













deliverables and milestones for each task. Umulisa *et al.* (2018) studied Rwanda's Agaseke Project and found that project resource planning practices such as budgeting, contingency planning, budget management, and cash flow analysis improve project performance.

## **2.3. Conceptual Review**

### **2.3.1. Project cost planning**

Project cost planning entails cost estimation, budgeting, and cost control (Mburu, 2017). Cost estimation refers to the process of assigning value (Yanget *al.*, 2017). The purpose of predicting the costs is to forecast the quantity, cost, and pricing of the project's resources. Work Breakdown Structure (WBS) and Cost Breakdown Structure (CBS) are equivalent methods for estimating the cost of a project (Yanget *al.*, 2017). Realistic cost estimates are based on project scope, work class structure, and project plans, and the cost of each task should be based on individual tasks (Heravi *et al.*, 2018). Cost budgeting in a project is the projected spending as indicated by the budget, and it serves as a baseline against which the actual expenditure and the anticipated final cost of the job may be determined (Yanget *al.*, 2017). Heravi *et al.* (2018) indicated that cost budgeting is the process of adding up the estimated costs of a person's activities or job packages. Mburu (2017) indicated that cost control entails examining the processes employed in discovering discrepancies between actual costs and budgeted expenditures.

### **2.3.2. Project risk planning**

Project risk planning is the process of systematically identifying, analyzing, and responding to potential threats to the success of a project. Takim *et al.* (2019) agreed that a good way to reduce risk is to replace volatile and unpredictable events with ones that are more predictable or controlled. Risk analysis enables the proper identification and management of the project's uncertainties since, when a risk is discovered, it is critical that a response strategy be devised (Kabutiei *et al.*, 2022). Risk identification, the act of detecting and recording possible dangers, is critical to the accomplishment of any project. Risk identification should be fostered by everyone engaged in a project (Kinyua, 2018). Risk rating analysis is utilized in order to prioritize risks that might have a major impact on the competing project demands (Kabutiei *et al.*, 2022).

### **2.3.3. CDP performance**

Project performance is the level of success of project outcomes. Takim *et al.* (2019) showed that project performance is measured by the amount spent, the time taken to achieve the results, the quality of the results, and the level at which the needs of the beneficiaries are

met. Project outcomes are evaluated in terms of time, money, and quality while evaluating CDPs (Stevens, 2017). Project performance is assessed by comparing actual and expected outcomes based on factors including budget, timetable, integrity, efficiency, and safety. Schedule Variance (SV) and Cost Variance (CV) are measured to inform a project manager whether the project has been on schedule and within budget (Takim *et al.*, 2019). For SV, the work done is measured against the work planned. Projects that have SV values larger than or equal to zero are on time, whereas those that have SV values less than or equal to zero are behind schedule (Takim *et al.*, 2019, Mutua, 2017). The difference between planned and actual work costs is shown in the CV, allowing to see if the project's budget has been met or exceeded (Takim *et al.*, 2019; Mutua, 2017).

