THE EFFECT OF PROJECT MANAGEMENT PRACTICES ON THE ORGANISATIONAL PERFORMANCE OF MILK PROCESSING COMPANIES. A CASE OF BURERA DAIRY LIMITED, RWANDA

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ABSTRACT

The purpose of this study was to assess the effect of project management practices (scope, risk, cost and communications management) on the organisational performance of milk processing companies with a case study of Burera Dairy Limited (Ltd). The data were gathered from 46 individuals apportioned as follows: 7 BDL staff, 14 local government staff at District level and 25 MCCs' cooperative leaders/members by utilizing a questionnaire, interview guides and focus group discussion guides. The data were analyzed by using SPSS software. The dimensions of the independent variable and intervening variables had significant, strong and positive correlation with organizational performance.

Key words: Project management, practices, organisational performance, milk processing companies, Burera Dairy Limited.

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INTRODUCTION

Nowadays, the management's attention is increasingly drawn to strike equilibrium between running business-as-usual and introducing changes to adapt to a changing business environment **(**Axelos, 2019). These changes can be introduced through projects which are managed by means of ten (10) best practices (commonly known as 10 knowledge areas, including integration, scope, schedule, cost, quality, resources, communications, risk, procurement, and stakeholder management) to improve organizational/corporate performance (Hartney, 2017). Organizational performance is evaluated against project performance and business performance (IGI Global, 2020; Market Business News, 2020; Langlois, 2020; Westland, 2015). Past research only focussed on the impacts or effects of the applications of project best practices in effective management of construction projects (Ollows, 2012). However, to the best of the researchers' knowledge, none of them attempted to assess the effects of project management best practices on the organisational performance of milk processing companies/projects. Thus, several questions/issues are not fully elucidated and remain unsolved. This study was conducted to shed more

lights and suggest avenues on how the application of project management practices could lead to enhanced organisational performance of Burera Dairy Ltd. Between 2013 and 2015, the government of Rwanda spearheaded milk processing projects under the Community based Processing Centre (CPC) program (Mutijima, 2017). These CPC projects were developed on the 'design, build and pass on' model whereby the idea was to establish and run the CPCs, and then transfer them to the private sector for further development and use after they have proven to be viable and profitable (Nuwagira, 2015). Burera Dairy Limited (BDL) epitomizes the many other CPC projects set up nationwide (Mutijima, 2017). It was built on the land of CEPTL (farmers' cooperative) which, ipso facto, became a shareholder with 1.7% while the remaining shares (98.3%) appertained to the government of Rwanda (GoR). Together with other CPCs, BDL was proposed with the vision to create viable, dynamic, and competitive dairy enterprises that contributes to export growth of 28% and increasing off farm jobs to 3.2 million by 2020 (Schebesta, 2016; Anonymous, 2015). More specifically, BDL was mandated to collect all the district's milk produced and collected at five Milk Collection/Cooling Centres- MCCs (MCC CEPTL, MCC KIRAMBO, MCC GIRINKA, MCC GIRAMATA and MCC IZERE); reduce unemployment; contribute to export growth; process milk; trade milk and dairy products; attract other investors to become shareholders; provide farmers with basic knowledge on dairy cattle farming; improve animal health; provide advisory service and advocacy on dairy cattle farming; artificially inseminate cows for improved milk production; and distribute animal feeds (Mutijima, 2017). In 2014, the GoR entrusted CEPTL with the day-to-day management of BDL was entrusted with CEPTL which, sooner after, failed to run its day-to-day's operations owing to inadequate technical capabilities, financial constraints, etc. A further intervention by the GoR occurred in early 2015 by separating CEPTL and BDL and creating two separate entities. Since then, a managing director was appointed by the GoR to properly manage BDL while CEPTL would no longer get involved in its management. In a bid to revitalize the factory, the new leadership introduced the project management practices (scope, cost, communications and risk management). However, soon after, the factory struggled to source milk and became idle for several months. On 14th January 2020, the GoR sold off its 98.3% shares to a Zimbabwean company (African Solutions Private Ltd) which, since then, took over its full control (Tabaro, 2020; Zimbabwe Voice, 2020; Kayitare & Mutesi, 2019).

LITERATURE REVIEW

Project Management Practices and Organisational Performance

Organizational performance is evaluated against project performance and business performance based on the schedule, quality, cost, stakeholder satisfaction, shareholder value, financial performance, market performance, and sustainability against the business case (Westland, 2015). An organization's ability to maximize shareholder value is evaluated against its ability to enrich its shareholders (Market Business News, 2020). Financial performance looks at profits, return on assets, value added, return on investment, and the organization's debts' history (IGI Global, 2020). The market performance is evaluated at two levels: organization level (organisational market performance) or product level (product market performance). It looks at sales growth and product's market share gain (IGI Global, 2020). Sustainability is evaluated against supply chain sustainability, organisational mission statement, strategic partnerships, compliance level, competitive advantage, proactiveness, transparency, board engagement, company's ecosystem engagement, and staff engagement (Haanaes, 2016; Langlois, 2020). For many years, the authors studied how project management affects the organizational performance. Ollows (2012) found that ignorance of critical methods of project management results in dissatisfied customers, lost revenue, and unsatisfactory performance at the corporate level. The study by (Cross & Daniel, 2019) discovered that

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project management practices enhance organisational performance and recommended to prioritise communications and risk management over other practices. A study by Mohammed & Knapkova (2016) revealed that risk management allows managers to effectively determine the unusual occurrences and changes, which paves a way to address them as they crop up, thereby enabling the company to stabilize its earnings/profits and its long-term viability.

Dairy Processing Plant Projects and Implementations

A milk processing plant project begins with building physical structure and proceeds with dairy products manufacturing and marketing (School of Agriculture, 2017b; Kandoi, 2014). In Rwanda, the top five dairy/milk processing plants/companies include Inyange Industries Ltd, Crystal Industries Ltd, Nyanza Milk Industries Ltd, Blessed Dairies Ltd and Burera Dairy Ltd. They have a combined installed capacity of about 317,000 litres per day apportioned as follows: 190,000 litres capacity, i.e., about 60% of the whole nation installed capacity belong to Inyange Industries Ltd with its three subsidiaries: Nyagatare Savannah Ltd (Nyagatare district), Masaka Dairy Ltd (Kicukiro district) and Mukamira Dairy Ltd (Nyabihu district) (Ntirenganya, 2020; Inyange Industries, 2020); 97,000 litres capacity (30.5% of the country's installed capacity) belong to Crystal Industries Ltd (Bugesera district); 20,000 litres capacity, i.e., 6.3% of the country's installed capacity belong to Nyanza Milk Industries Ltd (Nyanza district), while BDL (Burera district) and Blessed Dairies Ltd (Gicumbi district) have the lowest installed capacity, i.e., 5,000 litres per each. However, all these factories have been operating below capacity. For instance, Crystal Industries Ltd started in 2016, with the ability to process 100 metric tons daily but has, for long, operated at 10% capacity (Agriterra, 2019). So far, only about 10-15% of 2.2 million litres produced daily in Rwanda gets processed into factories (Abdulsamad & Gereffi, 2016; Sabiiti, 2017; Rutagwenda, 2016). The products manufactured in Rwanda are pasteurized milk, UHT milk, fermented milk, butter, creams, ghee, cheeses, and yoghurt flavoured (Inyange Industries, 2020; APTC Ltd, 2018; MINICOM, 2015; Blessed Dairies, 2019; Rutagwenda, 2016). The powdered milk, a shelf stable product for export markets, is not manufactured in the country. The manufactured products are either sold in Rwanda's urban areas or exported to Burundi, the Democratic Republic of the Congo, and Tanzania. When contrasting the top five companies, one can notice that there is a little product differentiation among Rwandan milk processors. As well, the rwandan dairy processors lack an aggressive marketing to trigger domestic mass milk consumption. In fact, due to poor advertising, the dairy business has lost more than 3.4 million Rwandan customers who view milk as a beverage for children (TheEastAfrican, 2013).

