Improving competitiveness of SMMEs through the Private Sector Development Programme Botswana

Poultry value chain analysis and action plan

October 2015

Government of Botswana

European Union

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The findings and opinions expressed in this report remain those of the consultancy team and do not necessarily reflect those of the PSDP.

"The Private Sector Development Programme is an initiative of the Government of Botswana, represented by the Ministry of Trade and Industry (MTI) and the Ministry of Finance and Development Planning (MFDP), in partnership with the European Union (EU). The Programme is supported by the Centre for the Development of Enterprise and Business Botswana."

Foreword

Poultry value chain analysis and action plan

This study is based on a comprehensive analysis of the challenges and opportunities of the poultry value chain, which recommend the development of a national strategy in order to increase the demand of poultry meat products.

Pragmatic recommendations have been highlighted which can be implemented immediately by the public and private sector. Among these are the diversification of processing beyond simple cuts; the development of smallholder poultry production, effective marketing, branding and packaging. This could be achieved together with the upgrading of the capacity of the Botswana Poultry Association.

The action plan presents some key interventions, including the elaboration of practical tools in order to upgrade the capacity of poultry farmers in the management, operations and commercial domains.

The implementation of the action plan and practical tools can be used by Government and Intermediary Organizations to effectively develop the value chain, impacting positively on new investment and employment while building the capacities of the institutions and human resources that support it.

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Acronyms

BDC	Botswana Development Corporation
BAMB	Botswana Agricultural Marketing Board
BCA	Botswana College of Agriculture
BMC	Botswana Meat Commission
BCU	Botswana Cooperative Union
BMO	Business Membership Organisation
BPA	Botswana Poultry Association
CDE	Centre for Enterprise Development
BOBS	Botswana Bureau of Standards
DOC	Day-old chick
DVS	Director Veterinary Services
DW	Dead Weight
CEDA	Citizens Entrepreneurial Development Agency
EDD	Economic Diversification Drive
FARA	Forum for Agricultural Research
FDI	Foreign Direct Investment
IP Platform	Botswana Small Stock Innovation Platform
LAC	Livestock Advisory Council
LEA	Local Enterprise Authority
MSE	Medium and Small Enterprise
MoA	Ministry of Agriculture
MITC	Meat Inspection Training Centre
NPL	Non-Performing Loan
R&D	Research and Development
PSDP	Private Sector Development Strategy
PVC	Poultry Value Chain
SACU	Southern African Customs Union
SADC	Southern African Development Community
SME	Small and Medium Enterprise
SCARDA	Strengthening Capacity for Agricultural Research and Development in Africa
UNIDO	United Nations Industrial Development Organisation
VC	Value Chain

Executive Summary

This report on the Botswana poultry sector is a component of the wider *Value Chain Analysis in Emerging Sectors*, a Government of Botswana initiative, undertaken under the Private Sector Development Programme (PSDP), which is supported by the European Union and the Centre for the Development of Enterprise. The main purpose of the study is to map the sector's value chain, identify key actors, highlight bottlenecks and upgrading opportunities, enabling the development of a national strategy and an action plan. Methodological tools used involved analysis of statistics and relevant documents, targeted interviews of 30 value chain actors, and benchmarking.

Major findings of the intervention are that:

- Botswana has two poultry production systems: a) about 90,000 traditional/family holdings with some 1.1 million chickens of genetically unimproved stock, mostly fed on harvest waste and, b) 10 large commercial farms using maize as the main component to feed exotic breeds in poultry houses, and producing most of the country's annual consumption of 42,000t carcass weight. They are partly supplied by small-scale operators who also sell directly to the broiler meat market.
- 2 large breeding farms yearly produce 30 million fertilized eggs and 2 large-scale hatcheries produce 28 million day-old chicks (DOC).
- Poultry producers are mainly situated in, or close to, urban areas.
- There are 28 licensed abattoirs, 21 of which slaughter 28 million birds per annum and sell meat with little added value directly to retailers.
- Specialty cuts (chicken wings) represent imports of 4,000t per annum.
- Because of the shortage of local maize available for animal feed, the industry is constrained by the restriction requiring 70% of feed inputs to be sourced locally. The feed-per-broiler ratio in Botswana is 25% less than the international norm, resulting in lower weight gains.
- Poultry consumption is very low at 3.6kg/per capita/year (South Africa: 25.1kg).

Although the poultry sector is not governed by a specific policy or institutional framework, it has benefited from the provisions of general technical and financial support schemes (MITC, BAMB, BPA, MoA).

The key features of the Poultry Value Chain are:

- demand for chicken is almost entirely met by local production, largely due to import bans;
- Botswana's self-sufficiency in poultry meat is actually the sign of a non-competitive industry because of a protectionist policy and lack of economies of scale;
- the total carcass weight market value is P1.5 billion/year;
- feed, produced by two factories, valued at P242 million pa, accounts for 70% of production costs;
- the sector employs 5 200 people: 70% in production of broilers, 15% in slaughtering, 6% in feed production, 3% in processing, 3% in distribution, and 3% in production of DOCs and eggs. It is estimated that a further 4,300 are employed in the retail sector (supermarkets and groceries).

Because the poultry sector is the largest agricultural industry in neighboring South Africa (17.5% of total animal production) where it is the main source of protein, this country has been selected as the most appropriate benchmark for Botswana. South Africa has successfully developed pure meat-type breeds and intensive production in enclosed houses. Although 50% of the market is supplied by two large producers, small- and medium-scale operators respectively account for 33% and 17% of sales. Productivity is almost 100 times higher than in Botswana. The broiler industry is regulated by a specific Code of Conduct.

To reach the objective of increasing domestic production and consumption of poultry meat by 50%, recommended actions include: effective lobbying along the value chain, improving technical skills, management and commercial support, and development of a Code of Conduct. The creation of a competitive poultry sector requires a national poultry policy, selective breeding, access to finance, small holder support and skills development. Improving broiler animal husbandry implies removal of the 70/30 feed import restriction, improving feed quality and availability, encouraging housing of birds and improving health standards. An indicative Action Plan is proposed.

Introduction

Objective

This report presents the findings of the Poultry sector component of the study "*Value chain analysis in emerging sectors*" undertaken under the Private Sector Development Programme (PSDP). PSDP is a Government of Botswana initiative supported by the European Union and the Centre for the Development of Enterprise. It aims to stimulate and sustain growth through diversification of the economy while building the capacities of institutions and human resources that supports the private sector

Value chain analysis is a useful tool for understanding the potential of agricultural industries, and through the application of this approach, new insights can be gained and valuable new strategies developed, both at the micro-economic (company) level and at the macro-economic (national) level. The poultry value chain analysis in this report describes the overall value chain, apportions costs to the various elements within each segment and the relationships and mechanisms between them.

The methodology used involved a literature review of the sector, analysis of statistics, value chain mapping, survey of 30 actors throughout the value chain and benchmarking from other countries. Based on this, a national strategy and action plan have been outlined for discussion by the stakeholders.

The overall aim of this assignment is to identify potential markets, upgrading opportunities and constraints throughout the poultry value chain in order to develop a national strategy and Action Plan that will develop this sector.

Overview of the Poultry Sector in Botswana

Production

The poultry industry has two distinct sub-sectors namely; the small-scale (traditional/family poultry production) and commercial poultry production systems. Moreki (2006) describes a "family poultry" production system as one in which production is based upon the use of unimproved genetic stock usually raised in small numbers of up to 15 birds and fed on harvest waste and inferior grains. Comparatively, the commercial sector operates with exotic breeds kept in a controlled environment (poultry houses) and fed high quality feed aimed at enhancing and shortening the production cycle to ensure that the chicken are ready for slaughter within 6 weeks.

The Central Statistics Office Agricultural Report of 2012 estimates that there are 1.1 million chickens under the traditional system owned by about 91,300 farmers, each holding an average of only 12 chickens. Poultry meat quality tends to vary due to differences in hygiene standards adopted in the poultry abattoirs. Some factors that affect meat quality include temperature, ventilation rate and nutrition. Presently, the Department of Veterinary Services has licensed 28 poultry abattoirs and these receive technical support from Government meat inspectors[1].

There are 10 large producers of poultry in Botswana. There are also a large number of small-scale producers who supply the large firms on a contract basis. For example, some 18 small-scale farmers in the Gaborone region supply Tswana Pride who, according to the company, employed some 200 workers and are responsible for 40% of the company's annual production.

