



Ministry of Economic Affairs

# Angola Livestock Sector Report

A guide for Dutch exporters and investors





## Foreword

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This report on the Angolan Livestock Sector, serves as a guide for Dutch exporters and investors to assess and benefit from the agribusiness opportunities in developing the Angolan livestock value chains.

Angola is going through an era of fast economic growth strongly driven by the revenues of the petroleum industry and supported by a relatively stable political situation. The physical infrastructure in the country improves rapidly, which makes remote areas better accessible for travelers, local trade and supplies and rural development. Foreign investments largely flow into the petroleum industry but every sector in the economy has seen growth and investment, both foreign and domestic.

Angola's economic development is still hampered by many challenges ranging from in transparencies, bureaucracy and lack of skilled labor. This leaves the country dependent on imports of many basic materials and services, and expatriate workers for many key sectors in the economy.

Food production and supply are still underdeveloped, resulting in large imports of virtually all food products and extremely high consumer prices in the commercial food sector and retail. Subsistence farming and informal food trade are the standard in the more remote rural areas. Only a small part of the fertile arable land of Angola is used for commercial agricultural production.

The fast growing middle class and consumer markets for quality food and the availability of arable land, make Angola an interesting partner for Dutch agribusiness and technologies. This report provides crucial information about the livestock sectors, the most important players and recommendations on how to start working in Angola.

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PS. Other market reports on agribusiness in our region can be consulted and ordered at the website of the Netherlands Embassy Pretoria: <http://southafrica.nlembassy.org/>



## **Table of Contents**

<b>ABBREVIATIONS AND ACRONYMS:</b> .....	<b>4</b>
<b>LIST OF TABLES AND FIGURES:</b> .....	<b>5</b>
<b>A. EXECUTIVE SUMMARY</b> .....	<b>7</b>
<b>B. INTRODUCTION</b> .....	<b>8</b>
B.1 OBJECTIVE OF THE LIVESTOCK STUDY .....	8
B.2 METHODOLOGY .....	8
<b>C. ANGOLAN LIVESTOCK SECTOR – BRIEF OVERVIEW</b> .....	<b>9</b>
C.1 ANGOLAN COUNTRY PROFILE .....	10
C.1.1 Introduction .....	10
C.1.2 Political situation .....	11
C.1.3 Economy .....	15
Gross Domestic Product (GDP) .....	15
Trade Balance .....	17
Inflation Rate .....	18
Exchange Rate .....	19
Access to finance .....	20
Specific finance programs to livestock sector .....	22
C.1.4 Social context and demography .....	23
Population .....	23
C.1.5 Technology and infrastructure .....	24
C.1.6 Climate and geographic agricultural conditions .....	24
Geographic agricultural conditions .....	24
Climate and agriculture conditions .....	25
C.1.7 Legal .....	27
Foreign private investment .....	27
Repatriation of capital .....	27
Tax and customs incentives for private investment .....	27
Land Property rights .....	28
C.2 LIVESTOCK SECTOR OVERVIEW .....	28
Livestock population .....	29
Livestock production.....	30
Meat production targets set by the Ministry of Agriculture .....	30
Value chain .....	31
Public Authorities and Animal Health.....	35
<b>D. CURRENT STATE OF THE LIVESTOCK SECTOR IN ANGOLA</b> .....	<b>36</b>
D.1 IMPORTANCE OF THE LIVESTOCK SECTOR .....	36
D.2 SUB-SECTOR ANALYSIS .....	36
D.2.1 Poultry Sub-Sector .....	36
D.2.1.1 Stakeholder analysis .....	36
D.2.1.2 Demand and Supply analysis .....	36
D.2.1.3 Challenges and Opportunities.....	39
D.2.2 Pork Sub-Sector .....	39
D.2.2.1 Stakeholder analysis .....	39
D.2.2.2 Demand and Supply analysis .....	40
D.2.2.3 Challenges and Opportunities.....	41
D.2.3 Cattle Sub-Sector.....	41
D.2.3.1 Stakeholder analysis .....	41
D.2.3.2 Demand and Supply analysis .....	42
D.2.3.3 Challenges and Opportunities.....	44
D.2.4 Goat and Sheep Sub-Sector .....	44
D.2.4.1 Stakeholder analysis .....	44
D.2.4.2 Demand and Supply analysis .....	45
D.2.4.3 Challenges and Opportunities.....	47
D.2.5 Dairy Products Sub-Sector .....	47
D.2.5.1 Stakeholder analysis .....	47
D.2.5.2 Demand and Supply Analysis .....	48
D.2.5.3 Challenges and Opportunities.....	48

<b>E. INVESTMENT OPPORTUNITIES .....</b>	<b>49</b>
E.1 OPPORTUNITIES FOR DUTCH INVESTMENTS .....	49
<b>F. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>50</b>
<b>APPENDIX A – "WHO ´S WHO" IN THE LIVESTOCK SECTOR .....</b>	<b>51</b>
<b>APPENDIX B – CONSUMER SURVEY .....</b>	<b>52</b>
<b>APPENDIX C – LIST OF MAJOR CHICKEN BREEDERS BY PROVINCE .....</b>	<b>55</b>

#### **ABBREVIATIONS AND ACRONYMS:**

ADB	African Development Bank
BNA	<i>"Banco Nacional de Angola"</i> , Angola National Bank
FDI	Foreign Direct Investment
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
IMF	International Monetary Fund
INE	<i>"Instituto Nacional de Estatística"</i> , National Institute of Statistics
WHO	World Health Organization
MINAGRI	Ministry of Agriculture, Rural Development and Fishery
MPLA	<i>"Movimento Popular de Libertação de Angola"</i> , Popular Movement for Angola Freedom
NISSME	National Institute to Support Small and Medium Enterprises
SADC	Southern Africa Development Community
UHT	Ultra-High Temperature
USD	United States Dollar



## LIST OF TABLES AND FIGURES:

FIGURE 1 –	LIVESTOCK SECTOR INFOGRAPHIC .....	9
FIGURE 2 –	ANGOLA MAP .....	10
TABLE 1 –	PROGRAMS FOR THE DEVELOPMENT OF THE AGRICULTURAL SECTOR .....	12
TABLE 2 –	PROGRAMS FOR THE DEVELOPMENT OF THE LIVESTOCK SECTOR BY PROVINCE, IN ANGOLA .....	13
FIGURE 3 –	GDP COMPOSITION IN ANGOLA (%), 2010-2012 .....	15
FIGURE 4 –	GDP EVOLUTION AND GROWTH RATE .....	16
FIGURE 5 –	OIL VS. NON-OIL SECTOR GROWTH RATE .....	16
FIGURE 6 –	AGRICULTURE CONTRIBUTION TO GDP PER COUNTRY (%), 2012, SADC COUNTRIES AND NIGERIA .....	17
FIGURE 7 –	ANGOLA'S TRADE BALANCE (MILLION USD) .....	17
FIGURE 8 –	IMPORTS COMPOSITION (%) IN 2010 .....	18
FIGURE 9 –	INFLATION RATE EVOLUTION (%), 2004-2018 .....	18
FIGURE 10 –	STRUCTURE OF THE INFLATION INDEX IN ANGOLA (%), 2010 .....	19
FIGURE 11 –	EVOLUTION OF THE EXCHANGE RATE AOA-USD .....	19
TABLE 3 –	BRANCHES DISTRIBUTION BY PROVINCE (MARCH 2011) .....	20
TABLE 4 –	RANKING FOR THE EASINESS OF GETTING CREDIT .....	21
FIGURE 12 –	CREDIT PROVIDED BY THE BANKING SECTOR AS A PERCENTAGE OF GDP, IN 2011 .....	21
TABLE 5 –	FEED GRAIN PRODUCTION .....	22
TABLE 6 –	POULTRY BREEDING (ALL PROVINCES) .....	22
TABLE 7 –	BEEF CATTLE BREEDING .....	22
TABLE 8 –	DAIRY CATTLE BREEDING.....	22
TABLE 9 –	GOAT, SHEEP AND SMALL RUMINANTS (ALL PROVINCES) .....	22
FIGURE 11 –	POPULATION DISTRIBUTION BY GENDER AND AGE GROUP (2012) .....	23
FIGURE 12 –	AVERAGE NUMBER OF CHILDREN BY AGE GROUP OF MOTHER (2012) .....	23
FIGURE 13 –	ANGOLA POSITION IN DOING BUSINESS RANK BY TOPIC, TOTAL OF 185 NATIONS (2012) .....	24
TABLE 10 –	EVOLUTION OF AGRICULTURE LAND IN ANGOLA, 2007-2011 .....	24
FIGURE 14 –	MAJOR AGRICULTURE REGIONS .....	25
FIGURE 15 –	AVERAGE MONTHLY PRECIPITATION AND TEMPERATURE IN LUANDA, 1990 TO 2009 .....	26
FIGURE 16 –	AVERAGE AIR TEMPERATURE IN OC (2010) FIGURE 17 – AVERAGE RAINFALL IN MILLIMETERS PER YEAR (2010) .....	26
FIGURE 18 –	AVERAGE EVAPOTRANSPIRATION RATE (2010) FIGURE 19 – AVERAGE NUMBER OF MONTHS WITH HYDRIC DEFICIT (2010) .....	26
TABLE 11 –	TAX AND CUSTOMS INCENTIVES BY GEOGRAPHICAL AREA IN ANGOLA .....	27
TABLE 12 –	LIVE ANIMALS IN ANGOLA (HEADS), 2008 TO 2012 .....	28
FIGURE 20 –	CONTRIBUTION OF DIFFERENT SPECIES TO THE TOTAL LIVESTOCK UNITS .....	28
FIGURE 21 –	LIVE CATTLE, GOAT, SHEEP AND PIGS PER CAPITA, 2011 .....	29
FIGURE 22 –	LIVE CHICKENS PER CAPITA, 2011 .....	29
TABLE 13 –	NUMBER OF ANIMALS SLAUGHTERED IN ANGOLA .....	30
TABLE 14 –	MEAT (BEEF, CHICKEN, PORK) PRODUCTION TARGETS SET BY THE MINISTRY OF AGRICULTURE, 2011-2015 .....	30
TABLE 15 –	CONSUMER PRICE INDEX: DAIRY PRODUCTS, 2010-2012 .....	31
FIGURE 23 –	PERCENTAGE OF CONSUMERS BY THEIR MEAT PREFERENCE .....	32
FIGURE 24 –	PERCENTAGE OF CONSUMERS BY CHICKEN PART PREFERENCE .....	33
FIGURE 25 –	PERCENTAGE OF CONSUMERS BY MEAT EATING FREQUENCY .....	33
FIGURE 26 –	PERCENTAGE OF CONSUMERS BY MOST IMPORTANT FACTOR WHEN BUYING MEAT ...	34
FIGURE 27 –	PERCENTAGE OF CONSUMERS BY MOST IMPORTANT FACTOR WHEN BUYING DAIRY PRODUCTS .....	34
FIGURE 28 –	POULTRY BIRDS UNITS PER PROVINCE.....	36
FIGURE 29 –	FROZEN CHICKEN PRICE IN AKZ PER KG, SEPTEMBER 2013 .....	37
TABLE 15 –	LIVING POULTRY ANIMALS PER PROVINCE, 2008-2012 .....	37
FIGURE 30 –	TOP 5 PROVINCES FOR POULTRY LIVING ANIMALS, 2012 .....	37
FIGURE 31 –	PER CAPITA DENSITY OF POULTRY LIVING ANIMALS PER PROVINCE, 2010 .....	38
FIGURE 32 –	PROVINCES WITH THE HIGHEST RATIO OF POULTRY LIVING ANIMALS PER SQUARE KILOMETER .....	38
FIGURE 33 –	PIGS PER PROVINCE .....	39
TABLE 16 –	PORK LIVING ANIMALS PER PROVINCE, 2008-2012 .....	40
FIGURE 34 –	TOP 5 PROVINCES FOR PORK LIVING ANIMALS, 2012 .....	40
FIGURE 35 –	PER CAPITA DENSITY OF PORK LIVING ANIMALS PER PROVINCE, 2010 .....	40

FIGURE 36 –	PROVINCES WITH THE HIGHEST RATIO OF PORK LIVING ANIMALS PER SQUARE KILOMETER .....	41
FIGURE 37 –	PORK (FRESH MEAT) PRICES AKZ/KG, SEPTEMBER 2013 .....	41
FIGURE 38 –	CATTLE PER PROVINCE .....	42
TABLE 17 –	CATTLE LIVING ANIMALS PER PROVINCE, 2008-2012 .....	42
FIGURE 39 –	TOP 5 PROVINCES FOR CATTLE LIVING ANIMALS, 2012 .....	43
FIGURE 40 –	PER CAPITA DENSITY OF CATTLE LIVING ANIMALS PER PROVINCE, 2010 .....	43
FIGURE 41 –	PROVINCES WITH THE HIGHEST RATIO OF CATTLE LIVING ANIMALS PER SQUARE KILOMETER .....	43
FIGURE 42 –	BEEF CATTLE PRICE (FRESH MEAT) AKZ/KG, SEPTEMBER 2013 .....	44
FIGURE 43 –	GOATS PER PROVINCE .....	44
TABLE 18 –	GOAT LIVING ANIMALS PER PROVINCE, 2008-2012 .....	45
FIGURE 44 –	TOP 5 PROVINCES FOR GOAT LIVING ANIMALS, 2012 .....	45
FIGURE 45 –	PER CAPITA DENSITY OF GOAT LIVING ANIMALS PER PROVINCE, 2010 .....	45
FIGURE 46 –	PROVINCES WITH THE HIGHEST RATIO OF GOAT LIVING ANIMALS PER SQUARE KILOMETER .....	46
TABLE 19 –	SHEEP LIVING ANIMALS PER PROVINCE, 2008-2012 .....	46
FIGURE 47 –	TOP 5 PROVINCES FOR SHEEP LIVING ANIMALS, 2012 .....	46
FIGURE 47 –	PER CAPITA DENSITY OF SHEEP LIVING ANIMALS PER PROVINCE, 2010 .....	47
FIGURE 48 –	PROVINCES WITH THE HIGHEST RATIO OF SHEEP LIVING ANIMALS PER SQUARE KILOMETER .....	47

## A. Executive Summary

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The purpose of this study is to identify investment knowledge and technology transfer, and business opportunities for Dutch entities in the livestock sector in Angola. It is expected that the study will be valuable and informative to potential investors and other actors interested in supporting the development of the livestock sector in Angola.

In the last years, Angola has emerged as being one of the world economies with higher prospects of growth and becoming one of the most relevant nation in the Southern African Development Community, with several business opportunities to foreign investment.

Nevertheless, the country's livestock sector is still mostly familiar, disperse and domestic oriented. As a consequence, meat products are essentially imported (government estimations indicate that during 2011, 96% of chicken meat was imported). Since the population of the country is extremely young (43% of Angolans are under 15 years old) and it's expected to grow (fertility rate is 5 children per woman), in the next years demand for livestock products will remain high. Public authorities' projections about chicken consumption and our on-field retail price assessment indicate that in 2015, chicken sub-sector will represent 977 million USD.

In spite of government intention to reduce food imports and to increase income of rural farmers, business environment in Angola is attractive but challenging: in a total of 185 nations of the "Doing Business Ranking" from the World Bank, Angola occupies the 183rd place for enforcing contracts, and the 131st place for registering property.

The current state of livestock production in Angola is underdeveloped if compared to consumption, the nation has 1 live chicken per capita while South Africa has 3,8, but on average each Angolan eat 14Kg of chicken per year.

Since most of official information is either lacking or difficult to access, we conduct an on-field assessment to capture relevant insights from industrial players (their contacts are available in Appendix A) and also a consumer survey (that is available in Appendix B and C).



## B. Introduction

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### B.1 Objective of the Livestock Study

This study was commissioned by the Embassy of the Kingdom of The Netherlands, in August 2013, with the objective to identify knowledge, technology transfer and business opportunities for Dutch entities in the livestock sector in Angola.

It is expected that the study will be valuable and informative for potential investors and other actors interested in supporting the development of the livestock sector in Angola.

Although it seems that Angola embodies excellent business opportunities, it's important to understand some of its challenges like the access to skilled staff, raw materials, machinery, local partners, among others. Furthermore it is also important to comprehend the cultural and business context and how the different elements of the value chain are linked and work with each other.

### B.2 Methodology

To achieve the objectives of the study, this project was conducted in three phases, an on-desk analysis, an on-field assessment, and a last phase of final conclusions and recommendations.

The on-desk analysis included the review of previous documents and studies, the gathering of statistical information, newspapers and magazines interviews with relevant stakeholders, in order to provide information about the livestock sector through the characterization of the value chain, its enabling environment and the sector's competitiveness.

The on-field assessment was designed to validate livestock sector analysis, to conduct interviews with relevant stakeholders (e.g. farmers and farmer's organizations) and to visit local markets and supermarkets. By doing this, it was possible to get insights from local people and to identify possible value-added opportunities for Dutch investment.

After the research and gathering of qualitative and quantitative data, main findings and conclusions were summarized to support valuable recommendations regarding business opportunities, challenges, trends, funding opportunities and international trade agreements.

During the progress of the study, the Embassy of the Kingdom of the Netherlands was involved in the discussion of results, conclusions and recommendations of the market report.

