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ASSESSING THE EFFECT OF IMPLEMENTATION PRACTICES ON POULTRY PROJECT PERFORMANCE: EVIDENCE FROM UZIMA CHICKEN LTD, RWANDA

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Abstract

The general objective of study was assessing the effect of project implementation practices on performance of poultry projects in Kicukiro District, Rwanda.Evidence from Uzima Chicken Ltd, rwanda A Case study of Uzima Chicken Ltd, This study investigates how implementation practices influence the success of poultry projects in Rwanda, addressing key issues such as low productivity, disease outbreaks, and sustainability challenges that hinder industry growth.the study used descriptive and correlational design. The study population target was 179 employes where the sample size was undertaken to be same as 179 respondents.The study used primary data in data collection with questionnaire instrument and the data was analysed by SPSS tool. The findings revealed that project Implementation planning, project resource scheduling , and communication management strategies had a notable impact on project performance.The overall mean scores that project Implementation planning, project resource scheduling,and communication management strategies were 4.88,4.53 and 4.76 respectively,while the overall mean for project performance was 4.63 and it showed a positive performance tendency.The Pearson correlation results showed significant relationships between the independent variables and project performance, with correlation coefficients of 0.672 for project Implementation planning, 0.808 for project resource scheduling, and 0.799 for communication management strategies.However, regression analysis indicated that project Implementation planning (p = 0.394) was not statistically significant project resource scheduling(p = 0.000) and communication management strategies (p = 0.000) all were statistically significant predictors of project performance. Overall, the inferential results demonstrated that 78.5% of the variation in project performance could be explained by Project implementation practices, while the remaining 21.5% was attributed to other external factors not covered in the study. With the recommendation, MINAGRI should consider revising its regulations to provide updated and practical guidelines that support agricultural companies in refining their project implementation practices. By developing a strategic framework that integrates planning, resource allocation, and communication, Uzima Chicken Ltd. can foster an environment that promotes enhanced project performance and successful outcomes in the poultry industry. These directives were not only streamline project operations but also facilitate better performance monitoring and evaluation, ultimately contributing to the overall sustainability and growth of the agricultural sector in the Kicukiro District

Keywords:*Project implementation practices ,project Implementation planning, project resource scheduling , and communication management strategies*

1. Introduction

Poultry is recognized as a valuable source of animal-based protein due to its relatively low production costs and smaller spatial requirements compared to other meat animals. In large-scale commercial operations, the estimated cost per broiler chicken within a single flock cycle is approximately $2.19 USD. A broiler is a chicken raised specifically for meat production. However, there are certain disadvantages associated with poultry farming, notably the high initial capital investment required to establish a farm, despite the fact that recurring costs tend to be low in the long run (Chief, E. in., 2019)

The houses for birds and the equipment used to maintain the houses can cost hundreds of thousands of dollars to a farmer although in the US this may vary considerably depending on location and size of the poultry operation. There are several reasons for considering poultry production when aiming to increase animal protein production and consumption in low-income countries to address mal- and undernourishment. The first of these reasons is the relatively short time to maturity and high number of offspring of poultry when compared to other livestock species. Chickens take just 147 days to begin reproducing compared to 730 days for cattle or 333 days for swine (Peters, C. J., Picardy, J. A., Darrouzet-Nardi, A., Griffin, T. S., 2014). Chickens also produce 157 offspring per breeding cycle for meat type birds (250 for breeds selected for egg laying rates) versus just 0.92 per breeding cycle for cattle and 10.90 for swine (Peters, C. J., Picardy, J. A., Darrouzet-Nardi, A., Griffin, T. S., 2014). Another reason poultry is considered is its efficient feed conversionratio (FCR). FCR measures how many kilograms of feed it takes to produce one kilogram of meat. The lower the FCR the more animal weight produced for every kilogram of feed consumed by the animal. Farm weight FCR, which measures the FCR based on the live weight of the chickens, is often the most used as it gives farmers feedback on how well, or efficiently, they are using their resources.

Broilers, birds produced for human consumption, have the lowest farm weight FCR when compared to other sources with only 1.89kg of feed used to produce 1kg of live poultry weight whereas beef cattle take 14.30kg and swine take 2.63kg of feed to produce1kg of live weight (Peters et al., 2014). This low FCR means that a smaller amount of crop resources, and therefore capital, must be used to raise poultry when compared to other livestock.