Geographical distribution of value chain actors

According to Moreki (2006), family poultry production systems are popular in rural areas as components of small farms or as income generating and food source for the majority of the rural poor. They are distributed throughout the country but mostly found near urban and peri-urban centres of Gaborone, central and the Francistown region as illustrated in Table 1.

Table 1: Traditional Poultry Distribution

Region	Total Holdings	Total Chickens	Average Chickens / Holding
Southern	15,588	214,127	14
Gaborone	28,929	343,327	12
Central	21,492	268,412	12
Francistown	16,561	111,136	13
Maun	5,056	54,285	11
Western	3,675	29,850	8
Total	91,301	1,119,734	12

Source CSO (2012)

[1]Grynberg R and Motswapong M, (2012).*Competition and trade policy: The case of the Botswana poultry industry*

Government Policy

The Government of Botswana has no poultry policy but practises a *de facto* protectionist policy for all inputs and most end products, so that it claims self-sufficiency in chicken production. However, this self-sufficiency is artificial and based on Government controls of all inputs along the value chain (see below).

Domestic Control Regimes

Importing live birds and day-old broiler chicks is banned. The importation of fertilized eggs (to produce broiler day old chicks) into Botswana is restricted and was expected to be completely banned during 2013-2014 (Grynberg et al, 2012).

Botswana also has a trade restriction on feed importation. Broiler producers have to source at least 70 per cent of their feed locally. If there is a shortage of domestic supply to fulfil the 70% and the producer needs to import, it will need to obtain an import permit.

Similarly, there are import controls on poultry imports which are largely banned and only allowed when Ministry of Agriculture's Committee sees a shortfall in local production compared with consumer demand. Currently only imports of speciality cuts (chicken wings) for the fast food industry are permitted, as the technology for such cuts does not exist in Botswana. The Ministry of Agriculture, however, is now considering further bans to include speciality cuts.

Business Support Services

In Botswana there is no single organisation that is promoting or regulating the poultry industry in a holistic manner but there are several organisations with each supporting single components of the industry

Business Support Services

The poultry value chain is dominated by large players who seem to have attained economies of scale by developing their own systems and support structures (for e.g. feed). This value chain is protected from external competition through Government legislation with the aim of achieving self-sufficiency in meat and eggs.

Key institutions supporting the value chain are:

- Meat Inspection Training Centre (MITC)
- BAMB
- CEDA
- NFTRC
- Botswana Poultry Association (BPA)
- MOA

The MOA plays a critical role in the regulations that govern the poultry sector including inputs to this sector (through percentage ratio requirements for imported/local inputs to feed), thereby inadvertently impacting on the production cost and the price of meat and eggs. There is concern that the MOA has a low capacity to fully maintain a supportive policy and regulations to ensure a more competitive and inclusive sector. Under present arrangements the SMME failure rate in the sector is high.

Key institutions such as the Ministry of Agriculture often have budgetary challenges to deliver such services as training and extension services.

Financing

CEDA offers long term loans to citizens for bankable projects at a much lower than commercial rate, of 5% per annum. CEDA is therefore the preferred supplier of credit by Botswana. In the poultry sector CEDA stipulates the following requirements among others:

Poultry Broilers (meat)

- A minimum of 10,000 birds per cycle
- An abattoir should meet the minimum standards of the Livestock and Meat Industries' Act. (if included in loan)
- Reliable and acceptable slaughter facilities must be provided for
- Reliable source of water and electricity.

Layers (Eggs)

- A minimum of 5,000 birds per cycle
- Reliable source of water and electricity

There is concern about the rate of failure in this sector by funders. Several reasons have been advanced including input costs. However one official also advanced one reason not often cited: "project owners do not spend as much time at the project site, leaving management to poorly trained/untrained workers".

Extension Services

The Government of Botswana through the Division of Non-Ruminants under the Department of Animal Production provides general extension services to poultry producers through service points located in all the 26 agricultural districts spread across the country. Specialist extension help on poultry, however, can be obtained from the head office in Gaborone. Services that are provided across the agricultural districts are those aimed at promoting poultry production, breeding, and feeds.

The Division, through Regional Rural Training Centres, provides capacity building exercises on poultry focusing on;

- Training producers on good management practices;
- Transfer of technologies;
- Marketing strategies;
- Women and youth empowerment in poultry;

The challenges that poultry producers face with regard to this services include;

- Lack of poultry specialists in the field;
- Poor infrastructural development;
- Poor communication network especially on notifiable diseases outbreak;

Development and Support Services

The Local Enterprise Authority (LEA)works with investors and entrepreneurs in the poultry sector from the initial project initiation stages (business plan write-up) through requisition of funding via a series of targeted capacity building exercises and mentorship until establishment and production. At the production stage, they assist in market access facilitation and other marketing related activities.

Business Services & Business Membership Organisations

BMOs are essential not only in advocating for a conducive environment but also in providing market information, business support, training, and in mobilising the needed support to be offered at lower/negotiated rates directly by themselves or through other service providers. Where BMOs are strong they can also facilitate a reduction in the cost of services and other business inputs through economies of scale.

However, there is no effective BMO for the poultry sector in Botswana. The Botswana Poultry Association has no dedicated resources (e.g., HR, communications, own offices), is low on capacity to offer, among others, research for policy advocacy, information dissemination facility, technical support and continuous training and development to members.

Poultry Value Chain Analysis

The Poultry Value Chain

Overview

In order to plan and survey the value chain in any sector, and then develop upgrading and expansion strategies, it is first necessary to understand the value chain itself. The "theoretical" value chain for the poultry sector can be divided into three core sub-sectors as shown in Figure 1:

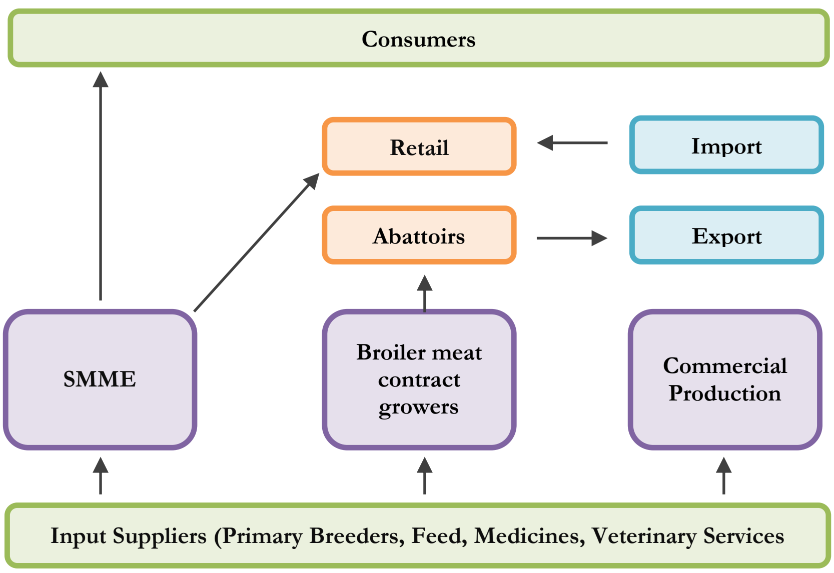
1. inputs;
2. primary production; and
3. processing.

The value chain consists of farms and contract growers as primary producers, feed companies and other input suppliers and breeders as providers of inputs. In the secondary sector, there are abattoirs, importers, exporters, as well as processors and retailers who reach the end-markets for poultry.

Inputs

There are two main inputs to the poultry value chain: day-old chicks (DOC) and feed. Maize is usually the main component of poultry feed but current levels of commercial maize production are such that the local supply of maize cannot meet demand for poultry feed. In 2009, the total procurement of maize by the Botswana Agricultural Marketing Board (BAMB), which is the only significant buyer, was approximately 4,500 tonnes. Almost all of this was sold to 2 firms to produce maize meal with very little going to production of animal feed. As there is very little local maize available for animal feed production, the 70/30 law requiring 70% of feed inputs to be sourced within Botswana, this provides a legally assured market for nutri-feed products.[2]

Figure 1: Poultry Value Chain



[2]Grynberg et al, 2012

Primary Production

Broiler meat producers feed day-old chicks and grow them into birds for slaughter. Primary production can be categorised into two groups: commercial and small-scale. Live broiler meat is marketed through two channels;

- **Abattoirs** market the majority of broiler meat, sold as carcasses to processors and packers. These, in turn, may export, sell to retailers or further processors and live broiler meat markets respectively.
- **Broiler meat markets.** Small-scale producers sell through live broiler meat markets. These small-scale producers depend on hawkers and small retailers for distribution to consumers.

