

Developments and competitiveness of Mozambican chicken meat industry

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Abstract

Mozambican poultry industry might be an option to facilitate people's access to animal protein, as well as to reduce the dependence on imports of the product, bringing jobs and income forth. This study aimed to characterize and to analyze the competitiveness of poultry industry in Mozambique. Porter's Five Forces Model, which focuses on the five strengths that shape business competition, was applied. The results show a low level of competition within the industry, a limited supply of raw material and the fact that national products are commodities and competes with strong foreign participants. Domestic demand for chicken meat is increasing, but buyers base their decision mainly on price. Challenges include establishment of governance structure and policies for poultry sector and consumer welfare. Another alternative to improve the poultry industry in Mozambique is to promote technical cooperation with other countries, such as Brazil, in order to acquire specific structures for chicken production, as well as genetic material and adequate nutrition.

Key words: *Poultry industry, African agribusiness, Five Forces Model*

Introduction

Mozambique is a nation where the majority population (about 80%) practices agriculture and poultry activity, fact that might contribute to cover the protein deficit of low income families. Poultry activity contributes for the promotion of food security and employment generation in the country (Agostinho, 2010).

Moreover, poultry industry has faced many difficulties with the increasing import of frozen chicken, mainly from Brazil. The import is partly due to the fact that national production is insufficient to meet domestic demand and might also be related with the lower prices of the imported chicken, compared to Mozambican one.

Chicken meat production has economic and social relevance in Mozambique. Firstly, by allowing farmers to increase and diversify their income and to promote risk reduction (FAO, 2010). Secondly, for promoting food availability, therefore contributing to food security. In order to perform this role, Mozambican chicken meat industry has the challenge of improving its competitiveness. For this to be achieved, it is necessary to profitably gain and maintain market share in domestic as well as in foreign markets (Van Duren, Martin and Westgren, 1991).

Competitive forces and their underlying grounds should be considered to reveal whether producers can effectively compete in a given market (Porter, 2008). To identify the important structural features of certain industry through the five forces, an industry analysis can be developed to find the key factors for competitive success.

Based on this context, the research questions are as follows: a) How is the structure of Mozambican chicken meat industry, focusing on their differences and similarities with the Brazilian industry? b) What are the forces with greater influence on the competitiveness of the chicken meat industry in Mozambique?

Thus, the objectives of this study are: i) To characterize the chicken meat industry in Mozambique and in Brazil, ii) To analyze the competitiveness of the chicken meat industry in Mozambique.

By understanding the competitive forces within the chicken meat industry, participants in the market can develop successful strategies to influence the forces for their own benefit.

Competitiveness

Most often, productive activities in different countries and industries have different results. A new slaughter technology may take off in Brazil but fail in Mozambique. When measuring differences within countries and across industries, we can obtain an overview of both the gains and losses from past policies and investments, and the value of new investments and policy changes (Masters, 1995). Market and policy failures are inter-related, as each one implies the other: a failure of the economic and political systems interact in a cost-effective manner.

The term “competitiveness” has been diversely defined. Regarding definition, Masters (1995) comments that the competitiveness of an activity determines whether or not it can attract

workers and other resources. The competitiveness can predict whether or not new firms would engage in certain activity.

If competitiveness has a clear meaning for firms, it is unlikely that a nation is competitive in all industries, a fact that makes the issue “competitiveness” more difficult for nations (Farina, 1999). Addressing what it considers national competitiveness, Porter (1990) considers the meaningful concept of competitiveness as generic at national level and argues that regarding competitiveness, the emphasis must not be placed on the economy as a whole, but on specific industries and industry segments. A nation’s company must relentlessly improve productivity in existing industries by raising product quality, adding desirable features, improving product technology, or boosting production efficiency (Porter, 1990).

Among the models of analysis, Porter’s Five Forces Model of competitive market forces provides a structure for examining competition applicable to all industries and business sectors (Porter, 2008). The model relates a company to its environment and provides a systematic way of thinking about how competitive forces work at the industry level and how these forces determine the profitability of different industries and industry segments (Cernusca, Gold and Godsey, 2012).

Understanding the competitive forces, and their underlying causes, reveals the roots of an industry’s current profitability while providing a framework for anticipating and influencing competition (and profitability) over time (Porter, 2008).

Porter’s five forces are: bargaining power of suppliers; bargaining power of buyers; threat of new entrants; threat of substitutes, and rivalry among competitors. Together, the strength of the five forces determines the profit potential in an industry by influencing the prices, costs, and required investments of businesses - the elements of return on investment.