According to (Chilala, Namonze., 2019), affirms that the poultry industry has recorded a sharp drop in egg production. The total volumes of chickens and eggs sold on the market dropped and also the selling prices for poultry products dropped. This situation was mainly due to the eroded purchasing power of customers. Production costs like feed, feed, fuel, equipment and other inputs went up, mushrooming of unregulated fees and levies emerging in different district councils that are adding cost to the industry. Avian influenza is a disease that poultry farmers are under intense threat due to the rate at which the disease is spreading. He called for enforcement of high-level bio-security and hygiene practices as a precautionary measure (Sosala R., 2017)Despite the fact that most layers and broilers are on commercial farms, the number of households that rely on poultry as their main source of income is significantly high amongst the small-scale producers. This is the reason we have seen increased traders of both eggs and broilers on our local markets that product their flock under the backyard system. (Harad C. L., 2013). (Kuruppuarachchi, P. R., Mandal, P., Smith, R., 2012) note that the execution of a project includes carrying out the tasks specified in the form of the plan in order to achieve project goals and generate results and output. The output relies on many variables both internal and external. A fairly well coordinated project management and successful tracking of project success and associated costs are two of the most significant aspects. According to (Meredith, J. R., Mantel Jr, S. J., 2016) the project management must provide an effective management structure and must also be responsive to relevant criteria and changing circumstances, as the project is never carried out exactly on the original timetable. (Jofre, L.D., 2011) note that modification process of the planned investment by introducing actions that are specific and processes to operationalize the investment vision and ultimately extract the project's expected benefits is referred to as project implementation. Project implementation in this study was measured in terms of scope, time & quality and budget/cost.

In 2018, world poultry production rose to its highest point ever reaching 95.5 million metric tons of broiler meat which is 12 million metric tons higher than its 2012 level of 83.3 million metric tons (Statista., 2019). This rise in poultry production mirrors the growing global middle class. As people move from the lower class into the middle class, their mean animal protein consumption as a percentage of their total caloric intake increases from 2.2% of their diet to between 3.7 and 5.2% of their diet (Sans, P.,Combris, P. , 2015).

Rwanda perspective, According to reports from the Rwanda Rural Development Board (RDB) and the Food and Agriculture Organization (FAO), Rwanda's poultry population was estimated at approximately 13 million chickens in 2020 (RDB., 2020).The country produces around 25,000 to 30,000 metric tons of poultry meat annually, with a significant proportion originating from smallholder farms (Rwanda Ministry of Agriculture, 2022). Poultry meat consumption in Rwanda has been steadily increasing, with per capita consumption estimated at about 8 kg per year in 2021, driven by population growth and urbanization factors (MINAGRI., 2022). Although precise production costs per broiler are not extensively documented in Rwanda, estimates suggest that the cost per bird ranges from $3 to $4 USD, accounting for expenses related to feed, labor, and inputs.The sector faces several constraints, including high initial capital investment requirements, limited access to quality feed, frequent disease outbreaks such as Newcastle disease, and inadequate infrastructure, all of which pose significant challenges to poultry farmers in Rwanda (FAO., 2021).

The Government of Rwanda(GoR)'s Vision 2050 hopes to address these problems by propelling Rwanda into a middle-income country by the year 2020 through multifaceted programming aimed at increasing income, improving food access, and reducing malnutrition (Gill, T., 2018). One possible way to do this is to increase rural Rwandan poultry production. In Rwanda, the average poultry producer raises 2 to 18 free range birds per flock that were obtained solely through heritage lines, and predation and disease are substantial problems (Mbuza et al., 2016). These back-yard flocks are meant to be consumed by the grower and are often dual-purpose birds (i.e., meant for both egg and meat production). This can lead to tough meat when consumed and erratic egg production can result in irregular household revenue or nutrition. Through teaching Rwandan farmers improved husbandry and genetic selection, supplying a reliable source of birds, and increasing the amount of poultry on the market, it is possible to supply Rwandans with a low production cost protein source that was help combat malnutrition and potentially provide additional household income.

2. Statement of the Problem

Implementation of the project relates to the method of reviewing the project plan by introducing such particular activities and processes to render the project vision practical and ultimately extract the intended benefits from the project (Pinto, J. K., Slevin, D. P., 2017). en developed and disseminated to some smallholder farmers.