## 2.4. Conceptual framework

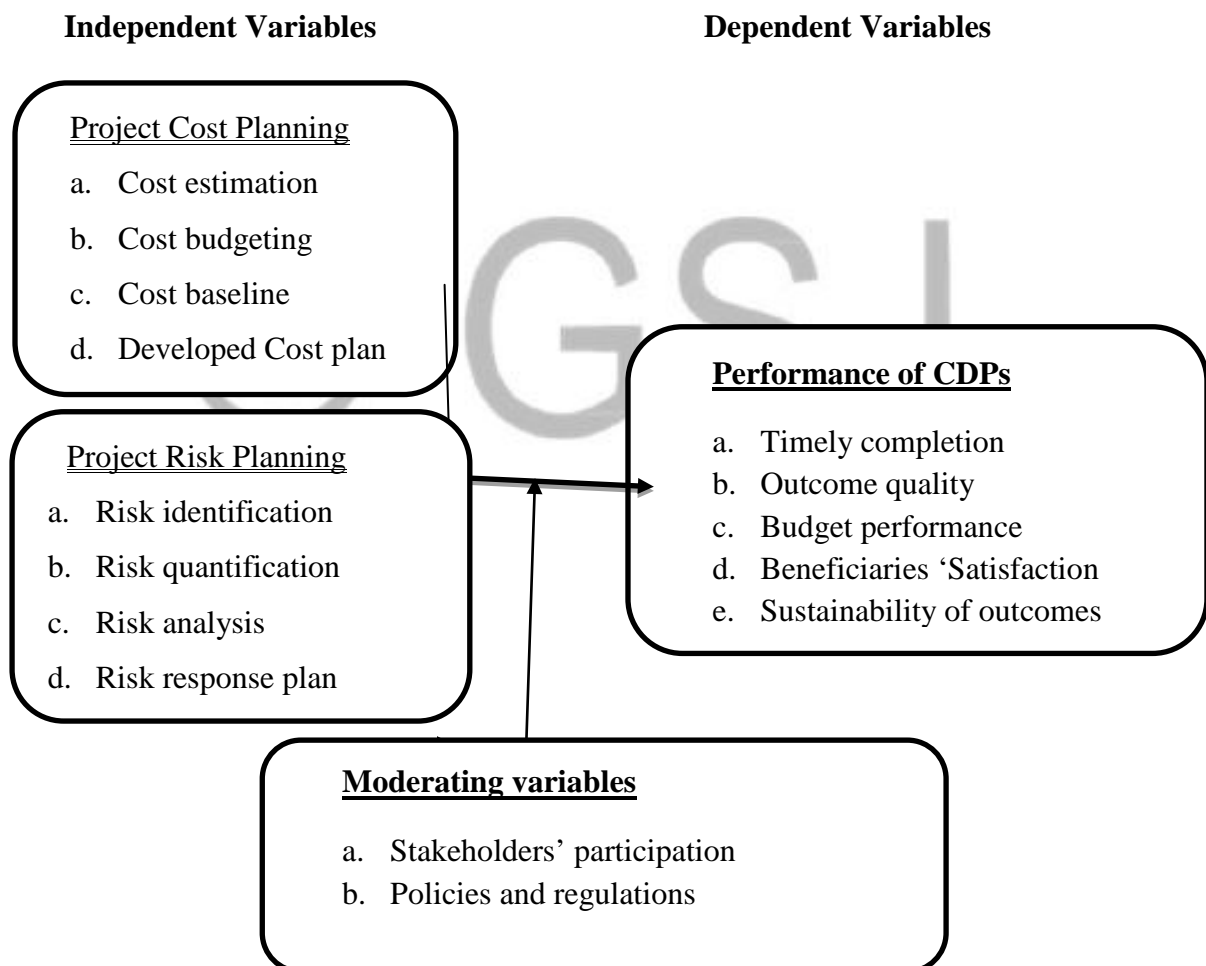




Figure above illustrates the interdependence and relationship between project planning practices and the performance of the project as documented in the literature, and the framework was adopted and modified by Ondiek (2018). From Figure 1, it is illustrated that the project planning practices are conceptualized as independent variables and indicated by selected practices such as project cost planning, scope and risk planning, and the moderating influence of the stakeholders' participation in the planning process. CDP performance, on the other hand, was conceptualized as a dependent variable and is measured by the timely completion of projects, the quality of the outcomes, budget performance, and beneficiary and other stakeholder satisfaction.

### **3. RESEARCH METHODOLOGY**

#### **3.1. Research design**

The study employed a descriptive and co relational research design to achieve its objectives. A descriptive research design was used in this study since it gave the researcher precise information on the phenomena under study without changing its status and enabled the researcher to find answers to critical questions such as what, how, when, and where. On the other hand, a co relational research design was adopted to evaluate the correlations between the variables under consideration.

#### **3.2. Research Philosophy**

The study was based on both primary and secondary data to achieve its objectives. Gill *et al.* (2018) indicated that data from primary sources is that which has been collected because of the accuracy and precision they provide in answering the research questions. Secondary data, according to Ngechu (2018), is information that has undergone one degree of analysis before being employed in the current study. Both first-hand and second-hand sources of information were used to make sure that the conclusions were correct and reliable.

#### **3.3. Target population**

Target populations included a total of 2,912 individuals of VUP beneficiaries, VUP employees at cells, sector level, and district level as depicted in Table below.