Review of regulations and policies in milk business in the region

Abdulsamad & Gereffi (2016) reviewed the dairy regulations, standards and policies in East African Community member states (Kenya, Tanzania, Uganda, Burundi, South Sudan and Rwanda) and showed that a harmonized protocol on sanitary and phytosanitary (SPS) measures and regional quality standards exist. However, the smooth execution was hampered by many factors, including the capacity of rural households' dairy producers to comply with the regulations; the large informal network of milk traders; the noncompliance with mutual recognition of national quality standards resulting in time-consuming inspection; and the utter lack of a billing system predicated on milk quality, which discourages dairy farmers from upgrading. In Rwanda, milk regulation is nascent as it started in 2016 with the promulgation of the ministerial order n°001/11.30 of 10/02/2016 determining the guidelines for collecting, transporting, and selling milk. Under this law, any milk originally intended for retail sales must be collected and verified for quality at the MCC level or processing plant (MINAGRI, 2016). This law is, however, silent about milk prices. Hopefully, a

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guideline issued by the Ministry of Trade and Industries bridges the gap. This requires that FRW200 per litre of milk be paid to the dairy farmer (farmgate price) and FRW220 at the MCC level (MINICOM, 2018). However, compliance to this guideline remains problematic as the farmer usually gets between FRW140 and FRW200.

Theoretical Framework

The current study was guided by six theories/models, including the theory of project management with its two dimensions: Project theory (transformation, flow, and value generation) and management theory (planning theory, execution theory, and control theory) (Koskela & Howell, 2002); and PRINCE2 model (Invensis, 2020a; Mohammed, 2018; Roseke, 2018; Priyanka, 2016).

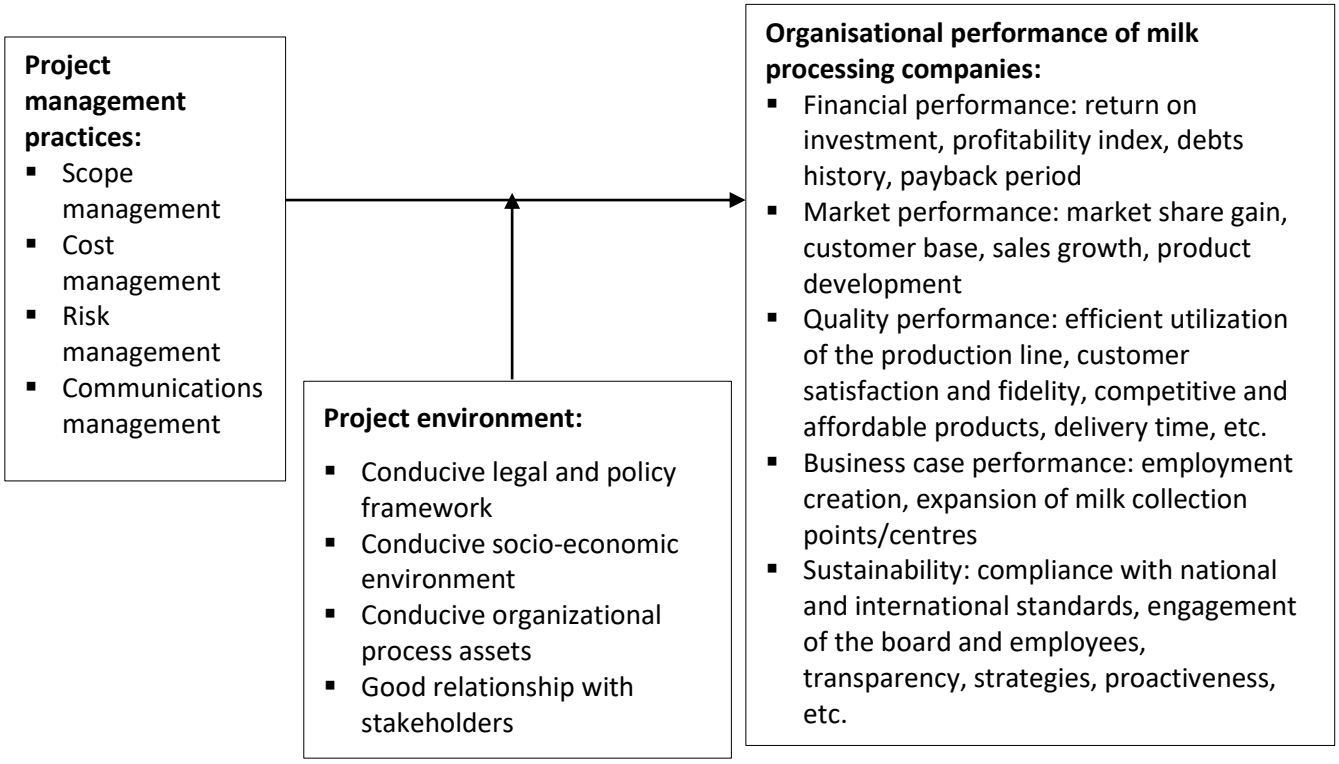

Figure 1: Conceptual Framework

METHODOLOGY

This study utilized the descriptive and analytical approaches. The geographical scope was limited to 5 administrative sectors: Cyanika, Kivuye, Gatebe, Bungwe and Rusarabuye. They all harbour a dairy infrastructure, namely milk processing plant and/or Milk Collection/Cooling Centres-MCC. The study encompassed 46 individuals apportioned into 7 staff from Burera Dairy Ltd, 25 MCC members/leaders, and 14 local government staff. As the population was inferior to 100, the researchers used census inquiry, i.e., the size of sample was equal to 46 individuals, as well. The secondary data were obtained through documentation. The primary data were gathered using a questionnaire, focus group discussion guide, interview guides, and direct observation. Through semi-structured interviews, the researchers conducted face to face and telephone interviews from the LG staff and interacted with Burera Dairy Ltd' staff through focus group discussions, while the MCC leaders/members were only subjected to the focus group discussions. The quantitative data were analysed by SPSS through descriptive statistics (percentages, means, and standard deviations), correlation, and regression analyses while qualitative data were analysed through content analysis. The T-paired test was performed to test

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the hypotheses. With correlation analysis, the researchers utilized Pearson correlation (r) and the results were interpreted following these assumptions: r=±1 is perfect correlation, r=±0.9 to ±1 is very strong correlation (or very high correlation), r=±0.7 to ±0.9 is strong correlation (or high correlation), r=±0.5 to ±0.7 is moderate correlation, r< ±0.5 is weak (low) correlation and r=0 is absence of correlation. Plus (+) shows a positive correlation while minus (-) shows a negative correlation. Sig (2-Tailed) value (or *p*-value) greater than or equal to 0.05 (p≥ 0.05) is statistically not significant. Likewise, a p<0.05, is statistically significant. When it came to testing the hypotheses, p≤ 0.05 suggested strong evidence against the null hypothesis. Therefore, the H0 was rejected, whereas the alternative hypothesis was accepted. A p-value higher than 0.05 (p> 0.05) indicated strong evidence for H0 (Anonymous, 2008; McLeod, 2019). The regression analysis R-Squared (also known as R^2) was used to estimate relationships between dependent and independent variables. R^2 measures the amount of variance in a dependent variable that might be accounted for by the independent variable. Typically, R^2 values are expressed as percentages from 0% to 100%, with a range from 0 to 1. For instance, an R^2 of 0.9 meant that 90% of the variance in the dependent variable are caused by the independent. To ensure the validity and reliability of the findings, the researchers ran the reliability test and found an acceptable Cronbach's alpha (or coefficient alpha) of 0.867.