Uzima Chicken is a poultry company that has started its operations in Rwanda in 2017, taking over the former Rubilizi National Hatchery, and expanded into Uganda, Burundi and Kenya. Uzima Chicken plans to transform the poultry industry in East Africa by reaching out to smallholder farmers with a robust bird called SASSO that thrive in the local, rural conditions and is 4 times more productive compared to the local chickens (Sarkar, Golam., 2009) asserted that changes in traditional management practices in a bid to improve performance of Indigenous Chicken projects and thus contribute to household incomes and food security per year. However, the Problems continue to exist in the poultry industry, these include disease risks associated with the concentration of poultry production, Fowl cholera, coccidiosis, avian influenza, fowl pox, Newcastle disease virus, and salmonellosis are all risks poultry farmers face with every flock, and their tolls on productivity and profitability can be high (Chief, E. in., 2019). A study by The (Uwimana, J., Niyonsaba, C., Rwamasirabo, E., 2020). Impact of supply chain inconsistencies on the market performance of Uzima Chicken. indicated that Uzima Chicken's market performance was hampered by inconsistent supply chains, resulting in a 22% reduction in market sales compared to projected targets. This market performance lag was primarily driven by logistical challenges and limited access to diverse markets, which restricts revenue streams and scalability.For example, an analysis on the impact of poultry disease in Egypt shows that Newcastle disease virus is associated with up to 80% mortality rate and a 30% loss of total income (Fasina, F. O., Ali, A. M., Yilma, J. M., Thieme, O., Ankers, P., 2012).

Also, the increase in chicken feed is likely to push some poultry farmers out of business if there are no measures to reduce the impact (Mupenseni, Kennedy., 2015). It was proven that poultry raisers are highly affected by the rising costs of feed of which have left a lot of small and medium poultry farmers considering suspending their operations cost on feed (Mupenseni, Kennedy., 2015). The rising cost of feed has resulted in most small and micro farmers who represent a significant number of the industry unable to meet their overhead costs of sustaining the operations. (Mbale, Tryness., 2018). Due to the open market system, the price some farmers are considering suspending their farm operations with feed pegged for both broiler and layers starter feed, it has been predicted by industry players that if the present crisis is not addressed and the market forces do not control the situation, a lot more farmers may be forced out of the market, which may result in reduced supply of eggs and chickens (Mbale, Tryness., 2018). Poultry farmers are faced with challenges which threaten further growth and sustainability of the industry. We also note that poultry farmers operate in a volatile and complex business environment because of the challenges they face, which must equally impact their ability to make effective and timely decisions. (Msoffe, G.,Ngulube, P., 2015) and (Karanja, G. M. , 2014) observed that poultry farms in East Africa are already largely characterised by inadequate management practices which is mainly caused by a lack of adequate systems to guide farmers in decision making. (Begum, I. A., Buysse, J., Alam, M. J.,Van Huylenbroeck, G., 2010) classify a poultry farm as a decision making unit, in which farmers must make decisions concerning management of the farm and its flocks, due to lack of project planning, ineffective resources allocation, limited management commitment and most commonly inability to match with the required project management practices,A study conducted by (Niyonsaba, C., Mugisha, S.,Uwimana, J., 2021). The impact of management practices and technology access on productivity in poultry farming revealed that Uzima Chicken Ltd. experienced an average productivity loss of 15% annually due to operational inefficiencies, primarily stemming from inconsistent implementation of best practices. This productivity decline was significantly associated with inadequate management practices and limited access to modern technology, which hindered optimal feed conversion ratios (Niyonsaba, C., Mugisha, S.,Uwimana, J., 2021).It is in this reason why a researcher seeks to establish study on Assessing the Effect of Implementation Practices on Poultry Project Performance: Evidence from Uzima Chicken Ltd, Rwanda

3. Objectives of the Study

3.1 Specific Objectives

i.To assess the influence of Implementation planning on poultry project performance in Uzima Chicken Ltd

ii.To evaluate the effect of project resource scheduling on poultry project performance in Uzima Chicken Ltd

iii.To analyze the influence of communication management strategies on on poultry project performancein Uzima Chicken Ltd

3.2 Hypotheses of the Study

The study intends to test the validity of the following hypothesis:

H_{01}= Implementation planning has no significant influence on poultry project performance

H_{02}= Project resource scheduling has no significant influence on poultry project performance

H_{03}= Communication management strategies has no significant influence on poultry project performance

4. Literature

4.1 Theoretical framework

This study was developed with reference to the McQuail's mass communication theory and theory of constraint

