of respondents by gender**

Respondents by gender	Frequency	Percentage
Female	10	15.9
Male	53	84.1
<b>Total</b>	<b>63</b>	<b>100.0</b>

**Source: Primary data (2022)**

Table 4.6 indicates that 84.1% of the respondents were males while only 15.9% were females. The researcher clearly observed from the findings that the number of male staff members is more than the number of female staff members in Rwanda Electricity Sector Strengthening Project. Therefore, this project is ineffectual as far as gender balance is concerned since the males are more than females. On the other hand, according to the findings, the project isn't in line with the government's policy of promoting the females since the females are less than 30% of the total employees in the Rwanda Electricity Sector Strengthening Project. More so, the findings are in line with what was stated by Garry *et al* (2013), who asserted that mostly in electrification projects, it is the male employees who dominate their counterparts.

**4.2.3 Educational level**

The education levels of respondents were also considered in this study to help the researcher identify the capacities to study their respective activities.

**Table 4.4: Distribution of respondents by education level**

Education level	Frequency	Percentage
Masters	9	14.3
Bachelors	43	68.2
Professional Courses	11	17.5
<b>Total</b>	<b>63</b>	<b>100.0</b>

**Source: Primary data (2022)**

To ask this question, the researcher wished to comprehend the education level of the respondents and the results as indicated in table 4.7, it is flawlessly stated that 14.3%, 68.2% and 17.5% are for the

respondents who had masters, bachelors and professional courses respectively. This shows that this project deals with the intellectuals only those that have sufficient qualification which is helpful in accomplishing their routine work. It was learnt from the coordinators of the project that some of the respondents especially those with bachelors’ degree level were pursuing a master degree. Besides, the researcher learnt that the project has fewer employees who only relied on the professional courses. Hence, the study used people who had knowledge about project planning strategies and performance since all the respondents who had reached the level of high institutions of learning where they learn about these concepts both theoretically and practically. This evidences the reliable findings of the study.

**4.2.4 Working experience**

All respondents in the sample were asked the period of time they have been involved in such projects either in Rwanda Electricity Sector Strengthening Project or elsewhere and they provided the following as presented in table 4.8, below. The data was described in form percentage in the table and was later fully discussed under the table as indicated here below

**Table 4.5: Distribution of respondents by working experience**

<b>Working experience</b>	<b>Frequency</b>	<b>Percentage</b>
Less than one year	3	4.8
1 to 2 years	6	9.5
3 to 4 years	24	38.1
5 to 6 years	30	47.6
<b>Total</b>	<b>63</b>	<b>100.0</b>

**Source: Primary data (2022)**

Table 4.8 shows that out of 63 respondents, only 3 respondents who stood at 4.8% of the total respondents had been working in similar projects in the period of less than one year, 6 respondents equivalent to 9.5% of the total respondents indicated that they have been employed by similar projects for the period between 1 and 2 years and the 24 respondents have working experience of between 3 and 4 years with 38.1%. The remaining respondents corresponding to 47.6% of the total respondents of 63 have worked for the project between 5 and 6 years.

From the above findings, it is clear that Rwanda Electricity Sector Strengthening Project used to keep retaining its employees for many years and this helped to know the procedure electrification projects use to reach higher experienced working and easily to achieve its set goals and objective concerning project planning strategies and performance.

**4.3 Human resources planning and performance of RESSP in Rwamagana district**

This section intends to make a full study of the practices that Rwanda Electricity Sector Strengthening Project get involved in order to enforce effectiveness of project planning strategies in particular human resources planning. The findings were presented in tables in form of percentages.

**4.3.1 Respondents’ views on human resources planning**

This sub section discusses the respondents’ level of appreciation on human resource planning as handled by Rwanda Electricity Sector Strengthening Project and the results are clearly indicated in the table whereby they in form of percentages. The explanations are under the table.

**Table 4.6: Respondents' level of agreement on practices of human resource planning**

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Project management hires human resources that have the required competences	18	28.6	45	71.4	0	0	0	0	0	0	63	100
Project personnel have the right technical and soft skills to optimize their functions	21	33.3	36	57.2	0	0	6	9.5	0	0	63	100
Project managers train and develop the skills needed amongst the workforce	19	30.2	44	69.8	0	0	0	0	0	0	63	100
Project personnel are motivated for increased productivity and effectiveness	27	42.9	36	57.1	0	0	0	0	0	0	63	100

**Source: Primary data (2022)**

For this question, the researcher intended to assess the appreciation level of respondents on human resource planning in Rwanda Electricity Sector Strengthening Project. As indicated in table 4.9, the most agreed was that project management hires human resources that have the required competences in running the RESSP and this was agreed at 71.4% and strongly agreed at 28.6%; the fact that project managers train and develop the skills needed amongst the workforce in the managing the RESSP was also agreed at 69.8% and strongly agreed at 30.1%. In addition, the fact that the Project personnel are motivated for increased productivity and effectiveness was strongly agreed at 57.1% and agreed at 42.9% of the respondents. Findings indicated that project personnel have the right technical and soft skills to optimize their function in the RESSP which was strongly agreed at 33.3% and agreed by 57.1% of the respondents. However, the same statement was disagreed by 14.3% of the respondents.

From the presented study results, since all the statements set were both agreed and strongly agreed, it is enough to understand that there is evidence of strong influence of project planning in ensuring that human resource planning is well carried out within the Rwanda Electricity Sector Strengthening Project and specifically in the Rwamagana district electrification projects. Besides, the findings were supported Graham (2015), from the institutional performance point of view, after the public sector attempted to implement effective project planning, it has helped decision-makers to have the right staff on board. It enables institutions to review their existing activities so as to justify and detail them as those activities would not likely have reviewed before they the recruitment process is done. An effective project planning must be conducted on a year-round basis. Preparations should include an assessment of the entire team to see if actual and estimated skills resulted in favorable or unfavorable results.

**4.4 Financial resources planning and performance of RESSP in Rwamagana district**

This section intends to make a full study of the practices that Rwanda Electricity Sector Strengthening Project get involved in order to enforce effectiveness of project planning strategies in particular financial resources planning. The findings were presented in tables in form of percentages.