RESULTS AND DISCUSSIONS

Out of 21 questionnaires distributed, 15 questionnaires were filled and collected (a return rate of 71.4%). However, these did not affect the reliability of data collected as their opinions were later captured through telephone interviews and focus group discussions testimonials conducted among local government and BDL staff, respectively.

Findings on identification of Respondents

The respondents' biographical information was captured. Gender wise, the results revealed a high representation of men (93.3%) as compared to 6.7% who were female, but this does no harm given the sampling method (census enquiry) utilized in this research. Position wise, the respondents were apportioned as follows: 33.3% were Sector Animal Resource Officer, 20% were Sector Executive Secretaries, 13.3% were Staff at District level, 6.7% were Management staff at BDL while 26.7% were non-management staff at BDL. Based on those positions, it is remarkable that respondents had responsibilities which are relevant to the topic in their daily activities, meaning that their information were reliable in concluding this study. Age wise, the most dominant age group for the respondents was 31 to 40 represented by 60.0%, followed by 41 to 50 and 21-30 age groups represented by 13.3% of those polled, while the minority of age group category was the group age of 51 to 60 and below 21 years represented by 6.7 % of those polled. This means that the respondents were dominated by adult aged people. This is a good indication to have more reliable data as the respondents are mature enough to provide useful information. Education wise, the percentage of ordinary level among the respondent in this research was relatively low (6.7%). Most of the respondents (53.3%) had a bachelor's degree. The number of respondents with Advanced level and A1 level are equal (13.3%), and master's degree is also 13.3%. The educated people are open and have the capacities to recall easier the past events, and in this case, to remember different information about BDL. Again, this increases the reliability of the data collected. Regarding work experience, the results indicated that 40.0% of BDL staff have an experience of 2 and 4 years, while other categories (below 1 year, between 1-2 years and above 5 years) account for 20.0% each. Employees with high experience provide reliable information than inexperienced employees. Thus, the information collected might be relied upon in making a conclusion about the study. Furthermore, the results showed that 53.3% of total respondents knew BDL for between 2 and 4 years, 40% confirmed that they have heard/known since it

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started operations, i.e., above 5 years, while only 6.7% of respondents have heard/known about BDL for less than 1 year. By considering several respondents 'views, it appeared that participants have heard/knew about BDL for a long time which suggests that they have some information to share as far as BDL is concerned.

Findings on research objectives

The results for Likert scale questions are interpreted as frequencies/percentages, mean and standard deviation. The lowest scale was 1 and highest was 5 whereby SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree; S.D. symbolizes the standard deviation.

Findings on scope management and performance

The first objective related to seeing how BDL's performance changed after implementing scope management. The results in Table 1 showed respondents views on how scope management was implemented by BDL.

Table 1: Respondents views on scope management

Items (n= 5)	SD	D	N	A	SA	Mean	S.D.
	%	%	%	%	%		
BDL has a scope management plan	-	-	-	80.0	20.0	4.2	0.4
BDL has clear vision and mission	-	-	-	40.0	60.0	4.6	0.5
BDL has developed clear objectives and goals	-	-	-		100.0	5.0	0.0
BDL has developed clear policies and strategies	-	-	-	40.0	60.0	4.6	0.5
Every personnel at BDL knows their roles and responsibilities	-	-	20.0	20.0	60.0	4.4	0.9
Every personnel at BDL knows the roles of their colleagues	-	-	40.0	20.0	40.0	4.0	1.0
Management defines the work delegated to the team managers	-	-	20.0	60.0	20.0	4.0	0.7
Team managers define the work packages to be delegated to their subordinates	-	-	20.0	20.0	60.0	4.4	0.9
The management delegates and monitors the work progress	-	-	20.0	40.0	40.0	4.2	0.8
Management identify where or not to source/procure the milk	-	-	-	60.0	40.0	4.4	0.5
The personnel verify feasibility of product designs and development processes	-	-	20.0	40.0	40.0	4.2	0.8
Purpose, composition, presentation and quality acceptance criteria of the final product are defined before its development	-	-	-	20.0	80.0	4.8	0.4
Management identify and allocate the resources (budget, machines and equipment) required to produce products	-	-	-	60.0	40.0	4.4	0.5
The management examines the ways to grow the scope by developing new product(s)	-	-	-	40.0	60.0	4.6	0.5
Management has developed a plan for training and promotion	-	40.0	-	40.0	20.0	3.4	1.3
The scope change is approved before its implementation	-	20.0	-	40.0	40.0	4.0	1.2
Management has set aside a change budget if change occurs	-	-	100.0	-	-	3.0	0
Scope management issues and suggestions for improvement reported to the appropriate people for future reference.	-	-	-	60.0	40.0	4.4	0.5
Overall Mean	**0**	**3.3**	**13.3**	**37.7**	**45.5**	**4.26**	**0.63**

Source: Filed data, December 2020

It appeared that many of respondents agreed that BDL implemented scope management as evidenced by a very high average mean of 4.26. As per Matchware (2020), a well-defined scope includes project goals, deliverables, completion dates, assumptions and exclusions, any known problems or risks, and review/approval by key stakeholders. Looking at individual means, it appeared that 16 out of 18 best practices were properly implemented. These showed a high mean (3.5-4.2) or a very high mean (4.3-5). Thus, the researchers established that BDL has a scope management plan, clear vision and mission. It has developed clear objectives, goals, policies and strategies. The direct observation,

documentation and interview testimonials indicated that the company's mission is to help farmer's organization to add value in milk produce through innovation and technology. Its vision is to become a competitive dairy company by providing healthy and premium quality dairy products which is affordable and available locally, regionally and international markets. Although quantitative analysis indicated that every staff knows their own roles and responsibilities and those of their colleagues/coworkers, direct observation, documentation and interview testimonials suggested a different view. Indeed, the Standards Operational Procedures (SOPs) were clear and documented in the production unit, but the job description, roles and responsibilities for the remaining staff were not documented. Thus, it is evident that every personnel at BDL would hardly know their roles and responsibilities and those of their colleagues/coworkers. The management-as-organizing approach of the theory of project management emphasizes the concept of structuring the environment, which includes developing an organizational structure chart, allocating human resources to achieve objectives, and deciding how to design individual jobs (duties and responsibilities) to efficiently use the human resources within an organization (Anonymous, 2015). Nonetheless, the management defines the work packages to be delegated to the team managers, which in turn, define the work packages to be delegated to their subordinates. The management delegates and monitors the work packages progress.

