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Effect of COVID-19 on the Marketing of Eggs: Case of Egg Layer Projects during the Pandemic in the Vhembe District of Limpopo Province, South Africa

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ABSTRACT The government of South Africa assisted beneficiaries with the establishment of projects to help alleviate poverty and create jobs in the country. Several projects were established amongst them: broiler production, vegetable production, and egg layer production. The focus of this study is on egg layer production. The objective of this study is to investigate the effect of COVID-19 on the marketing of eggs in the Vhembe district of Limpopo province, South Africa. In this study, the research design, which involved investigating the effect of COVID-19 on the marketing of eggs during the pandemic in the Vhembe district, using qualitative and explorative research was employed. The study employed focus group discussions where 7 members of the project from a total of 3 projects were interviewed. Egg layer projects have experienced a market loss of eggs during the past three months, structured interviews were also carried out with 1 extension officer in the college of agriculture who is responsible for conducting training and monitoring of such projects. The coded data were then analyzed using Statistical Packages for Social Sciences (SPSS version 22). The egg layer projects were facing the low market return of egg sales because of competition with commercial farmers who bring the stock to the local market. In conclusion, it is presumed that the results of this study would lead to informed decisions by the department of agriculture in terms of arranging markets and making sure that the commercial farmers do not compete with the projects in terms of prices of eggs.

INTRODUCTION

More than half of the world population is currently under some form of social distancing to contain the health crisis. As a result, millions of businesses have had to close shops (Laborde et al. 2020). The lockdown measures that South Africa has put into place have profound economic implications. The spread of the virus encouraged social distancing which led to the shutdown of financial markets, corporate offices, businesses, and events. The exponential rate at which the virus was spreading, and the heightened uncertainty about how bad the situation could get, led to a flight to safety in consumption and investment among consumers, investors, and international trade partners. (Ozili and Arun 2020). The implications of the pandemic in the rest of the world, and hence on demand for South Africa's export, are not as large as the effects of the domestic lockdown but are still very large by any normal measure (Arndt et al. 2020; McKibbin 2020). On 31st December 2019, the World Health Organization (WHO) reported a cluster of pneumonia cases in Wuhan City, China. Severe Acute Respiratory Syndrome Coronavirus 2' (SARS-COV-2) was confirmed as the causative agent of what we now know as 'Coronavirus Disease 2019' (COVID-19) (Arndt et al. 2020; WCDMA 2020). The virus has spread to more than 100 countries, including South Africa. South Africa finds itself at war, and the enemy is the novel coronavirus, which gives rise to the Covid19 disease. The study further highlighted that the tool currently available to mitigate the demographic effects of Covid-19 is some form of lockdown to reduce contagion by breaking existing social and economic forms of contact. Such measures impose a severe negative shock on the economy, with immediate loss of economic activity followed by medium-term and long-term economic effects. In his address to the Parliamentary Committee, Trade, Industry, and Competition Minister Mr. Ebrahim Patel stated that the pandemic has caused a massive and rapid shock on the economy, starting globally and transmitted rapidly to South Africa and the rest of the continent, with a dual impact on the demand and supply-side of the economy. He also stated that the impact on GDP will be very

significant – with a projected recession with severe contraction of the economy in 2020, accompanied by big job losses and firm closures with high levels of social hardship (APO Group and DTI 2020).

Vhembe district is no exception to the pandemic that has ravaged the whole world, economic activities are at a standstill and businesses are collapsing. The movement of people is restricted thereby increasing poverty among the already poverty-stricken people. Severely affected by the pandemic is the egg layer projects in the district, their survival is based on the sales of eggs to the local communities even though some projects have contracts with the retailers in the district.

This study seeks to investigate the effect of Covid-19 on the marketing of eggs in egg production projects in the Vhembe district. This study reveals that the marketing of eggs was not affected by the COVID-19 pandemic, however, the sales were affected by competition with commercial farmers who sold eggs at low prices. The commercial farmers sell their eggs locally and the projects also sell their eggs locally (Table 1).

Table 1: Comparisons of egg prices between projects and commercial farmers in the Vhembe district

Quantity	Egg layer projects	Commercial farmers
Large	R70	R45
Medium	R50	R40
Bulk	R70	R65

The differences in prices by the projects and commercial farmers. The commercial farmer put prices lower than that of projects, their prices differ according to the customer's preferences, for example; large, medium, and bulk eggs; the reason for this practice difference is to attract the market.

There are social problems that hinder the growth of egg layer projects in the district, however; some of these projects are surviving despite the presence of problems while others have closed down (Table 2).

Due to the prevalence of the COVID-19 pandemic, the egg layer projects in the Vhembe district are facing problems that hinder their growth.

