Poultry Layers Value Chain Analysis in Lesotho

Planning Monitoring and Evaluation Department March 2018

Background

Commercial poultry farming has been said to be one of the success stories in Lesotho's agriculture. This is mainly because Lesotho is in most instances self-sufficient in egg production. The history of commercial poultry farming in Lesotho dates back to 1941 when the Basutoland Department of Agriculture introduced commercial poultry farming through the Poultry Improvement Scheme. Since that time commercial egg farming in Lesotho progressed rapidly such that by 1987/88 there were 3 635 commercial poultry farmers keeping 229 400 commercial layers in Lesotho. By 1994/95 the number of layers had dropped to 169 217. Poultry farming has been thought to provide an excellent example of meeting Lesotho's national development objectives of increased employment, income growth and distribution, and nutritional improvement. One of the advantages of poultry farming is that it can be operated by female Labour. This is crucial as approximately 40 percent of Lesotho's male labor force works in South African mines as migrants

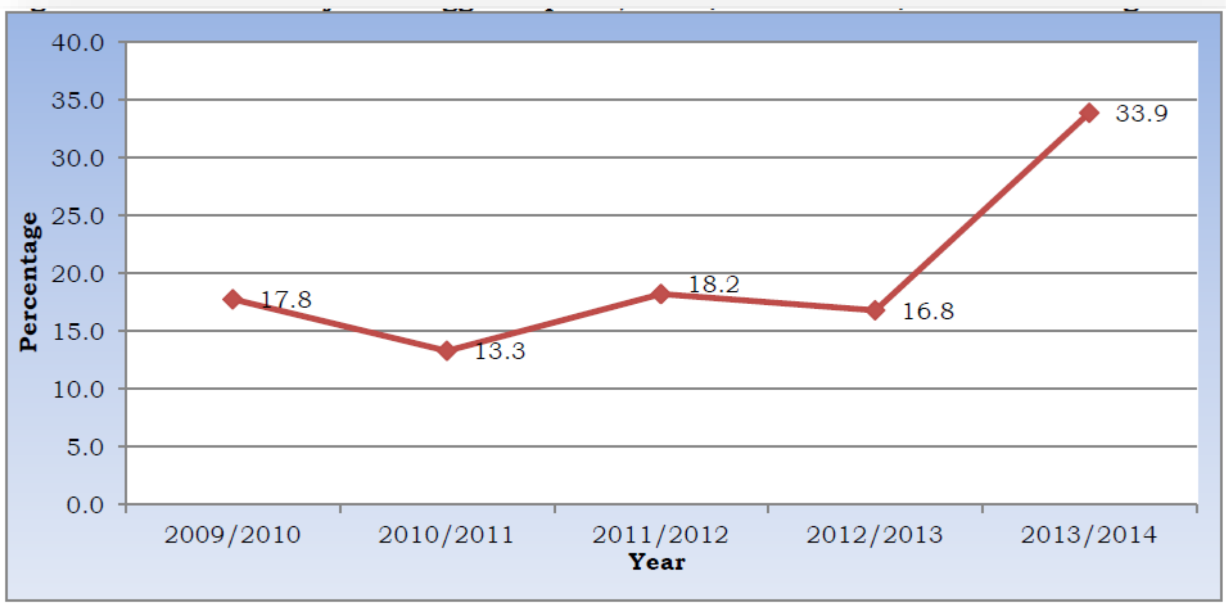
The history of the commercial poultry industry in Lesotho can be divided into four distinct time periods; 1941-1952, 1953-1961, 1962-1972 and 1973-1994. During the period prior to 1941 poultry farming was practiced on a small scale with farmers keeping indigenous breeds. It is thought that during this period there were no improved poultry breeds kept by farmers in the country. The period 1941-1952 saw the introduction of improved breeds by the Department of Agriculture through the Poultry Improvement Scheme. In the period 1953- 1962 a poultry plant was built in Maseru which produced improved chickens which were sold to farmers. The period 1963-1972 is marked by the establishment of Applied Nutrition Programme and the establishment of egg marketing co-operatives. The period 1973-1994 is marked by a regulated egg marketing system. The post 1994 period is marked by a free market system whereby farmers can sell anywhere at free market prices. This came about when some poultry farmer's appealed to the Ministry of Agriculture to be allowed to sell eggs directly to wholesalers, retailers and consumers. This resulted in the deregulation of the egg marketing system.

