

OVERVIEW OF THE KENYAN POULTRY SECTOR

September 2012



Renske Duns

Netherlands African Business
Council (NABC)

Kenya, September 2012



Table of content

1 Introduction

2 Characteristic of the poultry sector in Kenya

2.1 Poultry production trends in Kenya

2.3 Poultry systems in Kenya

3 Stakeholder in Kenyan poultry sector

3.1 Companies: poultry hatcheries

3.2 Associations in the Kenyan poultry sector

3.3 Government and research institutions

4 Supply of poultry equipment

4.1 Overview of supply in Kenya

4.2 Feed

5 Prices and market demand of poultry products in Kenya

5.1 Prices of chicken and eggs

5.2 Prices of feed

5.3 Retail sector

5.4 Consumer demand

6 Conclusion

Annex: Contact list of respondents and visited stakeholders Kenyan poultry sector during 01-09/10-09 2012

1 Introduction

The mission of the Netherlands African Business Council (NABC) is to be the main platform for the Dutch private sector active in Africa, as to strengthen economic relations between Africa and the Netherlands.

The Dutch poultry sector is a relevant and interesting partner for Kenyan poultry companies. Dutch companies could contribute to the Kenyan poultry sector in different fields ranging from the import of day old chicks, housing and health equipment up to training and education facilities. To get an overview of the Kenyan poultry sector an initial research in the Kenyan poultry sector was carried out in September 2012.

The goal of this initial research in Kenya is to provide a picture of the Kenyan poultry sector and an identification of possible long and short term business opportunities for Kenyan companies active in poultry business and for the Dutch consortium partners.

This study focuses on the characteristics of the Kenyan poultry sector, including description of main stakeholders, prices of chicken (meat), eggs and feed, market demand and the main constraints and challenges currently playing a role in the sector. It could be useful and valuable to Kenyan stakeholders active in the poultry sector and the consortium members participating in the 2g@-there program poultry Ethiopia. Moreover, it can be valuable information to identify bottlenecks and opportunities in the field of distribution of poultry equipment ranging from feed, vaccinations to poultry housing.

After all, we hope to give you an interesting and valuable insight in the Kenyan poultry sector which could be useful for sustainable (future) investment opportunities.

Farm view of KIM's poultry farm, Nakuru, Kenya



1.1 Kenya

Kenya is strategically well-placed in Ethiopia and is neighboring Ethiopia to the northeast, Somalia to the east, Sudan to the north, Tanzania to the south, Uganda to the west and the Indian Ocean to the southeast. The country hosts a population of 41.6 million people.

Figure 1 Kenya and its neighboring countries



Source: CIA (2008)

Kenya is characterized by low and undulating hills in the periphery and mountainous landscapes in the central highlands. A main geographical characteristic is the Great Rift Valley in the west. The country hosts the second highest mountain in Africa, Mount Kenya, with an altitude of 5199 meter. The climate in Kenya varies with altitude, ranging from a desert-type climate in the lowlands, to a temperate climate in the highlands up to a tropical climate along the coastal strip.

2 Characteristics of the poultry sector in Kenya

2.1 Poultry production trends in Kenya

Kenya has an estimated poultry population of 31 million birds. Of these, 75% consist of indigenous chicken, 22% of broilers and layers and 1% of breeding stock. Other poultry species like ducks, geese, turkeys, pigeons, ostriches, guinea fowls and quails make up 2 % of the poultry production (MOLFD, 2012). While indigenous chicken are mainly found in rural areas, broilers and layers are kept in urban and peri-urban areas. Currently the commercial poultry sector is producing over one million chicks per week, 14 % being layers and the rest being broilers (Dr. Humpreys, Head Breeders Association, 07-09-2012).

Table 1 Estimated production trends in millions in Kenyan poultry sector between 2006 and 2010

	2006	2007	2008	2009	2010
Layers	2,3	2,7	2,3	2,3	2,5
Broilers	4,1	3,4	1,9	1,5	2,1
Meat (kg)	6,2	5,1	2,9	2,3	3,1
Eggs	65,3	75,8	70,2	65,9	72,1
Indigenous chicken	22,0	22,8	24,3	22,8	21,3
Meat (kg)	11,4	11,8	12,6	11,8	11,0
Eggs	528,8	547,9	583,8	549,2	512,0

Source: MOLFD, 2010

The trend shown in table 1 shows that in the year 2008 there has been a big drop in broiler production. The main reason for this has been the post-election violence that led to loss of the tourism market. Current trends show a growing demand of especially commercial poultry products. Main reasons are the high urban population growth (3,5% in Nairobi, 2012), growth in tourism and the fact that incomes and health consciousness, including a preference for white meat, continue to growth.

It is obvious that the amount of eggs and kg's meat produced in the commercial sector are relatively much higher than in the indigenous production. Commercial production is a hopeful solution to fill in the demand gap and to possibly secure food stability. However, the current main constraint for producers are the high feed prices seen in the industry.

2.2 Poultry systems in Kenya

Kenya's poultry production can be classified into the four sectors shown in Table 2. This classification is based on the level of commercialization and bio-security (ILRI, 2007).

Table 2 Characteristics of poultry production systems in developing countries

Characteristics	Sector 1: Industrial integrated	Sector 2: Commercial	Sector 3: Semi-commercial	Sector 4: Village or backyard
Bird and product marketing	Commercial	Usually commercial	Birds usually sold in live bird markets	Birds and products consumed locally
Bio security	High	Moderate to High	Low to minimal	Minimal
Motivation for production	Profit	Profit	Profit, social	Social; source of household protein
Inputs	High external input use (in housing, feeding, processing)	Housing and feeding; Use of veterinary services	Some inputs with supplementary feeding; housing; limited use of veterinary services	Low input use

Source: FAO, 2010

On average, chicken hatcheries rear between 10,000-12,000 layer breeders and 10,000-18,000 broiler breeders per farm annually. Each hatchery produces between 300,000-800,000 day broiler chicks and between 750,000-1,200,000 day old layers annually. Except for Sector 1 hatcheries, day old chicks from other hatcheries are sold to small-scale poultry farmers on a non-integrated basis. Most hatcheries attempt to maintain modest to high (especially those in Sector 1) standards of hygiene and sanitation.