Processors

Processors, packers and further processors also rely on imports for their supplies. Further processors (polony, chicken spread etc) sell to retailers for final distribution. These inputs are important factors for production and quality and contribute to costs in value addition.

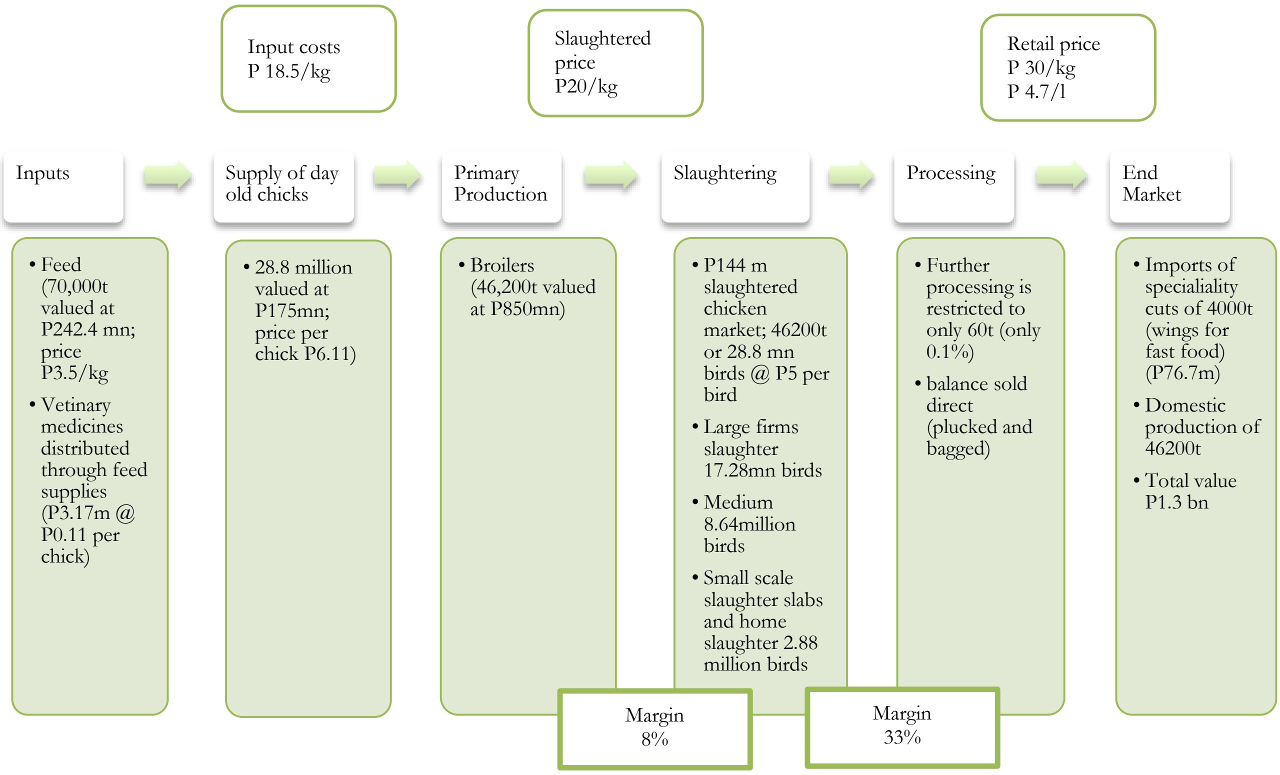
Survey Approach

The total number of actors surveyed were 30, comprising 2 members from each of the following along the value chain: breeders involved in the production of fertilised eggs, hatcheries, feed manufacturers, feed distributors/suppliers, large-scale producers, medium-scale producers, small-scale and contract farmers, processors, poultry meat distributors, slaughter slabs and retailers.

The Botswana Poultry Value Chain

The poultry value chain for Botswana has been mapped and is detailed in Appendix 1. A summary value chain is presented below.

Figure 2: Poultry Value Chain



The poultry value chain in Botswana totals 46,200 tonnes carcass weight of chickens with an average broiler carcass weight of 1.6 kg. Of this, 4,000 tonnes are imports of speciality cuts for the fast food industry (chicken wings) that cannot be processed in Botswana.

A total of about 5,200 people are employed in the chicken meat value chain with the vast majority (around 70%) of employment in production of broilers (3,610 persons), 770 persons in slaughtering, 320 in feed production, 170 in processing,160 in distribution, 90 in the production of day-old chicks and 80 in the production of breeding eggs. Annual earnings per employee in broiler production are between P19,672 – P380,000 compared with slaughtering of P90,000 – P450,000 (although highest input cost here is broilers) and processing of P100,000.

Key Observation:

- Chicken demand in Botswana is almost entirely met by local production (46,000 tonnesof the 50,000 tonnes carcass weight of chicken) with the only exception being 4,000 tonnes of speciality cuts for the fast food industry that cannot be produced locally. Therefore, opportunity for development of the sector over the short to medium term may be more in export, if competitive, and in diversifying some of the local production to offset the special cuts import demand.

- Although it is widely claimed that Botswana is fully self-sufficient in the production of broilers and chicken meat, this is an artificial claim as it results from import bans. The absence of exports indicates that Botswana may not be competitive and this policy is used to protect domestic producers. It is not known how much this “subsidy” costs consumers in Botswana and may be a contributing factor to the relatively low level of per capita consumption. Government could consider gradual liberalisation of the sector to introduce competition and increase efficiency which could, result in the development of an export industry.

Inputs

Breeding

They are 2 large breeding farms which produce 30 million fertilised eggs annually. Of these, 2.5% are discarded during the grading process at the hatchery due to cracks, dirtiness, soft shell, wrinkled, and double yoke. About 10 million mixed chickens (67% females and 33% males) are used in the breeding process. 80 people are employed at both farms with average wages of P1250 per month. Each egg is sold to the hatchery at P2.81 resulting in the annual turnover of the breeding process to be P83m.

There are 2 large-scale hatcheries with an annual capacity production of 28.08 million day-old chicks in Botswana, valued at P172 million and employing about 90 persons.

Table 2: Poultry Day Old Chicks Production

Parameter	Large Breeders
No	2
Average production	23 million
Average t/o (poultry business)	P171 million
Average number of employees	90
Average selling price	P2.8 per kg equivalent broiler

Table 2 indicates that the average production cost of a broiler would be P2.8 for the day-old chick plus P5.6 maintenance fee (3kg of feed at P3/kg for 1.6kg) making a total cost of chick and feed of P8.4 per kg.

There are 2 large feed producers in Botswana supplying 100% of domestic feed requirements. Feed is then distributed by the manufacturers and two other feed distribution companies. Total volume of feed to broiler production is estimated at 70,000 tonnes per annum and valued at P242.2 million.

Table 3: Feed Production and distributors

Parameter	Feed Producers	Feed Distributors
No	2	3 (with 17 branches countrywide)
Average production of feed for poultry sector	35,000t pa	10,000t pa
Average t/o	P106 mn	P 10 mn
Average number of employees	95	44
Average ex-factory price	P3.0/kg	P3.0/kg

It is estimated that between 69% of the cost of production of broilers are feedstuffs[3], P3.3 ($0.375/kg) for poultry finisher diet.[4] Annual consumption per broiler in Botswana is 3kg per bird.

[3] http://japr.oxfordjournals.org/content/18/2/325.abstract

[4] http://www.allaboutfeed.net/Process-Management/Management/2014/6/Poultry-sector-consumes-the-most-feed-1457657W/

Key observation

- Given feed costs in Botswana are similar to global cost of feed, then pricing is not an issue. However, the amount of purchased feed is considerably less than international norms, which is 4kg for broiler meat production compared with only 3kg in Botswana. This suggests that there could be efficiency gains (weight put on during production).

Primary Production

Primary production of broilers from day old chicks is undertaken by large, medium and small producers. However 60% of production is from large scale farms and a further 30% from medium sized farms. Total production of broilers is equivalent to 46,200 tonnes valued at P850million

Table 4: Poultry Production

Parameter	Large Broiler Farms	Medium Broiler Farms	Small Broiler Farm
No	3	6	202
Average production of Broilers	27,700 tonnes	13,850 tonnes	4,650 tonnes
Average t/o	P167 mn	P42 mn	P59,400
Average number of employees	500	250	3
Annual earnings per employee	P380,000	P168,000	P19,670

Key Observation

An economy of scale is the main determining factor in overall production capacities attained.