**4.4.1 Respondents’ views on financial resources planning**

Under this sub section, the researcher enquired from the respondents such that he could be informed about their level of appreciation as far as reliable information is concerned in line with Rwanda Electricity Sector Strengthening Project. The findings that were collected were presented in table 4.10 as shown below.

**Table 4.7: Respondents’ level of agreement on practices of financial resource planning**

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Project management supports decision-makers to review the existing activities	13	20.6	27	42.9	15	23.8	8	12.7	0	0	63	100
Project management provides adequate financial support amongst departments	18	28.6	24	38.1	21	33.3	0	0	0	0	63	100
Project leaders eliminates programs which are longer in public needs	20	31.8	30	47.6	9	14.3	4	6.3	0	0	63	100
Project staff effectively correctly records and reconciles all projects expenditures	0	0	12	19.1	30	47.6	15	23.8	6	9.5	63	100

**Source: Primary data (2022)**

As revealed in table 4.10, all presented statements about financial resource planning were disagreed on apart from only one whereas each of them was undecided about – an indication of some gaps in financial resource planning within in the project. The study results discovered that 42.1% of the respondents agreed that project management of RESSP supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process while 23.8% of the respondent were undecided. In addition, 23.8% of the respondents disagreed on the fact that project staff effectively correctly records and reconciles all projects expenditures in some way that counts; and project leaders at RESSP eliminate programs which are longer in public needs from the coming years' budgets was agreed by 47.6% of the respondents. Finally, the statement which stated that project management provides adequate financial support amongst different involved departments was agreed by 38.1% and undecided on by 33.3% of the study respondents.

Therefore, due to fact that most practices about financial resource planning were largely disagreed and undecided on by the respondents, the researcher the findings revealed in the tenth table pointed out challenges regarding management of finance at RESSP. This is in line with the existing challenges that were reported by different reports about the projects in the district. This could affirm the influence between financial resource planning and performance of the project performance. In the same line, findings were supported by Mayers (2014), ineffective financial resource planning practices lead to poor performance of any project and this could affect information stored in poorly organized database for future planning. In addition, Muhumuza (2014) urged that correct financial resource planning aids in identifying, choosing and implementing activities that will enhance the long term performance of an institution in case its opposite, it causes to embezzlement and other uncalled for vices.

#### 4.5 Communication channels and performance of RESSP in Rwamagana district

This section intends to make a full study of the practices that Rwanda Electricity Sector Strengthening Project get involved in order to enforce effectiveness of project planning strategies in particular communication channels. The findings were presented in tables in form of percentages

##### 4.5.1 Respondents’ views on communication channels

This sub section discusses the respondents’ level of appreciation on communication channels as handled by electrification projects and the results are clearly indicated in table 4.11 whereby they in form of frequencies and percentages.

**Table 4.8: Respondents’ level of agreement on communication channels**

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Project staff have open communication channels to reduce any misconstrued messages	6	9.5	27	42.9	30	47.6	0	0	0	0	63	100
There is a systematic and orderly flow of information in the project	9	14.3	34	53.9	0	0	20	31.7	0	0	63	100
Management transmits information about goals, policies and procedures RESSP	12	19.0	51	81.0	0	0	0	0	0	0	63	100
Project admin encourages communication channels that improve relations	27	42.9	36	57.1	0	0	0	0	0	0	63	100

**Source: Primary data (2022)**

From the above findings in table 4.11, respondents revealed outstanding communication channels in general in this project as a result of project planning strategies. The practice which was most agreed by the respondents was that the management transmits information about goals, policies and procedures of

the Rwanda Electricity Sector Strengthening Project by 81.0% of the respondents; whereas 57.1% of the respondents agreed that Project management encourages communication channels that improve workplace relations and the same statement was strongly agreed by 42.9% of the respondents. In addition, the fact that RESSP staff have open communication channels to reduce any misconstrued messages was agreed by 42.9% of the respondents and it was undecided on by 47.6% of the respondents. Finally, the practice which stated that there is a systematic and orderly flow of information in the project was agreed by 53.9% of the respondents though it was still disagreed by 31.7% of the respondents.

Hence, the practices of communication schemes were witnessed and seem not smooth as they are supposed to be like in any performance wanting electrification project. Like it was discovered in the financial resource planning, the communication skills as revealed by this study's respondents as presented in table 4.11 were not effective. More so, the results are against the works of Farías and Pimenta (2012), with the help of communication schemes strategies, senior managers assign responsibility for the establishment of more specific communication procedures to personnel responsible for the unit's particular departments. The effective communication schemes make it possible for management to consider advice from all the staff and stakeholders which is one of the requirements of the organizational management.

#### 4.6 Monitoring and control and performance of RESSP in Rwamagana district

This section intends to make a full study of the practices that Rwanda Electricity Sector Strengthening Project get involved in order to enforce effectiveness of project planning strategies in particular monitoring and control. The findings were presented in tables in form of percentages.

##### 4.6.1 Respondents' views on monitoring and control

In this section of the study, the researcher questioned the respondents such that she could be informed about their level of appreciation as far as monitoring and control is concerned, in line with RESSP in Rwamagana district. The findings that were collected were presented in table 4.12 and they in form of frequencies and percentages.

**Table 4.93: Respondents' level of agreement on monitoring and control**

Statement	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Monitoring and control of the project gives an orderly, efficient scheme	18	28.6	45	71.4	0	0	0	0	0	0	63	100
Management provides leadership and direction to staff regarding values	21	33.3	42	66.7	0	0	0	0	0	0	63	100
With the assistance of monitoring and control, most errors have been minimized	9	14.3	54	85.7	0	0	0	0	0	0	63	100
Monitoring and control have been proven to have curbed down cases of	0	0	25	39.7	27	42.9	11	17.5	0	0	63	100

embezzlement and fraud.												
-------------------------	--	--	--	--	--	--	--	--	--	--	--	--

**Source: Primary data (2022)**

Like presented, the researcher intended to assess the appreciation level of respondents on monitoring and control practices within in RESSP in Rwamagana district concerning the project’s successful level. As indicated in table 4.12, among all the four statements provided only one was undecided ; while the rest were all agreed and strongly agreed. Of the asked statements, the practice that stated that with the assistance of monitoring and control, most errors have been minimized in accounting and reporting was agreed by 85.7% of the respondents and strongly agreed at 14.3% ; the fact that monitoring and control of the project gives an orderly, efficient scheme for providing accurate evidence and reports was agreed by 71.4% of the respondents and strongly agreed by 28.6% of the study’s respondents. For the statement that management provides leadership and direction to staff regarding values, principles and policies was agreed by 66.7% and strongly agreed by 33.3%. Finally, 42.9% of the respondents were undecided on the statement that monitoring and control has been proven to have curbed down cases of embezzlement and fraud. However, 17.5% of the respondents disagreed about the same statement.