Bargaining power of suppliers

In order to develop a business, inputs such as labor, machines, raw materials, and services are required. The cost related to inputs might have a significant effect on profitability of companies. If the force is strong, then companies are in a weak position and may have to pay a higher price or accept a lower level of quality or service (Porter, 2008). The key is learning how suppliers can influence the terms and conditions of transactions in their favor.

Several conditions can favor the bargaining power of suppliers as when a small number of suppliers operates, when the company switch to another supplier is difficult, and the company’s purchases don’t represent an expressive share of the supplier’s business. These environments can promote high price and low quality of inputs.

Ways to decrease the bargaining power of suppliers can be related with partnership actions with them. Among the options, back integration and production of own inputs can reduce uncertainties of supply. Nevertheless, the capacity of investment to purchase the supplies or resources, as well as knowledge about the production are necessary. Another option may be to increase company power by forming a buying group of small producers to buy as one large-volume customer.

Bargaining power of buyers

Transactions between sellers and buyers create value for both sides. However, when buyers have more economic power, seller's abilities to capture a high proportion of the value created will decrease, and they will earn lower profits.

Bargaining power of buyers considers the effect that certain industry customers have on the profitability of this industry (Porter, 2008). Buyers of certain industry have more power when they are large and purchase much of the industry output. Many small customers acting as a group can create a strong force.

Customers have access to and are able to evaluate market information. Companies have less room for negotiation if buyers know market demand, prices, and their costs. When the product is not unique and can be purchased from other suppliers, buyers will base their decision mainly on price.

Options to reduce the bargaining power of customers are by increasing their loyalty to national industry business through partnerships or loyalty programs, selling directly to consumers, or increasing the inherent or perceived value of a product by adding features or branding.

Threat of new entrants

This force is related to the possibility of new firms to enter the industry (Porter, 2008). The effect of new entrants may force prices down and put pressure on profits. Analysis of this factor involves examining the barriers to entry and the expected reactions of existing firms to a new competitor. Entry barriers are unique for each industry and situation, and can change over time. One type of entry barrier is regulatory - import tariffs or quotas may be protectionist tools adopted by governments to favor domestic industries against foreign industries that operate in the same sector. On the other hand, the entry by new firms is easier when established firms do not have favorable access to raw materials, locations, or government subsidies. Another condition that favor entry is when economies of scale are minimal and there is little improvement in efficiency as scale (or size) increases.

Threat of substitutes

Chicken and pork can substitute beef or lamb in consumer diets. Products from one business can be replaced by products from another. A threat exists if there are alternative products with lower prices or better performance or both. If the products are commodities, they compete mainly on price, because consumers receive the same value from the products of different firms. But, in some cases, customers may be reluctant to switch to another product even if it offers an advantage. Customers may consider it inconvenient or even risky to change if they are accustomed to using a certain product. However, when price is the customer's primary motivator of loyalty, the threat of substitutes is greater. Beyond the price, substitutes can fill the gap when supply cannot meet demand for the original (Perdana, Roshetko and Kurniawan, 2012)

Rivalry among competitors

Frequently this factor is the strongest of the five competitive forces, but can vary widely among industries. When competition is intense, it may be necessary to enhance product offerings to keep customers, and prices may fall below break-even levels. In some industries, rivalries are centered on price competition, especially in companies that sell commodities. In

some industries, there are high fixed costs of production. When a large percentage of the production cost is independent of the number of units produced, companies are pressured to produce larger volumes. This may tempt companies to drastically cut prices when there is excess capacity in the industry in order to sell greater volumes of product. The rivalry among competitors in a growing market are lower, firms are able to grow revenues simply because of the expanding market. In a stagnant or declining market, companies often fight intensely for a smaller market.

The interaction among all these forces defines an industry's structure and shapes the nature of the competitive interaction within that industry (Cernusca, Gold and Godsey, 2012).

In this context, Government plays a vital role and it can influence each of the above forces either positively or negatively. That is why government as a determinant of competitiveness must be viewed apart from the forces.

Government acts in shaping the context and institutional structure surrounding companies and in creating an environment that stimulates companies to gain competitive advantage (Porter, 1990).

Porter's method not only evaluates the competitiveness of the farmer, but that of all the participants in the supply chain. This method allows us to identify and to analyze the structure of a sector and to point out the strengths and weaknesses. Critical success factors can also be identified to which participants in a chain have to pay special attention in order to develop and sustain competitive advantage as successfully as possible in the years to come.