Table 3 Number of poultry farms in the commercial, semi-commercial and village production systems by province

Province	Commercial (Sectors 1 & 2)	Semi-commercial (Sector 3)		Village Poultry (Sector 4)		Total
		Layers	Broilers	Indigenous	Others	
Rift Valley	1	1,975	1,132	559,266	393	562,767
Coast	1	1,088	1,030	131,457	213	133,789
Western	1	523	88	176,905	105	177,622
Nyanza	1	1,072	639	252,076	217	254,005
Central	1	4,902	10,750	115,252	980	131,885
Eastern	0	783	558	255,281	0	256,622
N/Eastern	0	6	0	9,493	0	9,499
Nairobi	2	962	9,464	7,833	192	18,453
Total	7	11,311	23,661	1,507,563	2,100	1,544,642

Source: MOLFD, 2010

In Kenya, there are 7 large hatcheries (2012) situated in different parts of the country as shown in Table 3. In Nairobi and the Central Province most commercial poultry production takes place.

3 Stakeholders in Kenyan Poultry Sector

In this chapter, main stakeholders in the Kenyan poultry sector are selected. It has to be noted that more stakeholders play a role in the sector that are listed or identified during the research. However, this chapter will give an insight of the main stakeholders playing a role in the Kenyan poultry sector.

3.1 Companies: poultry hatcheries

“Currently, the Kenyan poultry sector is producing over 1 million chicks per week, 14% being layers and the rest being broilers” (Dr. Humphrey C.W Mbugua, 06-09-2012, Nakuru).

Table 4 gives an overview of the major poultry hatcheries and companies in Kenya in 2012.

To get an indication of scale, the companies are divided in large-, medium- and small sized. Large companies produce over 800,000 day old layer chicks per year and over 1.2 million broiler chicks per year. Generally, each of the middle sized farms (hatcheries) keep about 10,000-12,000 layer breeding stock and 10,000-18,000 broiler breeding flocks per year, producing about 300,000 to 800,000 day old layer chicks and 750,000 to 1.2 million day old broiler chicks per year. A small scale poultry company has flocks between 3,000 and 12,000 birds.

Table 4 Characteristics of the Major Poultry Hatcheries in Kenya, 2012

FIRM	POULTRY SPECIES	PRODUCES EGGS/MEAT	SELLS DOC TO FARMERS	HAS PROCESSING UNIT	LOCATION	SCALE
Kenchic	Layer & Broiler Parents, Broiler grandparents & Kenbro +Cobb Sasso Pure Breed	Yes, broilers	yes	yes	Kajiado/Nakuru Counties	large
Sigma	Layer & Broiler	Yes, table eggs	yes	yes	Kajiado County	large
Anirita	Broilers	Yes, broilers	yes	yes	Nairobi County	medium
Muguku	Layers & Broilers	No	yes	no	Kiambu County	medium
Franku	Broilers	No	yes	no		small
Central	Broilers	No	yes	no		small
Kenbrid	Layers & Broilers	Yes, both	yes	yes		medium

Kim Hatchery	Broilers	No	yes	yes	Nakuru County	medium
A/A Acacia	Broilers	No	yes	no	Uasin Gishu County	small
Lakechic	Layers & Broilers	Yes	yes	yes	Kisumu County	small
Western Kenya	Layers	No	yes	no	Bungoma County	small
Bixa Kenya Ltd	Broilers	yes	yes	yes	Kwale County	medium
Hedge	Layers	Yes	no	no	Kilifi County	small
Latifali Amirali	Broilers	Yes	no	yes		tiny
Ray	Broilers	Yes	no	yes		tiny
Nyeri/Kingongo Hatchery	Broilers	Yes	yes	yes	Nyeri County	small
Njoga	Broilers	No	yes	no	Kajiado County	tiny
Gatare	Broilers	No	yes	no	Nairobi County	small
Betsy Poultry Farm	Broilers	No	yes	no	Nairobi County	small
Gem	Broilers, ostrich, guinea fowls	Yes	no	yes	Kilifi County	small
Nunyoro	Turkeys	Yes	ocasional	yes	Nakuru County	“large”
Ruaraka Duck	Ducks	Yes	no	yes		“large”
Kari-Nsa	Indigenous ecotypes & Dominant CZ	Yes	Yes-Organic	yes		tiny
Vetlab (Kabete)	Pure white leghorn	Research, Newcastle & Influenza diagnosis & vaccine production-Nairobi County				tiny
Maasai Ostrich	Ostrich	yes	Yes, from juvenile age	yes	Kajiado County	large
Vihiga/Nairobi	Quails	yes	no	yes	Kakamega County	small

Source: interview Dr. Humpreys, head Kenya Poultry Breeders Association, 06-09-2012, Nakuru

As stated before, the total production of chicks per week at the moment of research (September 2012) is over 1 million per week. Compared to 2004 the largest hatcheries produced in total 18.5 million chicks over that year (see table 5). Although the smaller hatcheries are not taken into account, it can be stated that there has been a huge growth in production of layers and broilers since 2004.

Table 5 Estimated number of day old chicks produced by main hatcheries in Kenya in 2004 (broilers and layers)

Hatchery	Province	Million		
		Layers	Broilers	Total
Kenchic	Nairobi	2.9	10.1	13.0
Muguku Poultry	Central	0.4	0.8	1.2
Kenbird	Rift Valley	0.8	0.3	1.1
Sigma Supplies	Nairobi	0.3	0.7	1.0
Bixa	Coast	0.6	0.4	1.0
Lake Chick Hatcheries	Nyanza	0.5	0.2	0.7
Western Kenya Hatcheries	Western	0.3	0.2	0.5
Total		5.8	13.6	18.5

Source: FAO (2007); MOLFD (2007)

The biggest poultry company, KENCHIC, is a private company with a range of activities in Eastern Africa. Key areas of interest of the company are:

1. Breeding for hybrids and improving local breeds / Upgrading
2. Selling day old chicks (DOC) - contractors who buy DOCs, sell back poultry meat to KENCHIC
3. Following up and extension services, liaising with stakeholders for information sharing and dissemination
4. Sale of poultry meat products to or through branded outlets



3.2 Associations in the Kenyan Poultry sector

Kenya Poultry Farmers Association

The Kenya Poultry Farmers Association is an umbrella body for regional poultry farmers associations that was formed in 2002 and registered in 2005. It is a non-profit democratic association whose key role is to voice legitimate interests of poultry farmers with a view of enhancing their welfare and status. The association's vision is to become a vibrant association of poultry farmers who are economically empowered in a growth oriented and profitable sector. This is done by contributing to social economic empowerment of poultry farmers by addressing sector constraints related to production, processing and marketing through lobbying, advocating and delivery of quality services. The association has an interim committee in place, a strategic plan and is housed by MOLD at Hill Plaza.