Although one of the statements about monitoring and control was disagreed and undecided about, many statements were agreed and strongly upon, an indicator that monitoring and control makes the staff more confident and accountable which at the end of the day contributes to the success of the project. These were line with response from the project manager during an interview we held with him. Furthermore, the findings are supported by Muhumuza (2014) who claimed that in the presence of monitoring and control, the management is capable of providing leadership and direction to staff regarding values, principles and policies. In addition, with the assistance of monitoring and control most errors are minimized in reporting There is an accountability dilemma and argues that performance audit tends to focus more on compliance than on performance and is biased towards hierarchy and punishment.

**4.7 Performance of RESSP in Rwamagana district**

This section elaborates the findings regarding what the respondents pointed on how they appreciate the performance level of electrification project in Rwamagan district. The findings are presented in form of frequencies and percentages.

**4.7.1 Appreciation on the performance of the RESSP in Rwamagana district**

The researcher inquired from the respondents such that she could be informed about their level of appreciation at which project planning strategies contribute towards performance level of timely completion of RESSP in Rwamagana district. Results are presented in the tables below.

**Table 4.10: Respondents’ appreciation on performance of RESSP**

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
RESSP projects ensure elimination of long processes	24	38.1	24	38.1	5	7.9	10	15.9	0	0	63	100
No bureaucracy in	21	33.3	42	66.7	0	0	0	0	0	0	63	100



collecting required reports information													
RESSP projects reports are always controlled timely	0	0	0	0	51	81.0	12	19.0	0	0	63	100	
RESSP projects ensure rejection of unclear strategies	15	23.8	48	76.2	0	0	0	0	0	0	63	100	

**Source : Primary data (2022)**

The results findings presented in table 4.15, the researcher wanted to understand if project planning strategies are in a better position as a kind of having RESSP performance. Data gathered revealed that in most issues tackled, most of the respondents strongly agreed and agreed on the preset statements. The undecided statement was that with project planning, RESSP reports are always controlled timely by 81.0% of the respondents. On the other hand, 76.2% agreed that RESSP ensure rejection of unclear strategies while the fact that RESSP ensure elimination of long processes was agreed by 38.1% and disagreed by 15.9% of the respondents. This was the badly appreciated aspect of the performance of the RESSP projects. When we enquired from some of the project managers, they asserted that there are a number of factors could lead to untimely completion of the projects rather than project planning such as funding.

Based on studies Reed (2018), timely completion of the projects funded by public institutions is a problem which most governments have to face, and which is determined, mainly, by the existence of some major deficits, a bureaucracy that makes it hard to collect money to the budget and their redistribution as soon as possible, but also as a result of implementing some public programs which are based on some performance objectives.

**4.8 Relationship between project planning strategies and RESSP in Rwamagana district**

To carry out this assessment facilitated the researcher to comprehend the relationship that lies between an independent variable and independent variable of this study. For that matter, correlation analysis was based on the measure of the relationship between these two variables.

**4.8.1 Correlation analysis**

This section of the chapter was tackled with the assistance of SPSS. The section articulates the significance relationship between the research variables which include project planning strategies and performance trend of RESSP in Rwamagana district.

**Table 4.4: Spearman test**

Model	Variables	Project Planning	Performance
Spearman's rho	Project Planning Correlation Coefficient	1.	.844**
	Sig. (2-tailed)	.	,000
	N	63	63
Performance	Correlation Coefficient	.844**	1.
	Sig. (2-tailed)	,000	.
	N	63	63

Model	Variables	Project Planning	Performance
Spearman's rho	Project Planning Correlation Coefficient	1.	.844**
	Sig. (2-tailed)	.	,000
	N	63	63
	Performance Correlation Coefficient	.844**	1.
	Sig. (2-tailed)	,000	.
	N	63	63

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

Spearman Correlation Coefficient is also referred to as Spearman Rank Correlation or Spearman's rho. It is typically denoted either with the Greek letter *rho* ( $\rho$ ), or  $r_s$ . All correlation analyses express the strength of linkage or co-occurrence between two variables in a single value. As it is revealed in table 4.14, the value of  $r_s=0.844$  and  $p=0.000$  which is also less than alpha explains that there is strong positive correlation between project planning strategies and the performance trend of RESSP ( $= .844, n = 63, p < .001$ ). From the spearman test therefore, the researcher learnt that project planning strategies in terms of human resource planning, financial resource planning, communication skills; and monitoring and control have strong relationship on the performance of public funded projects in Rwanda and in particular, RESSP in Rwamagana district.

#### 4.8.2 Regression analysis

Like any other studies, regression analysis helped the researcher to determine how changes in the independent variables are associated with changes in the dependent variable. For stance, coefficients revealed about these changes and p-values disclosed if these coefficients are significantly different from zero. With the help of SPSS, this sub section expresses the significant relationship between the research variables which include project planning and performance of public funded projects in Rwanda and in particular RESSP.

**Table 4.125: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844 <sup>a</sup>	.712	.707	.246

a. Predictors: (Constant) Human resources planning, financial resources planning, Communication skills; and Monitoring and control

The model summary basically indicates the adjusted R squared which is a coefficient of determination that expresses the variation in the dependent variable as a result of changes in the independent variable. The study findings presented in table 4.15 revealed the value of R squared was 0.712, an indication that there was a variation of 71.2% on performance due to changes in human resource planning, financial resource planning, communication skills; and monitoring and control. The results indicated in the table show further that 70.7% of the changes in performance in RESSP could be accounted on human resource planning, financial resource planning, communication skills, and monitoring and control.