The commercial poultry industry in Lesotho started on a small scale through the efforts of the Basutoland Department in 1941 to the present time whereby there are over 3 000 commercial poultry farmers raising around 200 000 layers producing over 3 million dozen eggs per annum. Commercial poultry farming in Lesotho has made great strides in egg production. Poultry farming has been said to be a success story in Lesotho and it is argued that this can be attributed to the efforts of the Poultry Production Section of the Ministry of Agriculture and the Department of Cooperatives of the Ministry of Rural Development. It is also argued that the increase in the number of commercial layers can be attributed to the single-channel egg marketing system whereby farmers were guaranteed payment whether the marketing outlets sold or did not sell the eggs. The other reason for the increase in layers was that the Lesotho commercial egg industry was protected from external competition. The increased commercial egg production has however met with marketing problems which resulted in egg marketing system being deregulated in 1994.

Current Development in Egg production in Lesotho

The deregulation of the egg marketing system led to a fragmented production and sales of eggs in Lesotho. With little or no support from the Government the egg production industry in Lesotho has been unstable, as seen in Figure 1 a trend analysis of Eggs' Imports by Year, 2009/2010 – 2013/2014 depicted in the diagram the below shows steady fluctuations in egg imports from 2009/10 to 2012/13 with a spike in imports in one year preceded by a slump the following year. Egg imports into Lesotho in 2009/10 were at 102 017 trays, which declined to 76421 tray in 2010/11, egg imports rose consequently to 104 640 trays in 2011/12 and declined to 96 533 trays by 2012/13. The average trend in the years shows an increasing demand for imports into Lesotho. This demand drastically increased by 101.6% in 2013/14 with a rise to 194 626 trays imported into the country. This doubling in imported trays from 96 533 Trays to 194 626 Trays from 2012/13 to 2013/2014 signals an increased national demand for eggs which is being met by imports.

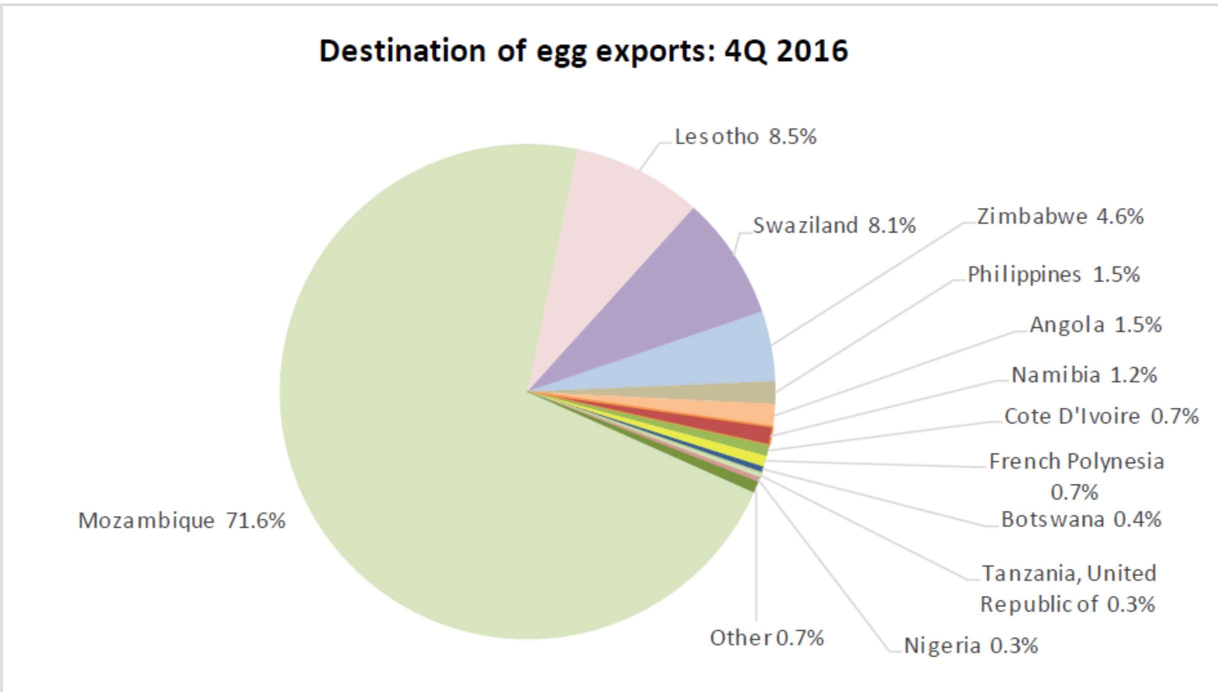
Figure 1. ***Trend Analysis of Eggs' Imports, 2009/2010 - 2013/2014 Marketing Years***