KEPOFA has a membership of around 2000 members. Membership is at a fee and is divided into three categories; full, associate or honorary membership. The services provided to members include:

- Empowering farmers through synergy, training, exposure tours and field days
- Recommending and linking them with stakeholders – banks, input suppliers, networks and development partners. The partners KEPOFA works with include KENFAP, PSDA, MOLD, Business Advocacy Fund (BAF), Christian Agricultural Related Professionals Association (CARPA), Association of Kenya Feed Manufacturers (AKEFEMA), Agriculture Sector Coordination Unit (ASCU) and Kenya Poultry Breeders Association (KPBA).
- Facilitating information collection and dissemination among members

KEPOFA has made the following achievements:

- Currently, the association has registered 26 district-based associations made up with 2000 registered members
- Trained 100 participants on Organization Development (OD) in 4 regions
- Linked members to Agricultural Finance Corporation (AFC)
- Was supported by Kenya Agricultural Productivity Project (KAPP) to reach out and recruit members in 28 districts, develop a 5 year strategic plan (2008-2012) and put up a governance structure in place
- In conjunction with MOLD is in the process of formulating a National Poultry Policy Document.

Kenya Poultry Breeders Association (KPBA)

This is a poultry breeders' association whose vision is to enhance sustainable growth of poultry farming and production, transform it into a modern and efficient industry so as to serve consumer needs. This is through their mission statement *"To be a medium and catalyst for any matter deemed beneficial to the poultry industry"*. While the KEPOFA primarily focuses on small scale farmers and their empowerment, the KPBA is the main platform for large and medium sized companies. The vision of the KPBA is related to this.

Vision: To enhance sustainable growth of poultry farming and production, transform it into a modern and efficient industry to serve consumer needs.

Mission: To be a medium and catalyst for any matter deemed beneficial to the poultry industry

The membership level of the association is 20 and it is open to people with a hatchery and breeder farm e.g. The benefits members derive from the association are knowledge sharing, exchange of quality inputs, either through sale or other arrangements. The level of interaction with other stakeholders in the livestock industry is high in terms of joint meetings and joint communiqués when issues deemed detrimental to the poultry industry crop up.

In summary, the association's key objectives are related to:

- 1. Promoting the exchange and dissemination of knowledge and information related to poultry Industry*
- 2. Encouraging Training and Technological Transfer*
- 3. Holding Workshops, Congresses and Exhibitions*
- 4. Statistical data maintenance which help to predict potential over or undersupply- demand (the two may have same effect on pricing and farm income but have different backgrounds) i.e. eventually develop, implement and administer a supply management system for the industry*
- 5. Promoting fair and free trade within East African Region through*
 - *Participating in agricultural trade policy development*
 - *Targeting group liaison (lobbying) on tax incentives ,tariffs etc*
 - *Development of code of practice to curtail smuggling and /or unscrupulous poultry trade practices*
 - *Participating in risk analysis studies/visits in breeding stock supplying countries*
- 6. Providing Advisory Service to members, growers, consumers and other special interest groups on Veterinary, Feed and Food Safety issues*
- 7. Generic Advertising and Promotion of Poultry and their Products*
- 8. Monitoring of Relevant Developments in the poultry industry environment, both locally and internationally*

The Association of Kenya Feeds Manufacturers (AKEFEMA)

This is the first registered association which brings together all the feed millers in Kenya. It was initiated in 2003 and became an official umbrella body that speaks on behalf of the feed millers in 2004. The Association of Kenya Feeds Manufacturers was formed in response to a changed policy environment and in realization that feed manufacturers have a role to play in quality input production, distribution and client capacity building. It is also recognized that strong association of feed manufacturers would be useful for lobbying with the Kenyan government, i particularly on taxation issues, ensuring industry self-regulation and to provide information on input use. In recognizing the important role the association should play in the development of the livestock sub-sector, ASCU provided some funding for establishment of a secretariat for AKEFEMA and to carry out a feeds industry survey. The overall goal of the AKEFEMA is to achieve a strong self-regulating feed milling industry through a strengthened feed millers association. This will enable the industry's contribution to the goal of poverty reduction at the national and household levels.

General goals:

- To evaluate the status of the feeds industry with regard to number of millers and their location, capacities and source of raw materials;
- To create a database of feed millers in the country for purpose of official planning and to enable AKEFEMA enhance recruitment and membership;
- To determine the constraints that exist in the feed milling industry

3.3 Government and research institutions

Ministry of Livestock Development (MOLD)

The mandate of the MOLD is *“to promote, regulate and facilitate livestock production for socioeconomic development and industrialization”*. This is through:

1. Creating favorable environment: Formulate, implement, monitor and review policy and legal frameworks.
2. Promoting and developing the poultry industry including emerging poultry species
3. Regulating quality of poultry inputs, produce, products and services
4. Managing and controlling poultry diseases and pests, especially the ones that can be notified
5. Providing and facilitating extension services
6. Managing livestock information
7. Conserving and managing poultry genetic resources
8. Facilitating development and rehabilitation of livestock marketing infrastructure
9. Provision of veterinary clinical services
10. Coordination of stakeholders in the industry

Challenges faced include:

- Weak coordination/collaboration
- Low staffing levels
- Inadequate and obsolete technology
- Weak communication network between and within technical and support service departments
- Inadequate transport facilities, tools and equipments
- Ageing technical staff and poor succession management
- Inadequate capacity in project cycle management, quality assurance and emergence preparedness
- Inadequate policy and legal framework
- Inadequate management information systems

Kenya Agricultural Research Institute (KARI–Naivasha)

This is a KARI station with a national mandate for research in livestock issues and all aspects of indigenous chicken breeding, feeding and management. The station also trains in poultry management for farmers and extension workers

The station has facilities that include:

1. A hatchery for commercial and research work
2. A semi-automated slaughter plant and cold room for training services

The station is also implementing projects in Makueni, Nzaui, Machakos and Kibwezi districts and aims at improving production and marketing of indigenous chickens.