4.1.1 McQuail's mass communication theory

McQuail's mass communication theory was developed by Denis McQuail in 2010, offers a comprehensive framework for understanding the complexities of mass communication processes. The theory emphasizes that communication is a dynamic, ongoing human interaction that occurs within specific parameters such as time, location, and contextual identity (McQuail, D., 2010). The basic tenets revolve around the idea that effective communication depends on the proper structuring of information flow, appropriate timing, and the setting in which communication takes place. One of the strengths of McQuail's theory is its emphasis on situational factors, highlighting how context, timing, and physical location influence communication effectiveness and the development of strategic communication channels. Additionally, the theory underscores the power dynamics inherent in communication, suggesting that communication can serve as a tool for exerting influence and control, which aligns well with the concept that communication is a form of power (McQuail, D., 2010). However, a notable weakness of the theory is its somewhat broad scope, which can make it challenging to operationalize in specific research contexts or to account for individual differences in communication styles. To address these limitations, subsequent studies have integrated more nuanced insights into individual traits and technological influences, thereby enriching McQuail's foundational framework. In current research, McQuail's theory applies significantly to health communication and media studies, where understanding how information flows and power exerted through communication can influence health outcomes and policy development. For instance, ensuring well-structured health messages aligns with McQuail's emphasis on organized and timely information dissemination, which enhances effectiveness and influence in public health campaigns (Knapp,Trees, L., 2017). Overall, McQuail's mass communication theory remains relevant as it provides valuable insights into the parameters that shape communication processes and their implications for social power and influence.

4.1.2 Theory of Constraints

The Theory of Constraints (TOC), developed by Eliyahu M. Goldratt and introduced in 1984, is a management philosophy that emphasizes the identification and management of the most critical limiting factor or constraint that hampers a system's performance (Goldratt, E.M., Cox, J., 2014). The basic tenets of TOC involve systematically identifying constraints, exploiting them to their fullest, elevating them to improve system performance, and continuously iterating this process to foster ongoing improvement. This approach aims to optimize the flow of work or resources through a system, thereby increasing throughput and overall efficiency. One of the key strengths of TOC is its focus on targeted problem-solving, which allows managers to prioritize efforts on the constraint that has the most significant impact on performance. Additionally, TOC's emphasis on buffer management helps in handling uncertainties and ensuring smooth project progression, making it a valuable tool in project management and operations (Goldratt, E.M., Cox, J., 2014).

However, TOC also has weaknesses. Its primary limitation lies in the challenge of accurately identifying the true constraint, especially in complex or dynamic systems where multiple constraints may exist simultaneously. Moreover, the approach may oversimplify complex interactions within a system, leading to potential neglect of other important factors or constraints. To address these weaknesses, studies often advocate for comprehensive analysis and continuous monitoring to ensure that the identified constraint remains the primary bottleneck throughout the process (Parker, D. W., Parsons, N., Isharyanto, F. , 2015).

In the context of this research, which examines the effect of project implementation practices on the performance of poultry projects in Kicukiro district, Rwanda specifically focusing on Uzima Chicken Ltd. TOC provides a valuable framework. It guides the identification and management of constraints that could hinder project success, such as resource limitations or logistical bottlenecks. Applying TOC enables the study to systematically address these constraints, optimize project workflows, and improve overall performance. By focusing on the critical constraints within poultry project management, the research can develop targeted interventions that enhance efficiency and productivity, ultimately contributing to better project outcomes.

4.2. Empirical Review

According to (Mwangi, J. K., Njoroge, S. K., 2022) .The impact of feed quality and management practices on broiler growth performance in small to medium enterprises in Kenya.The study employed a cross-sectional design involving 50 poultry farms. Data collection included structured questionnaires, farm observations, and measurement of growth parameters (weight gain, feed conversion ratio). Statistical analysis involved descriptive statistics and regression models to determine the influence of management factors on performance.The study found that farms implementing high-quality feed formulations and rigorous management practices achieved significantly higher growth rates and feed efficiency. Specifically, farms with better feed management had a 15% higher average daily gain compared to those with substandard practices. Additionally, training and knowledge of poultry management were positively correlated with performance outcomes.While the study highlights the importance of feed quality and management, it does not explore the specific role of disease management strategies or genetic improvements on performance, which are critical factors in poultry productivity.Understanding the influence of feed and management practices provides a foundation for Uzima Chicken Ltd. to optimize operational strategies, enhance productivity, and develop targeted training programs to improve overall project performance.

A study conducted by (Njeri, M., Kamau, P., 2021).The effect of resource scheduling practices on the productivity and profitability of poultry farms in Kenya.The study employed a cross-sectional survey design involving 50 poultry farmers. Data was collected through structured questionnaires focusing on resource planning, scheduling, and performance metrics. Descriptive statistics and regression analysis were used to determine relationships between resource scheduling and farm performance. The results indicated that effective resource scheduling significantly improves poultry farm productivity and profitability. Farms that adopted systematic scheduling approaches reported higher outputs, better feed utilization, and reduced operational costs. The study primarily focused on smallholder farms and did not explore the role of technological interventions in resource scheduling. It also lacked longitudinal data to assess long-term impacts. This review underscores the importance of resource scheduling in poultry project performance, providing a foundation for analyzing how structured resource planning can enhance Uzima Chicken Ltd's project outcomes.