Methods

Research methodology comprehends mainly secondary product and market information to identify actors in the chicken meat industry as a whole, production system, marketing practices, market access, and its problems and opportunities.

Secondary information regarding Mozambican poultry industry was gathered from researches that addressed poultry production in Mozambique and in Brazil, government agencies and other stakeholders of poultry industry. Data sources to be mentioned are: National Institute of Statistics (INE); Ministry of Industry and Trade (MIC) and Brazilian Association of Animal Protein (ABPA).

Because little is known about Mozambique poultry industry, a characterization approach was used to get baseline information about the industry structure and the market. The main discussions followed the theoretical model, addressing all forces that influence competition based on Porter's Five Forces Model.

The competitiveness analysis of an industry involves understanding the competitive rules that determine its attractiveness (Porter, 1985). Thus, to analyze the competitiveness of the chicken industry in Mozambique, the Five Competitive Forces Model of Porter (2008) was used.

Results and discussion

Results and discussion section is divided into three topics, the first of which deals with the characterization of chicken meat chain in Mozambique, the second with the characterization

of chicken meat chain in Brazil and the third topic addresses the competitiveness of poultry industry in Mozambique.

Characterization of chicken meat chain in Mozambique

The low development of the poultry industry in Mozambique is linked to the historical process of the economy, which can be divided into five distinct periods according to Agostinho (2010). The first period occurred after the independence process of the country (1975-1977), when the government began to adopt the system of central planning, culminating in the nationalization of production units across the country. In the second period (1978-1985), there was a consolidation of the management of the State and its expansion, but at the end of the period there was privatization of the poultry industry (Nicolau, 2008).

The third phase (1986-1994) was characterized by a transition period when the country's government started to adopt market economic system and, from that, there was the withdrawal of the state of business management. The fourth period (1995-2005) was characterized by a stagnation of the poultry sector, which stimulated the growth of imports. Only in 2006 is what started the organization and restructuring of the poultry sector in Mozambique, which characterizes the fifth period.

According to Nicolau (2008), with regional integration in Southern Africa Development Community (SADC), the poultry sector, which was already weakened, is pressured by international competition and thus the maintenance and development of the activity come to depend on the continued ability to adequacy of the sector to the new competitive forces. The measures of trade liberalization have forced domestic producers to achieve productivity levels equivalent to those in force in the foreign market, through competition with imported products.

Beyond restructuring of the sector, there is a modification on animal production in the country, especially on poultry. The production of chickens and goats, for example, are the most representative in the country, but chicken production is the largest with 23,920,938 units (INE, 2010). The province with more importance in chicken production is Zambezia, with 4,108,484 chickens, followed by Nampula, with 3,587,519 chickens. The province of Zambezia holds 17.5% of total poultry production in the country, while Nampula has 15.3% (INE, 2010).

Production of chickens for the poultry industry in Mozambique is performed by three types of farmers, according to Nicolau (2011), as it is shown in Table 1. Large producers, 10% of whole number of producers, are made by different companies and according productive structure, each dedicated to the production of raw materials (feed), others to the production of chickens and still others to the slaughter, and dedicated to the entire production process.

Table 1. Distribution of poultry farms in Mozambique, 2010.

Farmer scale	Production capacity per year (chickens)	Share
Small farmers	up to 5,000	70%
Medium farmers	5,001 to 50,000	20%
Large farmers	Above 50,000	10%
Total		100%

Source: Agostinho, 2010.

Medium Producers represent 10% of production, have a continuous production throughout the year, have intermediate technical-productive and commercial characteristics between household farmers and industrial group. The medium group is responsible for 20% of producers in the country (Nicolau, 2011).

Finally, the first type of producers, representing 70% of them, come mostly from family or informal sector. The household sector represents approximately 40% of national production, and is characterized by a seasonal activity - usually in the festive season - and irregularity of production. The productive performance is low, which can be verified by the feed conversion between 2.2 to 2.5 kg for viability around 90% by live weight at slaughter from 1.2 to 1.5 kg, and the delayed departure around 40 days (Nicolau, 2011). Yet, these types of producers are characterized by low quality conditions and poor sanitary control, as well as by irregularity of the produced quantity.

Concerning the production systems, Nicolau (2008) identifies three types of them: cooperative, independent and partnership. The farming system, less frequent, is practiced in cooperatives, which provide inputs (chicks and feed), technical assistance and in some cases, even creation facilities.

The independent system is dominant in Mozambique poultry production. But due to the high efficiency standard and exposed competition in the sector, it appears that by short and medium term, this practice, carried out by small and medium farmers (90% of total production), will have a more pronounced reduction.