4 Supply of poultry equipment

4.2 Overview of supply in Kenya

Table 5: Interaction between different (supply) groups

	Number	Location	Integrated (linked to production)	Through put (birds per year)
Feed mills	52 registered millers	33% around Thika, Nairobi & Kiambu; 13% Nakuru ;the rest are distributed throughout the country	<10% of the millers linked to production, exact figure not documented	NI*
Feed transport	Done by the millers, no specialized transporters	NA*	NA*	NA*
Transport day old chicks	Done by the hatcheries, no specialized transporters			
Firms transporting eggs	Not available			
Transport broilers and spent layers to abattoirs	Transported by producers/live bird traders			
Egg packing plant	Not available			
Meat processing plant	3	Farmers' Choice (Nairobi),	Not integrated	NI
Abattoirs		(Kenchic)Limuru Nakuru Naivasha Nairobi Mombasa, Thika Makueni	Kenchic &, Kim's are over 90% integrated; Mombasa ,Nakuru, Nairobi & Thika are attached to live bird markets; Makueni not integrated	NI
Poultry vaccine producers	1	Kabete	Not integrated	NI
Specialized poultry vets	Not available	NA		

Source: MOLFD, 2012

4.1 Feed

Feed is one of the most important inputs for animal production. Qualitative good feed is said to be expensive. According to stakeholders in the Kenyan poultry sector, the high price of maize, a main ingredient of feed, is the main responsible factor responsible for the high feed price. This has an effect on the market price of poultry products, which is shown in section 5.2. At the moment of research the price of 1 kg broiler feed was 50 KES which is equivalent to 46 eurocent.

“Adequate traditional raw materials for animal feeds should be encouraged, without distraction of researching on “alternative feedstuffs “which end up being more expensive, and with no interested parties to farm them commercially” (Dr Humphrey Mbugua ,Technical Advisor/General Secretary, Kenya Poultry Breeders Association, 09-2012)

Table 6 shows the feed ingredients available with Central, Nairobi and Eastern regions marked in red. These are the regions were most of the poultry and feed production takes place.

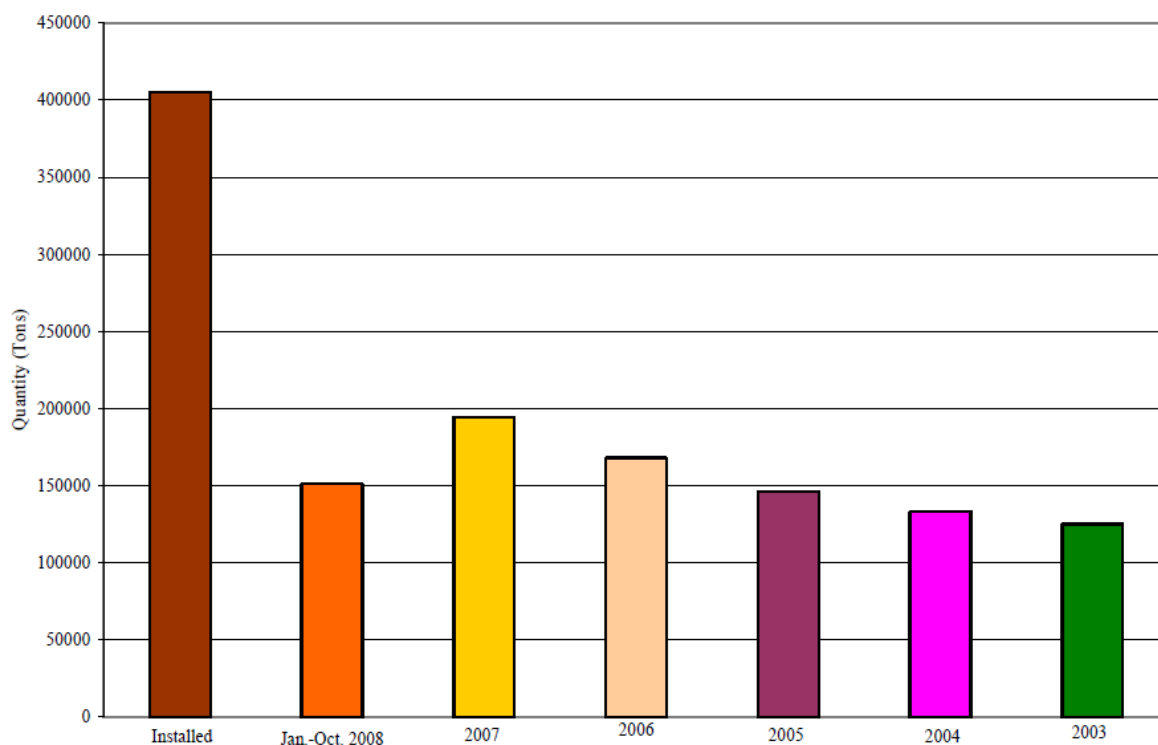
Table 6 Locally available feed ingredients in regions of Kenya

REGION				INGREDIENTS		
RIFT VALLEY				MAIZE, SORGUM ,SUNFLOWER, OMENA,LIMESTONE, SALT, BONE &BLOOD MEAL		
NYANZA				MAIZE,SORGUM,CASSAVA, COTTON SEED CAKE, GROUNDNUT CAKE, SIMSIM, OMENA,LIMESTONE		
COAST				MAIZE, COPRA , COTTON SEED CAKE, CASSAVA , SIMSIM, LIMESTONE, SALT		
WESTERN				MAIZE, MILLET,SORGUM, CASSAVA,RICE BRAN,COTTON SEED CAKE, SUNFLOWER, OMENA		
Central/ Nairobi & Eastern				Legumes, Maize, Sorghum, Millet, Rice Bran, Fish Meal, Cassava, Animal Fat, Sunflower, Blood & Bone Meal		
Percentage (%) INGREDIENT	CHICK	GROWER	LAYER	STARTER	FINISHER	
Cassava	50			10		
Maize germ	10	25	30	10		
Cotton cake	20	10		15		
Fish meal/omena	15		8	5		
Fat	0.5					
Premix	0.5	0.5	0.5	2.5	0.5	
DCP	4					
Sunflower			13		20	
Rice bran					40	
Sorghum			10	30	30	
Maize		30	30	5		
Blood Meal			3			
Limestone		3	4	2.2		
Salt			0.5	0.3		
Simsim		5		20		