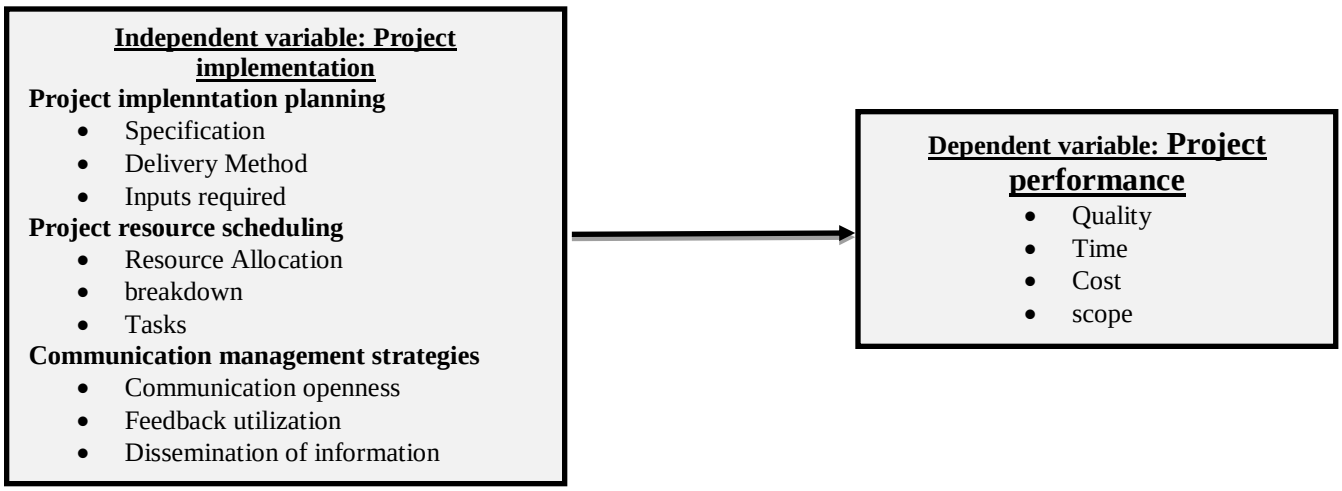
(Patel, R., Singh, A., 2022). Assessing the integration of digital resource scheduling tools and their influence on the performance of commercial poultry enterprises. A mixed-methods approach was adopted, combining quantitative surveys of 30 poultry companies with qualitative interviews. Data analysis involved descriptive statistics, correlation analysis, and thematic coding of interview transcripts. The study examined the adoption of digital tools such as ERP systems and their correlation with performance indicators. Adoption of digital resource scheduling tools was associated with improved resource allocation, reduced downtime, and enhanced decision-making capabilities. Companies leveraging technology reported a 15-20% increase in productivity and a 10% reduction in operational costs. The study focused on technology adoption but did not delve into the specific challenges faced by poultry companies in implementing such systems or their scalability in resource-limited settings. This review provides insights into how technological resource scheduling can optimize poultry project performance, relevant for Uzima Chicken Ltd's efforts to incorporate digital solutions for resource management.

(Karanja, S. M., Mwangi, J., 2021).The effect of communication management strategies on project success in manufacturing firms, with a focus on operational efficiency. A cross-sectional survey was conducted involving 150 project managers across various manufacturing companies in Kenya. Data was collected via structured questionnaires and analyzed using regression analysis to determine the relationship between communication strategies and project performance indicators. The study found that effective communication management strategies significantly enhance project success, particularly in terms of timely delivery and stakeholder satisfaction. The authors emphasized that transparent communication channels and proactive stakeholder engagement are critical for project performance. The research primarily focused on manufacturing industries, with limited exploration of service-oriented sectors like agriculture or poultry farming. Additionally, it did not consider the influence of digital communication tools, which are increasingly relevant. This empirical evidence underscores the importance of communication strategies in project performance, providing a foundation for investigating similar dynamics within Uzima Chicken Ltd, especially given the sectoral differences.

(Otieno, L., Ndegwa, P., 2023).The role of communication management strategies on project delivery and stakeholder engagement in agricultural projects in Kenya. A mixed-methods approach was employed, involving quantitative surveys of 200 project team members and qualitative interviews with 20 project stakeholders in the poultry and agricultural sector. Data were analyzed using SPSS for quantitative data and thematic analysis for qualitative insights. The study revealed that strategic communication practices, including regular updates, feedback mechanisms, and use of digital platforms, significantly improved project delivery timelines and stakeholder collaboration. It also highlighted that poor communication was linked to project delays and stakeholder discontent.The study focused on agricultural projects broadly, with limited specific insights into poultry farming or private companies like Uzima Chicken Ltd.