Therefore, there is a significant and positive relationship between the study variables as marked in the model summary table.

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

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9,151	4	9.151	150,633	.000 <sup>a</sup>
	Residual	3,706	58	.063		
	Total	12,857	62			

a. Dependent Variable: Performance

b. Predictors: (Constant), Human resources planning, Financial resources planning, Communication skills; and Monitoring and control

As it is presented in table 4.16, the ANOVA findings revealed that independent variables are statistically significant to the dependent variable. The ANOVA test discovered that P-value of 0.000 less than alpha (5%), is the significance level. This means that the given data fit well with the multiple regression models which is an indication that human resource planning, financial resource planning, communication skills; and monitoring and control of RESSP. Hence, the significance value which was also less than 0.05 is an indication that the model was statistically significant.

Therefore, the study’s ANOVA results confirmed the research’s alternative hypothesis that there is a significant effect of project planning on the performance of RESSP in Rwamagana district and the null hypothesis indicating that there are no significant relationships between variables is rejected.

**Table 4.14: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.702	.027		.420	1.000
Human resources planning	2.791	.022	.410	.303	.013
Financial resources planning	.833	.039	.558	.157	.000
Communication skills	.167	.044	.208	.211	.067
Monitoring and control	1.131	.044	.428	1.031	.020

a. Dependent Variable: Performance

From the study presented in table 4.17, the established regression equation was: Performance (P) =  $\alpha + \beta_1HR$  (Human resource planning) +  $\beta_2FR$  (Financial resource planning) +  $\beta_3CS$  (Communication skills) +  $\beta_4MC$  (Monitoring and control) +  $\epsilon$

$$P = 1.702 + 0.410 (HR) + 0.558 (FR) + 0.208 (CS) + 0.428 (MC) + 0.027$$

Based on the regression equation and findings presented in table 4.17, it was revealed that holding human resource planning, financial resource planning, communication skills; and monitoring and control to a constant zero, project performance would be 1.702. Indeed, this constant called y-intercept is not realistic but it is a needed parameter in the model. As per the findings, there is positive and significant effect of human resource planning on project performance of RESSP ( $\beta = 0.410$ ; t-test = 0.303; p-value < 5%). This implies that a unit increase in human resource planning would lead to an increase in performance by a factor of 0.410. Likewise, there is positive and significant effect of financial resource planning on project performance of RESSP ( $\beta = 0.558$ ; t-test = 157; p-value < 5%). This implies that a unit increase in financial resource planning would lead to an increase in project performance by a factor of 0.558.

Furthermore, there is positive but insignificant effect of communication skills on project performance of RESSP ( $\beta = 0.208$ ; t-test = 211; p-value > 5%). This implies that a unit increase in communication skills would lead to an increase in project performance by a factor of 0.208. Finally, there is positive and significant effect of monitoring and control on project performance of RESSP ( $\beta = 0.428$ ; t-test = 1.301; p-value > 5%). This implies that a unit increase in monitoring and control would lead to an increase in project performance of RESSP by a factor of 0.428. From these presented regressions analysis results in which each component of project planning would contribute to project performance in RESSP by a big range, this evidences that all the variables were statistically significant in contributing to project performance of public-funded projects in Rwanda in particular RESSP.

#### **4.5 Verification of hypotheses**

The researcher concluded that there was a strong positive with a slightly significant effect among the study variables as shown by the regression analysis since they all indicated a positive influence on project planning in terms of human resource planning, financial resource planning, communication skills; and monitoring and control on the performance of public-funded projects. Therefore, the study's independent variable, project planning has a significant effect on the study's dependent variable, the performance of public-funded projects in Rwanda and RESSP in particular. This means that all the null hypotheses were rejected while the alternative ones were undoubtedly accepted.

#### **4.9 Findings from the interview held with the management team**

In addition to the 63 valid respondents of the questionnaire; 02 other respondents who included 01 RESSP project manager; and 01 REG manager Rwamagana District were included in the study. They were both involved in an interview and their responses were presented hereunder.

##### **Q1. Which project planning strategies did you set up regarding the management of the Rwanda Electricity Sector Strengthening Project (RESSP) in Rwamagana District?**

For all the electrification projects targets to be met and RESSP doesn't work in isolation. A combination of solutions that focus on the location, income and consumption level are required instead of the traditional connection to the grid that may not be suitable for all households.

The most cost-effective means for increasing access to electricity is through the use of off grid solutions that have wide range of technologies such as a basic solar lantern that can charge a phone or radio to a solar home system that can light an entire house and power appliances such as a television and Mini-grids that can provide higher levels of electricity to both households and small and medium businesses.

The other distinct programs in the strategy include; the provision of basic solar systems as a basic necessity to the less privileged population under Ubudehe I, the establishment of a risk mitigation facility that will support the private sector, mechanisms that will increase, the development of mini-

grids in suitable locations and the continued rollout of the Electricity Access Rollout Programme (EARP).

**Q1. Which project planning strategies did you set up regarding the management of the Rwanda Electricity Sector Strengthening Project (RESSP) in Rwamagana District?**

For all the electrification projects targets to be met and RESSP doesn't work in isolation. A combination of solutions that focus on the location, income and consumption level are required instead of the traditional connection to the grid that may not be suitable for all households.

The most cost effective means for increasing access to electricity is through the use of off grid solutions that have wide range of technologies such as a basic solar lantern that can charge a phone or radio to a solar home system that can light an entire house and power appliances such as a television and Mini-grids that can provide higher levels of electricity to both households and small and medium businesses.

The other distinct programs in the strategy include; the provision of basic solar systems as a basic necessity to the less privileged population under Ubudehe I, the establishment of a risk mitigation facility that will support the private sector, mechanisms that will increase, the development of mini-grids in suitable locations and the continued rollout of the Electricity Access Rollout Programme (EARP).

**Q2. On scale of 1 through 10, please rate the performance of RESSP in Rwamagana considering the following factors:**

The researcher combined the two separate findings from both managers and came out with the following findings averagely.