Copra		20				
Others		0.5				

Source: AKEFEMA (September 2012)

Figure 1 Nairobi installed and actual productivity capacities

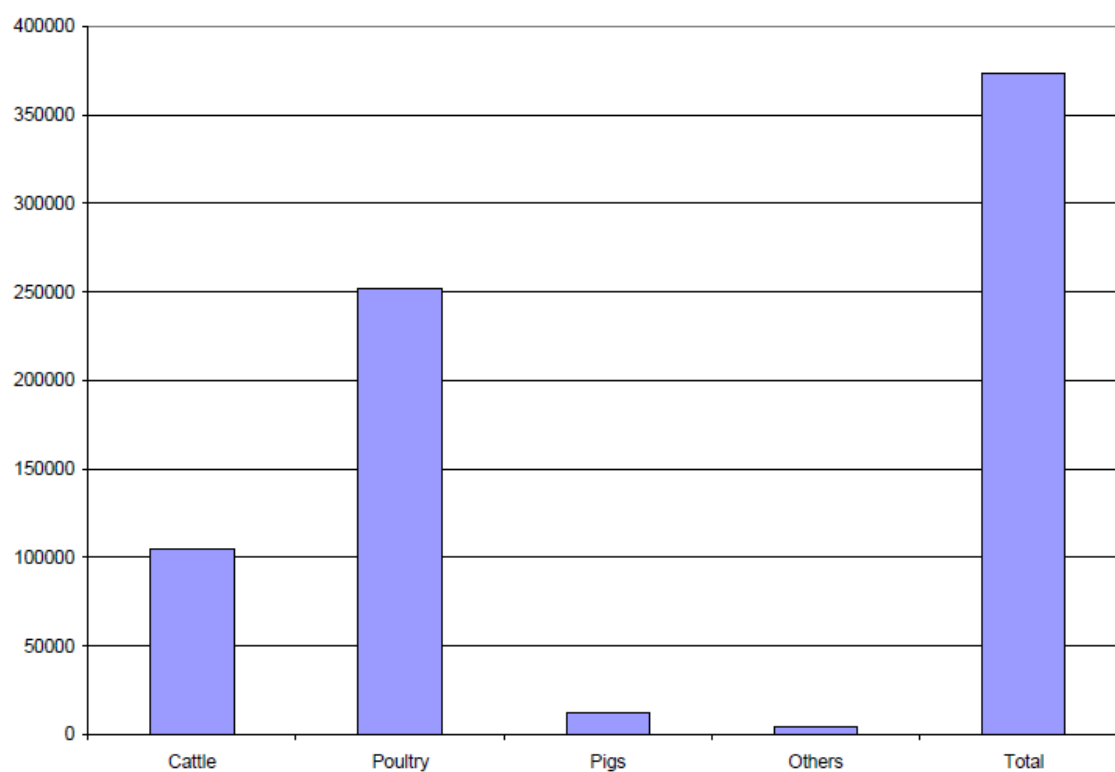


Source: AKEFEMA (September 2012)

The Nairobi region cumulative installed capacity stood 405,068 tons. However, findings in a Feed milling industry survey report of AKEFEMA (Kenya, 2009) demonstrate that the cumulative actual production for all the millers for the specific years is well below half the total installed capacity. Notably, there are slight variations in the actual production figures in the successive years up to 2007 – 48% of the total installed capacity. The challenges reported in the Nairobi region are ranked below in order of importance:

1. Availability of raw materials
2. High cost of raw materials
3. Low quality of raw materials
4. High cost of electricity
5. Debtors
6. High transport cost
7. Credit control
8. Lack/high cost of lab services;
9. Lack of know-how in feed manufacturing technology

Figure 2 Products from the Kenyan feed milling industry in 2007



Source: AKEFEMA, 2007

Poultry feeds (68%) were the most produced followed by cattle feeds (28%) and the pig feeds (3%) respectively. However, the rest of the products are produced in small quantities (1%).

5 Prices and market demand of poultry products in Kenya

This chapter describes the outcomes of the part of field research in the Kenyan poultry sector focusing on prices and demand of poultry products in Kenya and specifically Nairobi between 01-10 September 2012. Section 5.1 will provide an overview of the development and current prices of both indigenous and commercial live chicken and eggs. The most important and related component in poultry production influencing market prices is feed. According to stakeholders in the Kenyan poultry sector, high feed prices are a main constraint. Therefore, section 5.2 elaborates on feed prices. The retail sector is a main supplier of commercial chicken and eggs (further explained in section 5.3). In this study, the focus area is Kenya's capital city Nairobi, the most urbanized and fast growing centre of Kenya. Related to availability of poultry products is the demand of consumers, which is showing a growing trend (MOLFD, 2012; section 5.4).

5.1 Prices of chicken and eggs

Prices of chicken and eggs are fluctuating during the year. In times of high demand, e.g. with Eastern and Christmas, prices go up. Besides, prices of input and supply for poultry production influence the prices. All stakeholders and respondents mention the inflation of the maize price as being the recently main responsible factor for the inflation of the price of poultry products. Maize is an important component of chicken feed. Section 5.2 will further elaborate on feed prices. Except for high feed prices, high electricity costs are mentioned as another crucial factor responsible for the high price of poultry products.

Table 7 and 8 show the range of market prices for chicken and eggs at the moment of research (September 2012).