Poultry Slaughtering and Processing

There are 21 licensed slaughter houses that slaughter broilers which sell mostly to retailers and distributors. The majority of production is plucked, cut and chilled rather than any real value added production. These slaughter facilities handle an estimated 28.83 million birds, although some are slaughtered at home:

Table 5: Poultry Slaughtering and Processing

Parameter	Large	Medium	Small (including home slaughtering)
No	1	2	18
Average production per day	30,000 birds	2,500 birds	na
Average annual production	15 mn kg	1.2 mn kg	na
Average t/o	P300 mn	P25 mn	na
Average number of employees	660	55	na
Annual earnings per employee	P 454,545	P 454,545	na
Average price dw/kg	P20.0/kg	P20.8/kg	na

Only 60 tonnes of chicken is further processed in Botswana through 3 enterprises:

Table 6: Further Processing of Poultry

Parameter	Processors
No	3
Average annual production	20 tonnes
Average t/o	P18 m
Average number of employees	56
Monthly earnings per employee	P1500 – P2500
Average price dw/kg	P900/kg

Key Observation

- Processing of chicken meat beyond plucking, chilling and normal cuts is limited and accounts for only 0.1% of chickens produced although the value per kg is tenfold that of simple prepared chicken. There might be scope for development of more value added production into breaded, polony and other products, depending on demand domestically. When the self-sufficiency policy on poultry production was introduced, its purpose was to ensure that all domestic demand is met, therefore in the same vein, there is an opportunity for investors to invest into the specialised cuts market and service the annual 4,000 tonnes demanded by restaurants which is currently met by imports.

Market

The market for poultry meat in Botswana is 46,200 tonnes dw equivalent and valued at over P1.53 billion. It is dominated by domestic production with only 4,000 tonnes imports of speciality cuts.

Average consumption of chicken is 22.5 kg per capita dw or 3.6 kg boneless meat. However, compared with other African countries, this is low with per capita consumption in Kenya of 25.7 kg pa and 25.1 in South Africa. It is also much lower than that of countries immediately above and below Botswana in World Bank GDP per capita rankings. If Botswana had average consumption per capita of these countries of 21.6 kg per capita, consumption would normally be expected to be 50% higher than current levels of demand[5].

Table 7: Per capita consumption of poultry meat

Country	Per capita consumption (kg)
Mauritius	31.2
South Africa	25.1
Namibia	7.7
Djibouti	6.9
Libya	16.6
Botswana	3.6
Swaziland	5.4
Tunisia	13.5

[5]http.www.vegetarian.procon.org/view.resource.php?resourceID=004748

Country	Per capita consumption (kg)
Morocco	13.6
Malawi	1.10
Uganda	1.20

Figure 3: Chicken Meat Sub-Sector Value Chain Analysis

Primary production

Farm gate price per bird: P30
Input costs per bird

DOC:	P4.95
Feeds:	P13.17
Sawdust:	P0.59
Utilities:	P0.96
Vet. Medicines:	P0.11
Labour:	P1.12
Cleaning chemicals:	P0.06
Transport:	P0.15
Total:	P21.11
Farm gross margin:	30%

Poultry Slaughter Facilities / Services

Slaughter service per bird: P5.00
Input costs per kg

Labour:	P1.25
Hallal per bird:	P1.50
Utilities:	P1.50
Other:	P0.20
Total:	P4.45
gross margin:	11%

Primary Production Constraints

- Poor adherence to quality hygiene standards by workers
- Limited regular capacity training exercises
- High input costs (feeds & utilities)
- Unskilled labour
- Poor work ethics
- No quality assurance on feed
- Low market prices
- Lack of access to markets
- Ineffective poultry association

Poultry Slaughter Facilities Constraints

- Hallal requirements
- High slaughter costs
- Poor quality carcass / low average bird weights
- Few slaughter facilities
- Expensive slaughter equipment

There is a large degree of vertical integration amongst large and medium producers and their contract farmers whereby they supply all the big chain stores. They are able to guarantee both quality and quantity as well as timeliness in the delivery of the product which is considered key. In addition, they are also able to negotiate futures so as to reduce risks from price changes.

During the survey, it was discovered that the most common way of selling poultry meat was via cuts packaged in 2kg bags. These retailed at about P54 – P59 depending on the store and brand. Whole carcases made up a small part of the market and retailed at P35 – P39 for 1.5kg to 1.7kg.

Small producers do not have direct access to big chain stores and so they predominantly sell to individuals, restaurants, hotels and Government departments which attract lower prices.

Key Observations

- Consumption of poultry products in Botswana is low, with a lower per capita consumption than regional neighbours and that of countries of a similar economic standard (in fact Kenya and south Africa have higher per capita consumption than these). Therefore, if the market is encouraged then it could grow to P1.9 bn or 60,000 tonnes (domestic production), an increase of 20,000 tonnes or 12.5 million birds. National campaigns could be used to increase poultry consumption as a stimulus to the market and domestic production.

Lessons from Other Countries

Poultry Value Chains Benchmarking

The benchmark used for Botswana poultry meat sector is South Africa because of the importance and relative sophistication of its poultry meat sector.

Poultry Meat Benchmarking Parameters

Benchmarking Chicken Breeding

In South Africa, poultry meat production is the largest segment of South African agriculture. In 2010 the poultry industry contributed 17.5% of animal production to agriculture production. The broiler production dominates the agriculture sector. It is the main supplier of protein, greater than all other animal proteins combined, followed by beef. About 93.6% of the total poultry-meat production comes from broiler meat, while the remainder (6.4%) is made up of mature chicken slaughter (culls), small-scale and back-yard broiler meat production and other specialized broiler meat products (geese, turkey, ducks and guinea fowl).

South Africa uses cross breeding techniques and selection for the best performers to develop pure meat-type breeds for developing lines with outstanding characteristics to put on weight fast and use feed efficiently[6]. The common broiler chicken breeds on the market include Ross, Cobb, Arbor Acres and Hubbard.

Benchmarking Broiler Chickens Production

South Africa poultry meat production and specifically broiler chickens in 2011 was 978.8 million broiler chickens, in 2012 was 997 million broilers while in 2013 was expected to be 1,010 million broilers[7]. The chickens take 5 weeks or 33 - 35 days to reach a slaughter weight of 1.85 kg. The slaughtering is mainly done at abattoirs. The chickens are produced using intensive systems in which chickens are kept in enclosed houses. Some chickens are also produced under a free range system. The South African broiler meat industry is dominated by 2 large producers, and these are Rainbow and Astral. The 2 companies together produce 50% of the total broiler meat production in South Africa. The other 4 medium-sized broiler producing companies are: Tydstroom, Daybreak, Chubby Chick and Rocklands who each produce more than 400 000 broilers per week or 15% of the market and Argyle who produces 300,000 chickens per week or 2% of the market. The remaining 33% of the chicken market is produced by 49 small-scale producers who produce less than 200 000 broilers per week each and about 1745 subsistence farmers who sell approximately 500 live chickens per week[8].

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[6] http://www.sapoultry.co.za/training%20notes/Broiler%20notes/THE%20SA%20POULTRY%20FARMING%20INDUSTRY.pdf

[7] South Africa Poultry Update: the supply and demand for

broiler meat in South Africa, 2013, http://gain.fas.usda.gov/Recent%20GAIN%20Publications

[8] http://www.nda.agric.za/docs/AMCP/Broiler2012-13.pdf

Benchmarking Labour Productivity in the Poultry Industry

Labour productivity has been measured in terms of average number of chickens handled by one person. It should be noted that supermarket employees have been excluded from this analysis as poultry products are a very minor element of their retail sales activity. The average number of chickens handled by one person per year in Botswana (2015 figures) is 3,000 while in South Africa it is 35,848 chickens.

Table 8: Employment Creation by the Poultry Industry in Botswana and South Africa

Sector	no of people employed by Sector		% of people employed by Sector	
	South Africa[9]	Botswana[10]	South Africa	Botswana
Input supply	1,000	495	3.7	5.20
Production	7,597	4,380	27.8	46.10
Processors and marketing	18,709	4,632	68.5	48.70
Total no. of people employed	27,306	9,500	100.0	100.00
No of chickens produced annually (million)	1,367	28.8		
Average no of chickens handled by one person per year	35,848	3,000		

Institutional Benchmarking

In South Africa, the poultry meat industry is represented by the South African Poultry Association (SAPA). The organisation promotes all matters concerning the poultry industry. The aims of the Association are to improve the poultry and all poultry-related industries in South Africa through creating an enabling environment for achieving sustainable producer profits in the domestic and global market. The institution acts as a medium and a catalyst for any matter the industry wishes to collectively address.