There is also scant discussion on how specific communication strategies directly influence performance metrics within poultry projects. This research supports the notion that tailored communication strategies positively impact project outcomes, guiding an exploration of specific communication practices within Uzima Chicken Ltd's poultry projects.

5. Conceptual framework



Source:Researcher,2024

6. Methodology

Research methodology is a systematic plan or approach used to conduct research effectively and efficiently. It involves the selection of appropriate methods and techniques for collecting, analyzing, and interpreting data to answer specific research questions. A well-structured methodology ensures the reliability, validity, and objectivity of the study, guiding researchers through the entire research process from formulation of hypotheses to drawing conclusions. Essentially, it provides a clear framework that helps in achieving accurate and meaningful results in any research endeavor.

6.1 Sampling and Sampling technique

Census sampling was employed by ncluding all 179 staff members, through census sampling ensures that every individual's perspective is captured, providing a complete and accurate picture of the entire population. This approach eliminates sampling bias and increases the reliability of the data, especially when the population size is manageable. By surveying everyone, the organization can make well-informed decisions based on comprehensive information, rather than relying on a potentially unrepresentative sample.

Table 6.1 : Population distribution and simple size determination

Description	Target population	Sample size
Administration staff	12	12
Planning staff	14	14
M&E Staff	13	13
Finance staff	10	10
Human Resource Staff	12	12
Hatchery staff	39	39
Temporary staff	79	79
Total	**179**	**179 census enquiry**

Source: Uzima Chicken Ltd, 2024

7 . Data processing

7.1 Pilot testing

Researcher undertook a pilot study in one day in order to check accuracy and consistency of questions before the main activity of the study start. A pilot study finding was not considered in the main study, the essence of the action of that was about Reliability consistency measure. Reliability consistency measuring used items in the pilot study include questionnaires and interview which provided the similar results under similar situation conditions. The Cronbach alpha was used to test the answers gathered in pilot study conducted to check if they were relevant, as the Cronbach alpha coefficient value is 0.7 and above , Cronbach alpha that undertook and calculated then was compared to the limit standard of Cronbach alpha coefficient value is 0.7, The findings from piloting study was 17 items and rsulted into 0.808 which is 80.8% of respondents under tested in piloting study and this is to present a high level of internal consistency from the respondents and releveled the consistency to the research objectives.

7.2 Validity

According to (Middleton., 2020), validity, refers to how accurately a method measures what it is intended to measure. If research has high validity that means it produces results that correspond to real properties, characteristics, and variations in the physical or social world. In this study validity of data collection instruments was ensured through expert review.To ensure high levels of validity, the questionnaire items were aligned with the research objectives. Validity is the accuracy and meaningfulness of inferences which are based on research methods whereas reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials.To verify the validity, the researcher discussed the items in the research instruments with the supervisor to have a common understanding and ensure that the questions and the content are valid.

Suggestions from the supervisor was incorporated in the final copy of the questionnaire to ensure that the instruments are valid. Still, validation was considered prior filling of questionnaires by some few respondents and then check to ascertain whether questions are understandable and accurate for the purpose of answering the objectives of the study.

7.3 Reliability

Reliability of an instrument is the degree of consistency with which it measures a variable .. According to (Thwala, D., 2018) reliability concerns the extent to which a measurement of a phenomenon provides stable and consists result. Reliability is also concerned with repeatability. To verify the reliability the researcher was use pilot study method for determining the reliability of the researcher's instruments. Questionnaires that was issue 10% respondents to check whether they are answered consistently, where Cronbach Alpha was be tested and and expected to come above 0.7. The researcher then was ensured the reliability of the tools by checking whether respondents answers the questions rightly as the researcher wants it to be and also checking to see if questions are not ambiguous. Using this perspective, the researcher easily and quickly was change the questions which was not matching with the study.

8. Data analysis

Data analysis was obtained through questionnaires and were coded, typed into SPSS Version 25.0) software and edited in order to gain right data information. Analysis used Qualitative to and Quantitative approach to employ descriptive statistics and inferential statistics. Descriptive statistics such as percentages, frequency tables and mean was computed to reveal characteristics of the data.Inferential analysis wasemployed by using Multiple linear regression in order to assess the degree and character of the relationship between the variables that is independent variable and dependent variable. Multiple Linear regression assist a researcher to understand the direction and size of relationship between Project implementation practices in respect to independent variables and performance of project dependent variables. Regression is statistical technique that counts into determining linear relationship between two or more variable and it is principally used to estimate casual inferences, thus determination of statistical relationships applicability in between two or more variables:

Researcher presents the regression model as follow:

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

Where: Y = project performance

$\beta 0$ = constant; $\beta_1\beta_2\beta_3$= regression ,coefficients; X_1 = Project Implementation planning; X_2 = Project resource scheduling; X_3 = Communication management strategies ; ε = error term.