The partnership system is the system by which the integrating company works in partnership with small and medium poultry farms, without involving intermediaries. The main feature of this system is to have a single operational command, coordinating the operations of creating arrays and incubation of eggs, the production of poultry feed, slaughter and distribution, as well as the function of chicken farming. (Nicolau, 2011).

Production costs in Mozambique are different if compared, for example, with Brazilian ones. Reasons for this disparity are the lack of productive structure of the complete production chain in Mozambique, the manual production process, the lack of investment in technology, which increases production costs and, consequently, the market price of chicken. For example, raw material to feed the chickens is the most impacting of the production costs. Soybeans, yellow corn and vitamins to feed production are imported from South Africa, Europe and Latin America, due to the lack of domestic production (Agostinho, 2010). The feedlot market consists of 8 companies, and only 3 of them outside the province of Maputo (Agostinho, 2010).

Regarding suppliers of chicks to production, small farmers buy on the open market, being vulnerable to all uncertainties that this form of organization brings to the production process, thereby exerting influence on the formation of its price and also on the health of animals (Agostinho, 2010). In relation to the production of chicks, according to Nicolau (2008), the origin of the eggs are mostly from Zimbabwe (70 %), and the rest from Zambia; there are even imports of hatching eggs from Malawi by independent producers from northern Mozambique.

Major poultry slaughterhouses in Mozambique belong to the large companies and have varying degrees of automation of intermediate operations (Agostinho, 2010). However, most country chickens are slaughtered on farms and in communitarian slaughterhouses, whose

slaughtering technology is manual, with at most an automatic plucker. The installed capacity for slaughtering chickens on farms and in formal slaughterhouses in Mozambique in 2007 was of 1.025 million per month, while the idle installed capacity was 41% (Agostinho, 2010). The chicken is usually sold live because of the tax for slaughtering.

The main product coming from the slaughter premises in Mozambique continues to be frozen or chilled whole chicken, which is manually packaged for the final consumer. Most of the slaughtering is intended for retail establishments, such as retail outlets of large enterprises, supermarkets, coffee shops, butchers, grocery stores and to a lesser extent, the chicken goes to the wholesalers who are also responsible for importation of chicken (Nicolau, 2008). Producers, especially small and independent farms sell live chicken and slaughtered at the market place, which may be outdoors or at the gate of the farm himself, without any sanitary control.

Suppliers of slaughter services have a strong bargaining power in setting the rate of slaughter. Currently, this rate varies between 10-15% of chicken production costs, which are expense for small farmers and are boosting live chicken sales that permits higher profit margin. Globally adopted programs of production process inspection, such as HACCP (Hazard Analysis Critical Control Points) and GMP (Good manufacturing programs) are not present.

Besides the lack of domestic production capacity to supply the domestic market, the productive structure of chicken segment influences the variation of supply in domestic product throughout the year, in times of low and high supply, which occur respectively in the first and last quarter of each year. This inconstancy in supply of the national chicken, promotes import conditions, aiming to meet the demand in periods of supply deficit (Nicolau, 2008).

According to data of the Mozambican Association of Poultry Farmers (AMA) and reports from Ministry of Industry and Trade viewed in Nicolau (2011), Mozambique produces an average of 1.5 million units of chicken per month. The consumption of chicken in Mozambique in 2008, according to Agostinho (2010), was 1.1 kg *per capita*. According to Apex-Brazil (2011) data, in 2009 the most volume of chicken consumed in the country (80.7%) was originated from Brazil itself. However, there was a remarkable overall reduction in imports of chicken meat from Brazil between 2005 and 2012 (Figure 1).