The management identifies where or not to source/procure the milk. Qualitative data revealed that BDL procures milk from Burera, Gicumbi and Musanze districts. 100-200 litres of milk per day are procured from CEPTL MCC (Burera) daily and 2,000-2,500 litres from KIRAMBO MCC (Burera) on a biweekly basis. Other MCCs of Burera district (GIRINKA, GIRAMATA and IZERE) are currently out of the catchment area of BDL. The management examines the ways to grow the scope by developing new product(s) while the personnel verify feasibility of product designs and development processes. The purpose, composition, presentation and quality acceptance criteria of the final product are defined before its development. The interviews and FDGs with BDL staff revealed that the company extended from manufacturing fermented milk to involve other dairy products, namely butter, ghee, pasteurized milk, fresh cream, variety of yogurts (natural, plain, flavoured with vanilla, flavoured with strawberry), variety of cheeses (Gouda, Mozzarella, Feta, Processed, Maasdam, Licota, Halloumi, Mascopam). According to (FAO, 2020), the milk processing companies delivers a range of specialist products which might be categorized as follows: liquid milk (UHT milk, pasteurized milk, etc.), fermented milk (Yoghurt, Kefir, etc.), cream, cheeses, whey products, butter and ghee, condensed milk, evaporated milk, powdered milk and casein. As per this categorization, BDL would certainly be on good track regarding products diversification. BDL is certified for RSB Standardization Mark (S-Mark) and is yet to be certified to ISO standards (ISO 22000, etc.). Regarding quality aspects, the plant performs several tests on dairy products and milk, including physical appearance and smell, temperature, alcohol test, milk density measurement, mastitis test, milk fat content, test for acidity, bacterial count, and milk grading (grade I & II).

The management identifies and properly allocates the resources (budget, machines and equipment) required to produce the products. The scope change is approved before its implementation. The issues with scope management and suggestions for improvement, are found and reported to the appropriate people for future reference. On the flipside, it appeared that some of respondents remained neutral on the facts that the management has developed a plan for staff training and promotion and the management has set aside a change budget to be used if change occurs. In fact, the qualitative data confirmed a lack staff training and promotion plan. As well, the management has not set aside a change budget to be used should the change occur.

Table 2: Correlation between scope management and organizational performance of Burera Dairy Limited

		Scope management	Organisational performance
Scope management	Pearson Correlation	1	.802
	Sig. (2-tailed)		.013
	N	5	5
Organisational performance	Pearson Correlation	.802	1
	Sig. (2-tailed)	.013	
	N	5	5

Table 2 revealed that scope management had a significant and strong positive correlation with organisational performance of BDL (Sig.=0.013, r= 0.802). These findings are supported by Yausheva (2019) who indicated that project failure might result from unclear or incomplete scope, not finalized or poorly developed. A clear, realistic, finalized, agreed-upon and well-defined scope is fundamental to a successful project.

Table 3: Regression analysis on scope management and performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802[a]	.643	.524	.577
a. Predictors: (Constant), Scope management				

The Table 3 showed the effect of scope management on organizational performance of BDL. The results as measured by R-square show that 64.3% of the total variation in performance of milk processing company is caused by scope management.

Findings on cost management and performance

Further research was done to see how BDL's cost management affects the company's overall performance. The results in Table 4 showed respondents' views on cost management implemented by BDL.

Table 4: Respondents views on cost management

Items (n= 5)	N	A	SA	Mean	S.D.
	%	%	%		
BDL has a cost management plan	40.0	40.0	20.0	3.8	0.8
The management estimates costs for each work package/ activity to provide a basis for attributing expenditure	40.0	20.0	40.0	4.0	1.0
An annual budget is developed by allocating the costs over several years.	-	60.0	40.0	3.4	0.5
Accounting procedures and processes are put in place to keep track of actual spending and manage costs.	20.0	40.0	40.0	4.2	0.8
In order to develop an annual budget, costs are spread out over several years to keep track of actual spending and manage costs, accounting procedures and processes are put in place.	60.0	-	40.0	3.4	0.5
Overall Mean	**32**	**32**	**36**	**3.76**	**0.72**

Source: Filed data, December 2020

Many of respondents agreed that BDL implemented cost management as evidenced by a high average mean of 3.76. Invensis (2020) argued that regarding the management of projects, the budget is a crucial

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element to consider. Planning, estimating, determining budget and controlling costs are all included in this practice. In a bid to avoid displeasing stakeholders, the budget must be established using meticulous estimating techniques and continually monitored. Regular project status intervals are utilized to perform earned value analysis to establish the current status of the project. Looking at individual means, it appeared that 3 out of 5 best practices were properly implemented. These showed a high mean (3.5-4.2). Thus, the researchers established that BDL has a cost management plan, the management estimates costs for each work package/ activity to provide a basis for attributing expenditure, and the accounting procedures and processes are put in place to keep track of actual spending and manage costs. On the flipside, On the flipside, it appeared that some of respondents remained neutral on the facts that the annual budget is developed by allocating the costs over several years and that in order to develop an annual budget, costs are spread out over several years to keep track of actual spending and manage costs, accounting procedures and processes are put in place. Indeed, the interview testimonials revealed that no external audit has ever been conducted to shed some light on the actual financial position of BDL. As such, the efficiency of the cost issues management remains dubious.

Table 5: Correlation between cost management and organisational performance

		Cost management	Organisational performance
Cost management	Pearson Correlation	1	.724
	Sig. (2-tailed)		.028
	N	5	5
Organisational performance	Pearson Correlation	.724	1
	Sig. (2-tailed)	.028	
	N	5	5

Table 5 revealed that questionnaires were answered by 5 respondents. This table indicates that cost management had a significant and strong positive correlation with organisational performance (Sig.=0.028, r= 0.724); the more positive cost management is the better the organisational performance of BDL.

Table 6: Regression on cost management and performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724[a]	.608	.570	.943
a. Predictors: (Constant), Cost management				

The Table 6 shows the predictors of performance of BDL. The results as measured by R-square showed that 60.8% of the entire variation in performance of milk processing industry is caused by cost management.

Findings on risk management and performance

The third objective was to determine how risk management affects the organizational performance of BDL. The results in Table 7 showed respondents' views on how risk management was implemented by BDL.