Source: MTCIM-Department of Marketing

This incline in Lesotho imports from South African is also seen in the South African Poultry Association's report on Key Market Signals in the Egg Industry for the fourth quarter of 2016. During 4Q 2016, a total of 4 183 tonnes of eggs and egg products left South Africa, at a declared FOB value of R88.9 million. This tonnage increased by 18.7 % compared to the 3Q 2016 (+ 659 tonnes). As seen in Figure 2 below, the main countries of destination for South African exports of eggs and egg products during 4Q 2016 were Mozambique (71.6 % of exports), **Lesotho (8.5 %)**, Swaziland (8.1 %), Zimbabwe (4.6 %), Angola (1.5 %), Philippines (1.5 %), Namibia (1.2 %), Cote d'Ivoire (0.7 %); French Polynesia (0.7 %); Botswana (0.4 %) and others (1.3 %). With Lesotho being the second largest export market for South African Eggs.

Figure 2. ***Main Countries of destination for Egg Exports***



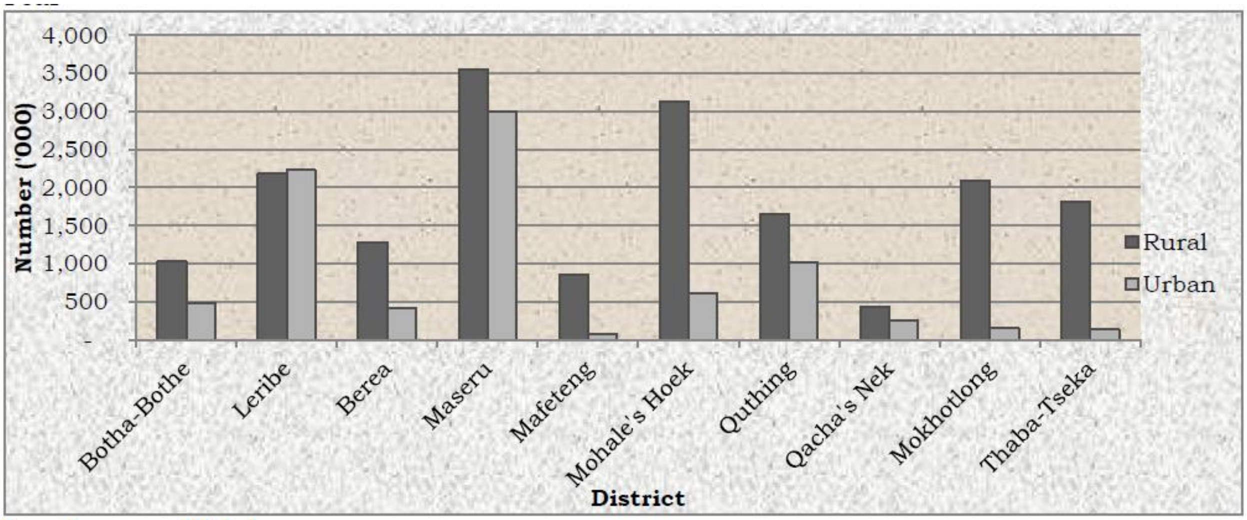
Source: South African Poultry Association