# C. Angolan Livestock Sector – Brief Overview

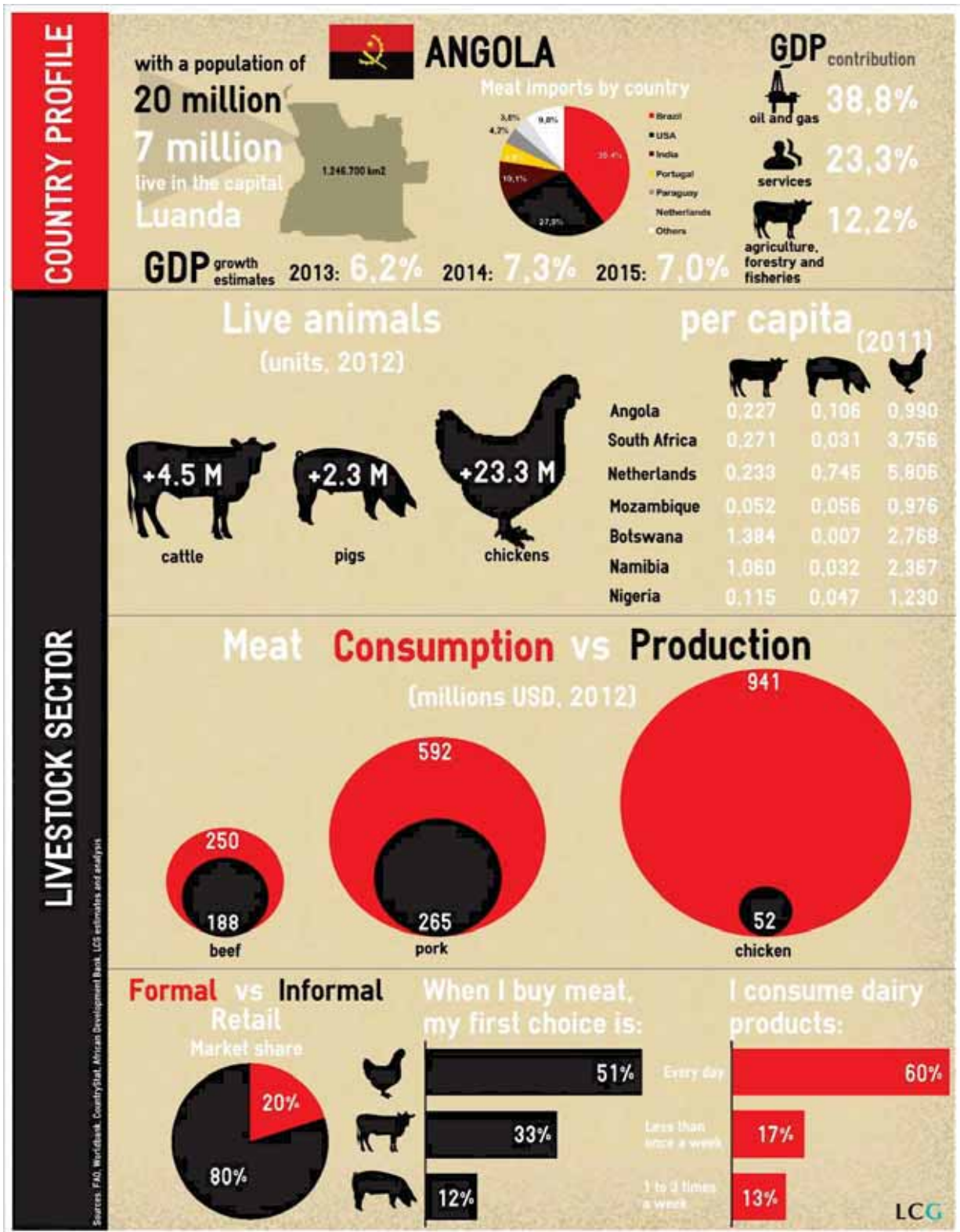
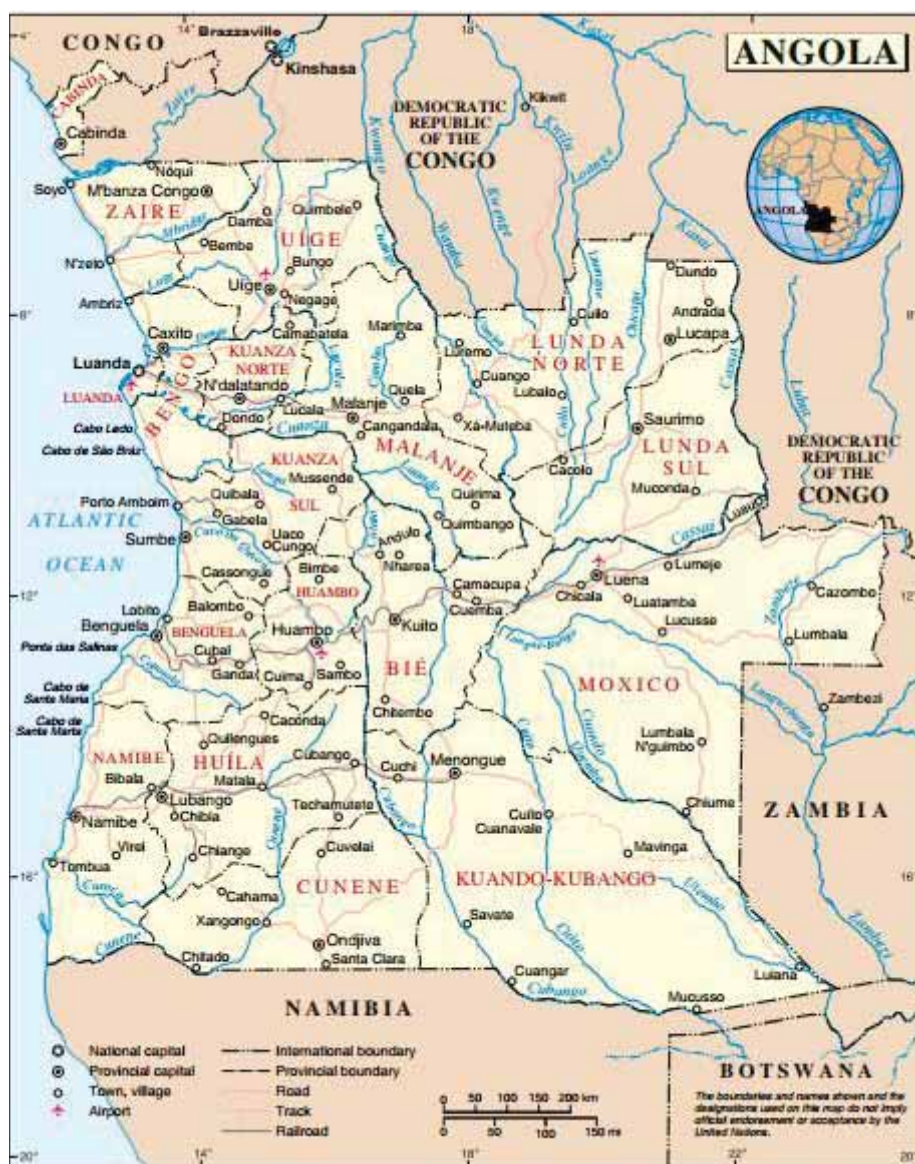


Figure 1 – Livestock sector infographic

## C.1 Angolan Country Profile

### C.1.1 Introduction

The Republic of Angola is the 7th largest country in the African continent. It's located in the west coast of southern Africa, south of the equator, with a total area of 1.246.700 km<sup>2</sup>, a coastline of 1.650 km and a land border with 4.837 km length<sup>1</sup>. The country has 18 provinces and 163 municipalities<sup>2</sup>.



Source: United Nations (Map No. 3727 Rev. 4 - August 2008)

**Figure 2 – Angola map**

As one of the fastest growing economies in the world, Angola has currently a thriving business environment with an average real GDP growth rate of 12% over the past decade<sup>2</sup>.

<sup>1</sup> Instituto Nacional de Estatísticas de Angola (National Institute of Statistics of Angola), <http://www.ine-ao.com/oPais.htm>

<sup>2</sup> Angola – Private Sector Country Profile, September 2012, African Development Bank



After the end of the war in 2002, the Government of Angola focused on several rebuilding and expansion programs, and in a few years, Angola expanded 50% of its capacity to generate energy, embarked on an ambitious program with several thousand of millions of dollars for the rehabilitation of roads, witnessed investments rise in the Port of Luanda and gave start to the rehabilitation program of water and sanitation supply systems<sup>3</sup>.

The country has one of the most important reserves of oil, gas and diamonds of Africa being Africa's chief oil producer along with Nigeria and the world 5th diamond producer<sup>4</sup>. Furthermore, it holds reserves of iron ore, copper, feldspar, gold, bauxite and uranium.

In its seas inhabit important maritime species, the country's climate is propitious to a great variety of cultures and the numerous water courses that cover the nation offer excellent possibilities of irrigation and confer an interesting hydroelectric-power potential<sup>5</sup>. Nevertheless, forestry and agriculture, hydroelectricity and fishing are some of the still underexploited sectors that have huge economic development potential<sup>6</sup>.

Over the past years, the large inflows of oil revenues accounted for most of the country's income. Close to 80% of the government's fiscal revenues come from oil which represents about 98% of all exports being also the main source of foreign direct investment (FDI)<sup>7</sup>. As a result, the country's growth has been highly dependent on the oil sector and import activities, since the national non-oil productive sector struggles with its low capacity to meet the country's domestic demand.

As an effort to diversify the economy and reduce the dependence on external markets and its vulnerability to oil revenue volatility, the government of Angola has been dynamically pursuing highly expansionary policies backing a full-steam reconstruction effort and ensuring the development of non-oil industries.

Moreover, the private investment has been highly encouraged by the Government's Development Program for Small and Medium Enterprises, launched by the Ministry of Economy (and materialized by the IFE<sup>8</sup> and INAPEM<sup>9</sup>) to stimulate four priority economic sectors, namely: (a) agriculture, livestock and fisheries, (b) building materials (c) manufacturing, geology and mining industries and (d) the support services to the productive sector<sup>10</sup>.

In the long term, Angola will become an increasingly important focus of interest for the United States and the European Union, which look forward to assure energy supplies outside the Middle East<sup>11</sup>.

### **C.1.2 Political situation**

In 1975, Angola became independent from Portugal. Since then and until 2002, the country faced a civil war that devastated most of the existing infrastructures and productive systems. Since 2002, MPLA<sup>12</sup>, the major party, have been ruling the nation. The first general elections, after the cease fire, occurred in 2008 and elected José Eduardo dos Santos as President since he was the head candidate of MPLA, the party who won the election with almost 82% of the votes. In 2012, general elections took place again, electing the same president, but this time with almost 72% of the votes. Although the number of votes has fallen, MPLA is still the major party and the government remains stable. The first municipal elections are planned for 2015 while the next general election will take place in 2017. It's expected that the overall government policies will follow the current objectives and strategic options.

<sup>3</sup> "Mercado Angolano: uma porta para África" – DE Projectos Especiais em parceria com Ernst & Young

<sup>4</sup> Africa Progress Report 2013

<sup>5</sup> Embassy of the Republic of Angola in the Hellenic Republic <http://www.angolanembassy.gr/English/RESOURCES.htm>

<sup>6</sup> Angola – Private Sector Country Profile, September 2012

<sup>7</sup> Angola – Private Sector Country Profile, September 2012

<sup>8</sup> Instituto do Fomento Empresarial (Institute of Public Enterprise)

<sup>9</sup> Instituto Nacional de Apoio às Pequenas e Médias Empresas (National Institute to Support Small and Medium Enterprises)

<sup>10</sup> Programa de Desenvolvimento das Pequenas e Médias Empresas (Development Program for Small and Medium Enterprises) – March 2012

<sup>11</sup> Angola Country Profile - KPMG

<sup>12</sup> Movimento Popular de Libertação de Angola

In the Angolan government programme for the 2012-2017 period agriculture is defined as a strategic sector to improve young employment and to fight poverty and hunger. Additionally, the 2013-2017 National Development Plan, states specific objectives and programmes to improve the sector. Some priorities are:

- Develop a competitive agriculture, based on the redirection of familiar production to market (not only to familiar consumption) and relaunch the business sector;
- Rehabilitate and expand infrastructures to support agricultural and livestock production;
- Stimulate the development of agricultural and livestock production through associations or new businesses;
- Achieve self-sufficiency in basic food products;
- Reduce imports and contribute to economic diversification;
- Strengthen agricultural research as a tool for technical, technological and scientific development;
- Promote job creation and contribute to enhance income from familiar agriculture;

The following table lists the various programs provided for the development of the agricultural sector.

**Table 1 – Programs for the development of the agricultural sector**

Programs	Policy measures
Encourage productive activity	<ol style="list-style-type: none"> <li>1. Carry out actions to support agricultural seasons</li> <li>2. Encourage seed production</li> </ol>
Development of familiar agriculture	<ol style="list-style-type: none"> <li>1. Rehabilitate and build 30 stations for Agrarian Development</li> <li>2. Promote the correction of soil acidity</li> <li>3. Promote familiar agriculture oriented to market</li> <li>4. Support Bom Jesus and Calenga development projects</li> <li>5. Implementation of agriculture and livestock development centers</li> </ol>
Food and nutritional safety	<ol style="list-style-type: none"> <li>1. Conduct vulnerability assessments to selected municipalities</li> <li>2. Implement meteorological network and early warning and response system</li> </ol>
Research and technological development	<ol style="list-style-type: none"> <li>1. Ensure the rehabilitation of agricultural research stations (Nsoso - Uíge, Humpata - Huíla, São Vicente - Cabinda, Kilombo - Kuanza Norte and Alto Capaca - Benguela)</li> <li>2. Rehabilitate and modernize zootechnical stations</li> <li>3. Promote agricultural and livestock training</li> </ol>
Development of commercial agriculture	<ol style="list-style-type: none"> <li>1. Ensure the installation of agro-industrial centers</li> <li>2. Support Camabatela's agriculture and livestock development program</li> <li>3. Rehabilitate Amboim and Ganda coffee experimental stations</li> <li>4. Promote a marketing campaign for Angolan coffee</li> <li>5. Promote the implementation of large agricultural projects</li> </ol>
Veterinary and public health program	<ol style="list-style-type: none"> <li>1. Promote tsetse fly eradication</li> <li>2. Conduct emergency and contingency campaigns against rabies</li> <li>3. Implement the project for containment of avian influenza and other diseases</li> <li>4. Ensure control of Newcastle Disease, contagious bovine pleuropneumonia and dermatitis</li> </ol>

Development of meats and milk subsectors	<ol style="list-style-type: none"> <li>1. Implement the familiar poultry production project in Kuanza Norte and Malange</li> <li>2. Support the organization of Cacanda, Negage, Nzeto, Luena and Cagandala farms</li> </ol>
Program to support and promote animal production	<ol style="list-style-type: none"> <li>1. Promote cattle vaccination campaigns</li> <li>2. Ensure the distribution of chickens to the selected communities in rural areas</li> <li>3. Support small ruminants production</li> <li>4. Promote cattle farming</li> </ol>
Construction and rehabilitation of irrigation schemes	<ol style="list-style-type: none"> <li>1. Build or rehabilitate Sumbo, Mucoso e Missonbo irrigated perimeters</li> <li>2. Rehabilitation of small irrigation schemes in the traditional provinces of Benguela, Bié and Kuanza Sul among others</li> <li>3. Rehabilitate Neves, Sendi, Chicungo and Chicomba hydro-agricultural dams</li> </ol>
Relaunch program for wood and non-timber products	<ol style="list-style-type: none"> <li>1. Promote cutting, processing and transport of wood projects</li> <li>2. Support projects of settlement and afforestation</li> <li>3. Assign forest concessions by public tender</li> <li>4. Modernize traditional apiculture</li> </ol>
Program for sustainable management of natural resources	<ol style="list-style-type: none"> <li>1. Support the combat of desertification</li> <li>2. Conduct forestry inventory</li> <li>3. Promote the creation of seeds banks</li> <li>4. Conduct an inventory of arable land</li> </ol>

Source: Plano Nacional de Desenvolvimento 2013-2017 (National Development Plan 2013-2017)

**Table 2 – Programs for the development of the livestock sector by Province, in Angola**

Region	Public orientations for the livestock development
<b>Bengo</b>	Develop the region with a diversity of agriculture and livestock activities to supply internal (fruits and vegetables) and external markets (coffee, cotton, sunflower, soy, palm oil).
<b>Benguela</b>	Recover agriculture and livestock potential and develop agro-industry. Develop the Industrial Development Center of Lobito/Catumbela, with focus on exporting capabilities.
<b>Bié</b>	Develop agri-food processing industries and agriculture production with potential for industrialization.
<b>Cabinda</b>	Explore commercial agriculture niches.
<b>Cunene</b>	Promote rural and livestock development, namely the livestock count, sanitary study and low cost agriculture technology and tools. Promote the repositioning of existing production to market, commercialization and develop new slaughter and meat processing industries. Create an agro-industry specialized center in Xangongo.
<b>Huambo</b>	Develop an agro-forestry-pastoral program with focus in animal repopulation and genetic improvement. Recover the position as a large industrial center investing in the Industrial Center of Caála with focus in agro-industries. Develop labor-intensive industries to replace imports of agricultural equipment.
<b>Huíla</b>	In terms of specialization: position Huíla as an agricultural and livestock surpluses producer, develop an industrial base for transformation of farming products and supply of the southern provinces markets, particularly agricultural equipment and tools, based in the Industrial Center develop in Lubango, linked to a network of industrial zones at the municipal level.



<b>Kuando Kubango</b>	Promote rural development, ensuring access to water in order to ensure food self-sufficiency, development of low cost technologies and tools and improved health status of livestock. Promote greater conversion of production to the market and the emergence of slaughtering and meat processing industries.
<b>Kwanza Norte</b>	In terms of specialization: develop a competitive commercial agriculture, organize a strong agro-industrial sector over the rail corridor of Malange and Dondo, establish the province as a major center for the production of electricity and encourage the installation of energy-intensive industries.
<b>Kwanza Sul</b>	In terms of specialization: make a strong effort in the industrial sector (industrial center of Porto Amboim and agro-industrial center of Cela) and develop industrial corn and cattle sectors.
<b>Lunda Norte</b>	Promote rural development (agriculture and livestock), involving the improvement of tools and the development of rural credit and commerce.
<b>Lunda Sul</b>	Promote rural development (agriculture and livestock), involving the improvement of tools and the development of rural credit and commerce; Encourage agriculture and livestock market in specific spaces compatible with the mining restrictions.
<b>Luanda</b>	There are no strategic orientations related to livestock development.
<b>Malange</b>	Develop a niche of agriculture business.
<b>Moxico</b>	Develop agriculture and livestock.
<b>Namibe</b>	Enhance livestock.
<b>Uíge</b>	Direct its specialization in order to move from a subsistence family farming to an agriculture producing for the market, recover the industrialization of agricultural products.
<b>Zaire</b>	Diversify subsistence agriculture and promote commercial agriculture niches.

Source: Plano Nacional de Desenvolvimento 2013-2017 (National Development Plan 2013-2017)

To promote agriculture and livestock development, government has also been launching other initiatives in order to promote entrepreneurship, in particular for industry, agriculture and productive sector services. Some of them are:

- Development of a national committee for *Codex Alimentarius* Angola which has the objective to create quality control infrastructures and implement legislation related with the storage, transportation, distribution, consumption and safety of food products;
- Implementation of PRESILD - Logistics and essential products distribution restructuring program - in order to organize commercial activity and distribution of essential products for the population across the country;
- Development of the program "Angola Investe" to help financing priority sectors such as agriculture;
- Promotion of the access to the Angolan Venture Capital Fund (FACRA<sup>13</sup>) which is a public venture capital fund, focused on helping Angolan MSME's<sup>14</sup> building and expanding their business;

Besides these initiatives there is also in place the Action Plan (PASAN<sup>15</sup>) to implement National Strategy for Food Safety and Nutrition (ENSAN<sup>16</sup>) which has as main objective "contribute to make possible that all Angolans have at all times, availability and adequate variety of quality food, and physical and economic access to these food enabling them to contribute to human, economic and social development of Angola".

<sup>13</sup> Fundo Activo de Capital de Risco (Active Fund Venture Capital)

<sup>14</sup> Micro and Small and Medium Enterprises

<sup>15</sup> Plano Acção de Segurança Alimentar e Nutricional (Action Plan for Food Security and Nutrition)

<sup>16</sup> Estratégia de Segurança Alimentar e Nutricional (Strategy for Food Security and Nutrition)

Some of the areas covered by this plan are production, storage, processing, distribution and commercialization, organization, capacity building, access to food, health and nutrition, education, water, energy, sanitation, research, food safety, development of information systems to monitor and provide relevant information for agriculture, among others.

After a period when the government established special conditions related to import taxes and customs duties to essential products, it's expected that these duties will rise again to protect national production<sup>17</sup>. The exemption from taxation affected local business like milling<sup>18</sup> discouraging investment in Angola and having repercussion in local production of animal feeds<sup>19</sup>.