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Table 7: Respondents views on risk management

Items (n= 5)	D	N	A	SA	Mean	S.D.
	%	%	%	%		
BDL has a risk management plan	-	60.0	20.0	20.0	3.6	0.9
BDL establishes a factory risk register by identifying the most significant threats to the facility.	20.0	60.0	20.0	-	3.0	0.7
BDL assigns a probability and impact score to each of the major risks.	20.0	80.0		-	2.8	0.4
According to their impact on the project's budget, schedule, and other factors, BDL performs a numerical analysis of the most important priority risks.	20.0	80.0		-	2.8	0.4
All parties are aware of how to respond when the risk occurs because BDL develops and communicates the risk response plans.	20.0	60.0	20.0	-	3.0	0.7
When things go wrong, BDL lets everyone know.	-	-	40.0	60.0	4.6	0.5
All processes are inspected on a regular basis to ensure they are running smoothly and to guard against potential hazards.	-	20.0	20.0	60.0	4.4	0.9
It is necessary to inspect the risk register on a regular basis and cross off any risks that are no longer relevant.	20.0	40.0	20.0	20.0	2.8	0.8
A risk budget has been set aside by the company's management in case risks arise.	-	80.0	20.0	-	3.2	0.4
Identification, documentation, and transmission to management of risk management issues and recommended improvements are all part of the process.	-	-	60.0	40.0	4.4	0.5
Overall Mean	**10**	**48**	**27.5**	**20**	**3.46**	**0.62**

Source: Filed data, December 2020

Many of respondents agreed that BDL implemented risk management as evidenced by a neutral average mean of 3.46. According to Hillson (2009), every project comes with risk(s), and so, modern approaches to managing projects recognize the need of managing the risk as an inherent component of the project management. Risk management shall be a joint effort which encompasses risk management planning, risks identification, qualitative risk analysis, quantitative risk analysis, risk responses planning, risk responses implementation and risks control (Mrmcentral, 2020). PRINCE2 advises that the risk budget be created to handle risks that arise during the project. The risk budget will only be available to the risk management team and only to be utilized to fund risks. If it is not used, then it is returned upon completion of the project. Also, PRINCE2 asserted that all projects confront uncertainty in trying to achieve their objectives. So, all projects should identify, assess and control uncertain events during a project. The risks are recorded in a risk log. Risks must be regularly reviewed and re-analysed throughout the project (Mohammed, 2018).

Looking at individual means, it appeared that 4 out of 10 best practices were properly implemented. These showed a high mean (3.5-4.2) and very high mean (4.3-5). Thus, the researchers established that BDL has a risk management plan; When things go wrong, BDL lets everyone know; All processes are inspected on a regular basis to ensure they are running smoothly and to guard against potential hazards; Identification, documentation, and transmission to management of risk management issues and recommended improvements are all part of the process. On the flipside, On the flipside, it appeared that some of respondents remained neutral (mean of 2.7-3.4) on other best practices

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which include the following: BDL establishes a factory risk register by identifying the most significant threats to the facility; BDL assigns a probability and impact score to each of the major risks; According to their impact on the project's budget, schedule, and other factors, BDL performs a numerical analysis of the most important priority risks; All parties are aware of how to respond when the risk occurs because BDL develops and communicates the risk response plans; It is necessary to inspect the risk register on a regular basis and cross off any risks that are no longer relevant; and risk budget has been set aside by the company's management in case risks arise.

The interview and FGDs testimonials revealed that BDL's main stakeholders (CEPTL, MCC KIRAMBO and Burera district) are communicated whenever the unexpected events occur. Also, whenever there is risk issue, appropriate actions are implemented and, if necessary, the risk issue is escalated to a higher level of management. Put differently, the company waits for issues to unfold before responding. This approach is reactive while risk management should be proactive. Moreover, the dominance of neutral responses (48%) raises concerns about how the company's management brings onboard its personnel to plan, implement and control the risks. Indeed, the findings of the FGDs indicated that most of the BDL staff were never convened to brainstorm on risk events. the risk management plan was not developed, the risks were never identified, and the company has no risk register. Also, risk evaluation was not done, and risk responses plan was not developed, either.

Table 8: Correlation between risk management and organizational performance

		Risk management	Organisational performance
Risk management	Pearson Correlation	1	.873
	Sig. (2-tailed)		.035
	N	5	5
Organisational performance	Pearson Correlation	.873	1
	Sig. (2-tailed)	.035	
	N	5	5

Source: Filed data, December 2020

The Sig value of 0.035 (which is inferior to 0.05) and Pearson Correlation value of .873 revealed a significant and strong positive correlation between risk management and organizational performance of BDL. This corroborates with a study by Mohammed & Knapkova (2016) which indicated that risk management helps organizations to avoid unpleasant surprises and financial losses by helping managers to spot potential problems before they arise. Thus, it allows the corporation to maintain and improve its earnings. When profit margins are consistent, business risk is reduced, and the company's long-term viability is enhanced. There would also be an increase in dividends and capital gains for current shareholders due to the decreased chances of bankruptcies.

Table 9: Regression analysis on risk management and performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783[a]	. 672	.638	. 147
a. Predictors: (Constant), Risk management				

Table 9 showed the value of R-square of 0.672, meaning that the proportion of performance (dependent variable) is explained by the independent variable (risk management) at 67.2%.

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This indicates that the independent variable highly explains the dependent variable.

Findings on communications management and performance

The fourth objective was to examine how communications management affects the organizational performance of BDL. Findings in Table 10 indicated respondents' views on communications management implemented by BDL.

Table 10: Respondents' views on communications management implemented by BDL

Items (n= 5)	N	A	SA	Mean	S.D.
	%	%	%		
BDL has a communications plan	-	40.0	60.0	4.6	0.5
BDL identifies its customer segments, their needs and expectations	20.0	20.0	60.0	4.4	0.8
BDL identifies its suppliers, their needs and expectations	20.0		80.0	4.6	0.9
Information is generated, gathered, stored, retrieved, analyzed and disseminated within established systems and procedures to aid decision making processes	-	60.0	40.0	4.4	0.5
BDL establishes what, how, when and how often to communicate with customers and suppliers	-	40.0	60.0	4.6	0.5
The reporting channel is clear to all staff and other key stakeholders	20.0		80.0	4.6	0.8
The management provides regular updates to its team on project progress, budget, issues, and action items	-	40.0	60.0	4.6	0.5
The management provides regular updates to its stakeholders on project progress, budget, issues, and action items	-	60.0	40.0	4.4	0.5
The lessons learnt are shared among staff members	20.0	20.0	60.0	4.4	.9
The lessons learnt are properly documented for future reference	40.0	40.0	20.0	3.8	0.8
BDL ensures that the needs of suppliers are addressed, and communication lines remain open	-	20.0	80.0	4.8	0.4
BDL ensures that the needs of customers are addressed, and communication lines remain open	-	-	100.0	5.0	0
Overall Mean	**10**	**28.3**	**61.6**	**4.5**	**0.59**

Source: Filed data, December 2020

As per Table 10, all the respondents agreed that BDL implemented communications management as evidenced by a very high average mean of 4.5. Roseke (2019) argued that communications management encompassed three processes: Developing an appropriate communications approach; Implementing the project communications plan; and finally storing and retrieving project-related information as needed. Looking at the individual best practices, it appeared that BDL has a communications plan; BDL identifies its suppliers, their needs and expectations; BDL

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establishes what, how, when and how often to communicate with customers and suppliers; the reporting channel is clear to all staff and other key stakeholders; the management updates its team on project progress, budget, problems, and next steps on a regular basis; and BDL works hard to ensure its vendors' needs are met and communication channels are open. BDL identifies its customer segments, their expectations and needs; the information is generated and gathered and then stored retrieved, analyzed and disseminated to support decision-making processes; project progress, budget, issues, and action items are regularly updated by management and shared with stakeholders; the lessons learnt are properly shared among staff members and documented for future reference. Despite the above, the review of existing reports/documents and interview testimonials revealed that the organisational structure chart was still under elaboration. In such a situation, effective communication, reporting channel and delegation of work packages become questionable.