Good Broiler Chicken Practices.

South Africa Code of Conduct for the Poultry Industry

The South African Industry has a well elaborated (2012) Code of Conduct for the Broiler Industry[11]. The Code specifies the minimum standards to be met by poultry farmers in commercial operations, research and educational facilities. The Code covers the following specific areas:

- Broiler Production Systems, which include housing of broilers in Floor Systems, housing of Broilers in Cage Systems, and Free Range Broiler Production (Internal Environment and External Environment);
- Preparation of poultry houses, which covers cleaning, disinfection and sanitary breaks together with house preparation

[9] http://www.nda.agric.za/docs/AMCP/Broiler2012-13.pdf

[10] Botswana Poultry Industry Value Chain Map of 2015

[11] http://www.sapoultry.co.za/pdf%20information/COP%20-%20May%202012%20Layers%20after%20Review%20meeting.pdf

- Management Practices in Rearing of Broilers, which covers receiving of chicks, temperature control, ventilation control, light control, feed, drinking water, supervision, access to external environment in Free Range Production, and transfer of birds to processing
- Health Control, rearing establishment, flock health, records, vaccination, disease monitoring and investigation, parasite, vermin and insect control, and bio security.

The Code of Conduct for the South Africa Broiler Industry provides detailed best practices for the different areas as outlined above.

Recommendations

Summary of Findings

The survey results indicate that the poultry industry in Botswana, although self sufficient in local production is anti-competitive. The introduction of an import substitution policy in the poultry sector has led to the demise in its competitiveness. The control to goods act of 1979 was introduced to restrict the importation of eggs and poultry meat and thus promote local production. Government's intention at that time was to promote the participation of small-scale producers in the poultry sector in order to alleviate rural poverty but what started as a good deed eventually became detrimental to the beneficiaries in that they could not compete due to low economies of scale and failure to finding niche markets that provides them with sufficient returns to justify their continuation in the sector. The survey indicated that of the total 46,080 tonnes produced locally, 10% is by small-scale producers whose production patterns are erratic and inconsistent.

Suggested Strategy

There are a number of options for the development of the Poultry sector:

1. Reduce the price of poultry meat and processed poultry products in Botswana (thereby increasing consumption of meat and processed products)
2. Development of Smallholder poultry production and marketing
3. Encouraging increased further processing of chicken beyond simple cuts
4. Combination of two or more of the above.

It is clear that there is potential for Botswana to increase the consumption of chicken meat and further processed chicken as an important nutrition/protein source to improve the standard of living.

Strategic target for Poultry value chain upgrading in Botswana:

The strategic target for upgrading the poultry value chain in Botswana is to increase the annual consumption of poultry by 50% from 46,500 tonnes to 70,000 tonnes (dw equivalent)of which 80% supplied domestically (similar import ratio as in South Africa).

In order to achieve this target, a number of strategic goals are proposed:

- ✓ *Strengthen the Botswana Poultry Association*
- ✓ *Increase productivity throughout the value chain*
- ✓ *Improvement in quality of broilers produced in Botswana*
- ✓ *Increase demand for poultry meat and poultry meat products in Botswana*

Strategic Goal 1: Strengthen the Botswana Poultry Association

The specific Objective of strategic goal 1 is:

To assure the long term efficiency and viability of the poultry sector, especially small producers

Activities to Achieve this Goal will include:

1. *Effective lobby of interests along the value chain.* The interests of the poultry meat sector are not well articulated. Lobbying should be based on the needs of the majority (not just the two large firms that dominate sales) and also look forward to future development of the sector. For a visionary association, a well-staffed secretariat is required with widespread membership, especially amongst small-holders (as well as adequate resources). To this end, Government should part fund the association for a limited period (set firmly at say 5 years) with a gradual reduction in subsidy paid to the association. Membership should be free initially with fees growing over the period as the sector develops, but the constitution should ensure equal rights of all members so that no segment can dominate.
2. *Improving technical skills.* There is a need for training throughout the value chain to increase productivity, develop new skills and improve processing. It should be the role of an association to identify and organise such training for its members. Existing institutions should be identified to undertake the actual training itself.
3. *Management and commercial training and support.* Lack of commercial aptitude and basic business skills was identified as a constraint for small holdings and small producers during the survey. Therefore a programme to teach basic business skills to members should be developed including book-keeping, profit and loss, cash-flow and marketing.
4. *Code of Conduct.* Development of a national code of conduct or certification programme, similar to that used by the poultry association in South Africa. This would set quality and animal husbandry standards that will not only improve business practice, but increase productivity, quality and hygiene.

Strategic Goal 2: Increase productivity throughout the value chain

The specific Objective of strategic goal 2 is:

To create a competitive and viable poultry sector in Botswana

Activities to Achieve this Goal will include:

1. *Development of a national poultry policy.* There is an important need to develop an open and liberal poultry policy to support the development of the poultry sector. Current policies are out-dated and only serve to constrain and limit the benefits of the sector to 2 firms at the expense of small firms, new potential firms and consumers. To enact such a policy, the Poultry Division of the Ministry of Agriculture should be adequately staffed to reflect the growing importance of the Sector. Furthermore, the Division should not just report to Government and the public on production of poultry in its Annual Report but also on consumer prices with a view to assuring a narrowing of the gap between domestic and neighbouring countries prices.
2. *Selective breeding programmes.* South Africa has benefited greatly from the development of selective breeding programmes. Therefore, the Government should embark on a quality

improvement programme that seeks to encourage the use and introduction of intensive selective breeding by the firms supplying the broiler industry.

3. *Access to finance.* There is a need to increase the scale of production as well as automated processing and further processing. However, access to funding to start-up or expand a poultry project is limited with CEDA and commercial banks reluctant to lend to the sector due to recent high failure rates. Therefore, financial programmes for investment in production of high value-added poultry products should be developed including guarantee schemes (to address collateral), subsidised lending and FDI, joint ventures. These financial instruments should be clearly linked to scaling-up broiler production, mechanisation and further processing.
4. *Small holders development programme.* The Government should give consideration to the development of a Smallholder Poultry Plan based in part on providing tax concessions and other benefits to larger firms and supermarkets to procure poultry from domestic smallholders. A smallholder marketing program should also be properly funded to assist smallholders to develop direct co-operative links to supermarkets.
5. *Training and skills development.* Low labour productivity in processing is partly due to low levels of mechanisation, but also due to poor skill sets. Automation should be addressed through finance and the preparation of technical guidebooks and manuals for the sector. In addition, the Government should explicitly target the skills deficit in the slaughtering and processing sector through a series of training programmes delivered through extension services.

Strategic Goal 3: Improvement in quality of broilers produced in Botswana

The specific Objective of strategic goal 3 is:

To improve the animal husbandry of the broiler segment in Botswana, especially from small holdings

Activities to Achieve this Goal will include:

1. *Removal of the 70/30 law on animal feed.* The law requiring 70% of all animal feed to be sourced in Botswana has the effect of restricting competition (only 2 monopoly feed producers), and lowering quality. Maize is not available for animal feed in Botswana (which is normally the largest input to poultry feed) but cheaper imports of maize are not permitted. Therefore, removal of this legislation would free up the market, reduce prices and increase quality.
2. *Improve the levels and quality of feed.* The level and use of feed by farmers is limited, especially amongst small holdings which tend to use only harvest waste. By encouraging the more systematic use of feed in broiler production, efficiency and growth times should increase. For example, broiler growing times are over 6 weeks in Botswana compared with 5 weeks in South Africa (that is, up to 20% longer). Whilst liberalising national feed requirements should lead to lower prices, and more widespread use. The promotion of feed as good practice is also needed.
3. *Encourage the use of housing for birds.* Housing of birds in South Africa has been shown to decrease production cycles and improve productivity. Therefore, small-holders should be provided with the means and knowledge to construct and maintain bird housing.
4. *Hygiene standards.* The lack of hygiene standards in small holdings has been cited as a barrier to accessing formal, more valuable markets such as supermarkets. Hygiene standards,

including sanitary measures are legal requirements, as well as market demands and so a programme for compliance should be developed.