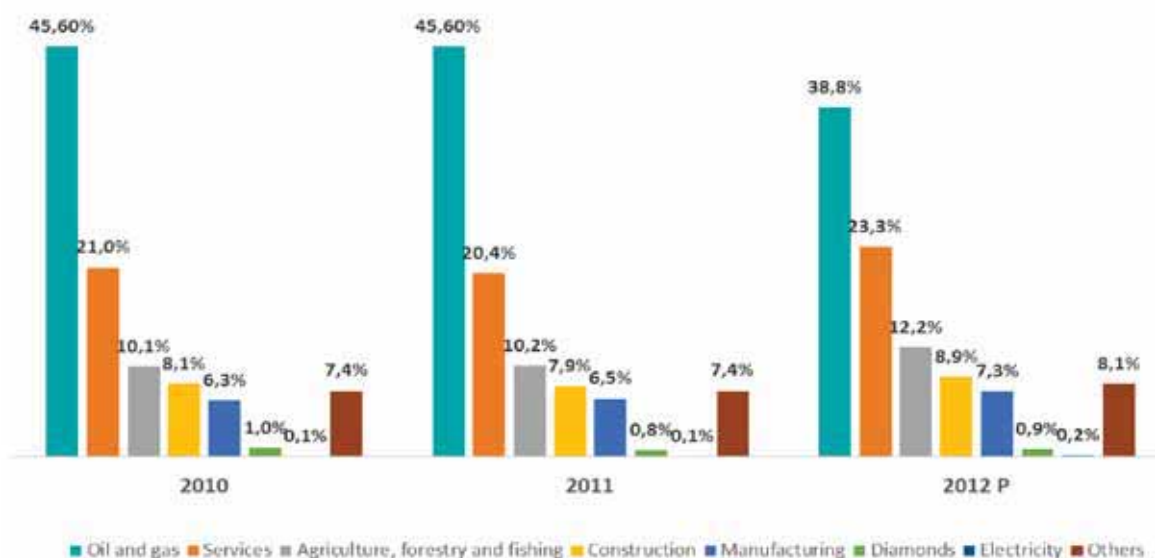
Furthermore, according to Transparency International, Angola ranks in 157th position out of 176 nations in the Corruption Perceptions Index. The country is seen as one of the most corrupt in the world, an image that has direct implications on how companies are managed.

### C.1.3 Economy

Since the end of the civil conflict, Angola has experienced an extraordinary social and economic recovery which translates into: rehabilitation and construction of schools, hospitals, health centers and clinics, roads and bridges, gradual increase of agricultural, livestock and fisheries production, not to mention the construction sector itself, which is considered the most dynamic of them all<sup>20</sup>.

#### Gross Domestic Product (GDP)

As one of the fastest growing economies in the world, Angola has currently a thriving business environment with an average real GDP growth rate of 12% over the past decade<sup>21</sup>. This was essentially supported by the country's oil production, which is currently around 1,65 million barrels a day (bbl/day), and it's price in international markets that remains historically high.



Data Source: Angola – Private Sector Country Profile, September 2012

**Figure 3 – GDP composition in Angola (%), 2010-2012**

In the last three years, the country's GDP has had its origin essentially on the crude oil production, followed by services, and agriculture, forestry and fishing activities. In 2012, these three sectors represented around 74% of the nation's GDP.

<sup>17</sup> [www.aiangola.org/vector-de-21-de-marco-de-2013/](http://www.aiangola.org/vector-de-21-de-marco-de-2013/)

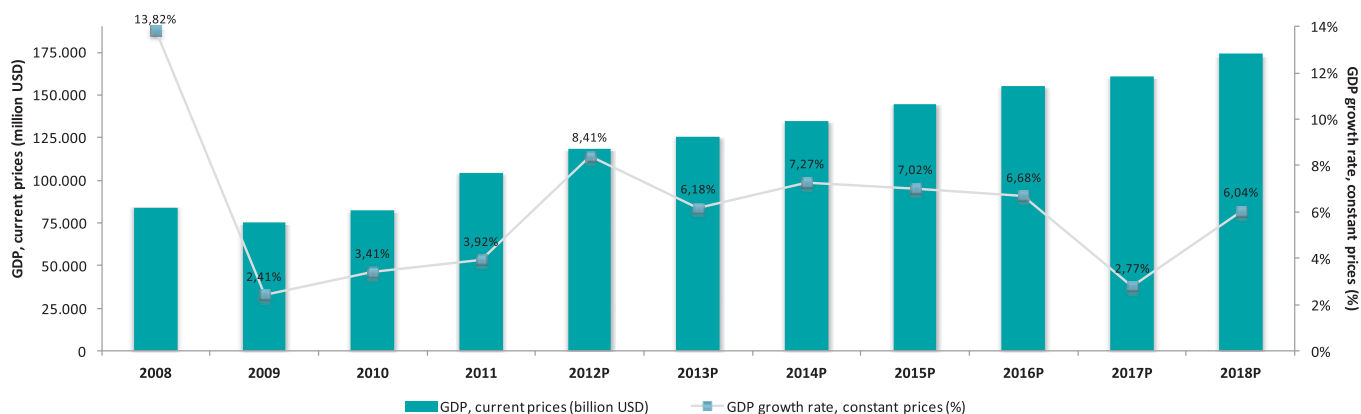
<sup>18</sup> [www.portalangop.co.ao/angola/pt\\_pt/noticias/desporto/2012/2/12/Isencaio-encargos-fiscais-afecta-rede-moagens-pais,3da73404-4c61-4eab-9748-53aef58dd5de.html](http://www.portalangop.co.ao/angola/pt_pt/noticias/desporto/2012/2/12/Isencaio-encargos-fiscais-afecta-rede-moagens-pais,3da73404-4c61-4eab-9748-53aef58dd5de.html)

<sup>19</sup> [www.portalangop.co.ao/angola/pt\\_pt/noticias/economia/2012/2/12/Angola-precisa-fabricas-racao-para-apoiar-producao-ovo-carne,a5ac3d2c-0996-4909-a46d-9c6f3ac961f0.html](http://www.portalangop.co.ao/angola/pt_pt/noticias/economia/2012/2/12/Angola-precisa-fabricas-racao-para-apoiar-producao-ovo-carne,a5ac3d2c-0996-4909-a46d-9c6f3ac961f0.html)

<sup>20</sup> Angola Country Programming Framework 2013-2017, FAO

<sup>21</sup> Angola – Private Sector Country Profile, September 2012

In 2012, it's predicted that the weight of the oil and gas related activities diminished, when compared to the preceding years. Recent estimates from IMF<sup>22</sup> forecast a real GDP growth of 6,2% in 2013, 7,3% in 2014 and around 7% in 2015 and 2016. This trend is subject to the effective development of non-oil sector activities.



Data source: IMF and LCG analysis

**Figure 4 – GDP evolution and growth rate**

The non-oil sector presented a 9,7% growth rate in 2011 and is projected to have a 9,1% growth in 2012. Furthermore and accordingly to targets from the Ministry of Finance in Angola, it's anticipated that the non-oil sector activities will foresee a high level of development and will maintain a sustainable progress until 2017.



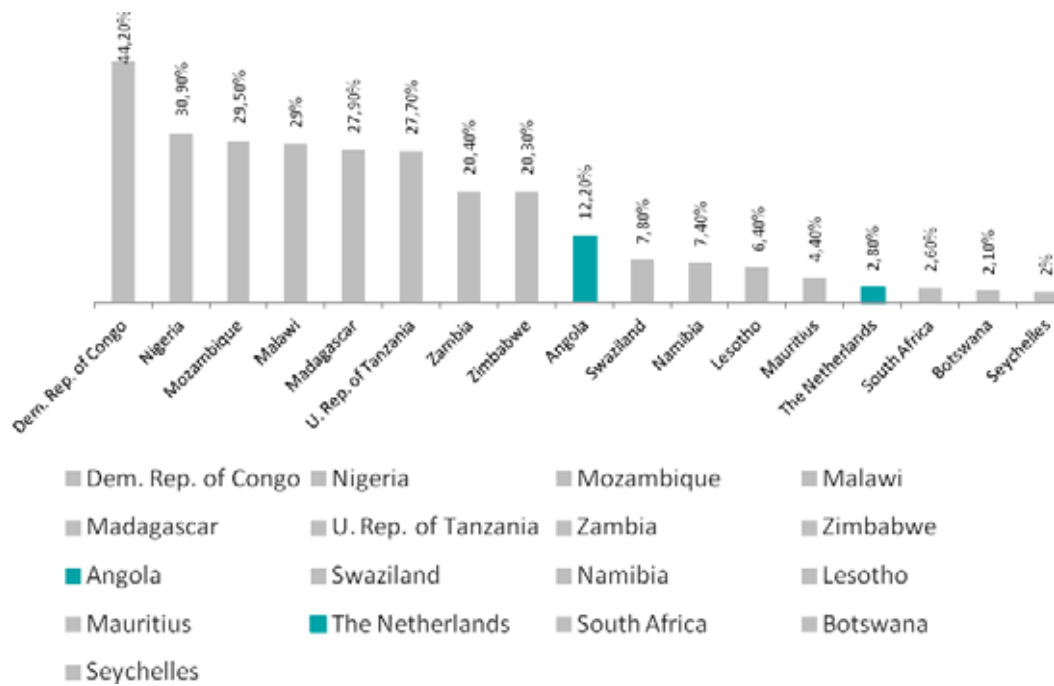
Source: Ministry of Finance of Angola

**Figure 5 – Oil vs. Non-oil sector growth rate**

In this context, Angola is currently seen as one of the main foreign investment destinations due to the wide range of opportunities mentioned above that remains unexploited.

A highlight should be particularly given to the agricultural, forestry and fishing industry that in 2012 was the third largest contributor to the country's GDP growth and is expected to be one of the fastest growing industries in the next years since 69% of the population works in the agriculture related activities.

<sup>22</sup> International Monetary Fund

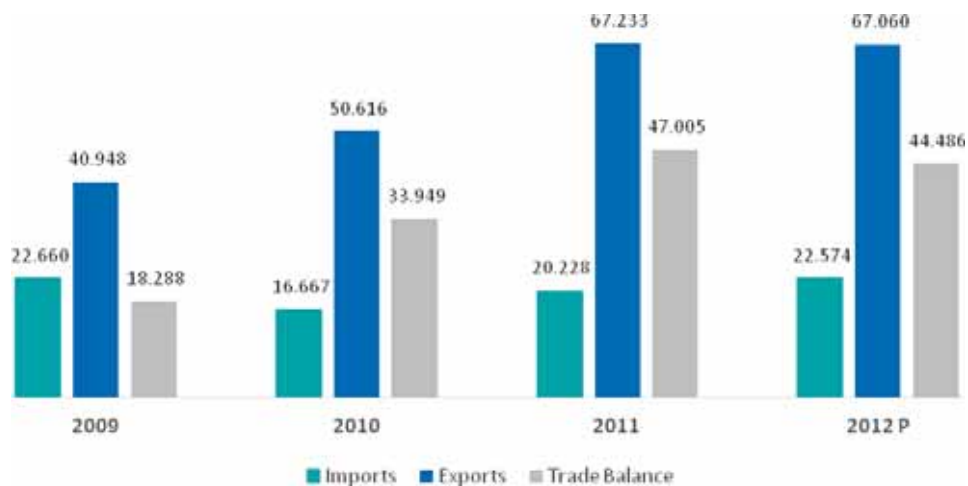


Data Source: Central Intelligence Agency – The World Factbook and LCG analysis

**Figure 6 – Agriculture contribution to GDP per country (%), 2012, SADC countries and Nigeria**

Comparing with the countries in the SADC region and with the Nigeria, Africa's biggest oil producer, the agriculture sector in Angola contributes in 12,2% to the country's GDP, occupying the 9th place among peers. The Democratic Republic of Congo followed by Nigeria and Mozambique are the nations where the agriculture's GDP is more evident and with further progress.

### Trade Balance

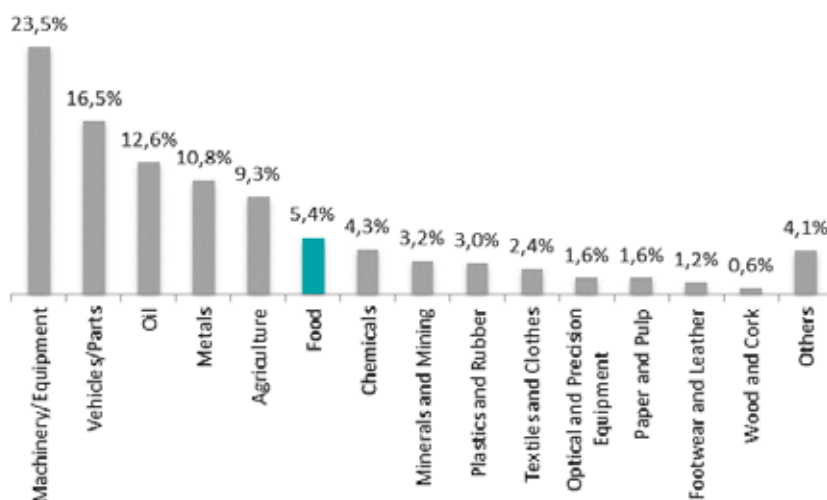


Source: BNA and IMF

**Figure 7 – Angola's Trade Balance (million USD)**

The subsistence agriculture provides the main livelihood for most local people, but half of the country's food is still imported<sup>23</sup>. Although the country's trade balance is frequently attributed to the relatively high volume of exports, in 2010, 98% of the total exports were oil production and supporting activities (Angola is the 7th biggest world oil exporter) while diamonds exports represented merely 2% of Angolan total exports<sup>24</sup>.

During 2012, the exports were made mainly to China, USA, India, Canada, Thailand, France, South Africa, Spain, Holland and Israel<sup>25</sup>. Additionally it's estimated that only 2% of the Angolan companies are exporters<sup>26</sup>.



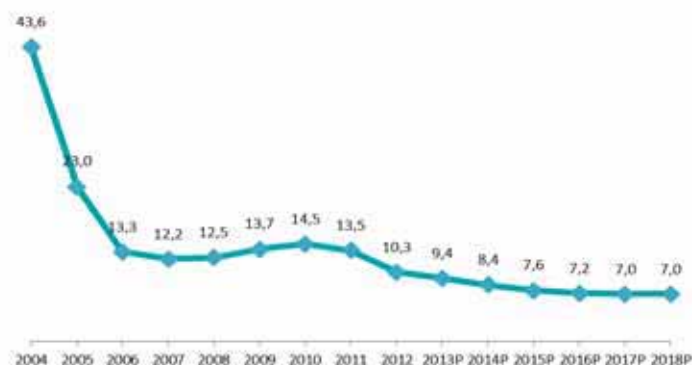
Data source: INE Angola

**Figure 8 – Imports composition (%) in 2010**

On the other side, the country's imports have been relatively stable over the last three years reaching an amount of 20.228 million USD in 2011. In 2010, these were headed by machinery/equipment and vehicles/parts that embodied 40% of the total volume of imports. Nevertheless, almost 6% of total imports were food, which unveils the country's difficulty in meeting consumer demand. Moreover, it's projected that 68% of the companies in Angola use imported products<sup>27</sup>.

The government of Angola has been dynamically advertising the recent creation of agencies and programs designed to promote entrepreneurship, motivate technology transference and create a modern and qualified labor force, namely the Business Development Institute, the National Institute to Support Small and Medium Enterprises or the Business Promotion Program. These initiatives aim to reduce poverty, unemployment and dependence on the oil sector.

## Inflation Rate



Data Source: IMF

**Figure 9 – Inflation rate evolution (%), 2004-2018**

<sup>23</sup> Angola Country Profile - KPMG

<sup>24</sup> Angola Country Profile - KPMG

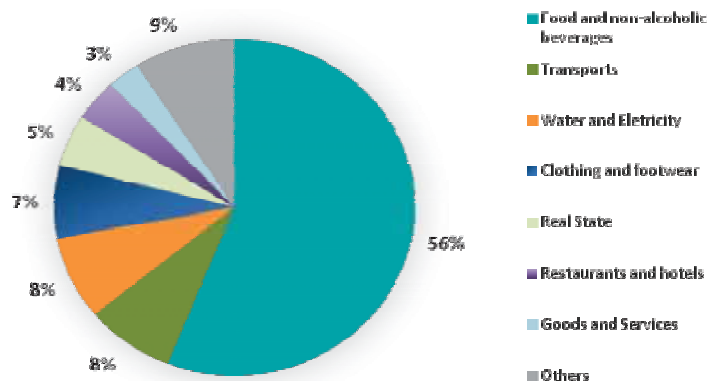
<sup>25</sup> Instituto Nacional de Estatística de Angola (National Institute of Statistics of Angola)

<sup>26</sup> Programa de Desenvolvimento das Pequenas e Médias Empresas (Development Program for Small and Medium Enterprises) – March 2012

<sup>27</sup> Programa de Desenvolvimento das Pequenas e Médias Empresas (Development Program for Small and Medium Enterprises) – March 2012

Due to the heavily dependence on imports, the country's inflation rate is relatively high, although is predicted to decrease and stabilize in the next years, maintaining a value below 10%, contrary to what have been happening in the past.

The logistical barriers in Angola, aggravated by customs and duties procedures, particularly at Luanda Port, and the narrowness of wholesale and retail sector created additional challenges to the efficient distribution of goods, especially food items that are highly perishable. These, along with an unsteady exchange rate are the main reasons of why the country's inflation rate is resistant to further decrease.

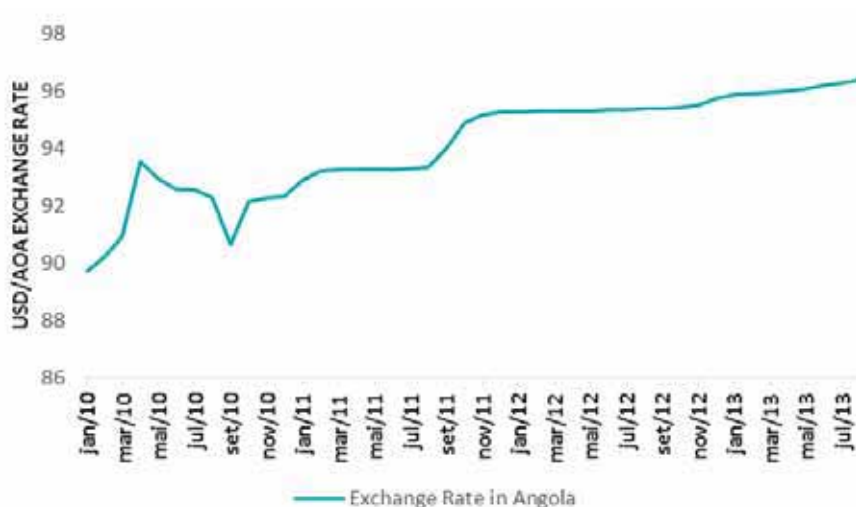


Source: INE Angola

**Figure 10 – Structure of the Inflation Index in Angola (%), 2010**

### Exchange Rate

Given that oil transactions are performed in USD, domestic economy continues to be directly influenced by the volatility of the exchange rate.



Data source: BNA and LCG analysis

**Figure 11 – Evolution of the exchange rate AOA-USD**

During 2010, the behavior of the exchange rate was characterized by frequent fluctuations, alternating from period of appreciation with phases of depreciation. Since November 2011, the exchange rate USD/AOA has remained relatively stable with a slight upward trend, which can be a factor discouraging investment in real non-oil sectors of the economy, whose development is assumed to be crucial for stabilizing the Angolan economy in the medium and long term<sup>28</sup>.

<sup>28</sup> BAI – Banco Angolano de Investimentos



### Access to finance

In Angola, the large majority of people and entrepreneurs have limited access to formal financial services, particularly in the districts outside Luanda. As of late 2011, Angola had 23 commercial banks and only three of them were state-owned. While every provincial capital has at least three bank branches, only 14% of the population resort on banks and fewer businesses even consider applying for a bank loan<sup>29</sup>, essentially due to the lack of information about the process.

The majority of branches are located in Luanda where demand for products and services is highly concentrated.