Table 7 Prices of indigenous and commercial (chicken) meat in euro

Live indigenous chicken on market (1.2-1.3 kg)	2.32-4.65
Cleaned and fresh whole indigenous chicken	3.76-4.32
Day old chicken	0,56-0,93
Commercial whole cleaned and frozen chicken in supermarket (1.5 kg)	5.92

Table 8 Price of indigenous and commercial eggs in euro

Indigenous egg in market and supermarket	0,09-0,14
Commercial egg in supermarket	0,14

In 2000, the price of an indigenous (1.3 kg chicken) was 150 KES (1.39 euro), while an egg of 40 g was 4 KES (0,04 euro) (FAO, Livestock Policy Discussion Paper No. 1, 2000. p.23). Table 9 gives an indication of the broiler outgrower profit in the year 2012, provided by KIM'S Poultry Farm (07-09-2012, Nakuru)

Table 9 broiler outgrower profit year in KES

Items	Unit Price	Order	Amount
DOC	60,00	10.000,00	600.000,00
Feed Str	3.800,00	200,00	760.000,00
Feed Fsr	3.600,00	280,00	1.008.000,00
Ttl feed wt	33.600,00		
FCR	1,90	2,00	2,10
Live wt kg	17.684,21	16.800,00	16.000,00
Contrat Pr / kg	180,00	180,00	180,00
Dress conversion	0,68	0,68	0,68
Dress Wt Kg	12.025,26	11.424,00	10.880,00
Meat sales	280,00	280,00	280,00
Sales Price	320		

Parentstock at Muguku Farm



5.2 Prices of feed

At the moment of research all stakeholders and respondents mentioned the high feed price as the main constraint in the Kenyan poultry sector. *“There has been a struggle between the traditional Kenyan food and the input of the raw material for (poultry) feed ”*(Dr. Humpreys, 07-09-2012, Nakuru).

For decennia the main staple of the Kenyan population has been “Ugali”. This is a porridge made of maize.

Ugali, the Kenyan staple food



Due to population growth (2.7%, 2010, World Bank), demand of maize is greater than supply. Maize for commercial (poultry) feed is imported from Uganda. *“In the Ugandan poultry sector the feed prices are cheaper and more stable since the Ugandan population is not eating the same quantity of maize as Kenyans do”* (KIM, 07-09-2012, Nakuru)

At the moment of research the average price of 1 Kg of broiler feed was 50 KES. In 2000, the prices quoted by main feed mills in Nairobi were ranging from 12 KES up to 21 KES per kg (FAO, Livestock Policy Discussion Paper No. 1, 2000. p.23) Table 10 gives an indication of the financial returns to broiler production while table 11 gives an indication of the financial returns to egg production, including costs for feed and purpose originated from the year 2000. It has to be noted that approximately 110 KeS is 1 euro (Exchange rate 11-09-2012).

Table 10: Financial returns to broiler production by different feed costs (per bird)

	Average feed cost Ksh 18 per kg	High feed cost Ksh 21.5 per kg	Low feed cost Ksh 14.5 per kg
Sale price 1.5 kg carcass @ Ksh 130 per kg	195	195	195
Cost of broiler chick Ksh	39	39	39
Feed cost: 2.5 kg per kg x 2.3 kg liveweight	104	124	83
Losses @ 10 % Ksh	16	18	14
Margin per bird Ksh	36	14	59

Source: FAO, Livestock Policy Discussion Paper No. 1, 2000

Table 11: Financial returns to egg production by different feed costs (per bird)

	Growers' and layers' mash @ Ksh 14/kg	Growers' and layers' mash @ Ksh 17/kg	Growers' and layers' mash @ Ksh 12/kg
Day old chick	65	65	65
Feed cost to point of lay 10 kg	140	170	120
Losses @ 25 %	68	78	62
Cost to point of lay	256	313	247
Feed cost 200 x 0.2 kg	560	680	480
Losses of layers @ 10%	93	110	81
Sale of eggs 200 @ Ksh 50	1,000	1,000	1,000
Sale of culled bird	150	150	150
Gross margin	224	47	342

Source: FAO, Livestock Policy Discussion Paper No. 1, 2000

Table 12 Feed prices in Kenya between 2001 and 2007

Feed type	Year						
	2001	2002	2003	2004	2005	2006	2007
Chick/Duck mash//70kg	1,150	1,150	1,150	1,150	1420	1450	1450
Growers mash/70kg	840	840	840	840	1050	1080	1080
Growers mash/20kg	280	280	280	280	350	360	360
Layers mash/70kg	950	950	950	950	1250	1250	1250
Layers mash/20kg	320	320	320	320	420	420	420
Broiler starter/70kg	1,350	1,350	1,350	1,350	1600	1650	1650
Broiler starter/20kg	450	450	450	450	530	550	550
Broiler finisher/70kg	1,100	1,100	1,100	1,100	1450	1450	1500
Broiler finisher/20kg	390	390	390	390	510	510	530

Source: FAO and University of Nairobi, 2007

5.3 Retailsector

The availability of commercial chicken and eggs in Kenya is by far the highest in the retail sector in urban areas. Supermarkets, restaurants, fast food branches and hotels and some fresh markets all sell commercial chicken and eggs either prepared or cleaned and frozen. On the other side, few indigenous chicken are found in the urban areas. They are mostly found alive in the backyard of people's houses or on open markets but, not cleaned or prepared. Local eggs are found in very few supermarkets in urban areas.

Supermarkets

Supermarkets are found throughout the main cities of Kenya like Nairobi, Mombasa, Nakuru, Eldoret and Kisumu. Supermarkets are standing alone or are situated in shopping malls. The three main supermarket branches are Tusky's, Uchumi, Naivas and Nakumatt. A broad range of commercial chickens and eggs are for sale. No indigenous chicken or eggs can be found.

For example, Nakumatt is one of the biggest supermarket branches, having 14 supermarkets in Nairobi, 8 in Mombasa and few in other cities throughout the country. In these supermarkets frozen chicken and capons are for sale in weights ranging from 1.2 up to 1.8 kg. Also all parts of chicken are for sale. In Nakumatt two different poultry companies, namely Kenchic and Quality Farmers Choice, supply chicken meat. With regard to eggs, Nakumatt's main supplier is Sigma company.

Restaurants and fast food branches

Nairobi has an extensive variation of restaurants of cuisines from all over the world. Indians for example, which have resided in Kenya since colonial periods in the 19th century, have brought their cuisine, in which chicken is a main component. Except for restaurants offering chicken and egg in all forms on the menu, there are several established fast food branches. Fried and grilled chicken can be found throughout the city.