- a) **Timeliness** 7/10
- b) **Cost** 8/10
- c) **Quality** 8/10
- d) **Goals** 9/10

**Q3. How has Rwanda Electricity Sector Strengthening Project contributed to socio-economic standards of the beneficiaries of Rwamagana district?**

Electrification projects in Rwanda and in particular RESSP has the following contributions: lower bills of the final users, increased power accessibility, reduced maintenance costs, and ncreased operational accuracy.

**Q4 What challenges have you met before and during the implementation of the RESSP in the district? Please narrate how you have managed to go over the mentioned challenges.**

Delayed funding. The most significant and well-known obstacle to renewable energy adoption right now is funding, in particular, the costs associated with building and installing facilities like solar or wind farms.

Compensation costs. Rwanda, being a small nation, extending electrify to all rural areas requires one to compensate some people living along the planned route of the electric poles.

Power theft: Some clients tend to use non-billing methods in order to cheat the power. Other related challenges include incorrect billing.

Leakage in transmission and lack of investment in upgrading the transmission infrastructure

## **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of findings, the conclusions reached in the study and recommendations suggested to RESSP project and the REG management in general based on research findings about the study on project planning strategies and the performance of public funded projects in Rwanda. A part from highlighting recommendations for improvement; this chapter also outlines recommended topics for further research.

### **5.2 Summary of findings**

The general objective of this study was to assess the effect of project planning on performance of public funded projects in Rwanda. The research embraced both descriptive and correlational study designs. The study used questionnaires to collect primary data from employees of the RESSP based in Rwamagana district. The study based its findings on the data collected from 65 respondents of whom 63 filled the questionnaires while 02 were engaged in an interview. This represented a response rate of 100% of the total sampled number; which was an excellent indicator to draw conclusion from. The study considered performance of public funded projects as dependent variable and project planning strategies as its independent variable.

The study findings revealed that 84.1% (majority) of the respondents were males while only 15.9% were females. This was an indication that RESSP are incompetent when it comes to gender balance due to the fact that both males and females were less than 30% as the government policy of promoting both gender but most especially the females. It was revealed that 21 respondents represented by 33.3% of the total respondents have been working in similar projects. In addition, those that had worked for such projects from 7 to 8 and those above 9 years were represented by 19.0% and 14.3% respectively. Findings clearly elaborated that, it is clear that 14.3%, 68.2% and 17.5%, are for the respondents who had masters, bachelors and professional courses respectively. The study results established that this project engaged respondents are literates hence they are competent as regards to project's findings.

#### **5.2.1 Human resources planning and performance of RESSP in Rwamagana district**

For this question, the researcher intended to assess the appreciation level of respondents on human resource planning in Rwanda Electricity Sector Strengthening Project. As indicated in table 4.9, the most agreed was that project management hires human resources that have the required competences in running the RESSP and this was agreed at 71.4% and strongly agreed at 28.6%; the fact that project managers train and develop the skills needed amongst the workforce in the managing the RESSP was also agreed at 69.8% and strongly agreed at 30.1%. In addition, the fact that the Project personnel are motivated for increased productivity and effectiveness was strongly agreed at 57.1% and agreed at 42.9% of the respondents. Findings indicated that project personnel have the right technical and soft skills to optimize their function in the RESSP which was strongly agreed at 33.3% and agreed by 57.1% of the respondents. However, the same statement was disagreed by 14.3% of the respondents.

#### **5.2.2 Financial resources planning and performance of RESSP in Rwamagana district**

The study findings revealed that all presented statements about financial resource planning were disagreed on apart from only one whereas each of them was undecided about – an indication of some gaps in financial resource planning within in the project. The study results discovered that 42.1% of the respondents agreed that project management of RESSP supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process while 23.8% of the respondent

were undecided. In addition, 23.8% of the respondents disagreed on the fact that project staff effectively correctly records and reconciles all projects expenditures in some way that counts; and project leaders at RESSP eliminate programs which are longer in public needs from the coming years' budgets was agreed by 47.6% of the respondents. Finally, the statement which stated that project management provides adequate financial support amongst different involved departments was agreed by 38.1% and undecided on by 33.3% of the study respondents as funding.

### **5.2.3 Communication channels and performance of RESSP in Rwamagana district**

Research findings presented in table 4.11 revealed outstanding communication channels in general in this project as a result of project planning strategies. The practice which was most agreed by the respondents was that the management transmits information about goals, policies and procedures of the Rwanda Electricity Sector Strengthening Project by 81.0% of the respondents; whereas 57.1% of the respondents agreed that Project management encourages communication channels that improve workplace relations and the same statement was strongly agreed by 42.9% of the respondents. In addition, the fact that RESSP staff have open communication channels to reduce any misconstrued messages was agreed by 42.9% of the respondents and it was undecided on by 47.6% of the respondents. Finally, the practice which stated that there is a systematic and orderly flow of information in the project was agreed by 53.9% of the respondents though it was still disagreed by 31.7% of the respondents. Hence, the practices of communication schemes were witnessed and seem not smooth as they are supposed to be like in any performance wanting electrification project.

### **5.2.4 Monitoring and control and performance of RESSP in Rwamagana district**

Like presented, the researcher intended to assess the appreciation level of respondents on monitoring and control practices within in RESSP in Rwamagana district concerning the project's successful level. As indicated in table 4.12, among all the four statements provided only one was undecided; while the rest were all agreed and strongly agreed. Of the asked statements, the practice that stated that with the assistance of monitoring and control, most errors have been minimized in accounting and reporting was agreed by 85.7% of the respondents and strongly agreed at 14.3%; the fact that monitoring and control of the project gives an orderly, efficient scheme for providing accurate evidence and reports was agreed by 71.4% of the respondents and strongly agreed by 28.6% of the study's respondents. For the statement that management provides leadership and direction to staff regarding values, principles and policies was agreed by 66.7% and strongly agreed by 33.3%. Finally, 42.9% of the respondents were undecided on the statement that monitoring and control has been proven to have curbed down cases of embezzlement and fraud. However, 17.5% of the respondents disagreed about the same statement.