**Table 3 – Branches distribution by province (March 2011)**

Province	Number of branches offices	Population by province	Number of persons per branch
Luanda	490	3.072.000	6.269
Cabinda	32	302.000	9.438
Zaire	21	398.000	18.952
Bengo	17	289.000	17.000
Namibe	18	234.000	13.000
Cunene	24	387.000	16.125
Kwanza Norte	13	668.000	51.385
Benguela	65	1.091.000	16.785
Lunda Sul	11	251.000	22.818
Malange	20	1.549.000	77.450
Kuando-Kubango	10	211.000	21.100
Huíla	53	1.449.000	27.340
Kwanza Sul	31	1.079.000	34.806
Huambo	34	2.628.000	77.294
Lunda Norte	15	486.000	32.400
Moxico	11	547.000	49.727
Uíge	21	1.496.000	71.238
Bié	16	1.944.000	121.500
<b>TOTAL</b>	<b>902</b>	<b>18.081.000</b>	<b>20.045</b>

Data Source: Angola – Private Sector Country Profile September 2012, CountryStat FAO and LCG analysis

Despite the availability of funds in credit institutions in Angola, bank executives are disappointed with the technical quality of most projects submitted for funding. Besides, there are also constraints to credit expansion, a tradition for weak contract enforcement, lack of collateral and difficulty to identify borrowers with good credit risk due to lack of accounting frameworks and credit information<sup>30</sup>.

Even compared with its African peers, Angola is the country where the formal financial institutions are less willing to give credit. Angola and Mozambique stand at the 129th position in the ranking of 185 economies on the ease of getting credit, below the average position when compared within Sub-Saharan Africa nations.

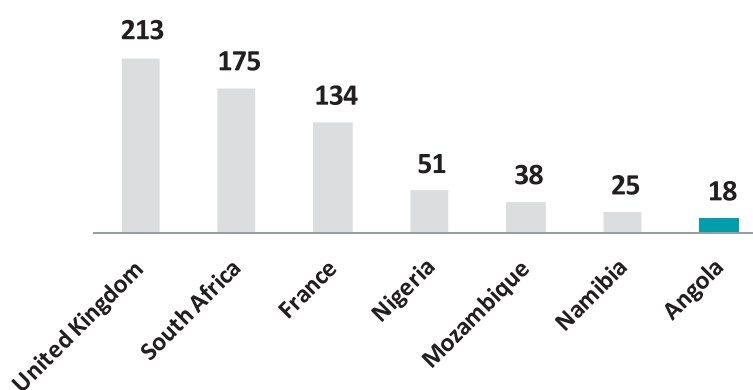
<sup>29</sup> Angola Country Profile - KPMG

<sup>30</sup> Angola Country Profile - KPMG

**Table 4 – Ranking for the easiness of getting credit**

Country	Position in Ranking
South Africa	1
Nigeria	23
Namibia	40
Netherlands	53
Botswana	53
Portugal	104
Average of Sub-Saharan Africa	109
Mozambique	129
Angola	129

Source: Angola Doing Business 2013, Netherlands Doing Business 2013, LCG analysis



Data source: World Bank and LCG analysis

**Figure 12 – Credit provided by the banking sector as a percentage of GDP, in 2011**

In this context, the banking sector is characterized with high liquidity because instead of providing credit, banks in Angola prefer to charge fees from transactions, to provide short-term trade financing and to invest in high-yield government bonds<sup>31</sup>.

On the other hand, recent changes have been announced, suggesting that the government is encouraging the development of the microfinance sector and has been revealing new initiatives to enhance the capacity of the financial sector and intermediate funds into productive investments, which are crucial to the growth of the private sector, particularly non-oil activities in the country. An explicit example is the launch of the "*Angola Investe*" program that consists in a line of credit for small and medium enterprises, valued at 1,5 billion dollars and characterized by a subsidized interest rate of 5% per annum, a repayment term of 7 years and a grace period 6 months. This program is strategically tailored to support local investors but also partnerships between local and international producers, to encourage the skills and technical knowledge transference, staff training, rehabilitation and construction of efficient productive infrastructures.

<sup>31</sup> Angola – Private Sector Country Profile, September 2012

Furthermore, a country's key foreign-policy is to diversify access to international finance while expanding the country's regional and international influence and consolidating relations with key strategic partners<sup>32</sup>.

#### Specific finance programs to livestock sector

Angola Development Bank (BDA) is a credit institution, owned by the Angolan State that focuses on the development of industrial and agriculture sector. This bank has the following loan conditions available to finance livestock investment projects<sup>33</sup>:

**Table 5 – Feed grain production**

Assets	Grace Period (in months)	Repayment Period (in months)	Total (in months)
Current	Up to 18	Up to 90	Up to 120
Non-Current	Up to 30	Up to 42	Up to 60

**Table 6 – Poultry breeding (all provinces)**

Assets	Grace Period (in months)	Repayment Period (in months)	Total (in months)
Current	Up to 9	Up to 36	Up to 45
Non-Current	Up to 18	Up to 78	Up to 96

**Table 7 – Beef cattle breeding<sup>34</sup>**

Assets	Grace Period (in months)	Repayment Period (in months)	Total (in months)
Current	Up to 24	Up to 48	Up to 72
Non-Current	Up to 48	Up to 132	Up to 180

**Table 8 – Dairy cattle breeding<sup>35</sup>**

Assets	Grace Period (in months)	Repayment Period (in months)	Total (in months)
Current	Up to 24	Up to 36	Up to 60
Non-Current	Up to 48	Up to 102	Up to 150

**Table 9 – Goat, sheep and small ruminants (all provinces)**

Assets	Grace Period (in months)	Repayment Period (in months)	Total (in months)
Current	Up to 14	Up to 28	Up to 42
Non-Current	Up to 18	Up to 78	Up to 96

All these programs were designed to finance 90% of the investment amount, with a minimum interest rate of 6,7% per year, plus one-time fee for credit assignment.

<sup>32</sup> Angola Country Profile - KPMG

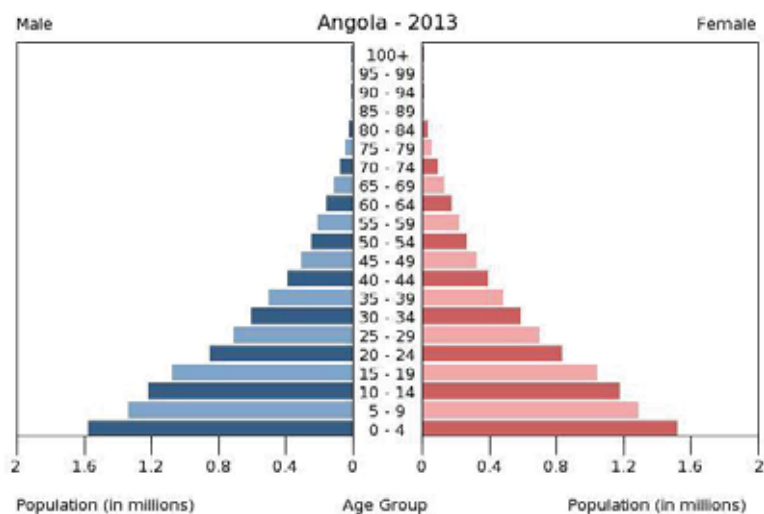
<sup>33</sup> <http://www.bda.ao/agricultura-pecuaria-e-agro-industria/>

<sup>34</sup> Restricted to the following provinces: Benguela, Bié, Huambo, Huíla, Kwanza-Sul, Malange, Moxico, Lunda-Sul, Uíge e Zaire

## C.1.4 Social context and demography

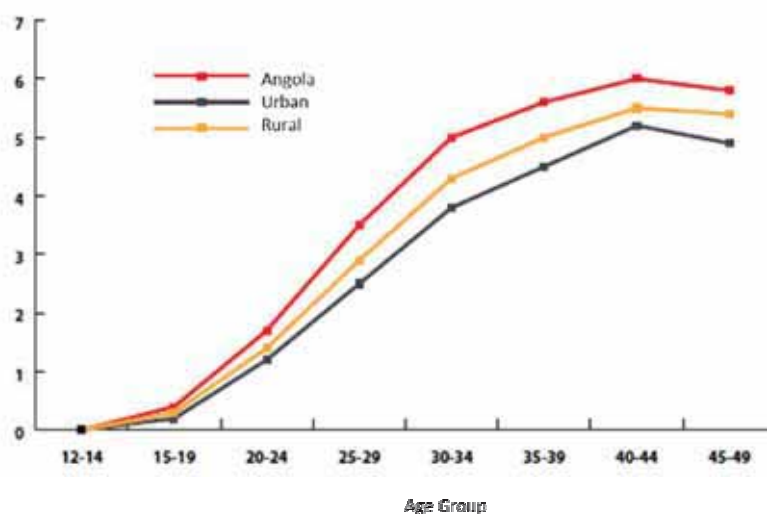
### Population

Angola's population is estimated to be 20 million<sup>35</sup> in 2011. Due to high fertility rate among women and low life expectancy of population, the median age is 18 years and more than 43% of population is under 15 years.



Source: National Institute of Statistics of Angola

**Figure 11 – Population Distribution by Gender and Age Group<sup>36</sup> (2012)**



Source: National Institute of Statistics of Angola

**Figure 12 – Average number of children by age group of mother<sup>37</sup> (2012)**

According to the World Health Organization (WHO), in 2010, only 59% of Angolans were living in urban regions while the other 42% were residing in rural areas. This trend is expected to increase since in 2020 is forecasted that 66% of the country's population will be living in the urban zones of Angola. Nonetheless, currently around 72% of the population that lives within poverty lives in rural areas.

The main ethnic groups among the population are the Ovimbundu (37%), Kimbundu (25%) and Bankongo (13%).

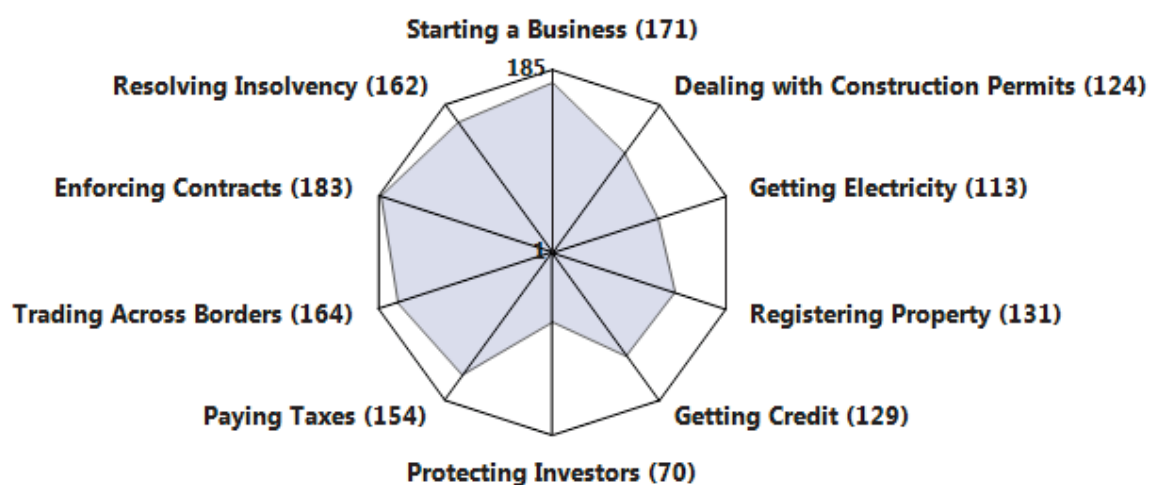
<sup>35</sup> <http://data.worldbank.org/country/angola>

<sup>36</sup> "Angola em números 2012, Instituto Nacional de Estatística"

<sup>37</sup> "Angola em números 2012, Instituto Nacional de Estatística"

### C.1.5 Technology and infrastructure

Angola has made some important reforms to improve its appeal to foreign investors, but accordingly to Doing Business Ranking in 2013, a scheme to measure the easiness of complying with regulations compiled by the World Bank every year, the nation is still struggling with critical challenges, namely the use of courts to enforce contracts.



Source: www.doingbusiness.org

**Figure 13 – Angola position in Doing Business Rank by topic, total of 185 nations (2012)**

### C.1.6 Climate and geographic agricultural conditions

#### Geographic agricultural conditions

Angola has the 16th largest agricultural potential area in the world, with excellent conditions for agriculture, a favorable climate, abundant water resources, but presently it's not self-sufficient due to the lack of required investments, modern industrial infrastructures, agricultural equipment and technical training of farmers. Nevertheless, it's also among the countries that have the biggest potential to reach production levels able to contribute to the harmonious development of its population. Angola has 47% of agricultural land, 575.900 km<sup>2</sup>, and only 5,7% of it is exploited<sup>38</sup>.

**Table 10 – Evolution of agriculture land in Angola, 2007-2011**

	2007	2008	2009	2010	2011
Land area (sq. km)	1.246.700	1.246.700	1.246.700	1.246.700	1.246.700
Agricultural land <sup>39</sup> (% of land area)	46,27%	46,27%	46,76%	46,84%	46,84%
Land under cereal production (sq. km)	14.853	10.190	16.855	17.108	19.451
Arable land (sq.km per person)	0,0019	0,0019	0,0021	0,0021	0,0020
Arable land <sup>40</sup> (% of land area)	2,73	2,73	3,21	3,29	3,29
Rural population (% of total population)	44,28%	43,40%	42,51%	41,62%	40,86%

Source: World Bank data and LCG analysis

<sup>38</sup> Angola Country Programming Framework, 2013-2017, FAO

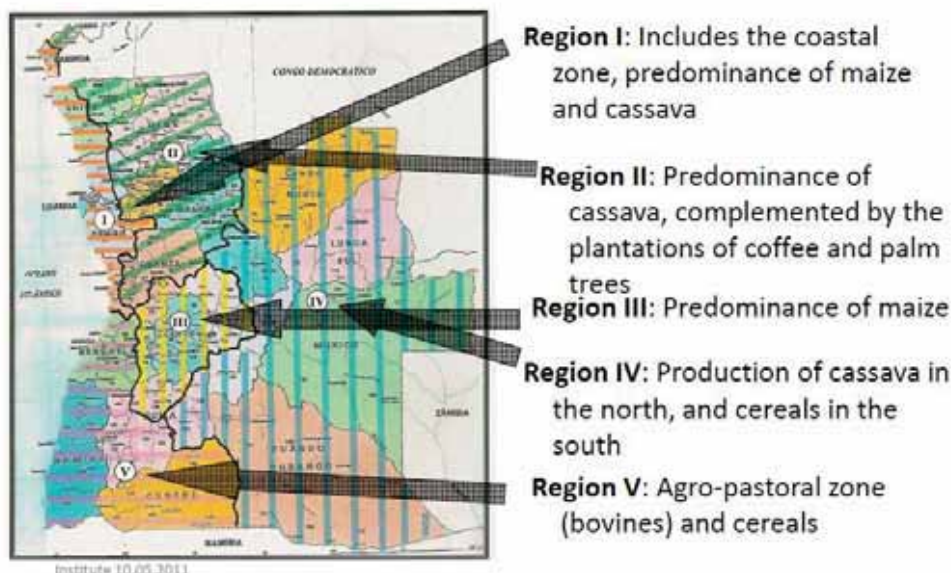
<sup>39</sup> Agricultural land refers to the share of land area that is arable, under permanent crops and under permanent pastures

<sup>40</sup> Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

The existence of soils with high aptitude, biodiversity, climate and genetics, the abundance of water resources and aquatic biological and natural resources, combined with an impressive range of a dynamic rural population whose activity is directly related to the agriculture, livestock and fishing are favorable factors for economic and social development of the country.

Until 1975, it was self-sufficient in all key food crops except wheat. By then, agricultural exports accounted for nearly 60% of total exports and were composed of coffee (48%), sisal (5%), maize (2%), and a number of other agricultural products including bananas, tobacco, cotton, beans, sugar, palm oil and rice. On the contrary, currently the country is highly dependent on food crops imports.

The country has five major ecological zones that correspond to five production systems characteristics, as seen in the map below.



Source: Angola Country Programming Framework, 2013-2017, FAO

**Figure 14 –Major agriculture regions**

Agricultural production in Angola is predominantly a family-labor activity for millions of smallholder self-subsistence farmers, planting an average of 1,4 ha per family on two or more parcels of land; the area planted increased slightly every year. Agricultural production is based on a rainy season, the main growing season which spans from September to December in the most part of the country.

Although agriculture, livestock and forestry contribute to 12% of nation's GDP and 42% of total employment, with women providing 70% of labor, the contribution of exports of agricultural products is non-existent<sup>41</sup>.

In what concerns to the meat and milk production, i.e., the livestock sector in general, Angola has an even bigger challenge. The national production is still very incomplete and oriented to the subsistence, familiar consumption and rituals especially in the southern regions of the country with the nomadic populations and transhumance habits. Despite this, each year the improvement and strengthening of the sector is remarkable, according to data published by the Cabinet of Planning and Statistical of the Ministry of Agriculture (GEPE/MINAGRI) in the year 2010/2011, it can be seen a growth in relation to the previous year the country had: 2,2% more assets of cattle population, 2,7% more of small ruminants, 10,4 % more of swine and 16,7% more of poultry. All this data has been published by the Ministry of Agriculture and based on estimates, considering one of the major obstacles which is the lack of accurate data: since the independence in 1975 no census has been carried out, including any animal census.

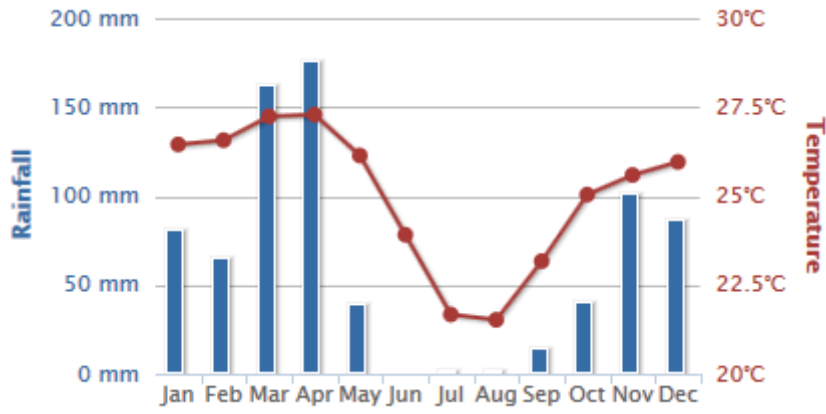
### **Climate and agriculture conditions**

The most important climate factor affecting the behavior of farm animals is temperature. Most livestock species will feel comfortable within the range of 10 to 20 OC because their body organs can be used to regulate temperature<sup>5</sup>. In hot and humid environments, the ability of the air to absorb additional moisture can be limited and farmers will need to provide external cooling in order to avoid heat stress, low productivity and the spread of infections. This is especially relevant for poultry, due to their absence of sweat glands.

Livestock, in particular dairy cows and pigs, reduce their feed-intake when exposed to hot temperatures which decrease their development and reproduction performance.