Table 11: Correlation between communications management and organizational performance

		Communications management	Organisational performance
Communications management	Pearson Correlation	1	.873
	Sig. (2-tailed)		.035
	N	5	5
Organisational performance	Pearson Correlation	.873	1
	Sig. (2-tailed)	.035	
	N	5	5

The Table 11 revealed a Pearson Correlation value of 0.873 and is significant (p=.035); So, the researchers found a strong positive relationship between communications management and organizational performance of BDL. These findings are supported by Roseke (2019) who argued that communications management informs every aspect of the project within the project staff and with other parties involved. To ensure a successful project, it's fundamental to have good communication amongst all parties involved. This bridge helps to minimise the chasms that might arise due to differences in background, knowledge, opinions, and interests.

Table 12: Regression on communications management and performance of BDL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873[a]	.762	.683	.471
a. Predictors: (Constant), Communications management				

The results of the Table 12 showed the effect of communications management on organizational performance of BDL. The results as measured by R-square show that 76.2% of the total variation on performance is caused by communications management.

Findings on project environment and performance of Burera Dairy Limited

The fifth objective was to find out the effect of project environment on the organisational performance of BDL. The Table 13 showed respondents' views on effects of project environment on the organisational performance of BDL.

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Table 13: Respondents' views on effects of project environment on the organisational performance

Items (n=5)	VL	L	M	H	VH	Mean	S.D.
	%	%	%	%	%		
The physical location positively affects the organisational performance of BDL	-	-	20.0	40.0	40.0	4.2	0.8
The management leadership style positively affects the organisational performance of BDL	20.0	40.0	-	20.0	20.0	2.8	1.6
The performance of the Burera district's MCCs positively affects the organisational performance of BDL	20.0	40.0	-	20.0	20.0	2.8	1.6
The purchasing power of Burera dwellers/citizens positively affects the organisational performance of BDL	20.0	20.0	40.0	20.0	-	2.6	1.1
The culture of Burera dwellers/citizens positively affects the organisational performance of BDL	40.0	20.0	20.0	20.0	-	2.2	1.3
The leadership style of the management positively affects the organisational performance of BDL	-	-	-	60.0	40.0	4.4	0.5
The organisational structure positively affects the organisational performance of BDL	-	-	-	60.0	40.0	4.4	0.5
The East African Community quality standards positively affects the organisational performance of BDL	-	-	20.0	20.0	60.0	4.4	0.8
The technical skills of BDL.'s personnel positively affect its organisational performance	-	-		60.0	40.0	4.4	0.5
The number of BDL personnel positively affects its organisational performance	-	20.0	20.0	40.0	20.0	3.6	1.1
The ministerial order n°001/11.30 of 10/02/2016 determining the guidelines for collection, transportation and selling of milk in Rwanda positively affects the organisational performance of BDL	20.0	-	60.0	20.0	-	2.8	1.0
The absence of a regulation on milk quality-based payment system positively affects the organisational performance of BDL	20.0	40.0	-	20.0	20.0	2.8	1.6
The ban of packaging using plastics positively affects the organisational performance of BDL	40.0	40.0	-	20.0	-	2.2	1.6
Overall Mean	**13.3**	**15**	**15**	**33.3**	**23.3**	**3.4**	**1.03**

Source: Filed data, December 2020

Most respondents remained neutral on the fact that project environment affects the organisational performance of BDL as evidenced by a neutral average mean of 3.4. The project environment embeds two determinants which lead to its success or failure: Organizational Process Assets or OPAs,

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for short, and the Enterprise Environmental Factors, EEFs, for short. OPAs include the processes, polices, procedures and corporate knowledge base (Malik, 2019; Hassan, 2018). The EEFs come from outside of project and enterprise. The project staff have no control over them (Hassan, 2018). They include the structure, culture, and governance; IT software; Facilities and resources distribution across the nation or world; resources availability; infrastructure; and the capability of employees (their education, personal experience on project, work ethics, and personal interests) (Boston, 2019; Malik, 2019). Other examples of EEFS are market conditions; issues and influences characterized by the social and cultural environment, legal implications/restrictions; economic and political considerations; technological considerations; commercial databases; academic research; government policies or industry standards; financial considerations; and physical environmental aspects (Rotich, 2020; Malik, 2019; Hassan, 2018; Santa, 2014).

Looking at individual means, it appeared that 6 out of 13 environmental dimensions affects the organisational performance of BDL as evidenced by high means (3.5-4.2) to very high means (4.3-5). These are physical location, management leadership style, organisational structure, East African Community quality standards, technical skills and number of BDL.'s personnel.

On the flipside, 7 out of 13 environmental dimensions had insignificant effects on the organisational performance of BDL as evidenced by low means (1.9-2.6) and neutral means (2.7-3.4). These are purchasing power of Burera dwellers/citizens; culture of Burera dwellers/citizens; performance of the Burera district's MCCs; ministerial order N° 001/11.30 of 10/02/2016 determining the guidelines for collection, transportation and selling of milk in Rwanda; absence of a regulation on milk quality-based payment system; and the ban of packaging using plastics. In fact, the study revealed that Burera dwellers mainly raised the cows for manure production. As well, the interview testimonials that revealed that the five district's MCCs (GIRAMATA GATEBE, IZERE BUNGWE, GIRINKA KIVUYE, KIRAMBO, & CEPTL CYANIKA) have a combined daily milk collection capacity of 18,500 litres but only operate at 7,500 – 9,650 litres of milk, i.e., at 40-52% of the installed capacity. The remainder of milk production is channeled through informal sector. GIRAMATA MCC is currently leading the pack as it collects between 3,500 and 4,000 litres per day. It is followed by MCC IZERE (1,500 – 1,700) and MCC GIRINKA (1,000-1,500). The least efficient collectors (least performing MCCs) are MCC CEPTL (650 –750) and MCC KIRAMBO (850 – 1,700). However, BDL is mostly contented with picking a portion of the milk collected by these least performing MCCs. The remaining milk is sold to the milk traders in Kigali (KIRAMBO MCC & CEPTL) and to the nearby coffee shops, Kidaho military camp and Musanze Police station (CEPTL MCC). The top three performers sell their milk to the private milk traders located in Kigali (GIRAMATA GATEBE & IZERE BUNGWE) and to Blessed Dairy Ltd in Gicumbi district (GIRINKA KIVUYE). Hence, their performance could not have repercussions on that of BDL.

Despite an absence of a regulation on milk quality-based payment system, study revealed that BDL pays FRW 200 for grade I milk and FRW 220 for grade II milk per litre of milk supplied by CEPTL. However, the farmer usually gets between FRW140 and 200 per litre of milk. This stance violates the guideline issued by MINICOM (2018) that FRW200 per litre of milk be paid to the dairy farmer (farmgate price) and FRW220 at the MCC level. Therefore, compliance to this guideline remains problematic. The existing literature argued that the formal channel (selling through MCC) is very demanding in terms of quality but offers lower prices as opposed to direct sales in the informal sector (Kamana, 2015). In fact, when milk is directly sold to traders or consumers, payment is by cash immediately while payment is done after 15 days when sale of milk has taken place through formal channel (MINICOM, 2015). On the flipside, the

informal channel (unregulated) is less demanding in terms of milk quality and offers relatively higher prices, and consequently, remains powerful as it controls 85-90% of dairy business (Abdulsamad & Gereffi, 2016). Clearly, the dairy farmers lack financial/market incentives (bonuses) to produce high-quality milk.