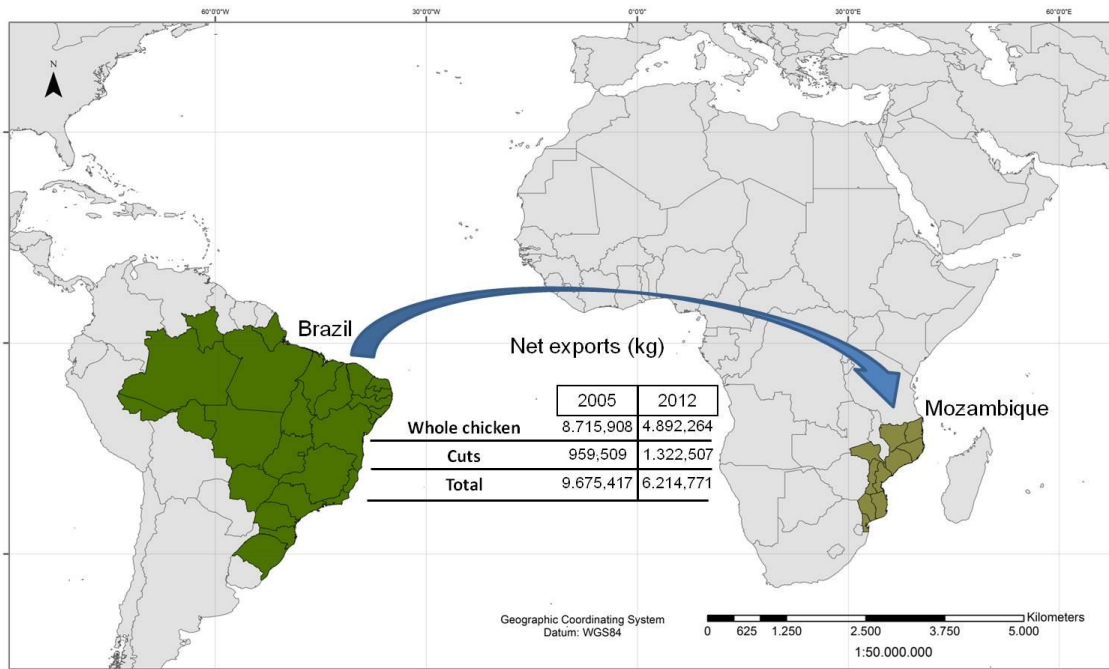


Figure 1. Brazilian chicken meat exports to Mozambique
Source: (ALICE WEB, 2013)

Conditions for this may be related to the union of producers and collaboration of the government to work together, which occurred from 2006 on. According to the report on the results of the national poultry production AMA (2008), from 2007 to 2008, national production of chicks recorded a growth of 11%, which also reduced imports of hatching eggs. The AMA has invested in the training of poultry farmers of small and medium scale. From 2007 to 2009, the AMA in collaboration with TechnoServe (Non-Governmental Organization) gave training programs to 1613 small and medium chicken farmers about good practices in production and 89 inspectors for chicken slaughterhouses in Maputo province.

The policy of exemption from VAT (Value Added Tax) to the retailer, which reduces the price of frozen chicken in the market also stimulates consumption of domestic chicken, since the main criterion for choosing the product on the market is the price, given the budget constraint of consumers. Imports of chicken meat are subject to customs duty of 20% on the price (CIF / Port of Mozambique) and internally, for sale to the public, are subject to 17% VAT, which was currently removed to dealers.

Consumption of domestic products has been encouraged by the Government through the MIC: the introduction of a label “Made in Mozambique”, was approved by ministerial decree number 119/2006, published in the Government Gazette number 24, Serie I.

The production system of the poultry industry in Mozambique has some problems according to Almeida and Cardoso (2001) which highlighted the climate (high temperatures), poor sanitary management, low productivity of local chickens and lack of inputs for poultry feed.

The next section presents a characterization of Brazilian poultry for the purpose of conducting a comparative analysis with Mozambique poultry industry.

Characterization of Brazilian chicken chain

According to Farina (1995), modern chicken industry has emerged in Brazil in 1970, in southern Brazil, where large slaughterhouses were installed in a market characterized by the dominance of few but large leading companies, alongside a large number of small and medium enterprises, being many of these clandestine.

It is estimated that 90% of the poultry industry in Brazil is under the integrated system (partnership) among poultry slaughterhouses and farmers (ABPA, 2014). Slaughterhouses provide feed, one-day-old chicks, veterinary products and technical assistance, while the farmers come to the capital involving the cages and equipment, as well as the responsibility for farming of chickens within the criteria established by the slaughterhouse.

According to Zilli (2003), the predominance of small farms (less than 50 hectares) and rugged terrain in some regions, hamper the development of other activities, which favored the emergence of poultry farming, often in partnership with swine production in Brazil.

The social importance of the poultry industry in Brazil is verified by the massive presence within the country, mainly in the South and Southeast regions. In many cities, chicken farming is the main economic activity. (ABPA, 2014).

In 2013, Brazilian chicken meat production was of 12.30 million tons. It had the domestic market as the main target (68.4%), whilst exports represented 31.6%. Exported products include: cuts (53.14%) that represent different chicken parts, such as thigh, breast and wing; whole chicken (38.14%) and more elaborated types of meat, such as industrial (4.13%) and salted (4.58%). Among the main markets are Asia, Africa, America and Oceania (ABPA, 2014).