Table 2: Main social problems faced by egg layer projects In the Vhembe district

Problems faced by egg layer projects	Problems in the market
Bloated workforce	Competition with commercial farmers
High electricity bills	Community members not buying from local projects
Theft	Inability to secure a market contract from retail stores
Lack of delivery vehicles	Government not organizing markets for projects

The problems are two-fold, namely, problems faced by egg layer projects and problems in the market. The problems faced by projects include a bloated workforce which is difficult to give salaries to, due to low turn-over, high electricity bills which are also not easy to pay, theft of stock by community members, and lack of delivery vehicles to the market. Problems in the market include and are not limited to the following-competition with commercial farmers who sell at low prices, community members not buying from local projects because there are always cheaper eggs from commercial farmers, inability to secure a market because the demand is not high, and government not assisting projects.

Objectives

The objective of this study is to assess the effect of the COVID-19 pandemic on the marketing of eggs by egg layer projects in the Vhembe District of Limpopo province, South Africa. The study highlighted some of the problems that typically revolve around the marketing of eggs in egg layer projects in the district. These problems led to some of them facing losses in profits. The government's intervention in the marketing of eggs may minimize the sales at low prices by the commercial farmers. It is anticipated that the return to economic activities after this pandemic will minimize further collapsing of projects in the district.

MATERIAL AND METHODS

The study was based on an extensive primary data collection by questionnaires performed by the researcher in April 2020 during the coro-

navirus pandemic with seven members of the egg layer projects in Vhembe district and one extension officer who was based at Madzivhandila College of agriculture. In this study, the research design, which involved investigating the effect of COVID-19 on the marketing of eggs during the pandemic in the Vhembe district, using qualitative and explorative research was employed. Holloway (1997), indicates that data collection in qualitative research involves the gathering of information for a research project through a variety of data such as interviews and observation schedules. In this study, the researcher used structured questionnaires for gathering data. Focus group discussions were carried out among seven members of the project from three projects in the Vhembe district. A structured interview was also carried out with one extension officer in the college of agriculture who was responsible for conducting training and monitoring of projects. Interviews dealt with, among others, project members' knowledge of COVID-19, government's regulations regarding the COVID-19 pandemic, and how the production cycle got affected during the lockdown. Special attention was given to the marketing of eggs and staff turnover during the pandemic.

Demographic

The projects in this study were found in the Vhembe District of Limpopo Province, South Africa. Limpopo Province shares its borders with Botswana in the northeast, Zimbabwe in the north, and Mozambique in the east. Vhembe District is composed of four local municipalities, namely, Makhado, Musina, Thulamela, and Col-

lins Chabane. Vhembe district has a population of approximately 1,393,949 and covers an area of 27,969,148 square kilometers, the coordinates are 22.76"96'S, 29.97"41'E (VDM 2019). The participants in this study include the beneficiaries of projects, men and women between the ages of 46 to 58 years, and an extension officer who was working at the local college of agriculture, where the study was conducted. Halloway (1997) hinted that data collection in qualitative research involves gathering information through a variety of data such as interviews, focus group discussions, and observation schedules. In this study, data collection was done using focus group discussions with beneficiaries of the 3 egg layer projects. The respondents of this study include 7 participants from the projects and 1 extension officer who was based at the local college of agriculture.

RESULTS

The study was conducted in the Vhembe district. The egg layer projects visited were all found in this district. Of the three egg layer projects, only one was found to be dysfunctional, namely, Thengwe egg layer project was closed down due to financial constraints, only Sasekisani farmer cooperative and Maila Women Multipurpose projects were found to be functional.

Data was collected using the focus group discussions with seven participants from three projects, that is, one telephonic interview with Thengwe project and two focus group interviews with three members of Sasekisani farmer cooperative and three members of Maila women multi-purpose cooperative. Of the three projects

Table 3: Effects of Covid-19 on egg layer projects in Vhembe district

Project	Effect of Covid-19	
Thengwe Sasekisani Farmer Cooperative	 Closed down due to financial constraints Movement of customers was affected Suppliers of feed not mixing feed accordingly Workers not getting paid due to poor marketing of eggs Department of labor withdrawing financial assistance to the project Project spending a lot of money on PPEs Competition of prices with commercial farmers 	
Marubini Multi-purpose Women Cooperative	 Staff resignation due to lack of salary Movement of customers was affected Workers not getting paid due to poor marketing of eggs Project spending a lot of money on PPEs Competition of prices with commercial farmers 	

visited, one of them was found to be dysfunctional. In all the sites visited, the participants were asked several questions by the researcher. The study recorded that participants agreed that they know about COVID-19 and how it has affected their projects.

The effect that COVID-19 has on different egg layer projects in the Vhembe district (Table 3). Thengwe project closed due to financial constraints, it was hard for them to continue with the operations because they claimed that the market of eggs was not favorable for them. In the Sasekisani farmer cooperative, the movement of people was affected, thereby making it very difficult for customers to arrive at the project site to buy eggs. They also said that the suppliers of feed were taking advantage of the lockdown by not mixing the correct ratio of laying mash, thereby affecting the production cycle of layers. This whole practice of poor production of eggs affected the workers so much that they did not get their salaries on time. The promising projects were given financial assistance by the department of labor in the past, but due to the COVID19 pandemic, the department withdrew the financial assistance to the projects. Lastly, in Sasekisani farmer cooperative, the project spent a lot of money on Personal Protective Equipments that resulted in staff resignation due to lack of salaries. The project also experienced competition of prices with the commercial farmers. The pandemic continued to have its negative impact on the production and sales of eggs in Marubini multi-purpose women cooperative, another egg layer project, the same way it has on Sasekisani farmer cooperative.