As per the quantitative data (mean of 2.2), the ban of packaging using plastics was not an apparent bottleneck for BDL. However, this parts ways with existing literature that it is a huge hassle for Rwandan milk processors as it has increased the cost of production and subsequently making the Rwandan dairy products less competitive in the regional markets (Muvunyi, 2019). According to Abdulsamad & Gereffi (2016), the polythene-based packaging is a tenth the price of Tetra Pak but is illegal in Rwanda due to environmental concerns. Consequently, Kigali's retail price for pasteurized packaged milk ranges from USD1 (FRW 998) to USD1.2 (FRW1,200) while it is reduced to only USD0.45 (FRW 449) per liter for boiled milk, i.e., the gap in retail price is 160%. That conflicts in views could be attributed to the fact that BDL staff have no clue about this Tetra pack packages, and subsequently an indication poor information sharing regarding threats.

Table 14: Correlation between project environment and organisational performance

		Project environment	Organisational performance
Project environment	Pearson Correlation	1	.891
	Sig. (2-tailed)		.032
	N	5	5
Organisational performance	Pearson Correlation	.891	1
	Sig. (2-tailed)	.032	
	N	5	5

In Table 14, the results showed that p-value is 0.032 which is inferior to 0.05, therefore a significant correlation between project management and organisational performance of BDL was found. Since the Pearson Correlation coefficient is 0.891 (strong positive value), the researchers established a strong positive relationship between the two variables. In support of these findings, Kwena et al. (2019b) showed that project strengthening components (funding availability, scope compliance, etc.) had a significant positive impact on project outcomes. Besides, (Kwena et al., 2019a) established that the geographical environment affects project outcomes, social and cultural factors inhibit project outcomes, belief and traditions affect project outcomes, political instability hinders success of project outcomes and technological changes affect project outcomes.

Table 15: Regression analysis on project environment and performance of BDL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	.607	.590	.913
a. Predictors: (Constant), Project environment				

Table 15 indicated the value of R-square of 60.7% which means that the proportion of performance (dependent variable) is explained by the intervening variable (project environment) at 60.7%.

Testing of Hypotheses

The T-paired test was performed to test the hypothesis. The Table 16 indicated the findings.

Table 16: T-paired test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Scope management – Performance	.400	.548	.245	-.280	1.080	1.633	4	.017
Pair 2	Cost management – Performance	-.200	1.095	.490	-1.560	1.160	-.408	4	.004
Pair 3	Risk management – performance	-.200	.447	.200	-.755	.355	-1.000	4	.034
Pair 4	Communications management – Performance	.800	.447	.200	.245	1.355	4.000	4	.016
Pair 5	Project environment – Performance	-.400	1.140	.510	-1.816	1.016	-.784	4	.047

The Table 16 showed p-value of 5 tested pairs as hypotheses of the study. A p-value inferior or equal to 0.05 (≤ 0.05) indicates strong evidence against the null hypothesis. Therefore, the alternative hypothesis was accepted. A p-value higher than 0.05 (> 0.05) indicates strong evidence for the null hypothesis. Therefore, the researchers fail to reject the null hypothesis. In this study, H0a: Scope management does not affect the organisational performance of BDL was rejected (p=0.017< 0.05). Therefore, H1a: Scope management affects the organisational performance of BDL was accepted. Since p=0.004< 0.05; H0b: Cost management does not affect the organisational performance of BDL was rejected. Therefore, H1b: Cost management affects the organisational performance of BDL was accepted. Since p=0.034< 0.05; H0c: Risk management does not affect the organisational performance of BDL was rejected. Therefore, H1c: Risk management affects the organisational performance of BDL was accepted. Since p=0.016< 0.05; H0d: Communication management does not affect the organisational performance of BDL was rejected. Therefore, H1d: Communication management affects the organisational performance of BDL was confirmed. Since p=0.047< 0.05; H0e: Project environment does not affect the organisational performance of BDL was rejected. Therefore, H1e: Project environment affects the organisational performance of BDL was accepted.

Findings on challenges of Burera Dairy Limited and suggestions to address them

The results in Table 17 showed respondents' views on challenges already solved by BDL.

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Table 17: Problems/challenges already solved

Items (n= 5)	BDL Staff		Local leaders	
	Mean	S.D.	Mean	S.D.
Under-utilization of installed capacity is a solved challenge at BDL	3.2	1.3	2.9	1.29
Small installed capacity is a solved challenge at BDL	3	1.41	3.2	0.92
Inadequate location is a solved challenge at BDL	2.2	1.1	2.8	0.79
Insufficient land at expansion possibilities is a solved challenge at BDL	2.2	0.45	2.4	0.52
Low penetration into the local markets is a solved challenge at BDL	2.4	0.89	2.5	0.97
Low penetration into the regional markets is a solved challenge at BDL	1.4	0.55	2.7	1.06
Little product differentiation is a solved challenge at BDL	3.8	1.64	2.6	0.97
Underdeveloped farm to consumer cold chain is a solved challenge at BDL	3	1	3	1.15
High transport costs required to reach regional markets is a solved challenge at BDL	1.6	0.55	3.1	0.99
Narrow reach of the retail distribution networks is a solved challenge at BDL	2.6	0.89	3	1.05
Narrow reach of MCCs is a solved challenge at BDL	3.4	1.34	3.2	0.79
Poor marketing of dairy products to trigger domestic mass milk consumption is a solved challenge at BDL	3	1	3.3	0.95
Concentration of dairy products in urban areas is a solved challenge at BDL	2.2	1.1	3.1	1.1
Large network of milk traders who operate in the informal milk markets is a solved challenge at BDL	2.2	1.1	2.8	1.03
Absence of milk quality-based payment system is a solved challenge at BDL	3.6	1.52	3.4	0.7
Inadequate machinery is a solved challenge at BDL	2.8	1.1	3.9	0.74
Supply of poor milk quality is a solved challenge at BDL	3.8	1.1	3.2	1.14
Poor organization of the milk supply chain is a solved challenge at BDL	3.8	1.1	3.4	0.97
Delayed payment for milk procured is a solved challenge at BDL	3.6	0.89	3.8	0.79
Lack of means to transport milk is a solved challenge at BDL	2.6	0.89	2.9	0.88
Insufficient working capital is a solved challenge at BDL	3.2	1.1	3.1	0.99
Insufficient number of skilled personnel is a solved challenge at BDL	3.8	1.1	2.8	0.79
Overall Mean	**2.8**	**1.05**	**3.1**	**0.93**

Source: Filed data, December 2020

The Table 17 revealed that most respondents remained neutral on the resolution of the problems/challenges marring BDL as evidenced by a neutral mean of 2.8 and 3.1 (between 2.7-3.4) among BDL staff and local leaders, respectively. Looking at the individual best practices, it appeared that some problems were solved and include the little product differentiation, absence of milk quality-based payment system, supply of poor milk quality, poor organization of the milk supply chain, delayed payment for milk procured, and insufficient number of skilled personnel. The FGDs and interviews testimonials revealed that BDL manufactures several products, namely fermented milk, butter, ghee, pasteurized milk, fresh cream, yogurts, cheeses (gouda, mozzarella, feta, licota, haroum, etc). Though the company manufactures those products, the local leaders are unaware of them. That is indicative of poor marketing of dairy products to trigger domestic mass milk consumption. The study revealed that the issue of inadequate machinery is a thing of the past. As well, the study revealed that since 2017, the Rwanda Dairy Development Project has supported the

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organization of the dairy value chain. The dairy farmers were grouped into the Livestock Farmer Field Schools (L-FFS) and further set up the Milk Collection/Aggregation Points (MCPs/MAPs). By 2020, 103 L-FFS groups were established and 4 MCPs were constructed across the district. The interviews and FDGs testimonials revealed that BDL had 14 skilled staff under status: Executive Director, General Manager, Production Supervisor, Production Officer, Production Assistants (4), Quality control Officer, Sales and Marketing Manager, Accountant, Cost Management Accountant, Cashier, and Storekeeper; 6 unskilled workers (2 cleaners under status and 4 casual workers). Occasionally, the company hosts the internees within production unit. As per (Kandoi, 2014), the plant with such amount of personnel would process at least 10,000 litres of milk per day. So, if BDL wants to stay profitable in the longer term, it needs to increase its processing capacity. The supply of poor milk quality is no longer an issue at BDL.