<sup>41</sup> Angola Country Programming Framework, 2013-2017, FAO

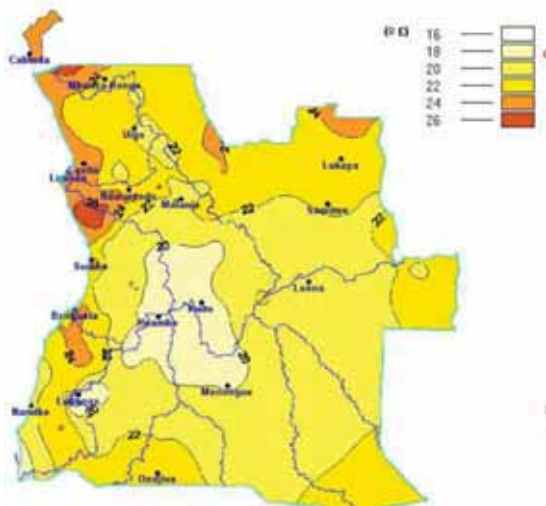




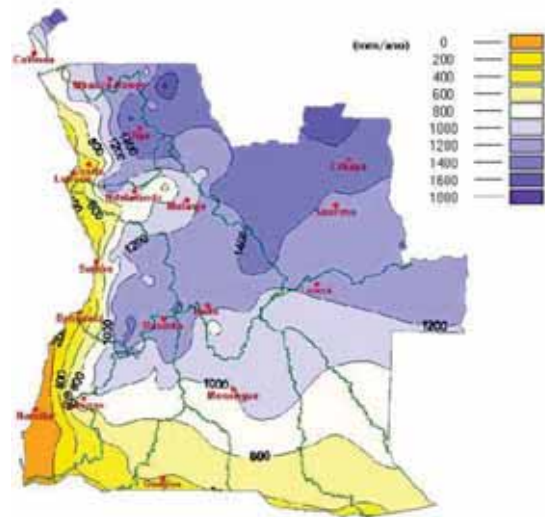
Source: sdwebx.worldbank.org

**Figure 15 – Average monthly precipitation and temperature in Luanda, 1990 to 2009**

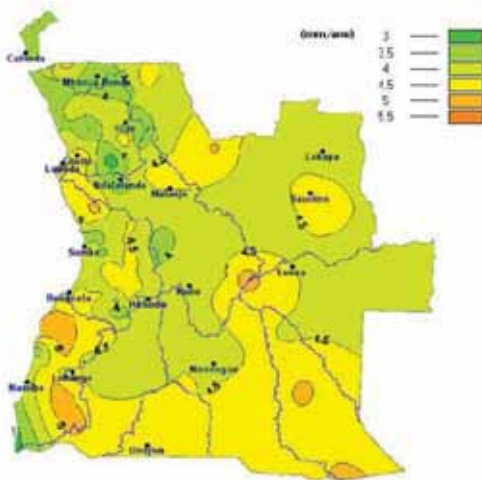
The highest average temperature in Angola varies between 24 and 26 °C and occurs along the coast, particularly in the northwest of the country. The lowest average temperature varies between 16 and 18 °C and occurs in the high land regions of hydric regions (Huambo, Cunene and Cuando Cubango).



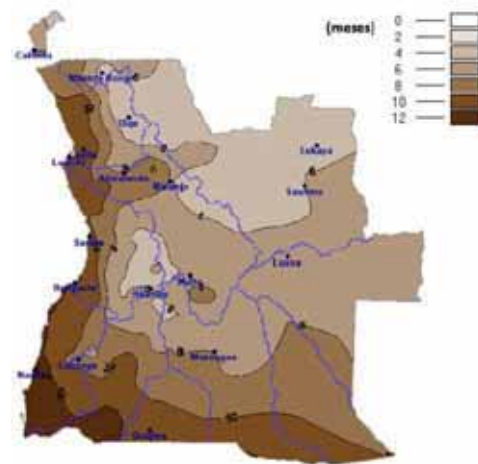
**Figure 16 – Average air temperature in °C (2010)**



**Figure 17 – Average rainfall in millimeters per year (2010)**



**Figure 18 – Average evapotranspiration rate (2010)**



**Figure 19 – Average number of months with hydric deficit (2010)**

Source: "Plano Nacional Director de Irrigação de Angola (PLANIRRIGA) "

In Angola, the rain season begins in October and ends in May. The precipitation levels are higher, 1800 mm per year, in Cabinda and in mountains regions, usually above 1500 mm per year.

### C.1.7 Legal

#### Foreign private investment

The Private Investment Act ("*Lei do Investimento Privado*", Act 20/11 of May 20) introduced important changes compared to the previous legal framework, namely the increase in the minimum amount of investment required from foreign investors, which is now at least 1 Million USD, the elimination of the automatic grant of tax and customs incentives and the establishment of contractual agreements for investments approval and respective inducements.

ANIP, which is the National Agency for Private investment was set up by the Angolan government to act as a key player in the evaluation, negotiation and control of foreign investment processes. Its main goal is to capture, promote and assist foreign companies and entrepreneurs in their decisions and to support contacts with local entities. ANIP has been a major force behind most of large investments in last years.

A private investment is considered to be foreign if there is recourse to assets domiciled a) "inside and outside national territory, by individual persons or corporate entities, with non-resident foreign-currency status", or b) "outside national territory, by individual persons or corporate entities with resident foreign-currency status".

If the foreign investment involves the creation of a commercial company under Angolan law, the following documents will be necessary for the notarial deed: a) Private Investment Registration Certificate issued by the ANIP, demonstrating the approval of investment, b) the capital import license, issued by BNA ("*Banco Nacional de Angola*") and confirmed by the commercial bank receiving the capital.

#### Repatriation of capital

Under the conditions mentioned above, established by the Private Investment Act, the foreign investor has the right to transfer profits and dividend abroad (articles 18 *et. seq.* of the LIP). The exercise of this right requires proof that the investment was made and that taxes due were paid. Additionally, to qualify for incentives, tax and custom benefits, the investor must have its accounts duly organized and certified by an external auditor.

The repatriation of profits and dividends is graded in the investment contract and conditioned to the zone in which the investment is being developed, the amount and duration of the investment. Furthermore, initiatives that are declared as being relevant to the strategic development of Angola can benefit from special terms (article 29.1 of LIP).

#### Tax and customs incentives for private investment<sup>42</sup>

The tax incentives available include reduction or exemption from Business Income Tax ("*Imposto Industrial*") and from Investment Income Tax ("*Imposto sobre a Aplicação de Capitais*") during a period of time that depend on the location of the investment. The Private Investment Act defined the following benefits:

**Table 11 – Tax and customs incentives by geographical area in Angola**

	Description	Business Income	Tax Business Income Tax
<b>Zone A</b>	Luanda and principal municipalities of Benguela, Lobito, Huíla and Cabinda	From 1 to 5 years	From 1 to 3 years
<b>Zone B</b>	Remaining municipalities of Benguela, Cabinda, Huíla, Kwanza Norte, Bengo, Uíge, Kwanza Sul, Lunda Norte and Lunda Sul	From 1 to 8 years	From 1 to 6 years
<b>Zone C</b>	Huambo, Bié, Moxico, Cuando Cubango, Cunene, Namibe, Malange and Zaire	From 1 to 10 years	From 1 to 9 years

<sup>42</sup> Doing Business Angola 2012, Morais Leitão, Galvão Teles, Soares da Silva & Associados, Sociedade de Advogados, RL (MLGTS)

### Land Property rights<sup>43</sup>

The ownership of the land is highly regulated and limited by Angolan law and therefore it is more usual to acquire a surface right, instead.

The surface right confers to its owner the ability to construct or maintain a building or plantation on the land. The maximum duration for a surface right, under current Land Law in Angola, is 60 years.

Foreign investors should pay special attention prior to negotiations regarding real estate assets (urban or agricultural) and collect the following documents: i) an up-to-date land certificate ("*certidão predial*") issued by the Land Registry, ii) a property record or certificate of the content of the register (issued no more than one year ago by tax authorities), iii) a public deed that prove the lawful acquisition of the right by the transferor, and iv) a property location plan (preferably certified by a local authority or professional company).

### Livestock population

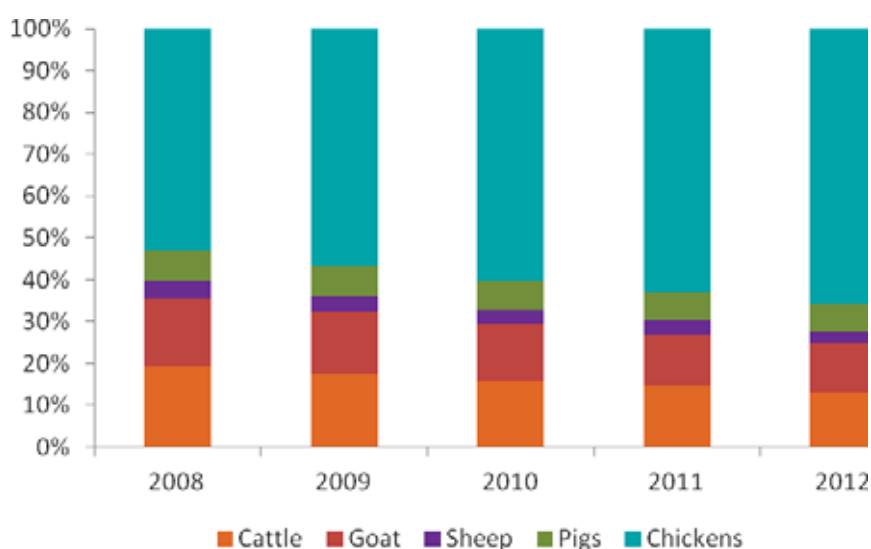
The livestock sector comprises Cattle, Goat, Sheep, Pigs and Chickens as illustrated by the table below:

**Table 12 - Live animals in Angola (heads), 2008 to 2012**

	2008	2009	2010	2011	2012	CAGR
<b>Cattle</b>	4.292.546	4.389.103	4.487.838	4.586.570	4.687.475	2,22%
<b>Goat</b>	3.639.971	3.740.976	3.844.785	3.948.595	4.055.207	2,74%
<b>Sheep</b>	930.835	956.663	983.209	1.009.756	1.037.020	2,74%
<b>Pigs</b>	1.553.259	1.733.548	1.934.764	2.135.979	2.358.121	11,00%
<b>Chickens</b>	11.878.420	14.259.809	17.118.618	19.977.427	23.313.658	18,36%

Source: CountrySTAT.org

In 2012, the livestock population was 4,7 million cattle, 4,1 million goat, 1 million sheep, 2,4 million pigs and 23,3 million chickens. Cattle, Goat and Sheep had an annual growth rate between 2% and 3% in the last 5 year. The population of pigs and chickens were those who had a more relevant growth, 11% and 18% annual growth, respectively.

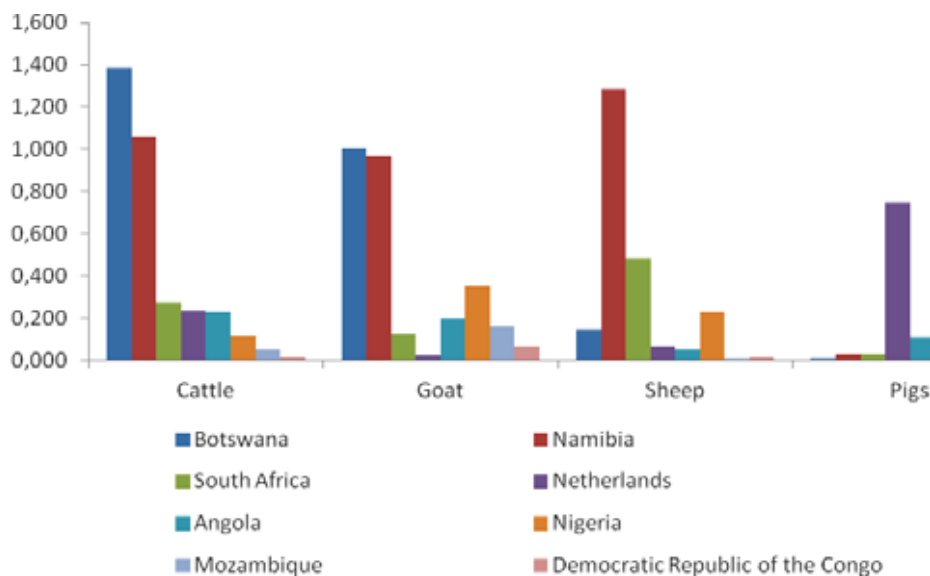


Source: CountrySTAT.org

**Figure 20 – Contribution of different species to the total livestock units**

<sup>43</sup> Practical guide to real estate investment in Portugal, Angola and Mozambique, PLMJ International Legal Network

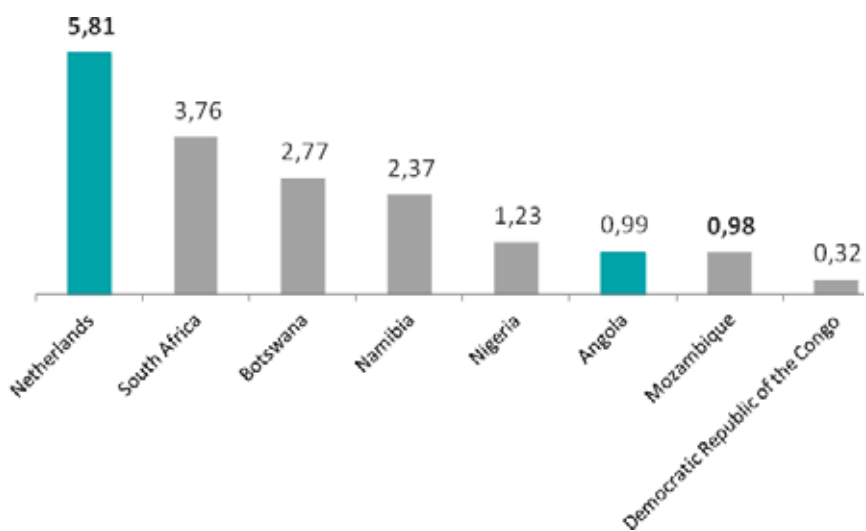
In Figure 21, it's visible the difference between Angola and other countries in the number of animals per capita. Compared to other countries like Mozambique or South Africa, Angola shows some good results on the number of live animals per capita. But the neighbour, Namibia and Botswana are more developed in terms of Cattle, Goat and Sheep production.



Source: FAOStat

**Figure 21 – Live Cattle, Goat, Sheep and Pigs per capita, 2011**

Regarding the number of live chickens per capita, Angola is still behind other countries, even being the most consumed type of meat in the country.



Source: FAOStat

**Figure 22 - Live chickens per capita, 2011**

The number of animals slaughtered had an annual increase that was bigger than the increase in the livestock population. While the demand keeps growing at a high rate, the livestock population is not growing at the same pace.

**Table 13 - Number of animals slaughtered in Angola**

	2008	2009	2010	2011	CAGR (2008-2011)	CAGR Livestock Population (2008-2011)
<b>Cattle</b>	35.859	42.131	53.307	63.249	20,82%	2,23%
<b>Goat</b>	16.007	16.281	21.325	24.099	14,61%	2,75%
<b>Sheep</b>	2.133	2.322	2.574	3.342	16,15%	2,75%
<b>Pigs</b>	18.127	19.651	25.550	27.635	15,09%	11,20%
<b>Chickens</b>	5.932.646	7.583.004	7.373.233	9.946.912	18,80%	18,92%

Source: CountrySTAT

### Livestock production

About 80% of the national production is done by familiar agriculture, existing more than 2 million small family farms<sup>44</sup>.

### Meat production targets set by the Ministry of Agriculture

The Ministry of Agriculture pretends to decrease the deficit on beef, chicken and pork meat, but until 2015 the deficit still maintains high due to the small difference between the production increase and consumption. As the population grows and the living conditions improve (middle class growth), demand for meat will increase making difficult to meet government objectives.

**Table 14 – Meat (beef, chicken, pork) production targets set by the Ministry of Agriculture, 2011-2015**

<b>Beef</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Per capita consumption (Kg)</b>	4	4	4	4	4
<b>Projected consumption (Tons)</b>	67.600	68.480	69.371	70.275	71.189
<b>National production (Tons)</b>	50.329	51.537	52.774	54.040	55.337
<b>Deficit (Tons)</b>	17.271	16.943	16.598	16.234	15.852

<b>Chicken</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Per capita consumption (Kg)</b>	14	14	14	14	14
<b>Projected consumption (Tons)</b>	236.600	239.680	242.800	245.961	249.163
<b>National production (Tons)</b>	10.322	13.188	17.184	22.390	19.173
<b>Deficit (Tons)</b>	226.278	226.492	225.616	223.571	219.990

<sup>44</sup> CPLP (2009) Agricultura Familiar e Segurança Alimentar e Nutricional na CPLP, and confirmed by the Ministry of Agriculture officials

Pork	2011	2012	2013	2014	2015
Per capita consumption (Kg)	9,5	9,5	9,5	9,5	9,5
Projected consumption (Tons)	160.381	162.469	164.584	166.726	168.897
National production (Tons)	70.200	72.816	77.101	81.717	86.693
Deficit (Tons)	90.181	89.652	87.483	85.009	82.203

Accordingly to the evolution of consumer price index, since 2010 dairy products price have been growing substantially every year. Yogurt and butter grew above 15% annually, while condensed milk grew about 10% annually. Fresh milk and powdered milk grew 7,26% e 8,68% respectively.

**Table 15 - Consumer price index: dairy products, 2010-2012**

	2010	2011	2012	CAGR (2010-2012)
Yogurt	100,00	110,58	136,36	16,77%
Condensed Milk	100,00	108,64	121,08	10,04%
Powdered Milk	100,00	107,52	118,11	8,68%
Fresh Milk	100,00	104,27	115,04	7,26%
Butter	100,00	116,94	140,06	18,35%

Source: CountrySTAT

## Value chain

### Inputs and infrastructures

Despite apparent potential measured by low per capita consumption levels in Angola, raising live animals it's an expensive activity due to feed costs (1 USD per Kg of compound feed) and the dependency on generators to keep electricity available. These costs of context are especially relevant for intensive regimes, as practiced in dairy industry and chicken processing. The supply of fresh and potable water is also relevant, particularly for dairy cows.

There are some companies, such as BrasAfrica that can provide live animals, imported mainly from Brasil and Argentina. Some small scale farmers can do the same with the following prices: 150 USD for goat under 40 Kg, 2.000 USD for cattle above 300 Kg and 3 USD for small chicken with 1 day.

Another input that should be considered is animal medication. The cost of antibiotics is about 2.500 AKZ (25 USD) per 100 ml. An anti-parasite such as Ivomec f 1% is 12.000 AKZ (12 USD) per 50 ml. Novomectin, another anti-parasite but not injectable, is 40.000 AKZ (40 USD) per 2,5 liters<sup>45</sup>.

### Production

In the extensive regime of breeding cattle, pigs or poultry, the animals move at will on available land, eating and drinking what is accessible. This method is common between small scale producers that are not focused on the improvement of their productive systems, but nevertheless represent the majority of national production. This type of farmers still struggle with management and technical requirements to increase their production, for example in Ambaca, a municipality of Kwanza North province, only 15 farms in a total of 150 farms are active.

The intensive regime is common among commercial oriented producers that do care about productivity and were forced to integrate along the value chain to secure inputs and distribution.

### Slaughter & Processing

Currently there are some new investments in abattoir development, such as Matadouro Industrial do Planalto de Camabatela in Kwanza North province, with capacity to process 120 animals per day, but consumers are used to select live animals in the informal market that are slough and processed there. Therefore most abattoirs are used by distributors and importers of live animals that do business with supermarkets.