#### **Table 1: Target population and Sample size distribution**

<b>Category of respondents</b>	<b>Total number</b>	<b>Sample size</b>
Beneficiaries of VUP	2,829	37
SEDOs	66	66
VUP Staff at sector level	16	16
VUP Staff at District level	1	1
<b>Total</b>	<b>2,912</b>	<b>120</b>

*Source: Researchers' own design, 2022*

### **3.4. Sampling and sampling techniques**

The sample size was determined by the Morgan Formula for sample size determination, and the resulting sample size was 120 respondents. The sample was selected using stratified random sampling and purposive sampling techniques. For the stratified sampling technique, the total population was separated into four distinct strata: VUP beneficiaries; Social and Economic Development Officers (SEDO) of cells; VUP managers at the sector level; and VUP managers at the district level. Moreover, simple random sampling was used to select respondents from the VUP beneficiaries, while purposive sampling was used to purposively select VUP managers at the district level.

### **3.5. Data collection instruments and procedure**

Primary data were gathered using a combination of structured questionnaires and interviews, while secondary data were gathered by reviewing documentation. A structured questionnaire containing close-ended questions based on the five-point Likert scale was administered to respondents. Before the questionnaire was administered, a pilot test was conducted on 12 respondents. Key informant interviews were used to collect data from members of the VUP committee and district steering committee to supplement the information gathered through the questionnaires. An interview guide was used as a suitable tool for collecting detailed qualitative information from the staff and the implementors that was not captured in the questionnaire.

### **3.6. Data analysis and presentation techniques**

The data analysis procedure included both quantitative and qualitative methods. Statistics like frequency tables and percentages, the mean and standard deviations, and

inferential statistics were used to analyze quantitative data and presented using tables. Multiple regression analysis was also used to determine the relationship between the variables in the study. Qualitative data were analyzed using thematic content analysis and presented in prose.

### 3.7. Ethical considerations

Prior to data collection, a recommendation letter from the University of Kigali was obtained and addressed to the administration of Musanze district, which offered the authorization letter to undertake the data collection. The letter was presented to the study participants for their assurance. Moreover, the researcher clearly explained the purpose of the research and assured the respondents that the information collected would be used only for academic purposes. Moreover, participants were assured that the information would be treated with the utmost confidentiality and privacy, while their identity was kept anonymous by assigning codes to the respondents instead of their names. Finally, the research was non-coercive, and the participants were assured of free withdrawal and their right to withhold their response if they did not feel comfortable.

## 4. FINDINGS

### Descriptive analysis

The study aimed at determining the effect of project cost planning on the performance of CDPs at VUP in Musanze district. The table 2 below presents the findings.

**Table 2: Descriptive statistics on project cost planning practices**

Statements	Mean	SD
Budget for the project was properly determined and allocated to activities	4.01	.357
Budgeted funds were enough to complete the entire projects on time	3.88	.217
Books of accounts of the project were accurately maintained over time	3.78	.124
Project costs were accurately estimated during the planning phase	2.98	.124
Project funds are disbursed on time to undertake tasks	2.94	.234
The costs of the project were maintained in all project phases	2.99	1.212

**Source: Primary data, 2022**

Table 2 demonstrates that the majority of respondents (Mean = 4.01, SD =.357) agreed that the project budget was properly decided and allocated to activities, and that the

budgeted funds were sufficient to complete all projects on time (Mean = 3.98, SD =.124). The majority of study participants also agreed that the project's books of accounts were accurately maintained over time (Mean = 3.78, SD =.124). However, the majority of the respondents (Mean=2.98, SD=.124) failed to agree to the statements that the project costs were well and accurately estimated during the planning phase and on whether the project funds were disbursed on time to undertake tasks (Mean=2.94, SD=.234). Finally, most of the respondents (Mean = 2.99, SD = 1.21) disagreed with the statement that the costs of the project were maintained in all project phases.