Strategic Goal 4: Increase demand for poultry meat and poultry meat products in Botswana

The specific Objective of strategic goal 4 is:

To encourage increased consumption of poultry meat and poultry products in Botswana to levels of similarly developed countries

Activities to Achieve this Goal will include:

1. *Liberalisation of imports.* There is little or no competition in the poultry value chain as it is highly vertically integrated and concentrated with two groups controlling the entire industry. These are groups aligned to Optifeeds and Nutrifeeds manufacturing companies. As a result, a 2kg bag of chicken pieces costs a consumer P60 in Botswana, whilst in South Africa, a 5kg bag costs only P83. Therefore, liberalisation of the import regime to free access for poultry should be undertaken to introduce competition.
2. *Greater value added.* There are few sales of further processed poultry products in Botswana, a combination of lack of competition and relatively high cost. To encourage development of further processing, creating demonstration projects for small-scale cottage industries and vertical integration with existing small-scale producers and cooperatives.
3. *National campaign for increasing consumption.* The aim of this campaign will be to raise general awareness through television, newspapers, health clinic brochures and posters, church networks, radio, bill boards designed by an appropriate marketing team.

Actionplan

Supervision, Monitoring and Evaluation

Implementation of this strategy, or indeed any other strategy, developed for the expansion and development of the poultry industry will require cooperation and actions by a broad range of stakeholders within the public and private sectors. Experience in other countries has shown that there needs to be an apex Organisation which has a strong supervisory and facilitation role and that can coordinate and oversee the programme's implementation. As noted in Strategic Goal 1, it is recommended that the Botswana Poultry Association (BPA) be selected for this role. The BPA will not only act as the driver of the strategy, but take responsibility for monitoring and evaluation. This will first require undertaking baseline studies of key indicators and publishing progress of the strategy (with appropriate media coverage to support the sector).This is a crucial role, and the organisation, acting in the national interest, will need to be given appropriate resources, including a clear mandate, skilled and experienced management and the authority to monitor and facilitate implementation.

Stakeholders should discuss, agree and appoint by consensus a lead organisation to drive through this strategy. Options for this role would include:

Ministry of Trade and Industry

Ministry of Agriculture

LEA

BPA

Institutional Arrangements

Implementation of this strategy will be undertaken by a broad range of stakeholders in both the public and private sectors. There are a number of options for implementation and lead agencies/organisations depending upon willingness, commitment and resources. During the initial discussion of this strategy amongst stakeholders, the exact modalities will be discussed and agreed, as well as completion of the Outline Action Plan (below).

Outline Action Plan

The following Action Plan provides an indicative schedule of activities to implement the strategy. The institutions involved in implementation, however, should review and revise the Action Plan on an on-going basis to ensure its accuracy, relevance and reflect the changing dynamics of Botswana as well as the global market.

The Action Plan is purposely incomplete to ensure national understanding, acceptance and ownership of the action plan by stakeholders who will first need to discuss and complete the Outline, assigning Lead Agencies, resources and budgets.

Once these have been agreed, each component of the Action Plan must be elaborated into an individual Work Programme. The Action Plan and individual Work Programmes will need to be revised periodically to take account of available resources, changing politics, commitment of the sector, international market dynamics and lessons from previous activities.

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
Overall objective	Increase value of poultry production sector from 46,500 to 56,000 tonnes dw	Increase the annual consumption of poultry by 50% from 46,500 to 70,000tonnes (dw equivalent) 80% of market to be supplied from domestically produced products				
Strategic Goal 1: Strengthen the Botswana Poultry Association						
Specific Target	To assure the long term efficiency and viability of the poultry sector, especially small producers					
Activity 1.1 Establish Effective lobby of interests along the value chain						
Task 1.1.1 Feasibility study and corporate plan	Revised Articles of association Budget in place Fully staffed and functioning organisation	Provision of effective representation and services to the industry.				
Task 1.1.2 Funding committed from Government						
Task 1.1.3 Membership recruitment across the value chain						
Task 1.1.4 Staffing						
Task 1.1.5 Identification of major strategic direction and constraints to the sector						
Activity 1.2: Develop technical and vocational training programme						
Task 1.2.1 Identification of existing national institutions	Institutions (research, training and academic) commit establish programmes for the poultry sector Association undertakes trainings for members	Research is undertaken on processing technologies, improvements and development Vocational training and skills upgrading				
Task 1.2.2 Development of programmes supporting the leather sector						
Activity 1.3: Management and commercial training and support						
Task 1.3.1 Identification of management weakness in firms	Increase in trainings delivered to poultry sector on basic business skills.	Improved business record keeping and management				
Task 1.3.2 Audit of business						

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
support programmes currently available and lobby for explicit inclusion of poultry sector	Increase in business mentoring to poultry firms					
Task 1.3.3 Development and delivery by Association of simple business training modules						
Activity 1.4:Development of a Quality Code of Conduct and Certification Programme						
Task 1.2.1 Identification of QA standards for each phase of the VC	Published Standards for quality and animal husbandry standards Certification programme in operation	Certified enterprises throughout the VC.				
Task 1.2.2 Identify and Appoint an accreditation body						
Task 1.2.3 Identify certification body						
Task 1.2.4 Develop programme of training and certification (determine if subsidised)						
Strategic Goal 2: Increase productivity throughout the value chain						
Specific Target	To create a competitive and viable poultry sector in Botswana					
Activity 2.1:Development of a national poultry policy						
Task 2.1.1 Development of a policy green paper that is visionary	Well-staffed poultry unit in MoA Policy Green Paper that is visionary New policy adopted	Liberal and open poultry policy that promotes competition and growth in the sector				
Task 2.1.2 Dedicated resources to poultry sector in MoA, including adequate staffing						
Task 2.1.3 Discussion and promotion of policy approach						
Task 2.1.4 Adoption of new policy approach						
Activity 2.2: Selective breeding programmes						

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
Task 2.2.1 Research into selective breeding techniques and its benefits	Manuals, guidelines and technical assistance to breeders on selective breeding techniques	Increase weights and shorter "growth times" for broiler production				
Task 2.2.2 Development of a Government/donor programme for selective breeding						
Task 2.2.3 Identification of breeders/potential breeders in Botswana to benefit						
Task 2.2.4 Implementation of selective breeding programme which may include visits to programmes/breeders in other countries						
Activity 2.3: Access to finance						
Task 2.3.1 Establishment of financial instruments for investment lending	Government provide loan guarantees and subsidised loans linked to scaling up broiler production, mechanisation and further processing	Increased investment in expanding size of broiler farms, mechanising processing and further processing to higher value products				
Task 2.3.2 Development of projects in the poultry sector for JV and FDI promotion						
Activity 2.4:Small holders development programme						
Task 2.4.1 MoA to develop package of support for small holders	Increased number of cooperatives Increase size of small holdings	Increased number of small holder broiler companies, able to supply competitively				
Task 2.4.2 Adopt and implement tax concession programme to encourage and support smallholders						

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
Task 2.4.3 Encourage the development of cooperatives amongst smallholders (design and promote model cooperatives, along with TA)						
Task 2.4.5 Implementation of technical support to smallholders						
Activity 2.5:Training and skills development						
Task 2.5.1 Identification of existing national institutions	Technical guidebooks and manuals for slaughtering Training and skills development programmes	Increased productivity of slaughtering and processing				
Task 2.5.2 Development of training programmes						
Task 2.5.3 Delivery of skills enhancement programmes through extension services						
Strategic Goal 3: Improvement in quality of broilers produced in Botswana						
Specific Target	To improve the animal husbandry of the broiler segment in Botswana, especially from small holdings					
Activity 3.1:Removal of the 70/30 law on animal feed						
Task 3.1.1 Draft revisions in legislation and regulation of animal feed legislation	Reduction in the price of feed. Increase in quality of feed.	Increase in the consistent use of quality feed in small holdings				
Task 3.1.2 Press announcement on complete liberalisation of national feed content requirement						
Task 3.1.3 Enactment of revised legislation						
Activity 3.2:Improve the levels of feedby smallholders						
Task 3.2.1 Develop a toolkit for poultry animal husbandry	Development of animal husbandry guidelines and	Reduction in grow times				