Data from Brazilian Institute of Geography and Statistics (IBGE) revealed that in the 3rd quarter of 2013, slaughter were of 1,444 billion of chickens in Brazil, setting a new record in the time series since 1997. This result meant increases 1.1% compared to the previous and 8.4 % compared to the same quarter in 2012 (IBGE, 2013).

It is found that the states located in the southern region of the country are responsible for the largest number of slaughtering of chicken with Federal Inspection Service (S.I.F in portuguese), certification which allow export. States of Paraná, Santa Catarina and Rio Grande do Sul are responsible for 31.12%, 16.66% and 14.56%, of slaughtering respectively (UBABEF, 2014). The location of most major slaughterhouses is also in southern Brazil. Nevertheless, its expansion into the Midwest is already observed. In general, automated slaughter lines of large-scale are present and products demonstrate high level of standardization (Jesus Junior et al, 2007).

The sophistication of Brazilian poultry industry led to the establishment of some paradigms related to practices and industrial premises that guide current production systems: i) plants with a slaughter capacity of 120,000 chickens/day, ii) lines of automation for chicken cuts, iii) own feed factory, and other practices related to health and environment control (Jesus Junior et al, 2007).

The chicken meat industry which includes “slaughtering chickens” and processing industry is characterized by different business models, with most operating companies of national origin. They can be divided into two groups: i) the first comprise large companies with global

operations and cooperatives that operate in the international market. And ii) the second is represented national medium and large companies. The first one is operating in different segments such as frozen, prepared and ready meals. Specialization cases in this market are rare and when they occur, are usually in regional companies (Oliveira, 2011).

We verify the existence of vertical integration in the chicken meat chain, being active in the slaughtering companies, which have leaved upstream, expanding their production base detaining feed mills and poultry genetics (chicken grandmothers and mothers), agreement contracts of partnership with poultry farmers offer chicks and delivering supplies to farming of chickens. So the industry adopts a substitute mechanism of the uncertainties of the markets, in order to reduce risks of price fluctuations and supply. The downstream firms act in the transport, export and distribution centers, incorporating new business (Oliveira, 2011).

The distribution of chicken products is mainly from retail (Martins, 1996). The consumption of chicken meat in Brazil showed remarkable increase. In 2000, *per capita* consumption of chicken meat was of 29.91 kg and in 2013 it grew up to 41.80 kg (UBABEF, 2014). Performance of consumption is linked to the economic policy adopted.

It is noteworthy that the implementation of “Plano Real” resulted, indeed, in a strong consumption of chicken meat in Brazil, mainly by classes with lower purchasing power, which transferred part of their food intake from carbohydrates to proteins (Silva, 2011). Chicken meat was included in a government policy named “green anchor”. It refers to the contribution of food prices for controlling inflation rates, and chicken meat is considered to be one of the products which support the objective of price stability for economic policy in Brazil (Farina and Nunes, 2002).

Completing the characterization of poultry sector in both countries the Figure 2 is presented, for comparing some aspects. This Figure will be explored to assist the analysis of Mozambican industry forces.

Characteristics	Brazil		Mozambique	
	Item	Source	Item	Source
Population	Over 200 million	IBGE, 2013	Over 20 million	INE, 2007
<i>Per capita</i> consumption	45 Kg (2008)	ABPA, 2014	1,1 Kg (2008)	Agostinho, 2010
Chicken meat production	10966072 tons (2008)	UBA, 2009	7040 tons (2008)	INE, 2009
Production system	90% partnership	Oliveira, 2011	90% independent	Nicolau, 2011
Raw material for feed	100% Corn and soybean national production	ABEF, 2004	60% must be imported	Nicolau, 2008
Eggs for broiler production	100% National production	ABPA, 2014	70% from imports (2008)	Nicolau 2008
Feed conversion	1,76 Kg (2009)	UBABEF, 2011	2,2 a 2,5 kg (main system)	Nicolau 2011
Number of slaughterhouses	436 (2010)	IBGE, 2011	30 medium and large slaughterhouses (2010)	Agostinho 2010
Chicken products available	Whole, frozen, industrialized and salted	ABPA, 2014	Whole and frozen chicken	Agostinho, 2010

Figure 2. Comparison between poultry sector in Mozambique and in Brazil.

The competitiveness of the poultry industry in Mozambique

The forces affecting profitability are often beyond companies’ control, so they must choose tactics to respond to the forces rather than try to change the business environment. A five

forces model is essentially a process for a manager to understand how the conduct and performance of firms in an industry might be determined by changes in its structure over time. Porter's Five Forces Model served as a framework for examining the competitive environment. A descriptive representation of the five forces and their influence on the Mozambique chicken meat industry is presented in Figure 3.