In Nairobi five Kentucky Fried Chicken restaurants can be found. There are four Chicken Inn restaurants. Others are Steers, Debonairs, Wimpy, Galito's and Kenchic. Except for these established branches, many small fast food restaurants sell specifically fried or roasted chicken. This can be a whole or half a chicken, or just parts. Some names of restaurants: Chicken Palace, Chicken on the way, Chicken on the run.

These fast food branches all sell commercial chicken. Consumers are ranging from families to individuals and from young to old.



5.4 Consumer demand

“Kenyans prefer red meat over white meat” (Kenyan woman on street in Nairobi, 03-09-2012).

However, other comments of Kenyan consumers population were:

“White meat and especially chicken meat is becoming more popular out of health reasons”

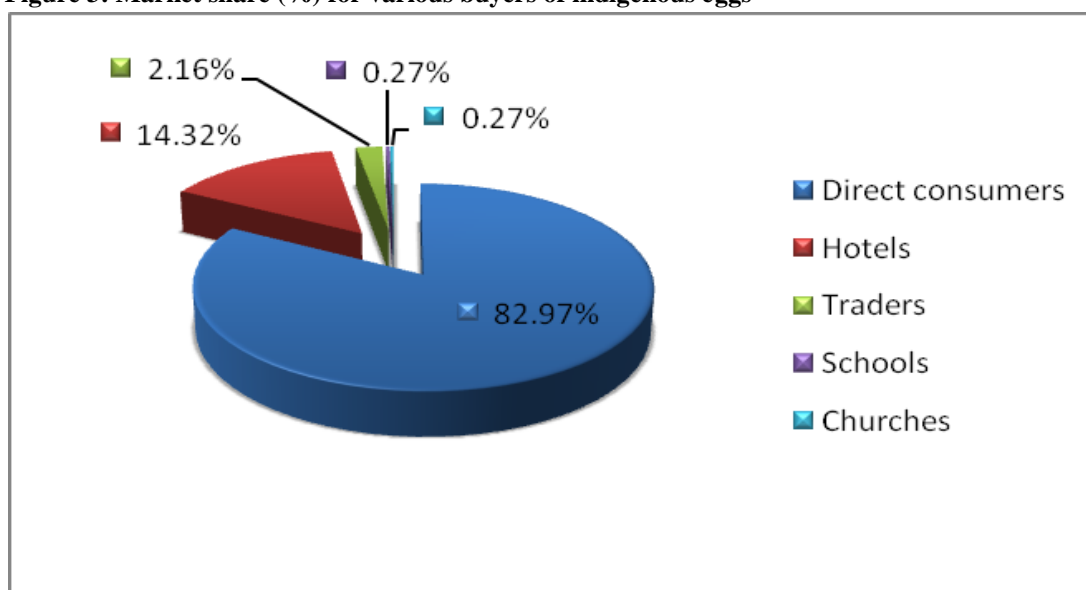
“Recently, the price of beef has gone up which has a positive influence on demand of chicken(meat)” (Mr. Muguku, proprietor -Ngong Muguku Farm, 06-09-2012).

Different comments are recognizable; however, demand of poultry products is growing especially in the urban centres which are the growing hubs in terms of population and retail stations.



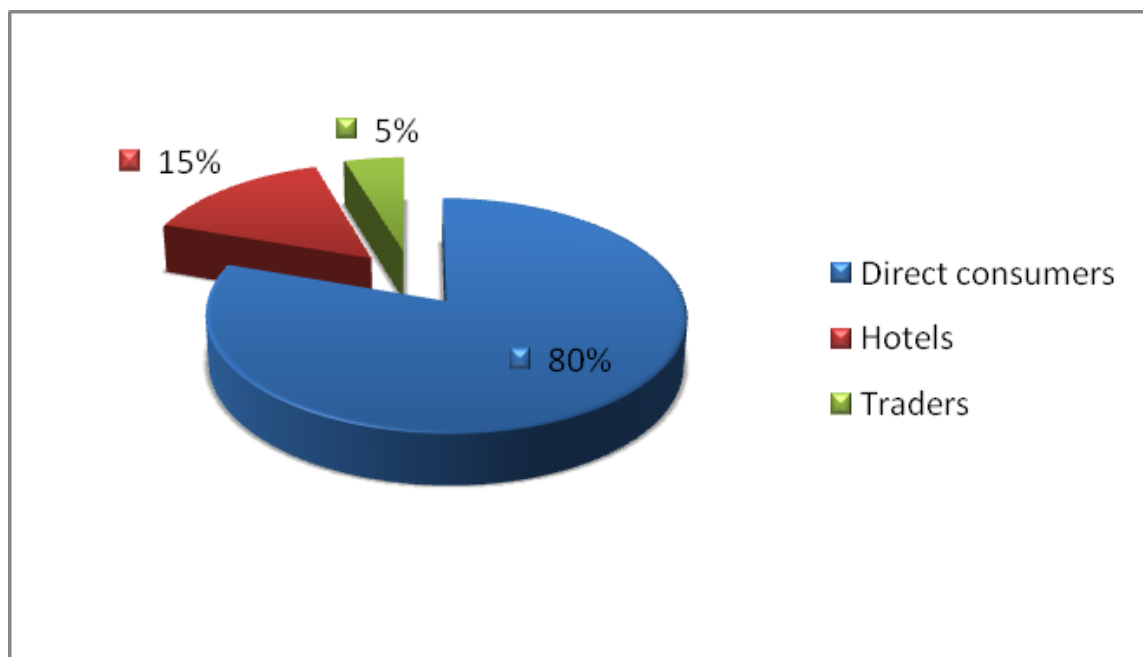
The availability of indigenous chickens and eggs in rural areas are main reasons for the demand of those chickens. Besides, indigenous chicken is seen as a specialty used during Eastern and Christmas. On the other hand, availability of commercial eggs and chicken in the urban retail sector, shown in section 5.3, creates demand. Figure 3 and 4 show that only a small percentage of the retail sector buys indigenous live chicken and eggs. As confirmed in section 5.3, supermarkets do not sell any indigenous chicken and only very few sell indigenous eggs. On the other side, hotels and restaurants use commercial chicken and eggs as their main poultry products.