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
Task 3.2.2 Develop programme of dissemination of information and awareness raising	brochures specifically targeted at smallholders and their workers Awareness events at farm, village and district level, potentially sponsored by feed companies who will benefit from the programme					
Task 3.2.2 Implementation of awareness raising programme						
Activity 3.3 Encourage the use of housing for birds						
Task 3.3.1 Development of guidebook, manual and build instructions for making bird houses	Development of animal husbandry guidelines and brochures specifically targeted at smallholders Awareness events at farm, village and district level, demonstrating how to build and manage bird houses Sales of subsidised materials for bird houses	Increase in number of small holders using housing systems for broiler production.				
Task 3.3.2 Dissemination of information on benefits of bird houses and how to use them						
Task 3.3.3 Development of a scheme of subsidise poultry bird houses – eg voucher system for subsidised cost of materials needed or constructing bird houses						
Activity 3.4: Improving Hygiene standards						
Task 3.4.1 Development of guidebook, manual and brochure on hygiene requirements and their benefits	Development of animal husbandry guidelines and brochures specifically targeted at smallholders Awareness events at farm, village and district level,	Increase in certified small holdings and improved hygiene				
Task 3.4.2 Dissemination of information						
Task 3.4.3 Promotion of Poultry association new code						

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
of practise and certification	including promotion of association code of practise					
Strategic Goal 4: Increase demand for poultry meat and poultry meat products in Botswana						
Specific Target	To encourage increased consumption of poultry meat and poultry products in Botswana to levels of similarly developed countries					
Activity 4.1 Liberalisation of imports						
Task 4.1.1 Draft revisions in legislation and regulation of chicken meat imports	Increase imports of chicken meat products Increased investment from existing and new firms in processing (market opportunities open)	Lower prices of chicken meat and further processed products				
Task 4.1.2 Press announcement on complete liberalisation of chicken meat imports						
Task 4.1.3 Enactment of revised legislation						
Activity 4.2 Greater value added production						
Task 4.2.1 Identification of products and processing techniques for poultry sector (further processing)	Advice, mentoring and training of SMEs in further poultry processing Demonstration projects of small-scale further processed products	Increased levels of production and consumption of further processed poultry products				
Task 3.4.2 Development of programmes supporting the establishment of further processing plants						
Task 3.4.3 Development of demonstration projects for cottage industries (as training and technology centres)						
Activity 4.3:National campaign for increasing consumption:						
Task 4.3.1 Development of key messages of campaign (uses, benefits and further processed products)	Awareness activities as defined in strategy (could include television,	Increase in awareness of the benefits of chicken amongst population				

Activities	Outputs	Result Indicators	Lead Agency	Duration (start-finish months)	Internal Resources	Other resources (Donor and National Budget)
Task 4.3.2 Procure marketing expertise	newspapers, health clinic brochures and posters, church networks, radio, bill boards)					
Task 4.3.3 Implementation of marketing campaign						

Appendices

Appendix 1: Detailed value chain Map

Input suppliers

Breeders (2 Large Scale)

Ross Breeders (75% of Market Share, 72,480 breeding chickens, 60 employees, P60m T/O)

Irvine Breeding (25% MS, 20 employees, P18m T/O)

Feeds (2 Large Scale, 3 Medium scale distributors with 20 branches)

Nutrifeed/ Master Feeds[1] (Total Vol 40000 tons, 110 employees, T/O P110m)

Opti Feeds (Total Vol 30,000tons, 80 employees, T/O P100m)

Distributors 2 (17 branches countrywide)

Total # of employees 130

T/O P30m

Total # of Enterprises 5 (2 large & 3 distributors)

Total production 70,000 tons

Total # of employees 320

T/O P240m

Ross Breeders (Botswana) (Pty) Ltd (75% Market Share) 440,000 chicks per week 22 million chicks per year, 70 employees &T/O P130m)

Irvine's (25% Market Share 127,000 chicks per week (8 million chicks per year), 25 employees, T/O P50m)

Total # of Enterprise 2 (L)

Total production 30 million chicks

Total # of employees 95

All vaccines are acquired from Feed distributors (P3.20m @ P0.11/chick)

Primary Production

Small holders (202 varies as there is no consistency in production)

- 10% of Market share (**4600**t)
- 2 – 3 employees
- T/O P60,000

Total Enterprises 200

Total value of segment P12m

Total # of employees 600

Large Scale (3)

- 60% of Market Share (**27648t**)
- 400 – 700 employees
- T/O P130 – P240 m

Total enterprise 3

Total value of segment P500m

Total # of employees 1700

Medium Scale (6)

- 30% of market share (**13824t**)
- 200 – 300 employees
- T/O P42m

Total Enterprises 6

Total value of segment P250m

Total # of employees 1750

Primary Processing

Processing

Total # of enterprise (3L)

Total value of segment (P55m)

Total volume (60t)

Total employment (170)

Poultry Slaughter Facilities (21)

Large Scale (1) (30000 birds a day, 660 employees & T/O P300m)

Medium Scale (2) 5000 birds a day, 110 employees, T/O P50m

Small Scale (18)

End Markets

Distribution

Total # of Enterprise 3(2L & 1 M)

Total value of segment P430m

Total Volume 20320t

Total Employment 160

MARKET

Retailers (151 (5L, 2M &144S)

Wholesalers (7) (www.africanadvice.com/Supermarketsand_GroceryStores_Botswana/6/)

Total # of Employees (4300 (CSO 2010))

Appendix 2: Directory of organisations by Value Chain Stage

Inputs

Feed Manufacturers

Nutrifeeds
Optifeeds

Feed (Distributors)

Agrifeed (9 branches)
Agrivet (8 branches)

Producers of Day Old Chicks

Ross breeders
Irvine poultry

Primary Production (Broiler Farms)

Mozumbi , Shakawe
Thamalakane , Maun
Philander , Maun
C.Dambe, Boro
KebonangMokgothe, Letlhakane
Veronica Mahlunge, Phokoje
Richmark /Bokomo , Moletemane
Bagele Botseka, Selebi
Kgalalelo Mmantli, Mmadinare
Jeanie Wame, Sefhophe
Simon Tsedi, Bobonong
Merciah Nthapapala, Phokoje
Khabe Moswetsi, Lebala
Lame Sebina, Tobane
Isaac Sekgwama ,Molalatawana
Mothusi ,Makome Hill
Dollar Trace Pro, Makome Hill
K.Molefe, Masama
B.Gaodumele, Serowe
B.Kebanetswe, Serowe
L. Leburu, Mosusupeni
Dijammogo Poultry Farm, Moiyabana
Copel Rancho, Masama
P.Gogaisamang, Thabala
E Mogorosi, Ramashaba
J.Nthobatsang, Masama
E.Sebina, Serowe
C. Phenyo, Mosusupeni
Mr Bagwasi, Makoro
Gojwane Youth, Gojwane
DaphneyBonang, Goo-Sekgweng
Modise Dev. Trust, Lerala
Business K., Lotsane
Mr. Humphrey, Lotsane
LentebanyeLesego, Mogapi
MothusiTshomane, Radisele
ObakengKgwasiwa, Setatse
K. Phaphane, Moshupa
Tlhalefang, Moshupa
Ntau, Moshupa
M. Ramolefe, Moshupa
N. Simane, Moshupa
M. Lekobe, Moshupa
T. Molete, Moshupa
T. Thobega, Moshupa
Webi, Moshupa
T. Modise, Moshupa
K. Kesenye, Moshupa
O. Matshelebe, Moshupa
O. Kowa, Moshupa
P. Makuruetsa, Moshupa
S. Mathibidi, Moshupa
G. Masunga, M/Bojang
O. Kereilemang, M/Bojang
S. Baitse, Polokwe
Phatshwa, Moshupa
Disele, Moshupa
B. Ramooki, Moshupa
Omphemetse, Moshupa
G. Radilwana, Moshupa
K. Tlhabiwe, Moshupa
Trenepol, Moshupa
S. Monakwane, M/Bojang
F.Tlhotsapele, Manyana
M. Sethibe, Manyana
F. Molefhe, Manyana
Ramaologa, Btesankwe
P.Ketshabile, Ntlhantlhe
G.F. Senna, Ntlhantlhe
T. Molebatsi, Lotlhakane East
B. Moroka, Lotlhakane East
J. Josephs, Ranaka
M. Oabile, Goodhope
S. Ngaka, Goodhope
S. Tshipinare, Goodhope
F. Coetze, Bethel
B. Ramolala, Digawana
M. Nyambe, Digawana
Sekhomanne, Gathwane
S. Monosi, Gathwane
Garogwe, Gathwane
Molosiwa, Lejwana
N. Mosetse, M/Ganyane
N & M Poultry, Leropong
Kets. Poultry, Kudumatse
M. Manyaphiri, Morale
K. Phuthego, Mmamasegotso
C. Khalepha, Phukoje
M. Nyambo, Malape
P. Keitumetsi, Mookane
L. Lepheseke, Kodibeleng
M. R. Selaka, Moungwana
G. Lesonya, Mmadiperetla
F. Manchwe, Machaneng
Mahalapye Prisons, Mahalapye
Tiny Holdings, Kalamare
P. Konopo, Capricorn
K. Moapare, Hukuntsi
P. Tshotlane, Kang
K. Kgogobi, Lokgwabe
M. Kgosietsile, Hukuntsi