On the flipside, other challenges remain unsolved and still take their toll on BDL's overall performance. These included the under-utilization of installed capacity, small installed capacity, inadequate location, insufficient land at expansion possibilities, low penetration into the local markets, low penetration into the regional markets, underdeveloped farm to consumer cold chain, high transport costs required to reach regional markets, narrow reach of the retail distribution networks, narrow reach of MCCs, poor marketing of dairy products to trigger domestic mass milk consumption, concentration of dairy products in urban areas, large network of milk traders who operate in the informal milk markets, lack of means to transport milk, and insufficient working capital. In fact, some of BDL's land is occupied by MCC CEPTL. The district, BDL, CEPTL and central government agreed to expropriate and relocate CEPTL to enable the company to have enough land for expansion possibilities, but that deal/consensus is yet to come to fruition.

The company has an installed capacity of 4,500 litres per day, but it only 2,500 – 3,000 litres per day are processed, i.e., the utilization capacity of between 55 and 67%. This small installed capacity and under-utilization of installed capacity are aggravated by inadequate location of the company. Although BDL has proximity to good road (10 m from the tarmac road), it appeared that it is located far away from MCCs. Except CEPTL MCC which is closer to BDL (the two entities share the same fence), other 4 MCCs of Burera district are relatively located far away relative to BDL: KIRAMBO MCC is located at 41km, GIRINKA KIVUYE at 53km, GIRAMATA GATEBE at 63km, and IZERE BUNGWE at 75km. These MCCs are only accessible via feeder roads. So, considering the roads status and long distances required to reach those MCCs, it becomes a hassle for BDL to procure milk from them. Yet, the School of Agriculture (2017), School of Agriculture (2017a) and FAO&WHO (2009) argued that a dairy factory should be located nearby milk producing area (milk shed) to enable the minimization of cost for procurement, production and distribution. It should also be nearby a good market for its produce.

The FGDs and interviews testimonials allowed to discover that, since the outset of its operations, BDL market has been concentrated in urban areas of Rusizi and Rubavu cities of the Western province, the City of Kigali, and Musanze city of the Northern province. The presence of BDL's products remain rare in rural areas. Due to poor marketing of dairy products, the domestic mass milk consumption remains very low. On the regional and international markets, BDL products are exported to Goma in the Democratic Republic of Congo. Clearly, BDL needs to align with its vision by expanding its presence on local, regional and international markets. The company's vision is to become a competitive dairy company by providing healthy and premium quality dairy products which is affordable and available locally, regionally and international markets. However, the experience with Tanzania where the government increased import taxes by 1,233%

(Abdulsamad & Gereffi, 2016) is an alert for BDL to emphasize on growing the local markets.

The interviews testimonials *confirmed that the network of milk traders who operate in the informal milk markets still exists across the district*. These findings corroborate with the existing literature (Abdulsamad & Gereffi, 2016; Sabiiti, 2017; Rutagwenda, 2016) that only about 10-15% of Rwanda's daily milk production gets processed into factories while the remaining proportion is channeled through alternative markets countrywide.

Regarding the means to transport milk, the FGDs and interviews testimonials revealed that the company has one truck that is utilized to transport milk from various geographical locations: MCC KIRAMBO of Rusarabuye sector (Burera district), AGIRAGITEREKA MCC of Musanze district and other MCCs located in Gicumbi district. Although BDL made considerable efforts in addressing the issue of delayed payment for milk procured, MCC leadership are not fully satisfied. In fact, the contract defines a timely payment as the one made within seven days after milk reception/pick-up, but on average payment is usually made between one and two months. In their eyes, contract violation is an issue to be fixed.

CONCLUSIONS AND SUGGESTIONS

The study purpose was to assess the effect of project management practices on the performance of milk processing companies. More specifically, the study objectives were to: assess the effect of scope management on the organisational performance of BDL, find out the effect of cost performance on the organisational performance of BDL, determine how risk management contributes to organisational performance of BDL, examine how communications management contributes to organisational performance of BDL, and find out the effect of project environment on the organisational performance of BDL.

The researchers established strong, positive and significant relationship between scope management and organizational performance (Sig. value or p=0.013; Pearson Correlation value or r=0.802). As well, cost management had strong, positive and significant correlation with organisational performance (p=0.028, r= 0.724). The researchers found strong, positive and significant association between risk management and BDL's organizational performance (p=0.035; r=0.873). The researchers further established strong, positive and significant relationship between BDL's communications management and its overall performance (p=0.035; r=0.873). Also, the researchers established a strong, positive and significant relationship between project environment and BDL's overall performance (p=0.032; r=0.891).

A p value inferior to 0.05 gave conclusion to reject the null hypothesis and confirm the alternative one. So, H0a: Scope management does not affect the organisational performance of BDL was rejected (p=0.017). Therefore, H1a: Scope management affects the organisational performance of BDL was confirmed. H0b: Cost management does not affect the organisational performance of BDL was rejected (p=0.004). Therefore, H1b: Cost management affects the organisational performance of BDL was confirmed. H0c: Risk management does not affect the organisational performance of BDL was rejected (p=0.034). Therefore, H1c: Risk management affects the organisational performance of BDL was confirmed. H0d: Communication management does not affect the organisational performance of BDL was rejected (p=0.016). Therefore, H1d: Communication management affects the organisational performance of BDL was confirmed. H0e: Project environment does not affect the organisational performance of BDL was rejected (p=0.047). Therefore, H1e: Project environment affects the organisational performance of BDL was confirmed.

Among other suggestions, it was felt that the government of Rwanda should foster the dairy business through promulgation of a milk quality-based payment regulation at different levels of the

dairy value chain. As well, BDL should increase its processing, utilization capacity and penetration into the local and regional markets, as well as expand its milk collection catchment across the district. Where possible, the dairy farmers should directly supply their produce to MCC without passing through middlemen transporters in order for them to get reasonable prices. Going forward, the comparative studies in other geographical locations should be conducted.

Suggestions for Future Studies

Upon study completion, the researchers noted a shortage of information on the topic. Therefore, it was felt that more research be done. Such research would include the comparative studies in other geographical locations and companies, notably Inyange Industries Limited, Nyanza Milk Industries Limited, Crystal Industries Limited, and Blessed Dairy Limited.

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