### **5.2.5 Relationship between project planning strategies and RESSP in Rwamagana district**

Finally, Spearman correlation coefficient also referred to as Spearman's rho was used to find out the relationship between project planning strategies and the performance of public funded projects. As it is revealed in table 4.14, the value of  $r_s=0.763$ . The P Values stood at 0.001 which less than alpha and this explains that there was a strong and positive correlation between planning strategies and the performance of RESSP in Rwamagana. Based on the regression equation and findings presented in table 4.17, it was revealed that holding human resource planning, financial resource planning, communication skills; and monitoring and control to a constant zero, project performance would be 1.702. Indeed, this constant called y-intercept is not realistic but it is a needed parameter in the model. As per the findings, there is positive and significant effect of human resource planning on project

performance of RESSP ( $\beta = 0.410$ ;  $t$  test = 0.303;  $p$ -value < 5%). This implies that a unit increase in human resource planning would lead to increase performance by a factor of 0.410. Likewise, there is positive and significant effect of financial resource planning on project performance of RESSP ( $\beta = 0.558$ ;  $t$  test = 157;  $p$ -value < 5%). This implies that a unit increase in financial resource planning would lead to increase in project performance by a factor of 0.558.

Furthermore, there is positive but insignificant effect of communication skills on project performance of RESSP ( $\beta = 0.208$ ;  $t$  test = 211;  $p$ -value > 5%). This implies that a unit increase in communication skills would lead to increase in project performance by a factor of 0.208. Finally, there is positive and significant effect of monitoring and control on project performance of RESSP ( $\beta = 0.428$ ;  $t$  test = 1.301;  $p$ -value > 5%). This implies that a unit increase in monitoring and control would lead to increase in project performance of RESSP by a factor of 0.428. From these presented regressions analysis results in which each component of project planning would contribute to project performance in RESSP by a big range, this evidences that all the variables were statistically significant in contributing to project performance of public funded projects in Rwanda in particular RESSP.

### **5.3 Conclusion**

This research's interest was to analyze the effect of project planning on the performance of public funded projects in Rwanda. The findings made a picture that project planning strategies in terms of human resource planning, financial resource planning, communication channels; and monitoring and control are well reinforced by the management of RESSP and the entire staff involved in the electrification projects. From the Spearman test therefore, the researcher learnt that project planning strategies in terms of human resource planning, financial resource planning, communication skills; and monitoring and control have strong relationship on the performance trend of public funded projects in Rwanda and in particular RESSP in Rwamagana district. In order to ensure performance of the projects in Rwamagana district, there must be effective project planning strategies. However, concerning timely completion of the projects, 19.0% of the respondents disagreed about the issue. In addition, 14.3% of the respondents disagreed on the statement that RESSP staffs take part in costs decision making processes. When enquired from some of the project managers, they asserted that there are a number of other factors that could lead to untimely completion of the projects rather than project planning strategies such as inadequate funding and delayed disbursement of the funds.

Finally, this study discovered some loopholes in project planning and management processes besides the ones that were highlighted by Office of Auditor General and Public Accounts Committee reports such as unethical behaviors of the public servants. This study learnt that despite project planning strategies in place, still some cases of incorrect records and reconciliation; and embezzlement and fraud continue to exist. Lastly, it was learnt that the projects are also affected by unsystematic and disorderly flow of information in the project within different departments which could affect the performance of the projects. Thus, this requires strong supervisory team in place against such unethical behaviors of the staff in public funded projects.

### **5.4 Recommendations**

Referring to the study results, the following are the suggestions and recommendations:

Concerning the issue of unethical behaviors such as fraud and embezzlement, the top management should put in place strong measures to punish the culprits. This could be done through empowerment of the human resources.



Regarding the lack of proper internal control processes in, the top management should look into it and be made a culture by the responsible personnel at the district.

As regards to untimely deliveries, officials who delay project activities and processes should also be handled individually so as other staff could avoid doing similar mistakes in future.

### **5.5 Suggestions for further study**

Due to insufficient resources and time, the researcher could not cover everything concerning the topic of the study. Therefore, the research is needed on how well measurements taken in response to prototypes to predict actual role of the project planning in the workplace. The study theories provided a foundation for further research on the role the personnel. The researcher suggests a study on: "Role of Local Government on the Performance of Public Funded Projects in Rwanda."

## **REFERENCES**

- Agbemabiese K. (2018). *Planning and Integrated Finance Systems*. Libras: Horizon prints Publishers
- Alexandra J. (2020). *Public Funded Projects Performance Measurement against Planning Management*, New York: Pinkwell publishers.
- Barahona, L and Elizondo, M. (2012). *Public Projects Analysis and Integrated Financial Management*, New Delhi: MC grow. Hill publishing company.
- Beuningen, Van J. & H. Schmeets (2013) *Developing a Social Capital Index, Social Indicators Research*, 2<sup>nd</sup> edition, New Dheli: Prentice hall.
- Borchgrevilko, L & Hambarg K (2012). *Dealing with the Planning Business Investor*, New York: Ernst & Young LLP
- Caird I. (2018). *Planning and Electronic project management systems, designing quality performance services for the public use*. Trinidad: Dell
- Cooper, H and Schindler, N. (2013). *Research Methodologies*, 2<sup>nd</sup> edition. New York: Pinkwell publishers.
- Daft M. Choi M, Keilla, D and Fish, K. (2017). *Internal Audit's Role in the Planning Management Era*. New York: Ernst & Young LLP.
- Durand, K. (2012). *Public Integrated Financial Information*. 3<sup>rd</sup> edition, Kampala: Business Publishing Group.
- Egbide, K. (2015). *Public Finance Decisions and the Service Delivery*, 3<sup>rd</sup> edition, Kampala: Business Publishing Group.
- Elizondo U, (2012). *The Growing Tension between Expertise and Legislation on Planning Fund*, Natorp Boulevard: Erin Joyner Publications House.
- Gibson K. (2012), *Impact of ICT on corporate performance productivity and employment dynamics*, Berlin: Brussels
- Gordon K. (2021). *Integrated Proejcts Management Information and its Role in Authorities: New Zealand Evidence*. New York: Palgrave Publishers Hall
- Graham, T and Marshal I. (2015). *Research Methodologies*, 3<sup>rd</sup> edition. New York: Pinkwell publishers.
- Gramling K. (2013). *Electronic Project Management Systems, Designing Quality Performance Services for the Public Use*. Trinidad: Dell
- Grinnell, V and William, C. (2016). *Methodes de recherché en Sciences Sociales*, 10<sup>e</sup> Edition, Paris: Lourousse.