<sup>45</sup> Based on HuilaVet quotations provided on 12/09/2013



## Retailing<sup>46</sup>

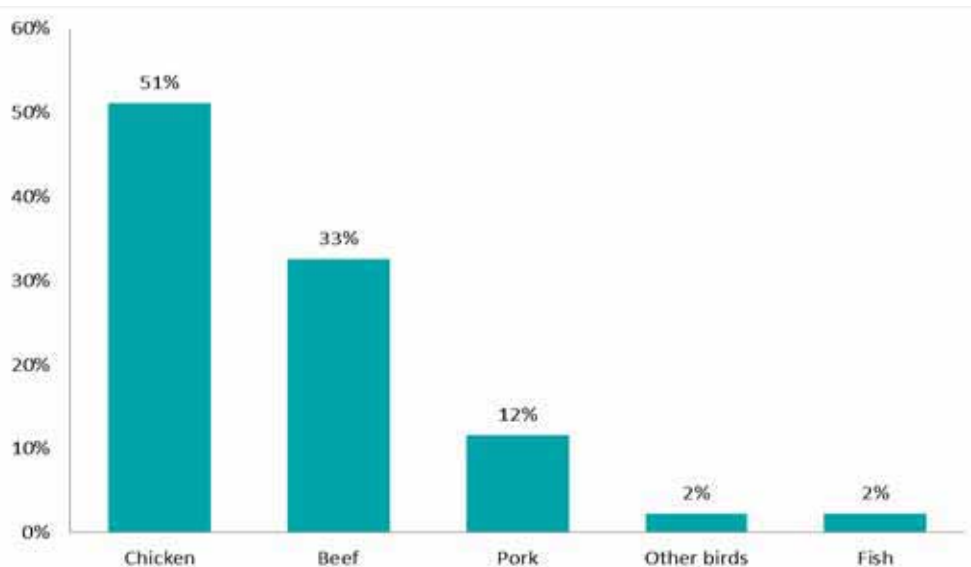
Although informal trade, the selling of products in small and convenient formats or in the street, remains the norm for 80% of retail sales, there has been strong growth in the development of formal retail players, namely the following:

- a) MAXI, which is the distribution brand of Teixeira Duarte group in Angola, has 11 stores (August of 2013). MAXI loyalty card has more than 100.000 members.
- b) KERO which is locally owned by the Zahara Group and it's focused on various retail categories such as food and non-food items, furnishing, textile products and electronic goods. KERO has three store formats, hypermarket, supermarket and convenience, and employs more than 1.500 workers. The management team chooses to win customers by a combination of everyday low prices, large choice of products (more than 20.000 SKUs<sup>47</sup> in hypermarkets), and regular supply chain to avoid out-of-stock items. Moreover, KERO wants to be a superior shopping experience provided by employee training and store format.
- c) Nosso Super is a nationwide chain of 30 supermarkets. This distribution brand was promoted by the PRESILD public program ("*Programa de Reestruturação do Sistema de Logística e de Distribuição de Produtos Essenciais à População*"). Despite the objective of this initiative, that was to improve consumer's access to critical products and facilitate small scale farmer's distribution, the chain was inactive until 2011. Recently, the ministry of commerce negotiated a 10 year agreement with NRSA ("*Nova Rede de Supermercados de Angola*") to invest US\$ 50 million for the fully recovery of supermarket operations, including Poupa Lá, a smaller neighbour chain located on heavily populated areas.
- e) Casa dos Frescos, is premium retail brand with 6 stores. This supermarket is focused on high quality, imported products especially food and beverage categories. Portuguese brands dominate shelf space. Each store has on average 1.000 sq. meters and it's supplied twice per week.
- h) Sonae – Continente.

It's the top retail player in Portugal by market share and has a joint venture agreement signed with Condis, a local retail player, to entry Angolan market. Sonae should open its first supermarket store in 2015.

## Consumers

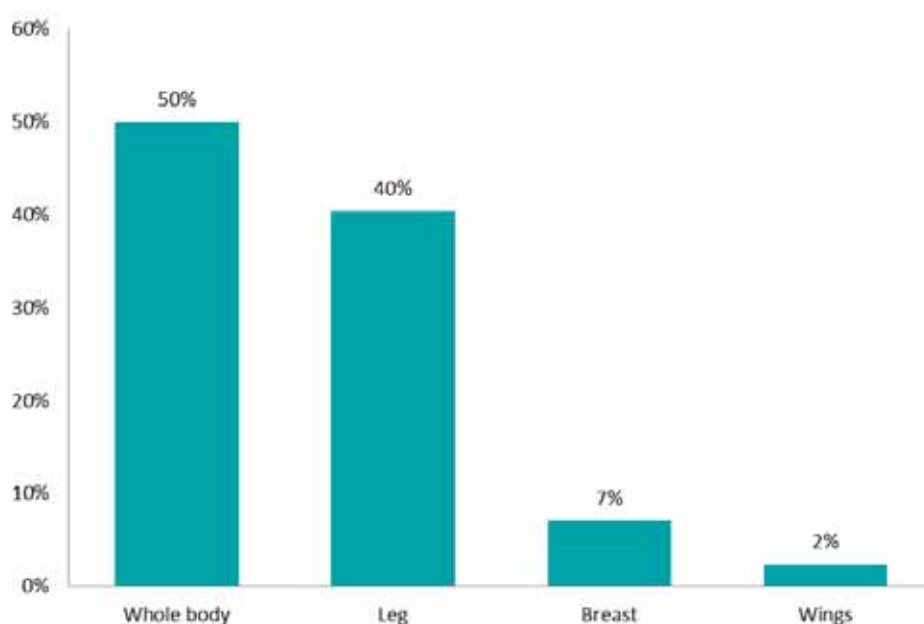
Based on our survey, when Angolans choose to buy meat, their first choice is chicken (51%) followed by beef cattle (33%). Only a minority of consumers favors pig meat and other preferences are residual.



**Figure 23 – Percentage of consumers by their meat preference**

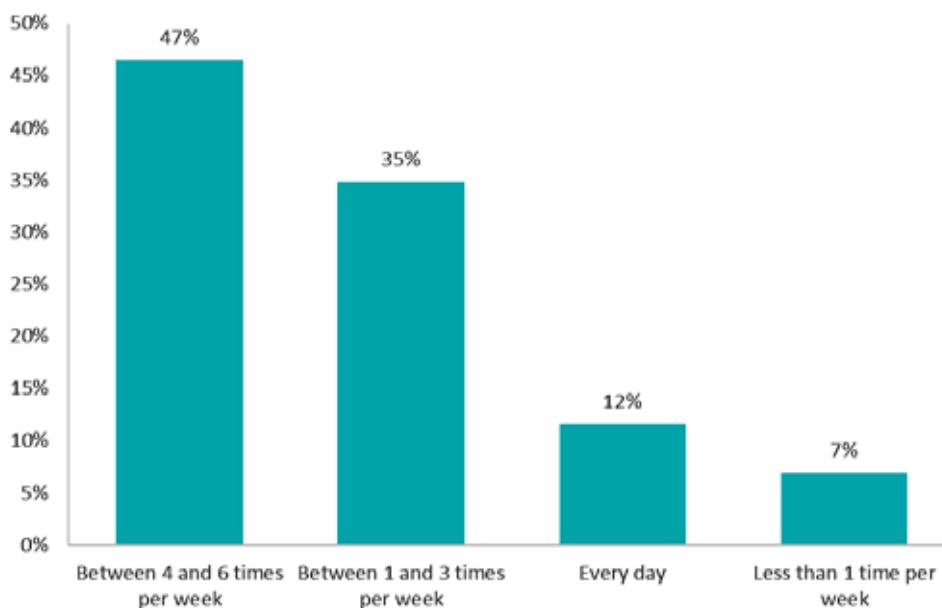
<sup>46</sup> Angola Private Sector Country Profile, 2012, African Development Bank

The majority of survey respondents declared to buy meat in formal retail (74%), however we know that sample do not reveal national behavior. Even though, one in every two buyers chooses to purchase the entire chicken instead of only legs, breast or wings.



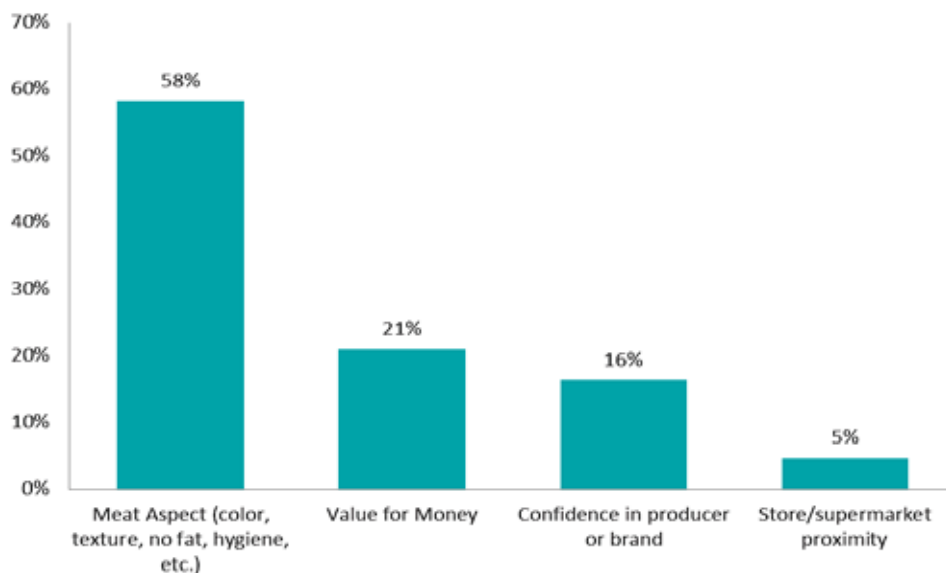
**Figure 24 – Percentage of consumers by chicken part preference**

Angolans are used to eat meat almost every day, 47% declared to consume it between 4 and 6 times per week. Our survey results indicate a strong preference to buy meat and dairy products on a weekly basis.



**Figure 25 – Percentage of consumers by meat eating frequency**

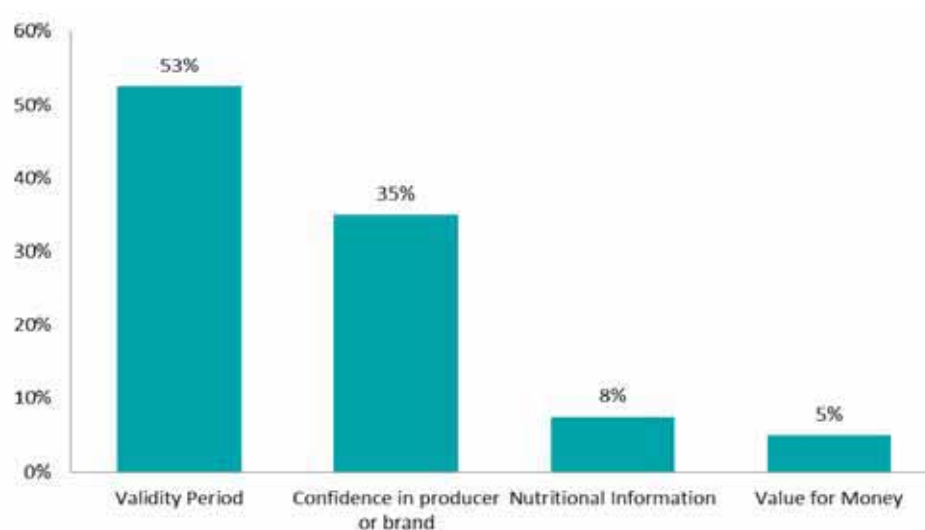
Concerning meat choice factors, Angolans seem to favor observable characteristics (58% say it's the most important reason to choose a product), such as color and texture. Only 21% declare to use quality-price relationship, or value for money, as the most important factor to choose a specific brand or product, which seems too price insensitive.



**Figure 26 – Percentage of consumers by most important factor when buying meat**

The majority of respondents declare to consume dairy products every day (60%), but there is a group of people (17%) that rarely buy these items, which could be explained by lactose intolerance, a common condition among African countries.

Regarding the choice factors that influence dairy product selection, the most important factor is the validity period.



**Figure 27 – Percentage of consumers by most important factor when buying dairy products**

This consumer tendency may harm international brands because their products spend more time outside the supermarket and when they arrive at shelf space part of the validity period is lost. On the other side, Angolans seem to value the brand or the producer much more than in the other food category such as meat. This brand awareness may benefit a new entrant with capacity to deliver dairy products to supermarkets efficiently.

### **Public Authorities and Animal Health**

The main diseases affecting the livestock sector in Angola, as a result of a personal meeting with the General Director of the Veterinary Services of the Ministry of Agriculture, Dr. José António, are as follows:

1. Contagious bovine pleuropneumonia. Fighting this disease is a shared responsibility between the government of Angola and farmers. The disease is prevented by the vaccination of cattle, which is an annual and mandatory activity. The creator of the business sector should bear the cost of the vaccine acquiring it through the veterinary services of this ministry, which are available in all provinces of Angola. The government program for animal health presents the combat to this disease that includes free vaccination for family cattle breeders, with no commercial purposes. This vaccine is not available in commercial retail stores but only in veterinary services.
2. Pest of the small ruminants, which is a disease that affects the areas bordering the Democratic Republic of Congo. The vaccination of animals is mandatory in the regions affected by the disease and the vaccine is available exclusively in the veterinary services of the Ministry of Agriculture.
3. African swine fever, a disease for which there is still no vaccine available.
4. Dermatophilosis in cattle and small ruminants.
5. Newcastle disease that primarily affects poultry under family production and there a vaccine available.
6. There are no recorded cases of foot-and-mouth disease (FMD), although the authorities have some fear with regards to the regions bordering Namibia, due to the commercial practice among small breeders.

The veterinary services of the Ministry of Agriculture are responsible for receiving the project investment for the cattle farm or poultry producing unit and carry out a preliminary examination of the premises prior to the issuance of the operating license.

## D. Current state of the Livestock sector in Angola

### D.1 Importance of the Livestock sector

Based on consumption projections from public authorities and current live animals in Angola, our study is dedicated to poultry, pigs, cattle, goat and sheep, and dairy products.

### D.2 Sub-sector analysis

#### D.2.1 Poultry Sub-Sector

##### D.2.1.1 Stakeholder analysis

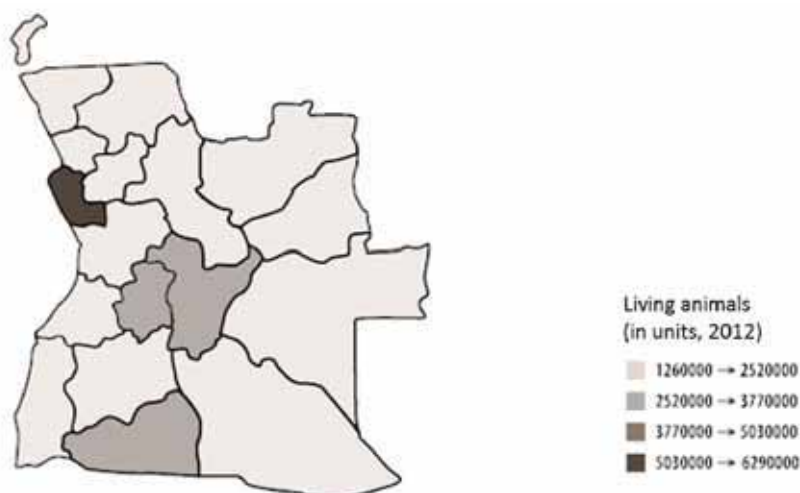


Figure 28 – Poultry birds units per province

Although poultry sub-sector includes different types of birds, such as turkey, duck, pigeons and others, chicken is by far the most consumed type in Angola. Therefore, the analysis of this sub-sector was narrowed to focus on chicken.

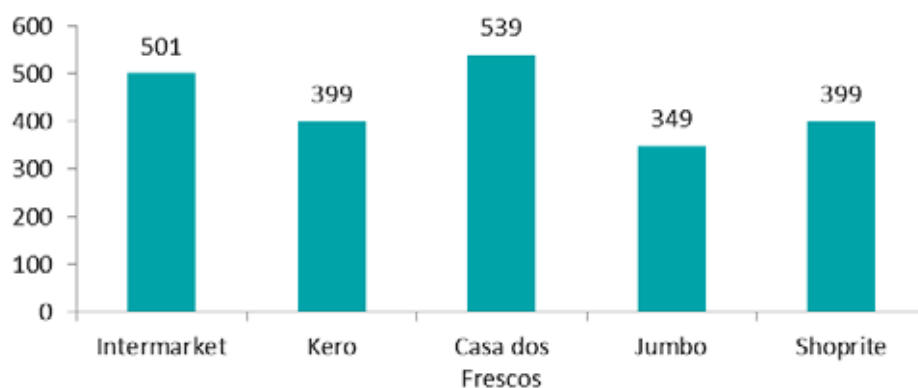
The largest national breeder is Aldeia Nova, a public-private partnership between Vital Capital Fund from Mittreli Group (an Israeli based company) and a consortium of state owned companies such as, Gesterra (responsible for the management of agriculture projects), Instituto de Desenvolvimento Agrário and Instituto do Sector Empresarial Público. This company, which is located in Waku Kungo in the Kwanza-Sul province, employs 290 direct workers and buys eggs from 524 families that live within the complex, and are responsible for the chicken breed and egg collection. This arrangement is part of a written contract between Aldeia Nova and the farmers and is providing each family 700 to 1.000 USD per month, after costs that may include credit payments<sup>48</sup>. Aldeia Nova guarantees to buy all eggs that are produced, to supply technical and or veterinary support, to provide land, equipment and other inputs, such as feed and remedies.

The company is currently producing 120.000 eggs per day, but has capacity to produce 241.920 eggs per day, accordingly to records shared by the Ministry of Agriculture. The average chicken productivity is around 90% (9 chickens in 10 lay an egg per day), which is a good ratio compared with international farms.

##### D.2.1.2 Demand and Supply analysis

Demand for this type of meat is divided in two: frozen chicken and farm-raised chicken. Most buyers, especially people from 30 to 50 years old, prefer to eat rural chicken breed in small farms. But, this may change because of two factors: i) the increasing urbanization trend in major cities, especially in Luanda, will make it difficult to buy, keep and slaughter live animals for domestic consumption, and ii) young people will entry the workforce, improve their buying power, and move from their parent's house. For them, buying frozen meat in a supermarket is a lifestyle habit linked to modern life. Also, the affordability of frozen chicken, as shown on figure x, will promote this change.

<sup>48</sup> Exame Angola, nº 38, 08-06-2013



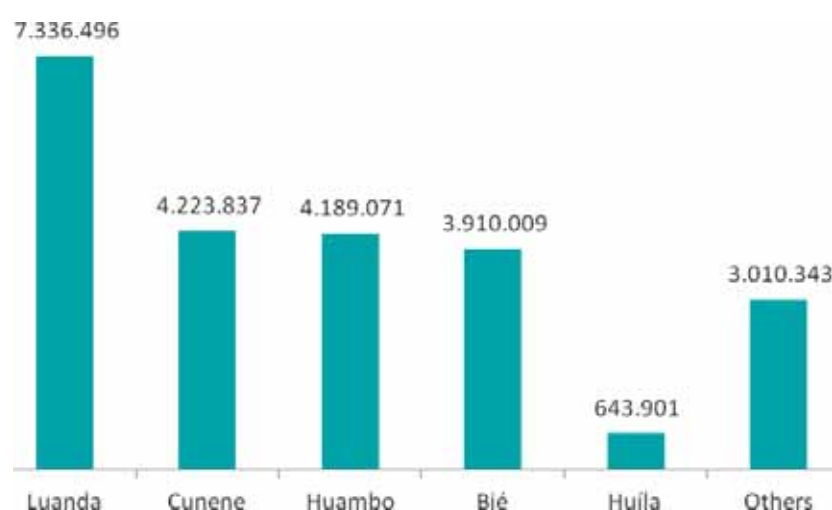
**Figure 29 – Frozen chicken price in AKZ per Kg, September 2013**

Since the breeding of chicken does not require too much space and their consumption is associated with urban areas, most of the live animals are concentrated in Luanda region. Another important factor is that eggs are difficult to transport without damage, particularly in roads poorly maintained that are common in Angola, and are highly sensible to heat temperatures.