Figure 3: Market share (%) for various buyers of indigenous eggs



Source: Tegemeo Institute of agricultural policy and development, 2010

Figure 4: Market share (%) for various buyers of indigenous chicken



Source: Tegemeo Institute of agricultural policy and development, 2010

Concluded, the growing population and retail sector in urban areas cause an high and increasing demand of commercial chicken and eggs. Moreover, the indigenous chicken and eggs are mostly consumed as special item in rural areas or during holidays. Therefore, there is huge potential for the expansion and improvement of commercial chicken and egg production in the Kenyan urban areas.

6 Conclusion

The primary purpose of this study was to give an overview of the characteristics of the Kenyan poultry sector by discussing the main issues and constraints apparent in the sector. At the same time, we were also able to identify long and short term business opportunities for Kenyan companies active in poultry business and for the Dutch consortium partners. This conclusion is a summary of the potential business opportunities.

The demand of poultry products in Kenya is high and growing. In fact, the combination of a growing population and growing retail sector strengthen the demand for commercial poultry products. On one hand, the Kenyan population prefers the indigenous Kenyan chicken for special occasions like Christmas and Eastern. Besides, due to a low availability of commercial poultry products in rural areas, the Kenyan rural population has easier access to indigenous chicken and eggs. On the other hand, urban areas show the highest population growth and retail sector growth combined with a high availability of commercial poultry products in supermarkets and fast food branches. Therefore, the urban markets like Nairobi, Mombasa, Nakuru and Kisumu can be said to be the most important markets for all kinds of commercial poultry products.

The demand of poultry products in urban areas is supplied by many different poultry companies. The largest supplier for broiler meat is Kenchick and for layer eggs is Sigma, which are also hatcheries. They produce over 1.2 million broiler chicks per year and 800,000 day old layer chicks per year. Kenchick also has parent- and grand parentstock. In addition to these companies, Muguku Poultry, Kenbird, Sigma, Bixa, KIM's poultry, Lake Chick Hatcheries and Western Chick are medium sized companies that are also hatcheries, producing about 300,000 to 800,000 day old layer chicks and 750,000 to 1.2 million day old broiler chicks per year.

The supply of Day Old Chicks comes from Kenyan hatcheries, only 3% of the total DOC's is imported. Parentstock is mainly imported, or supplied locally by Kenchick. While there is sufficient supply of Day Old Chicks, reliable and regular supply of parentstock is demanded.

With regard to feed, most companies have their own feed millers, or get their feed from one of the many feed millers, which are mostly situated in the Central and Nairobi region. Feed prices are high due to inflation of the maize price. Therefore companies look for qualitatively good and affordable feed, although the supply of this is often problematic.

Kenya has one vaccine producer, the Department of Veterinary Services, which supplies basic vaccines. Most vaccines and drugs are imported and spread by dealers. There is a need for proper drugs and vaccines, especially in smaller packets (e.g. with less than 5000 vaccines per packet, which are not yet available on the market).

Moreover, since fast food branches and supermarket branches in Kenyan cities have started to demand HACCP systems and requirements, there is a need for proper slaughter systems and slaughter houses.

As discussed above, there is a number of necessities which are to be met in order to develop and sustain the Kenyan poultry sector. In order to meet these necessities, potential investors could request the collaboration of several local associations, such as:

- Kenya Poultry Farmers Associations (KEPOFA)
- Kenyan Breeders Association (KPBA)
- Association of Kenyan Feed Manufacturers (AKEFEMA)
- Kenya Agricultural Research Institute (KARI–Naivasha).

In the Annex, we provide a list of stakeholders in the Kenyan poultry sector which may help the Dutch Poultry consortium for further market analysis, and for the establishment of contacts and potential business at the local level.

Annex: Contact list of respondents and visited stakeholders Kenyan poultry sector during 01-09/10-09 2012

Institutions and associations

Ministry of Livestock Development (MOLD)

Mr. Gikonyes (Steven), Head of departement Livestock, poultry.

Tel: +254735164968.

Email: stivgikonyo@gmail.com

KEPOFA Kenya Poultry Farmers Association (KEPOFA)

Chairman Wairimu Kariuki, email: kepofakuku@yahoo.com

Kenya Livestock Breeders Organization (KLBO)

Dr. Humphrey C.W Mbugua, Director Thama Veterinary Consultancy and Technical Consultant and Secretary KLBO.

Tel: +254725159104.

Email: hcwmbugua@yahoo.com

Kenya Agricultural Research Institute (KARI)

Ms. Ole Sinkeet, KARI Nairobi.

Dr. Kariuki, KARI Naivasha.

Tel: +254722336589

Dr. Anne Wachira, KARI Naivasha.

Tel: +254722443973.

Email: annmumbi@gmail.com

Tegemeo Institute for Agricultural Policy and Research

John Olwanda, research fellow.

Email: jolwande@tegemeo.org

Embassy of the Kingdom of the Netherlands, Nairobi / Ministry of Economy, Agriculture and Innovation

Mr. W.J (Hans) Wolff, Landbouwraad Kenia, Tanzania & UNEP.

Tel: +25420440137.

Email: NAI-LV@minbuza.nl

Companies

Kenchick

Exsan House, Enterprise Road Opposite Kobil Petrol Station

Tel: 020 2301518/20, 3560102/3.

Email: info@kenchic.com.

Website: <http://www.kenchic.com/>

Ngong Muguku Farm (Day old chicks, broilers and layers)

Daniel	Muthanji	Muguku,	proprietor.
Tel:	+	25420884236/	+254722764371.
Email:	danmuguku@hotmail.com		

KIM'S Poultry Farm Ltd.

Kim	Ki-Hwan,	C.E.O.
Tel:		+254733838391.
Email:		nakurukim@gmail.com .
Website:	kenyakim.com	

SIGMA

Nairobi (+254) 20 2338172/ (+254) 612303962

Website: <http://www.sigma.co.ke/>

KENBRID

Moi South Lake Rd Naivasha Rift Valley, Kenya.

Tel: (254) 50 – 2021139/ (254) 50 – 2021300

Bixa Kenya Ltd

Kenya Bixa Limited,

P.O.Box 96245 - 80110 Likoni, Mombasa - Kenya.

Tel +254-40-3300093/4 Fax +254-40-3300033

Email: info@kenyabixa.com

Website: <http://www.kenyabixa.com/>

Anirita Poultry Farm Ltd

Company address: 41748-00100 GPO, [Nairobi](#)

Tel: +254-203754902