Lesotho Poultry Industry Challenges

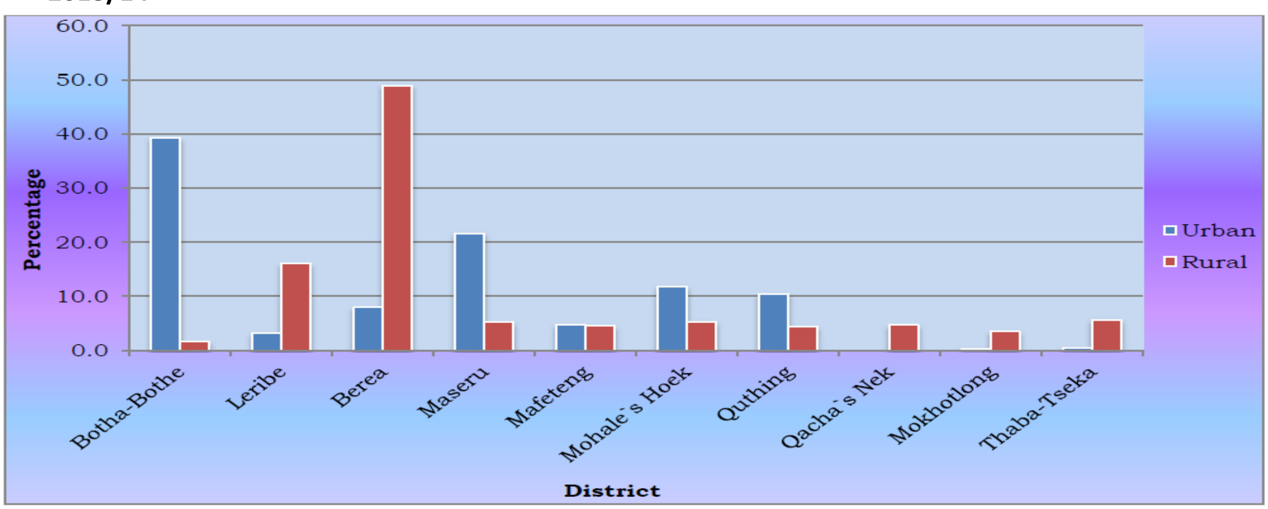
The Lesotho Poultry industry is currently faced with a **sustainability** problem where major retailers in the country concerned with supply consistency seek more reliable suppliers from South Africa. This can be observed in Table 1 below where the largest rural producer in 2012/13 was from Maseru followed by Mohale's Hoek and Leribe, while in 2013/14 the largest rural producer changed to Berea followed by Leribe and Thaba Tseka with larger differences in production scales that in the previous production year.

Table 1. ***Egg Production (trays) by District, Marketing Years 2012/13 and 2013/14***

2012/13



2013/14



This evident sustainability problem is mainly caused by the fact that throughout semi-urban and parts of urban areas in Lesotho, people rear a handful of chicken in their homes for eggs and meat. They usually use part of the maize reserved for human consumption and/or that of lower grade to feed them. This practice effectively removes these farmers from the commercial meat and eggs demand. However, every year in April, May, June and July, there is an increase in maize demand as their reserves begin to be depleted. This results in a cut in the number of chicken reared and a decline in egg laying- a scenario which contributes to high demand of commercial eggs and meat. Hence a reason why we have high rate of eggs imports during these months. (**Table 2.)**

Table 2. ***Percentage Distribution of Importation of Eggs (trays) by Month, Marketing Years 2013/14***

Month	Eggs	Percentage
April	22,325	11.5
May	17,737	9.1
June	9,285	4.8
July	3,000	1.5
August	19,272	9.9
September	28,391	14.6
October	0	0.0
November	36,122	18.6
December	3,251	1.7
January	19,148	9.8
February	15,957	8.2
March	20,138	10.3
Total	**194,626**	**100.0**

Lesotho Egg Production Value Chain Opportunities

The value chain analysis of the Lesotho poultry sector is the ideal manuscript that decomposes the activities the egg production and poultry production industry. Because poultry meat is an annual by-product of the egg production industry is seemingly as important to assess its dynamics.

As presented in Figure 3. The Egg and Poultry production industry is an interaction between the Lesotho and South African Market from the production side through initial operational start up equipment, to egg and poultry production and to the supply side where both eggs and poultry are sold competitively to the Lesotho Market, this is depicted as steps 1 to 3 or A to B.