9. Inferential Statistics

This section presents the findings from the inferential statistical tests, including the correlation coefficient and multiple linear regression analysis, examining the relationships between the independent and dependent variables in this research study.

9.1 Correlation

Correlation is a statistical measure that indicates the degree to which two variables move in relation to each other. It quantifies the strength and direction of their linear relationship, with values ranging from -1 (perfect negative correlation) through 0 (no correlation) to +1 (perfect positive correlation).

Table 9.2 Correlation

		Project Implementation planning	Project resource scheduling	Communication management strategies	Project performance
Project Implementation planning	Pearson Correlation	1	.503**	.910**	.672**
	Sig. (2-tailed)		.000	.000	.000
	N	179	179	179	179
Project resource scheduling	Pearson Correlation	.503**	1	.645**	.808**
	Sig. (2-tailed)	.000		.000	.000
	N	179	179	179	179
Communication management strategies	Pearson Correlation	.910**	.645**	1	.799**
	Sig. (2-tailed)	.000	.000		.000
	N	179	179	179	179
project performance	Pearson Correlation	.672**	.808**	.799**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	179	179	179	179

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

Source primary data 2024

The results highlight the relationship between the Effect of project implementation practices on performance of poultry projects in Kicukiro district , Rwanda . A Case study of Uzima Chicken Ltd . The key Project implementation practices examined include Implementation planning,project resource scheduling,communication management strategies

The Pearson correlation coefficient ranges from -1 to 1, where values between -1 and 0 indicate a negative correlation (with -1 to -0.5 representing a strong negative correlation, and -0.5 to 0 indicating a weak negative correlation), and values between 0 and 1 indicate a positive correlation (with 0 to 0.5 representing a weak positive correlation, and 0.5 to 1 indicating a strong positive correlation).According to the results, the correlation between Implementation planning,project resource scheduling,communication management strategies was 0.672,0.808 and 0.799 respectively, it presents that there was a significant relationship between the Effect of project implementation practices on performance of poultry projects in Kicukiro district , Rwanda . A Case study of Uzima Chicken Ltd.According to (Niyonsaba, C., Mugisha, S.,Uwimana, J., 2021) emphasized that meticulous implementation planning enhances resource utilization and project efficiency in agricultural projects in Rwanda, leading to higher productivity and

sustainability. Similarly, (Musoni, M., Rwigema, J., 2022) found that efficient resource scheduling significantly reduces delays and cost overruns in poultry projects across East Africa, thereby positively influencing project performance. Furthermore, (Uwimana, F., Nsengiyumva, R., Nkurunziza, J., 2023) highlighted that robust communication management strategies facilitate stakeholder coordination and conflict resolution, which are critical for project success in rural development initiatives.

9.2 Regression Analysis

Correlation is a statistical measure that quantifies the strength and direction of the linear relationship between two variables. It is expressed by the correlation coefficient (commonly Pearson's r), which ranges from -1 to +1. A value close to +1 indicates a strong positive linear relationship (both variables increase together), while a value close to -1 indicates a strong negative linear relationship (one variable increases as the other decreases). A correlation near zero suggests little or no linear relationship between the variables.

Table 9.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.886[a]	.785	.782	1.76773

a. Predictors: (Constant), communication management strategies , project resource scheduling , project Implementation planning

Source: Primary data,2024

The study was analyzed on Effect of project implementation practices on performance of poultry projects in Kicukiro district , Rwanda . A Case study of Uzima Chicken Ltd and the R Square = 0.785, meaning that 78.5% of the variation in project performance can be explained by the independent variables: Implementation planning,project resource scheduling,communication management strategies . Therefore, this suggests that these three project planning variables had a strong influence on Effect of project implementation practices on performance of poultry projects in Kicukiro district , Rwanda . A Case study of Uzima Chicken Ltd.The findings of this study, indicating that implementation planning, project resource scheduling, and communication management strategies collectively explain 78.5% of the variation in project performance ($R^2 = 0.785$), underscore the significant influence of effective project implementation practices on poultry project success in Kicukiro district, Rwanda. These results align with recent literature emphasizing the critical role of comprehensive planning and communication in enhancing project outcomes.For instance, a study by (Niyonsaba, C., Mugisha, S.,Uwimana, J., 2021) examined the impact of project management practices on the performance of agricultural projects in Rwanda and found that planning and communication strategies were key determinants of project success. The authors reported that projects with well-structured implementation plans and robust communication channels experienced higher performance levels, similar to the findings in this study.