**Table 15 - Living poultry animals per province, 2008-2012**

	2008	2009	2010	2011	2012	Units per capita, 2010	Per Sq. Km
Bengo	147.961	177.625	213.235	248.845	290.402	0,74	6,46
Benguela	7.570	9.088	34.515	40.279	47.006	0,03	1,09
Bié	23.950	28.751	2.871.019	3.350.479	3.910.009	1,48	40,83
Cabinda	35.277	42.350	50.840	59.330	69.238	0,17	6,99
Cunene	171.896	206.357	3.101.455	3.619.398	4.223.837	8,01	35,51
Huambo	265.549	318.787	3.075.927	3.589.607	4.189.071	1,17	89,76
Huila	2.134.352	2.562.247	472.800	551.758	643.901	0,33	6,30
Kuando Kubango	242.861	291.550	350.000	408.450	476.661	1,66	1,76
Kuanza Norte	44.874	53.871	64.671	75.471	88.075	0,10	2,68
Kuanza Sul	23.724	28.480	382.697	446.607	521.191	0,35	6,88
Luanda	3.737.980	4.487.371	5.387.000	6.286.629	7.336.496	1,75	2.386,80
Lunda Sul	163.064	195.755	10.910	12.732	14.858	0,04	0,14
Lunda Norte	328.071	393.842	34.190	39.900	46.563	0,07	0,33
Malange	224.344	269.321	323.314	377.307	440.318	0,21	3,31
Moxico	2.152.066	2.583.512	247.728	289.099	337.378	0,45	1,11
Namibe	1.992.169	2.391.559	235.000	274.245	320.044	1,00	4,04
Uíge	134.274	161.194	193.510	225.826	263.539	0,13	3,30
Zaire	48.438	58.149	69.807	81.465	95.069	43,01	1,74
<b>Total</b>	<b>11.878.420</b>	<b>14.259.809</b>	<b>17.118.618</b>	<b>19.977.427</b>	<b>23.313.658</b>	<b>0,95</b>	<b>13,39</b>

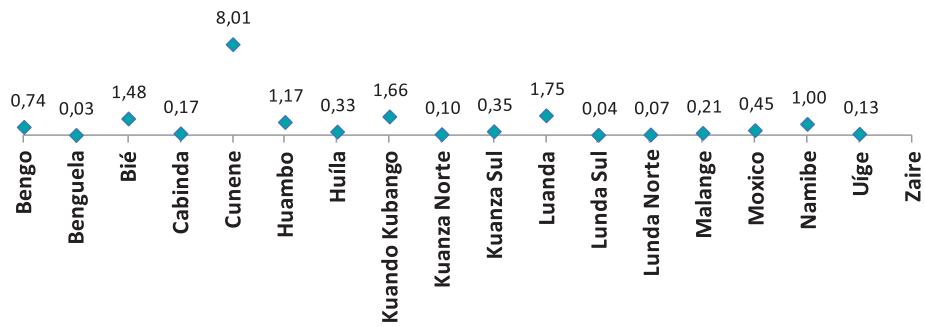
Source: CountryStat FAO and LCG analysis



Source: CountryStat FAO and LCG analysis

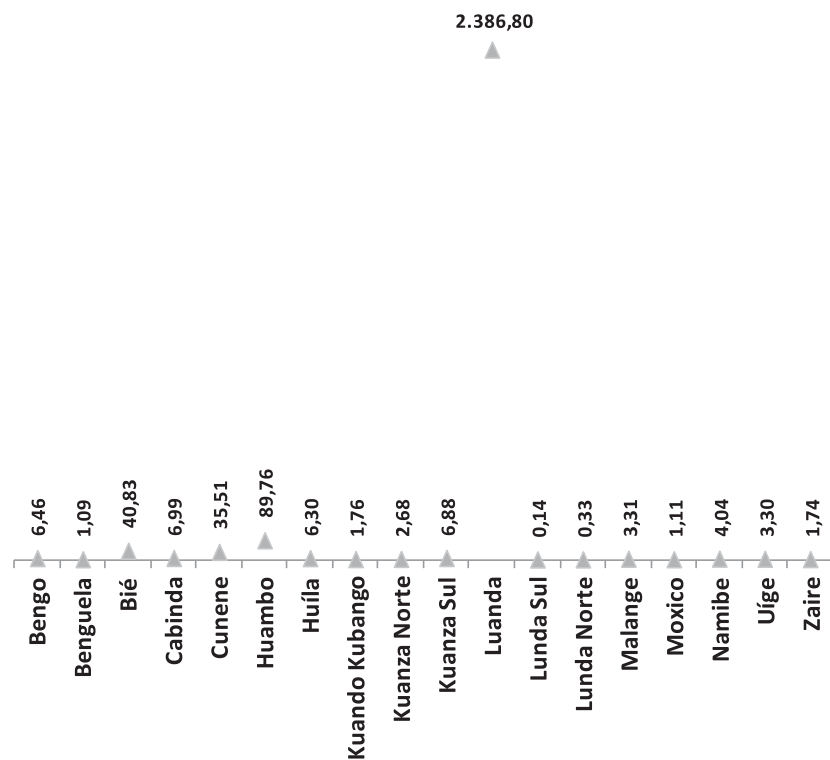
**Figure 30 – Top 5 provinces for poultry living animals, 2012**





Source: CountryStat FAO and LCG analysis

**Figure 31 – Per capita density of poultry living animals per province, 2010**



Source: CountryStat FAO and LCG analysis

**Figure 32 – Provinces with the highest ratio of poultry living animals per square kilometer**

Usually live chickens are bought with one day, at the cost of 3 USD each, and at the end of six months, they begin the laying phase. During this period, each chicken consumes 2,5 Kg of feed per month.

After that initial period, the chicken ingests 4,5Kg of feed per month. The price of national feed for chicken is 40 USD per bag of 40 Kg<sup>49</sup>.

The price of eggs in informal market or distributors is almost the same, 30 AKZ per egg. Therefore, each chicken creates potential revenue of 810 AKZ or 8 USD, per month.

One or two workers are enough to feed and collect eggs from 1.200 chickens. Each worker will cost 200 USD per month on average, in rural areas. In Luanda region, this cost may be 20% to 30% higher.

### D.2.1.3 Challenges and Opportunities

Infrastructure setup is costly in Angola. For example, the construction of a facility to breed 1.200 chickens will cost about 60.000 USD, plus the installation of cages will cost 80.000 USD.

Energy and water supply are also critical challenges that undermine profitability of investments. Aldeia Nova run its operation based on electricity generators that use 120.000 liters of diesel per month, which cost almost 50.000 USD, based on 40 AKZ per liter. Although price of diesel is highly subsidized by Angolan government (during 2012 the subvention was 4.000 Million USD) there is some pressure from Sonangol to change this policy because it's decreasing their revenue potential.

Another issue to chicken farmers is the feeding cost. The main portion goes to corn and soybean, commodities that are scarcely available in Angola, due to low levels of national production and therefore are imported.

## D.2.2 Pork Sub-Sector

### D.2.2.1 Stakeholder analysis

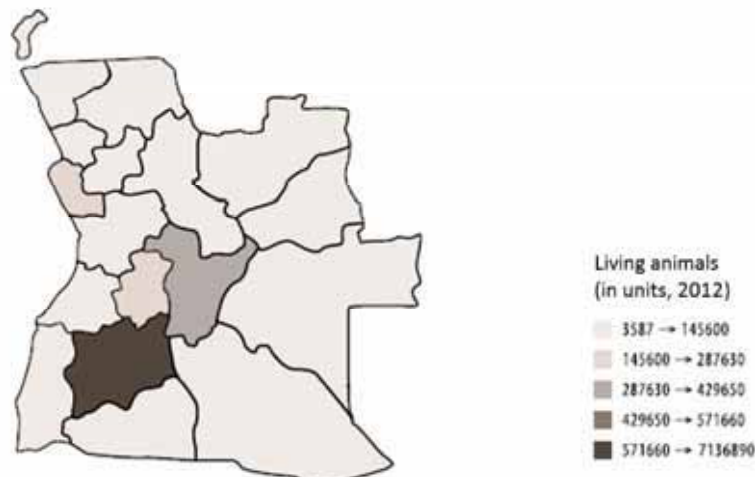


Figure 33 – Pigs per province<sup>50</sup>

The breeding of pigs in Angola is dominated by rudimentary production systems and are mainly for domestic and family consumption. There is a center of production and reproduction located on the outside of Huambo city, that accordingly to province government official Mr. Joaquim António, will have capacity to produce 600 female pigs. This unit will focus on the breeding of pigs and small scale farmers will manage their feed and slaughter.

For commercial purposes, pigs are raised in the intensive regime, grouped in straw-lined sheds. Pregnant sows (female pigs) are kept in gestation crates during 3 to 4 months.

<sup>49</sup> Based on HuilaVet quotation, 14-09-2013

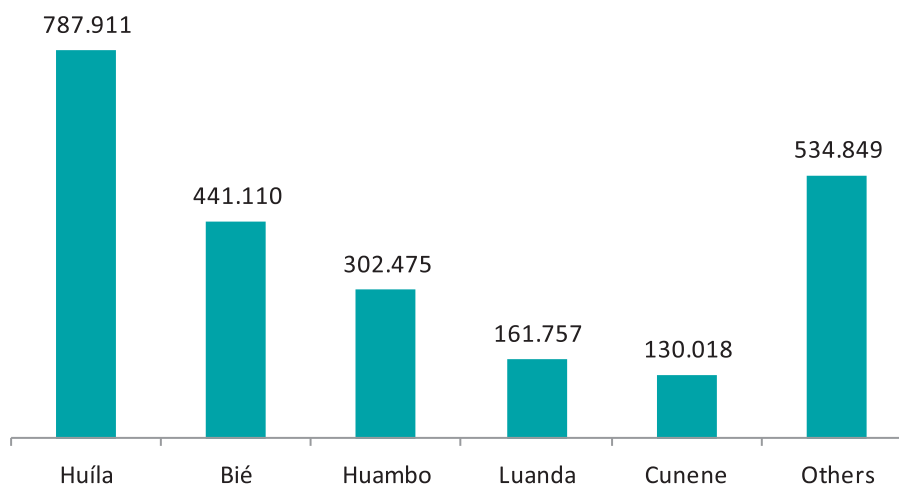
<sup>50</sup> Resultados da campanha agrícola 2011-2012, Ministério da Agricultura

### D.2.2.2 Demand and Supply analysis

**Table 16 - Pork living animals per province, 2008-2012**

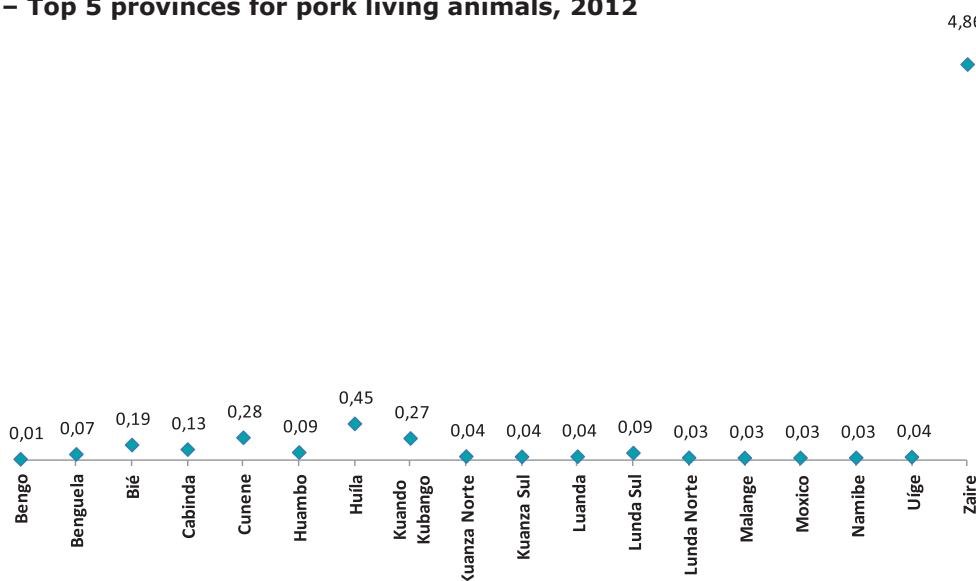
	2008	2009	2010	2011	2012 Units per capita, 2010	Per Sq. Km
Bengo	2.608	2.911	3.249	3.587	3.960	0,01
Benguela	17.669	19.720	78.247	86.384	95.368	0,07
Bié	62.818	70.109	361.916	399.556	441.110	0,19
Cabinda	31.656	35.330	39.431	43.531	48.059	0,13
Cunene	11.990	13.381	106.676	117.770	130.018	0,28
Huambo	35.498	39.619	248.171	273.981	302.475	0,09
Huíla	199.236	222.361	646.456	713.688	787.911	0,45
Kuando Kubango	45.219	50.467	56.325	62.183	68.650	0,27
Kuanza Norte	24.053	26.845	29.961	33.077	36.517	0,04
Kuanza Sul	11.412	12.737	44.217	48.816	53.893	0,04
Luanda	106.547	118.914	132.717	146.519	161.757	0,04
Lunda Sul	5.310	5.926	22.009	24.297	26.824	0,09
Lunda Norte	518.985	579.225	14.215	15.694	17.326	0,03
Malange	33.104	36.946	41.235	45.523	50.258	0,03
Moxico	85.641	95.582	14.935	16.488	18.203	0,03
Namibe	290.552	324.277	6.614	7.302	8.061	0,03
Uíge	45.229	50.479	56.338	62.197	68.666	0,04
Zaire	25.732	28.719	32.052	35.386	39.066	4,86
<b>Total</b>	<b>1.553.259</b>	<b>1.733.548</b>	<b>1.934.764</b>	<b>2.135.979</b>	<b>2.358.121</b>	<b>0,11</b>

Source: CountryStat FAO and LCG analysis



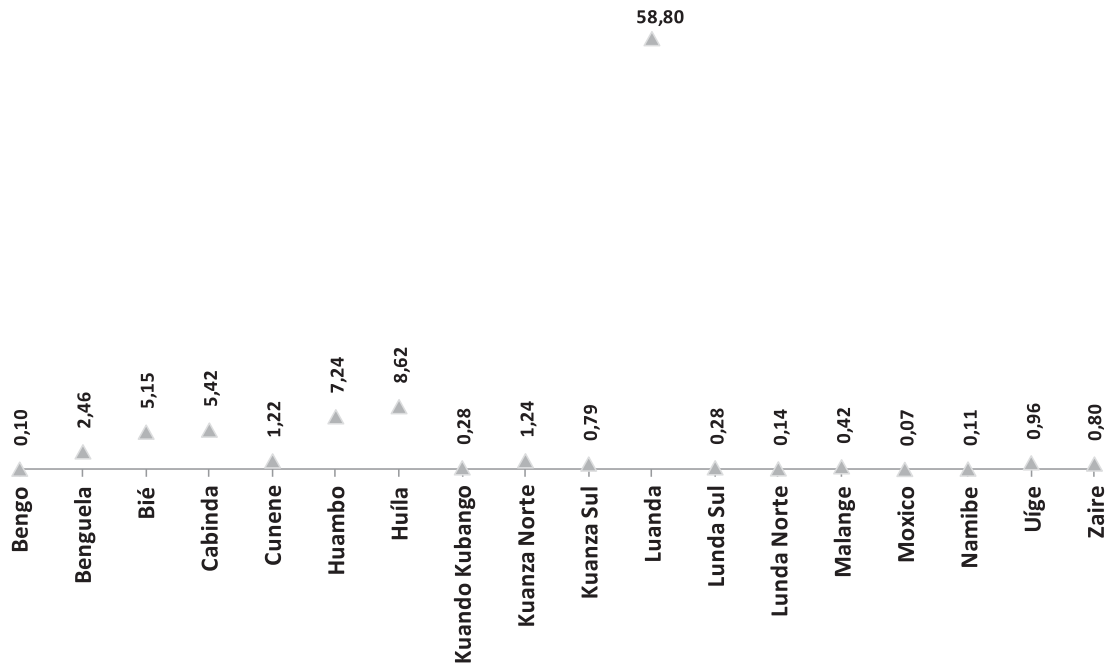
Source: CountryStat FAO and LCG analysis

**Figure 34 – Top 5 provinces for pork living animals, 2012**



Source: CountryStat FAO and LCG analysis

**Figure 35 – Per capita density of pork living animals per province, 2010**

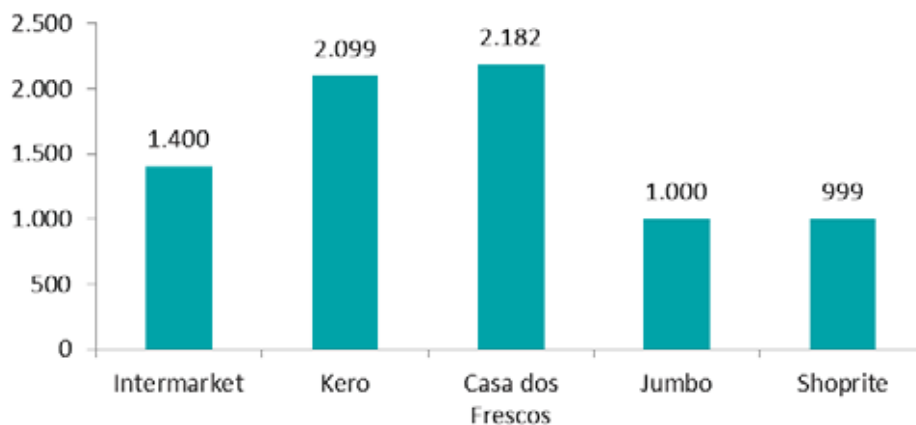


Source: CountryStat FAO and LCG analysis

**Figure 36 – Provinces with the highest ratio of pork living animals per square kilometer**

#### D.2.2.3 Challenges and Opportunities

As mentioned in the poultry sub-sector, the management of livestock in intensive regime requires technical know-how that are not locally available, equipment that is costly to acquire or to maintain and lastly, the use of inputs namely imported feed that cost up to 40 USD per bag of 50 Kg.

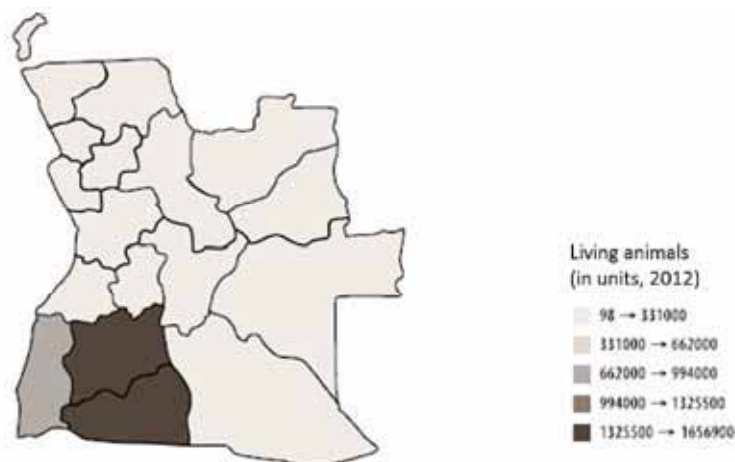


**Figure 37 – Pork (fresh meat) prices AKZ/Kg, September 2013**

#### D.2.3 Cattle Sub-Sector

##### D.2.3.1 Stakeholder analysis

Cattle breeding are highly concentrated in Huíla and Cunene province, where 69% of living animals are located.



**Figure 38 – Cattle per province<sup>51</sup>**

Cooperativa dos Criadores de Gado do Sul (CCGS) is located in Lubango, province of Huíla. This organization, which groups farmers from Huíla, Cunene, Namibe, Kuando Kubango, Benguela and Kwanza Sul, has 55 members that manage 25.000 live animals within 260.000 ha.