- Groves, K, Robert, P. Samson L (2013). *The Research Methodologies*, Harare: Deluxe Printing Group.
- Hajizadeh G. (2017), *Modern Research Methods in*, 2<sup>th</sup> edition, MC grow-hill, Irwin
- Hobday J. (2018). *Internal Pensioning, History, Evolution and Prospects*. 9<sup>th</sup> edition, New York: The Riot
- Howard I, Richeles, K, Wolfgang, H. (2015). *Integrated Finance Systems*. Libras: Horizon prints Publishers.
- Ibrahim, M and Dauda, T. (2014). *Public sector performance terms in relation to IT*, 4th edition, Dictionary le petit Robert.
- Khan, W. (2013). *Performance Management in an Organization*. Daryaganj. New Delhi: Sultan Chand & Sons
- Lee, M. (2017). *A Question of Values of Integrated Financial Management*. 2<sup>nd</sup> edition, London: British library.
- Mayers, M. (2014). *Organizational performance against Integrated Finance Management*. 2<sup>nd</sup> edition, 32:4. New Delhi: Vikas Publishing House.
- Ministry of Infrastructure (2022). *Monthly Report on Rwanda Electricity Sector Strengthening Project (RESSP)*; Retrieved from: <http://www.statistics.gov.rw/publication/integrated-business-enterprise-survey-ibes-205>
- Ministry of Finance and Economic Planning. (2019). *The Integrated Business Enterprise Survey in Rwanda 2015-2019*. Retrieved: <http://www.statistics.gov.rw/publication/integrated-business-enterprise-survey-ibes-2019>
- Muga, H. (2012). *Houston Chronicle: Contingency Theory Pension*. 3<sup>rd</sup> Edition, Libras: Horizon prints
- Mugenda O, and Mugenda L. (2013), *Modern Research Methods in*, 2<sup>th</sup> edition, MC grow-hill, Irwin
- Muhumuza, K. (2014). *Public Integrated Planning and Financial Information*. 3<sup>rd</sup> edition, Kampala: Business Publishing Group.
- Muigai, G. (2012). *Electronic Management in Organizations*. 8th edition, New York : Indica center
- Munir, J. (2014). *The Effectiveness of Planning Australian Review*, Johannes Burg: Richlies Horse Publishers
- Naale E, Meyers, M and Tucsonan, H. (2016). *Research Process and Methods*. Birmingham: Millan Publishers Ltd
- National Bank of Rwanda. (2017). *2017 Annual report of the National Bank of Rwanda*, Retrieved [https://www from. bnr.rw /fileadmin/uploaded/BNR\\_Annual\\_Report\\_2016-2017.d.pdf](https://www.bnr.rw/fileadmin/uploaded/BNR_Annual_Report_2016-2017.d.pdf)
- Office of Auditor General (2021). *2021 Annual report of the Office of Auditor General*, Retrieved [https://www from. oag.rw /fileadmin/uploaded/OAG\\_Annual\\_Report\\_2020-2021.d.pdf](https://www from. oag.rw /fileadmin/uploaded/OAG_Annual_Report_2020-2021.d.pdf)
- Pandey, D. (2015). *Renewed focus on Organizational performance*. Performance theory, London: Oxford University Press.
- Public Accounts Committee (2021). *The Annual Parliamentary Public Accounts Committee Report on Public Funded Projects in Rwanda 2021*. Retrieved: <http://www.parliament.gov.rw/publication/integrated-projects-enterprise-survey-ibes-2021>
- Paxton, J. (2012). *Electronic systems and performance development*. Sunderland: MCC records.

- Peurseem, D. (2016). *Planning Decisions and the Technology in Public institutions*, 2<sup>nd</sup> Edition, Kampala: Business Publishing Group.
- Pretty, M. (2015). *Organizational Planning performance against Integrated Finance Management*. 2<sup>nd</sup> edition, 32:4. New Delhi: Vikas Publishing House.
- Reed J. (2018). *Performance Management in Public Institutions*. Daryaganj. New Delhi: Sultan Chand & Sons
- Rwanda Energy Group (2021). *2016-2021 Rural Electrification Development Program*, Retrieved from <http://web.reg.org/evaluation/documents/annual-report/2022/ARE-2021.pdf>
- Rwanda Energy Group (2022). *Monthly report for January 2022 on Rural Electrification Development Program*, Retrieved from <http://web.reg.org/evaluation/documents/bi-annual-report/2022/ARE-2012.pdf>
- Riley H. (2012). *Effects of Business Process Outsourcing on Pension Performance in EU*, Kansas: Dreamland Publishers
- Rutherford M. (2013). *Performance and Projects Management Public Institutions*. Nairobi: ACK Uzima Publishing House
- Rwanda Electricity Sector Strengthening Project (2016) <https://projects.worldbank.org/en/projects-operations/project-detail/P150634>
- Schindler, K. Kushyine, P and Furairah, I. (2013). *The Research Methodologies*, New York: Deluxe Printing Group.
- Schmitt, F & Jankowitsch H. (2015). *Best Practices in electronic public finance management*. 1<sup>st</sup> edition, London: Routledge
- Sekaran Y (2013). *Effective Planning Benefits and Problems Associated with Independent Public Projects*. Quebec: CPA Journal publishers.
- Ward, D. (2021). *Renewed Planning focus on Organizational performance*. Performance theory, London: Oxford University Press.
- Wolfgang, H. (2014). *Understanding IT application in project management*. A survey of Bangladesh and Pakistan focus. Libras: Horizon prints.
- World Bank (2015). *2015 World Bank report on the economy of Rwanda*, Retrieved from <http://www.worldbank.org/en/about/annual-report-2015.pdf>

## **Appendix 1: Questionnaire addressed to the electrification project staff**

### **A QUESTIONNAIRE ADDRESSED TO ELECTRIFICATION STAFF**

Dear respondent,

My name is **UMUTONI CLAUDETTE**, a student at University of Kigali (UOK) at Kigali Campus finalizing my Master of Business Administration in Project Management of the University of Kigali. As part of my requirement for the Degree award, I have to present a dissertation. The study is all about, **“Project Planning and Performance of Public Funded Projects in Rwanda; a Case of Rwanda Sector Strengthening Project, Rwamagana District.**

I am currently on the field part of collecting information for this dissertation and you are kindly requested to respond to the various questions in the questionnaire attached. Any of your responses will be treated with great confidentiality. I would be grateful for your cooperation in this regard.