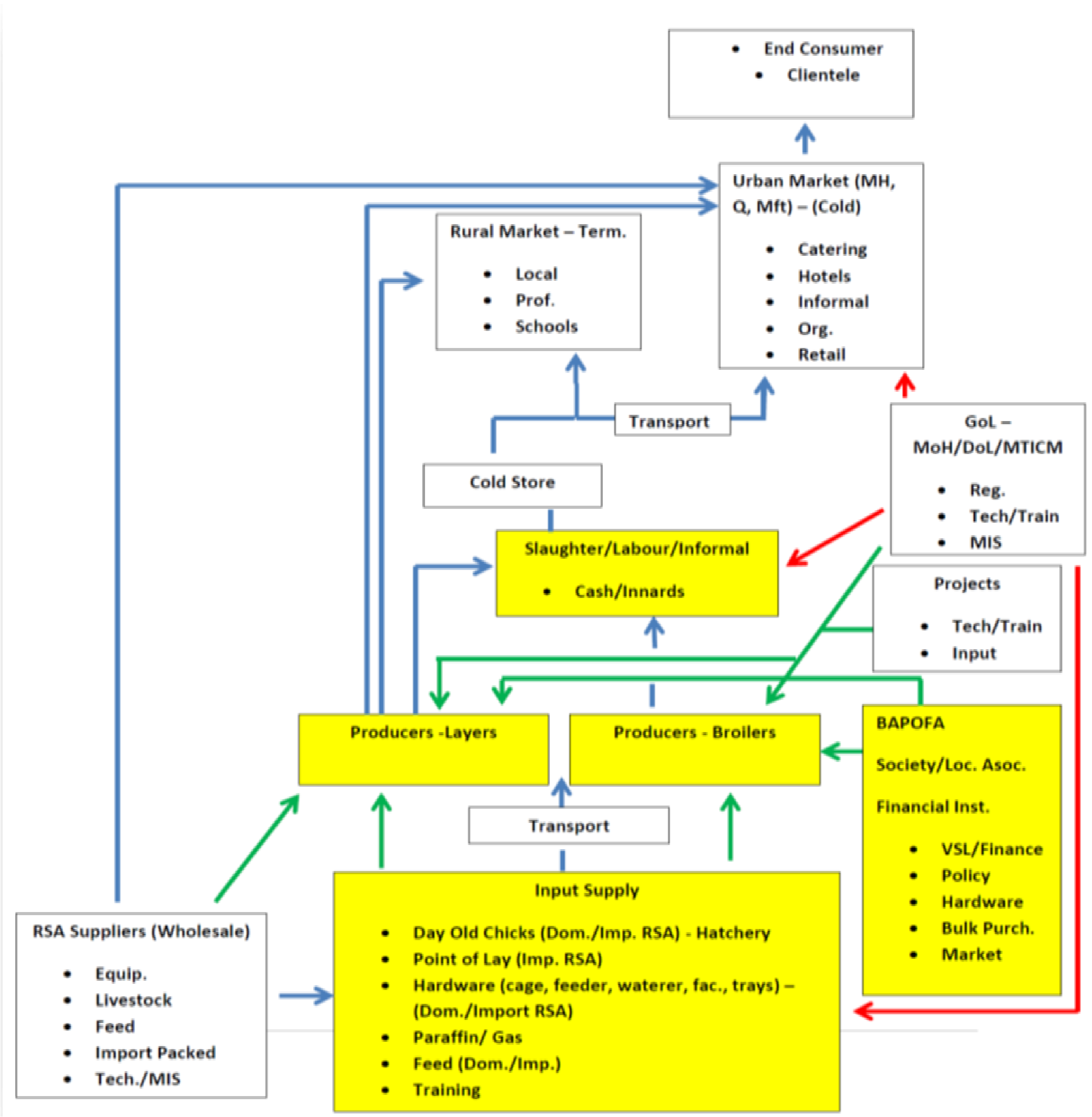
Looking at the Egg Production Value Chain, for industrial activity to commence one must have input supply. This input supply is available in South Africa, and also in Lesotho where players in this industry supply hatchery services, feed, heating means such as paraffin/ gas and hardware. However South African companies have a competitive advantage in the business of selling Point of Lay Hens.

Industry 2 is the egg production industry where egg producers play an active role. Input in this industry can be sourced from Industry 1 or completely imported from industry A (which is completely import based). Industry 2 is made up of local industries engaged in the production of eggs in Lesotho. The egg products of this industry are either supplied to the Rural Market (Schools, SMMEs, etc.) or the Urban Market where stiff competition is faced from industry A (Imports) which offering wholesale competitive prices to the urban market which is composed of (retailers, organisations, caterers, hotels, etc.).