Findings indicate that during the planning phase of the CDPs in Musanze district, there were proper projections of expenses and allocation of the overall cost estimates to individual work items to establish a baseline for measuring the success of the project. The budgeted funds were deemed to be enough to complete the VUP projects such as Direct Support, public works, and the financial services, while the books of accounts were maintained accurately for verification and monitoring purposes. The current findings are supported EDPRS (2018) reports which showed that one of the greatest issues for direct support has been recipient payment delays due to time and expense required to open beneficiary bank accounts, delays in financial disbursement and reporting requirements before the subsequent disbursements are made. Mukakibibi (2018) also showed that delays were caused by a lack of proper planning to overcome some of the challenges as well as a lack of prior establishment of the reporting process for carrying out these projects.

**Table 3: Descriptive statistics on project risk planning practices**

Statements	Mean	SD
VUP projects have established risk identification protocols	3.78	.214
VUP has established quantitative and qualitative tools for risk identifications	3.77	.124
Every project has risk communication plan for risks monitoring and controls	2.97	.327
There is established risk response plans to reduce their probability of and impacts	2.88	.247
There were minimal risks due to effective risk management plan	2.89	1.317

**Source: Primary data, 2022**

Table 3 shows that most of the respondents (Mean = 3.78, SD =.214) agreed that VUP projects have established risk identification protocols and have established quantitative and qualitative tools for risk identification (Mean = 3.77, SD =.124). This implies that a risk management plan exists, which should enable VUP managers to identify threats in the project

and ensure that they are prepared to respond to unexpected events when the plan was created ahead of time. However, most of the respondents failed to agree with the statements that every project has a risk communication plan for risk monitoring and controls (Mean = 2.97, SD =.327) and whether there are established risk response plans to reduce their probability of and impacts (Mean = 2.88, SD =.247). Finally, the majority of the respondents (Mean = 2.89, SD = 1.317) disagreed with the statement that there were minimal risks due to an effective risk management plan.

Current findings imply that the VUP projects lack proper risk communication mechanisms and an adequate risk response plan. Therefore, many risks have been noticed during every phase of these projects. Poor resource management following graduation of beneficiaries was also identified as a risk in the implementation of the VUP projects because many direct support recipients are unable to manage, utilize, or preserve the revenue-generating assets they are given, which frequently assets may not help and may result in resource loss. Findings agree with the results of Mukakibibi (2018) who showed that VUP projects lack a functional complaints and feedback system developed for the project to guarantee transparency and increase responsibility to recipients and the district that controls the finances of the programs.

**Inferential analysis**

To estimate the statistical influence of each study variables on the dependent variable, Pearson moment correlation coefficients were used to establish the individual influence of the independent variables on the dependent variable.

**Table4. Correlation Analysis Matrix**

<b>Model variables</b>		<b>Performance</b>	<b>Cost planning</b>	<b>Risk planning</b>
<b>Performance</b>	r	1		
	Sig. (2)			
	n	120		
<b>Cost planning</b>	r	.746*	1	
	Sig. (2-)	.000		
	n	120	120	
<b>Risk planning</b>	r	.521	.304**	1

Sig. (2-)	.02	.027	
n	120	120	120

**Source: Primary data, 2022**

Table 4 indicates that there was a positive and statistically significant relationship between the performance of CDPs and project cost planning ( $r = .746$ ,  $p\text{-value} = .05$ ) and project risk planning ( $r = .521$ ,  $p\text{-value} = .05$ ). This implies that the performance of CDPs at VUP in Musanze district is significantly influenced by project cost and project risk planning. This also suggests that accurate cost and budget estimates and tracking of resource efficiency for the various project activities were likely improve project performance, both in terms of time and money, as well as the quality of deliverables.

**Regression analysis**

To identify and ascertain the relationship between study variables, multiple regression analysis was utilized. The results are shown in the tables in the sentences that follow.

**Table 5. Regression Model Summary**

Model	R	R Square	Adjusted R Square	Sign'.
1	.522	.428	.422	.000

**a. Predictor (s):** (Constant), cost planning, risk planning

**b. Dependent variable:** Performance of CDPs

Table 5 demonstrates that the coefficient of correlation (R) was .522. This indicates that there was a moderate and positive relationship between the performance of CDPs and the project planning practices taken into account in this study, *i.e.*, cost planning and project risk planning practices. This shows that proper planning of every CDP will eventually increase its chance of success in meeting its goals within the stated budget and time while also meeting the beneficiaries' expectations. Table 4 also shows that the coefficient of determination ( $R^2$ ) was .428. This illustrates that the selected project planning practices account for 42.8% of the variation in the performance of the CDPs under consideration. This also implies that 51.2% of the variations in the performance of CDPs at VUP in Musanze District are explained by other variables not included in this study. The findings are in line with the results of Ondiek (2018) that there is a very strong relationship between project planning and project performance.