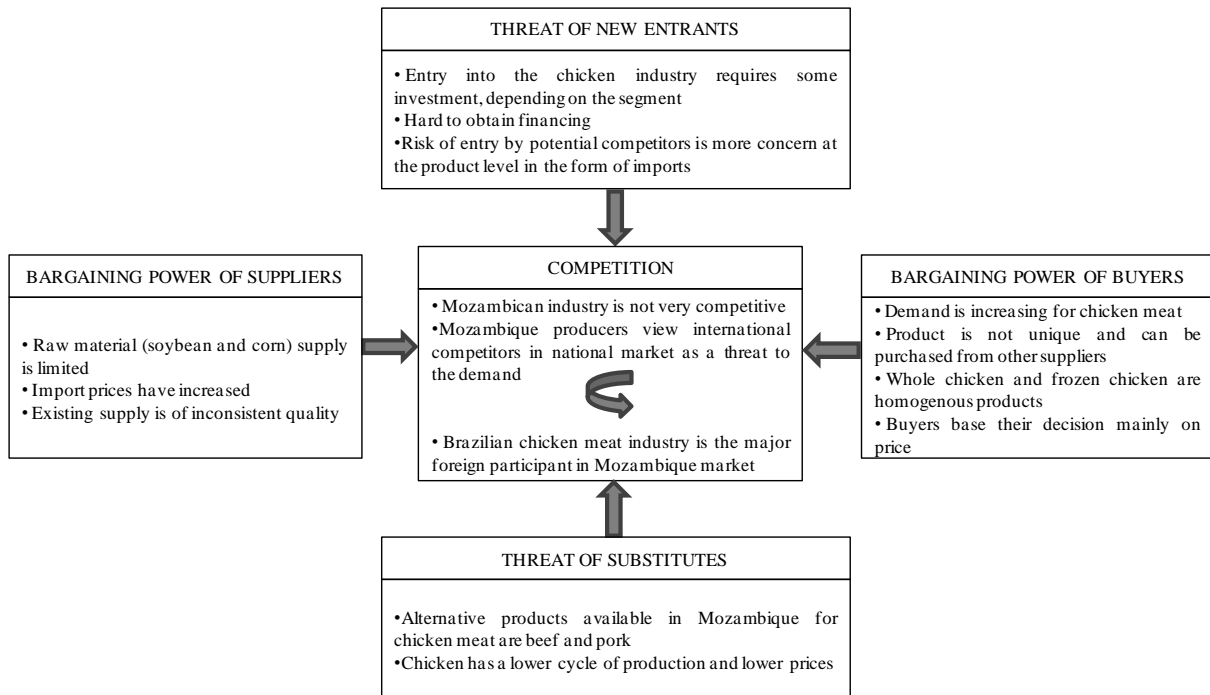


Figure 3. Representation of the influence of Porter's Five Forces on Mozambique chicken meat industry.

Source: Prepared by the authors

Raw materials for chicken meat production are commodity items that are generally cyclical in price and availability. This can have a significant effect on final production cost. Feed cost is the single largest expense for livestock, dairy and poultry production, often representing 60% or more of total production costs. Small producers are particularly challenged because they do not have the leverage associated with volume that the larger producers have. As a result, the force of suppliers on small producers can be viewed as relatively strong. However, a small Mozambique producer could decrease the effect by cooperating with other small players to make collective purchases.

The reality of many small scale independent poultry farmers weakens the sector, leading to difficulties of supply and coordination. The independent system of production is the main characteristic in Mozambican poultry production. However, due to the increasing efficiency and competition in the sector, it appears that at short and medium term, the independent system performed by small and medium farms will be reduced. (Nicolau, 2011).

This production system in which the farmer produces and sells its products in the free market, makes the chicken producer, the weakest agent in the chain in Mozambique. They are the most vulnerable to fluctuations in production costs and in price of chicken meat, because they have less bargaining power, which may adversely affect the competitiveness of this production chain. Another determining factor is the difficulty in obtaining lending for investment or funding in the financial market.

Unlike the Mozambican reality, in Brazil the poultry sector adopts partnership system (Barczsz and Son-Lima, 2009). In this country, the industrial sector plays a coordinating role in the production chain, allowing Brazil to be consolidated as the second largest producer and the largest exporter of chicken. According to Nicolau (2008), in order to implement this system, certain factors are essential for success, such as the distance from the farm to its partner, the technology level used by the farmer, the number of farmers by integrator, production contracts, installed capacity for slaughter and definition of production rates.