Thank you.

**INSTRUCTIONS**

- ❖ To answer, it is enough to tick in the corresponding box or corresponding rating scales;
- ❖ Where you are going to formulate the answer in your own words, please use the reserved space.

**Levels of agreement or disagreement**

SA: Strongly Agree A: Agree N: Neutral D: Disagree SD: Strongly Disagree

**Likert five point scale**

Weight scale	Interpretation	Description
5	Strongly agree	Agreeing without doubt
4	Agree	Agreeing with some doubt
3	Neutral	Don't know
2	Disagree	Disagreeing with some doubt
1	Strongly disagree	Disagreeing without doubt

**SECTION A : Identification of respondents**

**1. Age of respondents**

- 20-30
- 31-40
- 41-50
- Above 51

**2. Gender**

- Male
- Female

**3. Level of education**

- Degree
- Secondary
- Primary
- Others

**4. Experience**

- Less than 1 year
- 1 to 2 years
- 2 to 3 years
- 3 to 4 years
- 5 years and above

**SECTION B: Questions on human resources planning**

**To ascertain the effect of human resources planning on the performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district**

In the statements below, please indicate the extent to which you agree with the following statements regarding the effect of human resources planning on the performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district

<b>Human resources planning</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Project management hires human resources that have the required competences in running the RESSP					
Project personnel have the right technical and soft skills to optimize their function in the RESSP					
Project managers train and develop the skills needed amongst the workforce in the managing the RESSP					
Project personnel are motivated for increased productivity and effectiveness					

**SECTION C: Questions on financial resources planning**

**To assess the influence of financial resources planning on the performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district.**

In the statements below, please indicate the extent to which you agree with the following statements regarding the effect of financial resources planning on the performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district

<b>Financial resources planning</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Project management supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process					
Project management provides adequate financial support amongst different involved departments					
Project leaders eliminates programs which are longer in public needs from the coming years' budgets					
Project staff effectively correctly records and reconciles all projects expenditures in some way that counts					

**SECTION D : Questions on communication schemes**

**To analyse the effect of communication schemes on the performance of performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district**

In the statements below, please indicate the extent to which you agree with the following statements regarding the effect of communication schemes on the performance of performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district

<b>Communication schemes</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Project staff have open communication channels to reduce any misconstrued messages					
There is a systematic and orderly flow of information in the project					
Management has transmits information about goals, policies and procedures of the Rwanda Electricity Sector Strengthening Project					
Project management encourages communication channels that improve workplace relations					

**SECTION E: Questions on monitoring and control**

**To explore the effect of monitoring and control on the performance of performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district**

In the statements below, please indicate the extent to which you agree with the following statements regarding the monitoring and control on the performance of performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district

Monitoring and control	5	4	3	2	1
Monitoring and control of the project gives an orderly, efficient scheme for providing accurate evidence and reports					
Management provides leadership and direction to staff regarding values, principles and policies					
With the assistance of monitoring and control, most errors have been minimized in accounting and reporting					
Monitoring and control have been proven to have curbed down cases of embezzlement and fraud.					

### SECTION F: Questions on Performance

In the statements below, please indicate the extent to which you agree with the following statements regarding the level of performance of Rwanda Electricity Sector Strengthening Project in Rwamagana district

Performance	5	4	3	2	1
RESSP projects ensure elimination of long processes					
No bureaucracy in collecting required reports information					
RESSP projects reports are always controlled timely					
RESSP projects ensure rejection of unclear strategies					

**Thanks for your time!**

### Appendix 2: Interview guide with the management team

#### AN INTERVIEW GUIDE WITH THE MANAGEMENT TEAM

**Q.1** Which project planning strategies did you set up regarding the management of the Rwanda Electricity Sector Strengthening Project (RESSP) in Rwamagana District?

**Q.2** On scale of 1 through 10, please rate the performance of RESSP in Rwamagana considering the following factors:

- Timeliness
- Cost
- Quality
- Goals

**Q.3** How has Rwanda Electricity Sector Strengthening Project contributed to socio-economic standards of the beneficiaries of Rwamagana district?

**Q.4** What challenges have you met before and during the implementation of the RESSP in the district? Please narrate how you have managed to go over the mentioned challenges.

#### APPENDIX 5 : DATA COLLECTION AUTHORIZATION LETTER

**Thanks for cooperation**

#### Appendix 3: Study budget

S/N	Activities	Amount (Rwf)
1	Data collection	180,000
2	Internet 4G network	110,000
3	Communication charges	50,000
4	Transport	100,000

5	Photocopy, typing and binding	130,000
6.	Research project fees	350,000
	<b>Total</b>	<b>920,000</b>

**Appendix 4: Work plan**

S/N	Activity/task name	Duration (in days)	Starting date	Completion date
	<b>Phase I</b>			
1	Request and getting a supervisor and Submit the topics	3 days	17/05/2021	20/05/2021
2	Dedication and acknowledgement	1 day	25/05/2021	25/05/2021
3	Chapter one-Introduction of the study	10 days	28/05/2021	08/06/2021
4	Chapter two-Literature Review	15 days	10/07/2021	25/07/2021
5	Chapter three-Research Methodology	10 days	01/08/2021	10/8/2021
6	Correction of the above three chapters			
7	Submission of the Research proposal			
8	Defending Research proposal			
9	Correction of the proposal			
10	<b>Total No of days on Research proposal</b>			