**Table 6. Regression Model Coefficients**

Model	Unstandardized		Standardized	t.	Sig.
	Coefficients		Coefficients		
	B	Std Error	Beta		
Constant	1.307	.028	-	1.262	.000
Project Cost Planning	.782	.023	.231	2.145	.002
Project Risk Planning	.627	.258	.368	2.325	.002

**a. Predictor (s):** (Constant), cost planning, risk planning

**b. Dependent variable:** Performance of CDPs

Based on the unstandardized coefficients of the model depicted in Table 5, the regression equation becomes:

$$Y = 1.307 + .782X_1 + .627X_3 + e$$

Table 6 demonstrated that taking other variables at a constant at zero, the performance of CDPs would be 1.307. Besides, the coefficient for cost planning,  $\beta_1 = .0782$ , indicates that a unit increase in project cost planning will lead to a .782 increase in the performance of CDPs, other variables remaining constant at zero. The coefficient for project risk planning is  $\beta_2 = .627$ , indicating that a unit increase in project risk planning would lead to a .627 increase in the performance of CDPs, with other variables remaining constant at zero. The results concurred with those of Takim *et al.* (2019) who identified poor planning as one of the major causes of project failure and a prerequisite for the performance and advancement of CDPs. The findings also coincide with Chan *et al.* (2017) who noted that the project planning phase requires substantial time, money, and human resources, as well as effective scope identification. This method has been found to improve project performance.

**Table7. Analysis of variance**

	Sum of Squares	DF	Mean Square	F	Sig.
Regression	12.897	4	3.2224	51.477	.000
Residual	4.197	116	.063		
<b>Total</b>	<b>17.094</b>	<b>120</b>			

**a. Predictor (s):** (Constant), cost planning, risk planning

**b. Dependent variable:** Performance of CDPs

Table 7 shows that the F-value is 51.477, and the p-value is.000. This means the provided regression model is statistically significant and well fitted. This revealed that the research factors chosen (cost, scope, risk planning, and stakeholders' participation) are joint predictors of the dependent variable (performance of CDPs), and that the data parameters are excellent for drawing conclusions about the study variables.

## **5. Conclusion**

Based on the study findings, it was concluded that proper planning of every project is important to ensure eventual increase its chance of success in meeting its goals within the stated budget and time while also meeting the beneficiaries' expectations. Effective cost planning and risk planning ensures that the funds are timely available for the project, minimizes risks and cost overruns and ensure the timely completion of the projects. Moreover, accurate cost planning, cost estimation and budgeting are crucial for completing projects on schedule, within the allocated budget, and in accordance with stakeholders' expectations. Therefore, the success of the project execution phase depends on getting the money to the project on time and keeping track of the project's costs throughout its life cycle.

Effective risk management is essential because it enables VUP managers to recognize dangers to the project and get ready to react to unforeseen circumstances. Having a solid risk identification system and to establish ahead of time the procedures to be used in risk mitigation ensure the success of the project and ensure that risks can be identified and mitigated on time.

It is therefore crucial to allocate the overall cost estimate to individual work items in a timely and effective manner. Furthermore, the cost estimate should be based on the scope, the work breakdown structure, and be linked to the project plan. Moreover, implementers should establish proper risk communication mechanisms and an adequate risk response plan to ensure that the probable risks facing the execution of the VUP projects are mitigated on time. Further research should be undertaken to demonstrate the contribution of other factors in the performance of Community Development Projects in Rwanda.

## **6. Suggestion for further studies**

The findings of this study demonstrated that the project planning practices contribute 52.2% to the performance of the project at VUP in Musanze district. Further research should be undertaken to demonstrate the contribution of other factors in the performance of these projects.



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