Industry 2 also offers the sale of by-products being poultry meat at the end of each egg laying cycle. These are sold to Industry 2.3 which is composed of slaughters who slaughter and store meat in cold rooms and supply meat to the urban market. Products sold off in the urban market are passed on to the End consumer and clientele as either finished products or in their raw format.

The producer- layer industry is a composition of both domestic and international players with wholesale egg producers directly competing for the urban sector market while also acting as input suppliers to the local market.

Figure 3. Value Chain analysis of the Lesotho Poultry Sector



Source: Lesotho National Development Corporation

Field Verification

To verify the academic consensus on the state of egg production in Lesotho. The Basotho Enterprise Development Corporation through the Department of Planning, Monitoring and Evaluation undertook a country survey which covered 7 of the 10 national districts, where 21 entrepreneurs were interview face to face and through telephonic interviews.

Findings;

<table>
<tr><th colspan="2">General Findings</th></tr>
<tr><th>Challenges</th><th>Opportunities</th></tr>
<tr><td>✓ There is no Hatchery in Lesotho, these creates logistical expenses for farmers as the must either order at high prices from national agents, or they must pay a lot of money in terms of transportation of hens to south Africa
✓ The lack of a hatchery has also created supply challenges as when diseases hit South Africa, the farmers in Lesotho are unable to get the point of layer hens
✓ The lack of a hatchery means that point of lay hen supply takes between six to eight months to arrive. This creates operational challenges for businesses that reinvest in growth
✓ There are limited suppliers of bird cages in Lesotho, and the few that exist produce substandard cages
✓ Farmers claim that Lesotho Flour Mills offers substandard layer hen feed which limits produce and is out competed by brands from South Africa
✓ There is an evolving trend towards purchasing feed from south Africa because it is recognized as higher quality feed
✓ Vet clinics are generally understocked
✓ There need for developed infrastructure selected for layer hen farming as pollution is a challenge in community-based projects</td><td>✓ There is an abundant demand for eggs in Lesotho that has not been met
✓ There is a growing demand for Layer Hen Chicken Meat as it is considered healthier than packaged and imported chicken meat
✓ There is a growing demand for free range hens and their eggs, where a tray of Free range hens is normally twice the price of cage breed hens
✓ Expansion into Value chain opportunities such as:
o Running feed depots
o Opening a hatchery
o Opening an abattoir
o Opening a Hen cage production plant
o Packaging and distribution of Layer Hen Meat
o Hen House Construction
o</td></tr>
</table>

✓ Water supply is a challenge in most highlands regions, where a community tap is shared this normally creates clashes when water is scarce, and the farm suffers. ✓ The is a generally high cost of entry into the egg production business, this limits the players and supply capacities ✓ The general cold weather condition in highlands means that investment needs to be done in houses to guarantee good produce. ✓ Need for skills development in the business ✓ Lack of a readily available and accessible National Supplier Database	

Recommendations

- BEDCO should create egg layer specific training programmes.
- The Government of Lesotho should work towards creating a national hatchery that will meet the point of lay hen supply needs of the country.
- A national database of all value chain practitioners in the egg production business of Lesotho should be created; with readily available and accessible supplier information starting an egg production business will become easier.
- Quality checks should be frequently conducted on national Feed suppliers
- Quality checks should be frequently conducted on egg farms
- Trainings on innovative technologies in the Egg Production Sector should be pursued so as the scale up production for those aspiring entrepreneurs
- Equipment Leasing for Start ups will aid in lowering the barriers to entry into business
- It requires close to 500 hens to make reasonable profit in the business, coupled with the high costs for cages, infrastructure and feed, there is a need for access to Start up Finance will assist those who are less fortunate, but have the talent and ability to make the egg farming business a success.

Conclusion

Our finding matches closely that of the Lesotho National Development Corporation. A lot of work needs to be done to strengthen our input supply. South Africa is participating actively in input supply industries include hatchery, cage production, and feed, etc. However, in terms of egg supply, our research findings indicate that imported eggs less preferred to locally produced eggs, this is despite the fact the importer eggs are cheaper. The main competitive advantage that Lesotho eggs have over imported eggs is freshness, this advantage has created an abundant and growing demand for eggs in Lesotho from local producers, which needs to be strategically exploited. All parties who hold a state in entrepreneurship development in Lesotho should hold hands in strengthening this market.