Despite the entry barriers to produce a meaningful supply can be significant in part because production infrastructure is costly to build or buy.

Currently, it is relatively easy for customers by a little cost, to switch from Mozambique chicken to their competitors' products. Whole chicken and frozen chicken are homogenous products and similar to those of the international competitors. Enforces towards improvement of slaughter and processing plants could be a driver to differentiation, since currently derived chicken meat products are not available in Mozambique.

National industry has less negotiating power with its customers. However, the competitive pressure may be one driver for the expansion and improvement of Mozambican production chain. Options to reduce the bargaining power of customers are by increasing their loyalty to national industry business through partnerships or loyalty programs, selling directly to consumers, or increasing the inherent or perceived value of a product by adding features or branding. These actions also reduce the competition, concerning the foreign industry of chicken meat.

Alternative products for chicken meat available in Mozambique are beef and pork. Chicken has a lower cycle of production and lower prices, furthermore pork has religions restrictions. Customers may consider it inconvenient to change by economic and cultural aspects. Generally, in world market the chicken is a lower cost substitute for beef and pork and the poultry industry over the years has been more innovative in product development, branding and industry focus.

Mozambique producers view international competitors in national market as a threat to the demand for their product. Rather than restricting trade, governments should focus on maintaining competitive national markets and investing in public goods such as research and education (Van Rooyen, 1999). Mozambique chicken meat industry needs to improve its technical and economic efficiency, then might adopt tactics such as setting a product price that detains foreign entry.

According to Nicolau (2011), market liberalization through the removal of protectionist barriers, quickly, in part, helped to accentuate the fragility of the sector, to increase competition in the domestic market between domestic and imported products.

Consumer market in Mozambique is growing; therefore national industry is able to grow revenues simply because of the expanding market. Brazilian chicken meat industry participates in Mozambique market, and the competition can impose improvements for national industry.

Fleeing of the generally adopted protectionism, Masters (1995) indicated that, in many developing countries, reduced trade barriers and structural adjustment programs have made the appropriate direction for future less obvious reforms.

The action of differentiating industry product by branding might be interesting and to maximize the effect, collective advertising for an industry may be more effective - the “Made in Mozambique” program, for instance.

The increase of poultry activity on African Continent goes through four fundamental aspects: genetic improvement of chickens; optimization of management, resolution of the sanitary problem and the adoption of unconventional raw materials in poultry feed (Almeida and Cardoso, 2001).

Toward strengthening the poultry industry of Mozambique, besides major supplier of chicken meat, Brazil could become a supplier of social technologies for poultry production. An example is the program adopted in Brazil, that encourages family farmers to produce chickens with rustic breeds, but with improved production of meat and eggs. Also technical cooperation projects in agriculture developed by The Brazilian Agricultural Research Corporation (Embrapa) can promote improvements to Mozambican chicken industry by strengthening the supply chain.

Conclusions

As a general overview, the five forces concept provides an excellent tool for companies to examine the profit potential in a particular industry. The analysis model can also offer tactics for countering the strength of the forces.

In recent years, there was a production increase in the poultry industry in Mozambique. However, for it to become more competitive, some elements should be taken into account.

There is no single variable that explains satisfactorily what influences the national and international competitiveness, but a sum of factors related to the condition of activity and the country.

International alliances to integrate into competitive chains might be required. It will therefore be important to pin point the sources of reduced competitiveness and develop appropriate strategies to improve the Mozambique chicken meat industry situation.

Reaching cost-efficient production level and increasing support loyalty to national industry tend to downward the entry of challengers for Mozambique market.

One of the outstanding aspects that reduce the competitiveness of poultry farming in the country is the lack of a coordinator agent, which exists in Brazil, where the industrial sector plays this role, and encourages the adoption of specific structures for chicken production by farmers, as well as provides genetic material and adequate nutrition.

The chicken meat imports of Mozambique are originated mainly in Brazil. This country, in addition to trade issues, can become a partner to transfer and generation of technology for the Mozambican context, intensifying the existing technical cooperation between these countries.

Establishing a governance structure to improve the performance of the poultry sector, while promoting policies of consumer welfare and improvement of production resources to the production structure tends to favor Mozambique. This process can be carried out without closing the international market, which would be negative to consumers, but seeking partnership to bring more knowledge of the poultry sector from countries that already have an established and competitive poultry industry.

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