Furthermore, participants in this study confirmed that they know about the government regulations relating to COVID19, but insisted that they heard about them over the radio and on national television. Since the beginning of the national lockdown, had the egg layer projects stopped working, the layers could have died because of hunger and thirst. Sasekisani cooperative agreed that they have encountered challenges because of the restricted movement of customers to the projects and with the suppliers of feed, they argued that the suppliers of feed did not supply a properly mixed ratio of layer feed as this has affected the laying pattern of eggs. On the other hand, Marubini Multi-pur-

pose women's cooperative has said that the marketing of eggs was affected because of the restriction of movement of customers during the lockdown. The participants in all projects have agreed that they did not increase the prices of eggs due to lockdown as other businesses have done. They highlighted that there was already a problem of competition with the commercial farmers whose prices were lowered to attract customers. When asked to explain the production cycle of layers in winter and summer, the participants have said that in winter the production drops because layers do not drink plenty of water. During summertime, the production cycle improves because they drink plenty of water, but it was also argued that production could still be affected by the persistent heatwave of the Limpopo province.

DISCUSSION

Members of the egg layer projects in the Vhembe district were aware of the COVID-19 pandemic as well as the government regulations that go with it (South African Government 2020). These regulations, especially the Amended Directions on the movement of persons and goods, (Date: 7 May 2020), have affected their projects because people's movements were restricted. Mukiibi (2020), hinted that with more large farms facing labor challenges and scaling down production, hope remains in the rural communities that have shown high levels of resilience even when the mobility of supplies has been greatly affected by the existing logistical challenges. Cases of COVID-19 worldwide are growing exponentially, with major impacts on global staple food markets and poverty and hunger (Laborde et al. 2020). The study further highlight that with COVID-19 and its economic fallout now spreading in the poorest parts of the world, many more people will become poor and food-insecure. Some studies believed that most major industries faced large drops in the number of active business owners in April with the only exception being agriculture (Fairlie 2020).

In Vhembe district, projects were experiencing challenges of feed supply because the manufacturers were not mixing feed according to the ration required, but some projects never failed to produce eggs. Affected by the pandemic were

staff members in some egg layer projects because they did not receive salaries because of the nature of competition between commercial farmers and local producers. This resulted in some of them leaving their jobs and staying at home. The egg layer projects in the Vhembe district were very active during their initiation stage, since they were given funds by donors to start their operations. As time progressed, some of them started to be dysfunctional, the reason being financial mismanagement. Most of the beneficiaries of the projects disputed the notion that projects collapsed due to lack of financial management skills, but that was as a result of competition in the market with commercial farmers. The prices laid down by the commercial farmers were very low compared to those of the projects since commercial farmers produce more than the projects (Table 4).

Table 4: Current trends in the prices of projects and commercial farmers

Quantity	Projects	Commercial farmers
Large	R76	R59
Medium	R55	R40
Bulk	R80	R70

The current trends in prizes of projects and commercial farmers shown above show the difference in prices, which result in competition between the projects and commercial farmers. Projects sell their large graded eggs at R76 more than that of commercial farmers, which sell at R59. Projects sell medium graded eggs at R55, more than commercial farmers who sell at R40, and lastly; projects sell their bulk graded eggs at R80 more as compared to commercial farmers who sell at R70. These differences in prices caused the projects to lose profits and as a result, they cannot lower their prices as commercial farmers who normally produce in bulk. The advantage is that commercial farmers will never run into a loss because their production is high.

CONCLUSION

Thengwe egg layer project was closed down due to financial constraints, only Sasekisani farmer cooperative and Maila Women Multipurpose projects were found to be functional in the Vhembe district. The last two projects are doing well although under difficult circumstances. The projects in Vhembe district are doing well although they are in competition with commercial farmers. The competition is still very fierce because the commercial farmers play in the same market as projects, but still projects still survive because they sell to community on credit, while commercial farmers do not.

RECOMMENDATIONS

The experience of going up and down visiting egg layer projects was a daunting task, but it yielded good results. Each egg layer project has its problems. The findings proved that some of them could be addressed by projects themselves whilst others needed government intervention for their solutions. Based on the findings of the current study, the following recommendations can be put forward: the department of Trade and Industry should intervene on the issue of prices of eggs between the projects and commercial farmers because the commercial farmers' prices are much lower than that of the egg layer projects which results in egg layer projects not getting profit; during winter the production drops because layers do not drink plenty of water, therefore; projects must increase the number of layers so that the production level could still be maintained; and the projects should appoint within its ranks, a marketing officer whose responsibility is to seek market for eggs.

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