Table 9.4 Anova[a] Project implementation practices and performance of poultry projects

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2000.768	3	666.923	213.424	.000[b]
Residual	546.852	175	3.125		
Total	2547.620	178			

a. Dependent Variable: project performance

b. Predictors: (Constant), communication management strategies , project resource scheduling , project Implementation planning

Source:Primary data, 2024

The results indicate ANOVA[a], the results presented than the variables were statistically significant with F=213.424 and p value=0.000b, it means that the model is fit to be used in predicting the study variables. Acconding to the findings, a study by (Zhang, L., Li, X., Wang, Y., 2021) highlights that high F-values and significant p-values in ANOVA tests are indicative of models with strong predictive power and goodness-of-fit, especially in behavioral and social sciences research. Their findings reinforce that such statistical significance confirms the model's suitability for making reliable predictions and drawing meaningful conclusions from the data.

Table 9.5 Coefficienta of project implementation practices and performance of poultry projects

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		Sig.
(Constant)	3.932	2.852			
				.379	170
PROJECT IMPLEMENTATION PLANNING	-.128	.150	-.075		
				.854	394
PROJECT RESOURCE SCHEDULING	.571	.055	.491		
				0.319	000
COMMUNICATION MANAGEMENT STRATEGIES	.584	.105	.550		
				.558	000

a. Dependent Variable: PROJECT PERFORMANCE

Source:Primary data,2024

The results present the constant of independent variables project implementation practices . It is statistically significant since p value is less than 0.05. The results present the variables of Project implementation practices ; Implementation planning was not statistically significant with p value=0.394[b], the project resource scheduling was statistically significant with p value=0.000[b], and the communication management strategies was statistically significant with p value=0.000[b]. The regression coefficient for implementation planning (B = -0.128) suggests a negative relationship with project performance when controlling for other variables, which contrasts with the initial positive correlation observed. This discrepancy highlights the importance of considering multicollinearity and suppressor effects, where the influence of planning may be affected by its interaction with other implementation

practices. Supporting these findings, recent literature emphasizes the importance of resource scheduling and communication strategies in project success. For instance, Singh and Kaur (2021) underscore that effective resource scheduling reduces delays and improves productivity in agricultural projects, including poultry farming. They also highlight that robust communication management fosters stakeholder engagement and coordination, which are vital for project performance.

10. Conclusions and Recommedations

10.1 Conclusions

Project implementation practices is a critical factor in ensuring the successful implementation and performance of poultry projects. Project implementation practices provide a vital framework for understanding how projects operate, allowing for measurable assessment and contributing to the achievement of project objectives (Gahigana, S., 2019). In light of this, the researcher deducted based on the study's findings that there is a significant relationship Project implementation practices and performance of poultry projects, specifically, the correlation between correlation between Implementation planning,project resource scheduling,communication management strategies was 0.672,0.808 and 0.799 respectively. These correlations were statistically significant, with a p-value of 0.000b, indicating a strong link between Effect of project implementation practices on performance of poultry projects in Kicukiro district , Rwanda . A Case study of Uzima Chicken Ltd

10.2 Recommendations

Based on the results of this study presented in the previous sections, the researcher suggested the following recommendations:

Based on the findings of this study, it is recommended that organizations prioritize the implementation of effective project resource scheduling and communication management strategies, as these factors demonstrate a statistically significant positive impact on project success. With a p-value of 0.000 and a high beta coefficient for project resource scheduling ($\beta 2 = -0.571$), it is clear this variable plays a critical role in improving project outcomes. In contrast, Implementation planning ($\beta 1 = -0.128$) showed no significant correlation with project success, suggesting that organizations should reevaluate and possibly enhance their planning methodologies to better align with resource allocation and communication efforts. Given the strong correlations of 0.808 and 0.799 between project resource scheduling and communication management strategies, organizations should also explore integrated approaches that foster better coordination and information sharing among team members. This holistic strategy was likely optimize project implementation and lead to more successful project completions. For policymakers like MINAGRI, it is recommended to revise existing regulations to provide practical, updated guidelines that support agricultural companies in strengthening their project implementation practices. Developing a comprehensive strategic framework that integrates planning, resource management, and communication will streamline project operations, facilitate better performance monitoring, and ultimately foster the sustainable growth of the agricultural sector in the Kicukiro District. These policy-driven, context-specific recommendations aim to enhance project success and sectoral development through actionable and coordinated efforts.

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