O. Phetolo, Serinane
N. Seane, Khudumelapye
Themiso, Serinane
Kgalaeng, Khudumelapye
E. Leuwe, Ditshegwane
N. Batulopi, Salajwe
B. Rankosha, Serinane
J. Nagafela, Ditshegwane
Manyethwane, Serinane
N. Mokgothu, Rabaitaodi
O. Lekollwane, Serinane
Isabella Moeti, Mosinki
Bobsie chicken, Molepolole
O. T Leero, Gamodubu
Glaudinah, Mosokotso
Gracious Poultry Group, Mantsho
Motherwell, Mmamhiko
BuyaKgomotso, Suping
Moleps Poultry, Diagane
Mr Keddy, Suping
B. David, Thamaga
O. Letebele, Dikhutsana
Robson, Gabane
David Ndlovu, Thamaga
Ncube, Thamaga
Siamisang, Thamaga
Ofentse, Gakgatla
Motlogelwa, Thamaga
Tefo, Thamaga
Michael, Gakuto
Kgotla, Lentsweletau
Magosha, Gakuto
ThapeloSello, Lentsweletau
Obakeng, Kopong
Farouk M, Kopong
Boitumelo, Gakuto
Kopong group, Kopong
Bafentse, Mmatseta
Tswana Pride,
Boineelo,
Mokefane,
Mojanaga,
Vet agric,
Goodwill chickens,
Chicken zone,
Nelson Kwadikwe,
Douglas,
Patrick Pusi,
Sethonyane,
Olivia Mogotsi,
Mavis Pusi,
LoratoGontse,
Verimae,
Tlhwatlhwa,
Medina Chickens,
Jourbet,
Duplisee,
Mr Mathake,
Fred Kortze,
RafikShaik,
Stimela Shepard,
Mr Tobani,
Utwanang,
Madimabe,
Musa,
Lekote,
Botlhomeng,
Pemglan,
RJ,
Bobwe,
Kwena Pride,
I. Bagopi, Molongwana
P.P. Maribe, Mmaesoke
Q. Mogome, Artesia
S. Ntsatsi, Matebele
G. Mokotedi, Borejane
M. Phiri, Borejane
A. Moaisi, Matebele
S. Pilane, Kgope
B. Bafisi, Seleme
B. Rampiping, Oodi
D. Segwabe, Bokaa
M. Molefe, Tshukudu
L. Keishokile, Malotwana
P. Banda, Malotwana
K. Motswasele, Manfudisi
Odittoir, Oodi
Adam's Apple, Mmabe
S. Motshabi, Rasesa
Q. Moatshe, Mmathkwane
H. Sekale, Mmathkwane
PemslanChicks, Malolwane
S. Phale, Mmathkwane
B. Pilane, Malotwana
M. Chuma, Malotwana
G. Moseki, Nine three
I. Morton, Kgalapitse
O. Dintwe, Bokaa
T. Mbala, Bokaa
P. Mogome, Bokaa
L. Kgosietsile, Bokaa
B. Ratshoswane, Bokaa
S. S. Poultry, Matebele
Radikoko, Matebele
Trish, Matebele
Bobsie's, Oodi
Bobsie's, Matebele
Bobsie's, Pilane

Slaughter slab

Tswana Pride
Dikoko TSA Botswana
Choppies

Processing

Senn Foods
Quality Meat

Distributers

Senn Foods
Bidvest
Coldline

Appendix 3: Agencies Supporting the Development of the Poultry Value Chain in Botswana

INSTITUTION	PURPOSE/ MANDATE	SERVICES/EFFECT ON POULTRY VALUE CHAIN
Government Ministries		
MTI	Trade & industry policy, promotion & programmes	Private Sector Development Strategy & Programme; Trade Policy, Strategy, Negotiations & Implementation; Economic Diversification Drive; Industrial Upgrading & Modernisation Programme (IUMP); Business licensing;
MYSC	Youth & sport development	Youth Fund
Government Agencies		
Botswana Agricultural Marketing Board (BAMB)	Procurement and selling of locally grown cereals.	Inputs to stock feeds at Farm level
Meat Inspection Training Centre	Training centre	Meat inspection training; Slaughter floor operation training (Meat technology);
Public Procurement & Asset Disposal Board (PPADB	Government procurement regulation	Local market access/Public tenders
Business Membership Organisations		
BEMA	Membership support	Business advocacy; Export training & trade information; Manufacturing support; Local market access
BFFA	Membership support	Export/import logistics
BOTRA	Membership support	Transport logistics
Botswana Poultry Association	Membership support	Advocacy; Representation; Information; Membership services
Financial Institutions with SMME Products		
Anglo American Group	SMME funding	Tokafala Fund for SMMEs
CEDA	Business services & financial support	Credit provision & guarantee; Technical assistance; Young Farmers Fund
FNBB	SMME credit line	Credit
NDB	Funding	Business development funds
SCBB	SMME credit line	Credit
Training and Research Institutes		
Agricultural Hub, MOA	Transformation of agriculture	Commercialise and diversify agricultural sector (as part of Vision 2016)
BCA	Agric Education, training and research	Education & Training; R&D; Linkages with University of Botswana for additional R&D
BOBS	Development of national standards	Standards
BOTEC	Research and Technology Organization	R&D
BVI	Animal vaccines development & sales	Provision of animal vaccines
LEA	Technical assistance & Training	Technical assistance & Training; Value Chain analyses
NFTRC	Research & development (R&D)	Food Research, food safety and demonstration

Appendix 4: Profile of the Botswana Poultry Association

Established in 1996, paid up membership of the Botswana Poultry Association (BPA) is currently 60 members (although in the recent past the membership had risen to nearly 1,000). Membership is open to poultry farmers (individuals, groups and companies) and allied industries. Association is currently run from 3 separate offices: the Chairman's, the Secretary's and the Treasurer's, all at the respective officers own business premises. There are no permanent staff or Secretariat for the Association.

The initial registration fee is P50.00 (approx. USD5.00) for all categories of farmers/allied industries. The annual subscription ranges from P50.00 (for a farmer with less than 500 birds) to P500.00 (approx., USD50.00) for a large-scale farmer with up to 80,000 birds. The Chairman attributes low current membership to diminished interest in the sector and high subscription costs.

The key objectives of the BPA, as set out in its constitution, are as follows:

1. To establish and maintain a material organisation in Botswana, embracing any subsidiary organisation established to provide for the various specialised sections of the Poultry Industry, so that these subsidiaries and their members can co-operate effectively for the development of the Poultry Industry
2. To coordinate the views, aims and efforts of the subsidiaries of the BPA in the interests of the whole Poultry Industry in Botswana.
3. To advance all matters tending towards the improvement of the Poultry and Allied Industries by embracing and coordinating the objectives of these subsidiary organisations.

Its specific objectives are:

- Protection of the Poultry Industry from adverse legislation and facilitating in the formulation of legislation and regulations beneficial to the Industry
- Supporting research, education and training for Industry players, and maintain and improve the health status of the poultry flocks
- Information dissemination
- Acting as arbitrators on disputes among its members
- Facilitate and encourage local production of inputs to the Industry
- Encourage member participation in all Association activities
- Secure profitable production and assist in the improvement of production, testing, grading, packing, transportation, storage and marketing of poultry products
- Cooperate with Government of Botswana and other similar associations abroad

BPA is engaged in the following activities:

- Advocacy and representation on behalf of Members
- Has set 4 workshops per annum which are often funded by large farmers or allied members
- Support the participation of Members in special fora abroad (e.g. the South African poultry annual forum)

Advocacy and representation is often not backed by research due to the low capacity of the Association.

The PSDP is an inititative of the Government of Botswana, represented by the Ministry of Trade and Industry and Ministry of Finance and Development Planning, in partnership with the Euorpean Union

Government of Botswana

European Union

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