Based on the assessment share by the association's vice president, eng. Álvaro Fernandes, about half of its members are fully prepared and technically equipped to raise cattle. The majority of farmers in the cooperative create cattle in an extensive regime, where one animal has 10 ha available, with natural grass. Nevertheless, in this south region, annual precipitation is between 500 and 800 mm, so cattle need to eat additional feed, especially in dry season from May to September. This extra feed cost about 40 USD per bag of 50 Kg bag.

#### D.2.3.2 Demand and Supply analysis

Currently, about 95% of live animals were genetically improved, a practice the cooperative promoted because it creates the opportunity to develop a brand, which create awareness around the quality of meat. In the long term, this will improve selling prices, and consequently, benefit farmers from this region. Farmers buy their live animals, usually with 24 months and 400 Kg to 600 Kg, for female and male animals respectively.

Most of small-hold farmers raise beef cattle not as a commercial purpose, but more on social reasons, as a symbol of status and wealth. They will sell or trade live animals, if and when they need the money, or before a big event such as a family marriage or Christmas.

Male animals cost between 2.000 USD to 3.000 USD and female animals cost between 1.500 to 2.000 USD, transport to the farm is included in the price, except for a distance above 300 km.

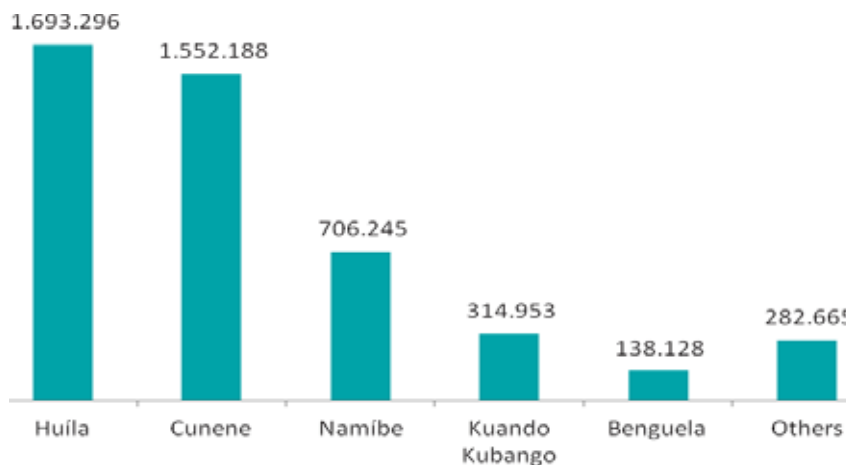
Usually in the farms that belong to CCGS, one worker is enough to manage 50 live animals. Each worker should cost between 150 USD and 250 USD.

**Table 17 - Cattle living animals per province, 2008-2012**

	2008	2009	2010	2011	2012	Units per capita, 2010	Per Sq. Km
Bengo	14.947	15.283	15.627	15.971	16.322	0,05	0,47
Benguela	2.487	2.543	132.245	135.154	138.128	0,12	4,16
Bié	126.490	129.336	56.741	57.990	59.265	0,03	0,81
Cabinda	3.582	3.663	3.745	3.827	3.912	0,01	0,52
Cunene	40.058	40.959	1.486.081	1.518.775	1.552.188	3,84	17,01
Huambo	8.982	9.184	94.569	96.649	98.776	0,04	2,76
Huíla	90.454	92.488	1.621.179	1.656.845	1.693.296	1,12	21,62
Kuando Kubango	288.418	294.905	301.539	308.173	314.953	1,43	1,51
Kuanza Norte	8.982	9.184	9.391	9.597	9.808	0,01	0,39
Kuanza Sul	4.538	4.640	9.391	9.597	9.808	0,01	0,17
Luanda	20.934	21.404	21.886	22.367	22.859	0,01	9,70
Lunda Sul	646.743	661.291	2.601	2.658	2.716	0,01	0,03
Lunda Norte	1.550.632	1.585.513	4.745	4.849	4.956	0,01	0,05
Malange	6.500	6.646	6.795	6.945	7.098	0,00	0,07
Moxico	1.421.413	1.453.387	41.880	42.802	43.743	0,08	0,19
Namibe	54.272	55.493	676.167	691.043	706.245	2,89	11,63
Uíge	3.022	3.090	3.160	3.229	3.301	0,00	0,05
Zaire	92	94	96	98	100	11,28	0,00
<b>Total</b>	<b>4.292.546</b>	<b>4.389.103</b>	<b>4.487.838</b>	<b>4.586.570</b>	<b>4.687.475</b>	<b>0,25</b>	<b>3,51</b>

Source: CountryStat FAO and LCG analysis

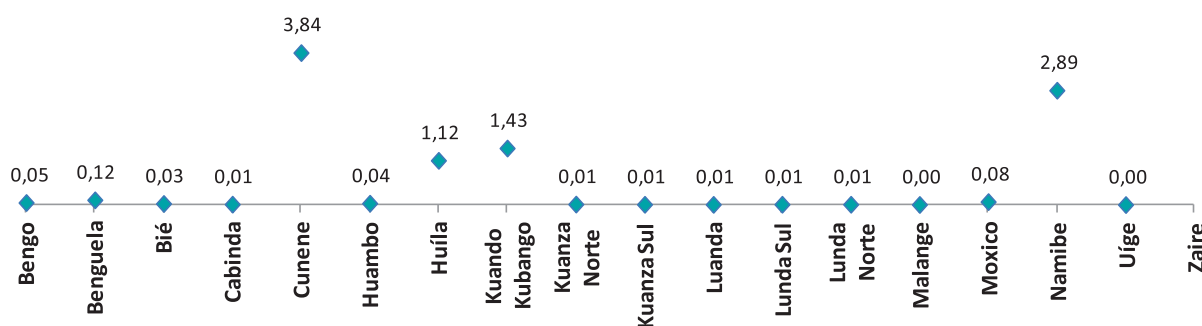
<sup>51</sup> Resultados da campanha agrícola 2011-2012, Ministério da Agricultura



Source: CountryStat FAO and LCG analysis

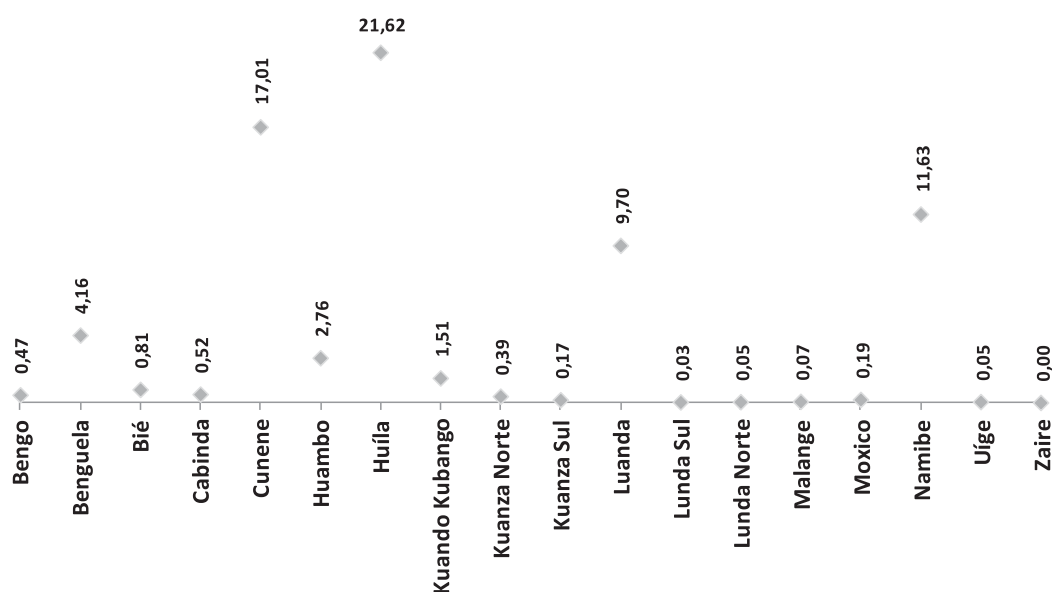
Figure 39 – Top 5 provinces for cattle living animals, 2012

11,28



Source: CountryStat FAO and LCG analysis

Figure 40 – Per capita density of cattle living animals per province, 2010



Source: CountryStat FAO and LCG analysis

Figure 41 – Provinces with the highest ratio of cattle living animals per square kilometer



### D.2.3.3 Challenges and Opportunities

Water supply is the most critical challenge because of its importance to cattle and natural pasture. Therefore, most small-hold farmers manage their cattle around river margins. In some areas of Namibe province it is possible to find water at 30 to 50 m deep, but in Huíla best regions have water in 300 m deep. Technical know-how and resources are scarce even within commercial oriented farmers. It's not common to find someone with agriculture training Luanda, among workers, managers or owners in this industry. The most talented people choose to work in the ministry of agriculture, or other public services, because livestock and agriculture private sector does not offer enough security.

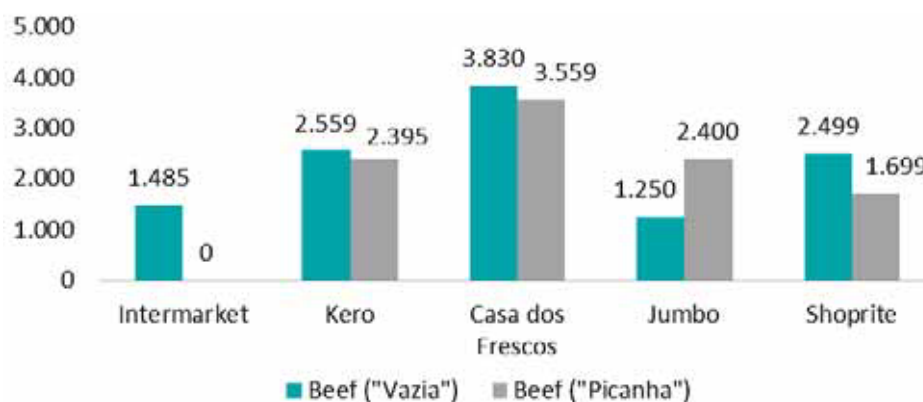


Figure 42 – Beef cattle price (fresh meat) AKZ/Kg, September 2013

### D.2.4 Goat and Sheep Sub-Sector

#### D.2.4.1 Stakeholder analysis

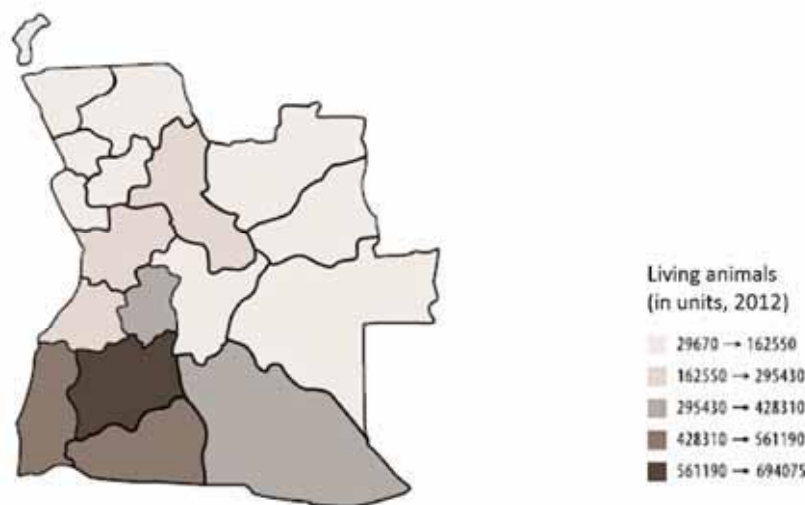


Figure 43 – Goats per province<sup>52</sup>

Based on our on-field assessment, goat is a highly appreciated type of meat in Angola, especially in the southern provinces of Huíla, Namibe and Cunene.

Due to its low cost, the price of a small goat with less than 60 Kg is about 150 USD at the farm or 180 USD in the informal market, this type of animal is preferred by Angolans.

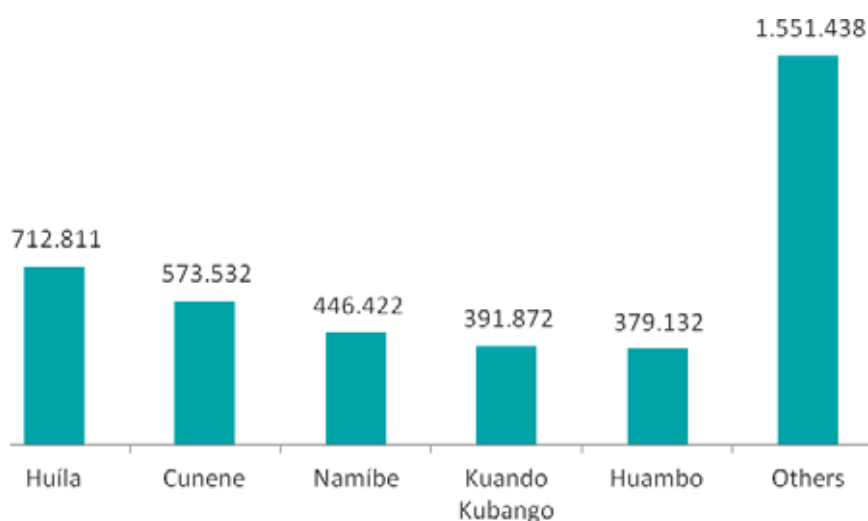
<sup>52</sup> Resultados da campanha agrícola 2011-2012, Ministério da Agricultura

## D.2.4.2 Demand and Supply analysis

**Table 18 - Goat living animals per province, 2008-2012**

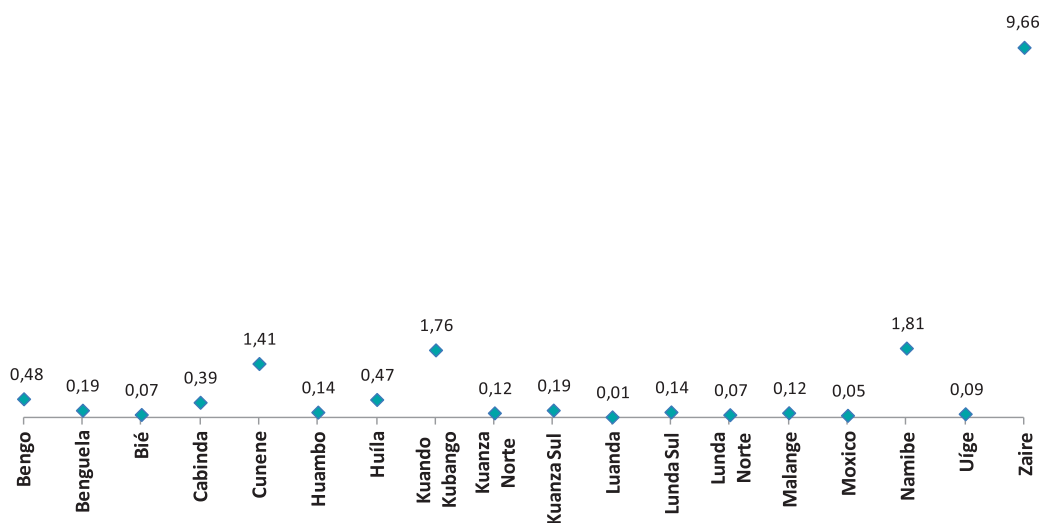
	2008	2009	2010	2011	2012	Units per capita, 2010	Per Sq. Km
Bengo	132.555	136.233	140.014	143.794	147.676	0,48	4,24
Benguela	33.533	34.464	203.075	208.558	214.189	0,19	6,39
Bié	192.257	197.592	144.529	148.431	152.439	0,07	2,06
Cabinda	112.377	115.495	118.700	121.905	125.196	0,39	16,33
Cunene	27.353	28.112	543.772	558.454	573.532	1,41	6,23
Huambo	193.219	198.580	359.459	369.165	379.132	0,14	10,49
Huíla	340.311	349.754	675.823	694.071	712.811	0,47	9,01
Kuando Kubango	351.746	361.507	371.538	381.570	391.872	1,76	1,87
Kuanza Norte	73.928	75.980	78.088	80.197	82.362	0,12	3,24
Kuanza Sul	31.644	32.522	204.091	209.601	215.260	0,19	3,67
Luanda	34.477	35.434	36.417	37.400	38.410	0,01	16,14
Lunda Sul	400.710	411.830	35.420	36.377	37.359	0,14	0,46
Lunda Norte	639.822	657.576	33.424	34.327	35.254	0,07	0,32
Malange	176.317	181.209	186.238	191.266	196.430	0,12	1,91
Moxico	514.805	529.090	28.892	29.672	30.474	0,05	0,13
Namibe	136.830	140.627	423.258	434.685	446.422	1,81	7,28
Uíge	131.955	135.616	139.380	143.143	147.008	0,09	2,37
Zaire	116.132	119.355	122.667	125.979	129.380	9,66	3,06
<b>Total</b>	<b>3.639.971</b>	<b>3.740.976</b>	<b>3.844.785</b>	<b>3.948.595</b>	<b>4.055.207</b>	<b>0,21</b>	<b>3,01</b>

Source: Countrystat FAO and LCG analysis



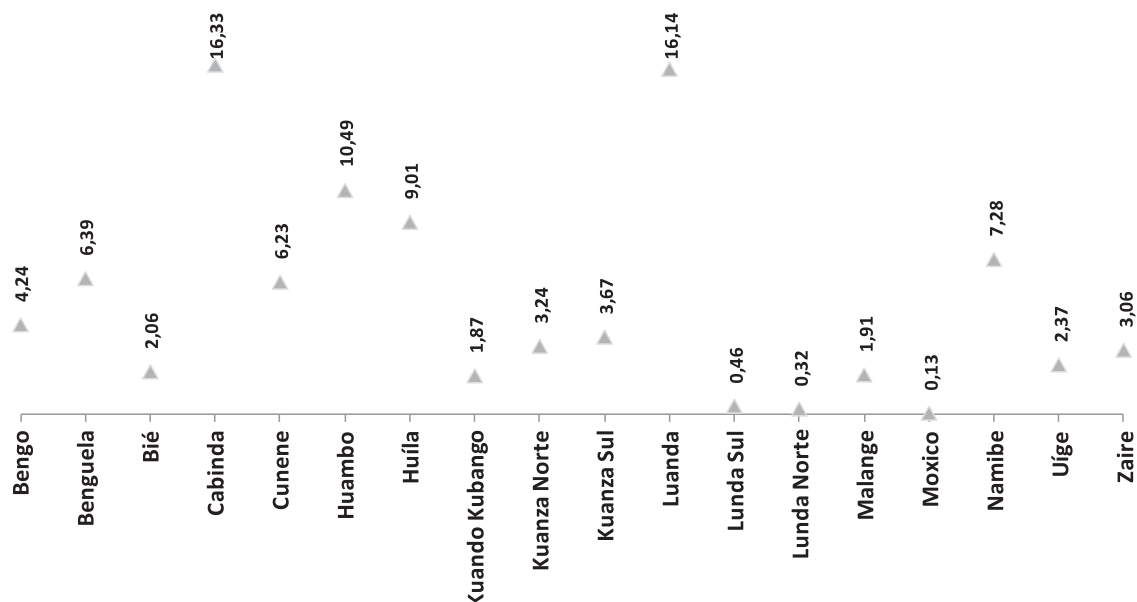
Source: CountrySTAT FAO and LCG analysis

**Figure 44 – Top 5 provinces for goat living animals, 2012**



Source: Countrystat FAO and LCG analysis

**Figure 45 – Per capita density of goat living animals per province, 2010**



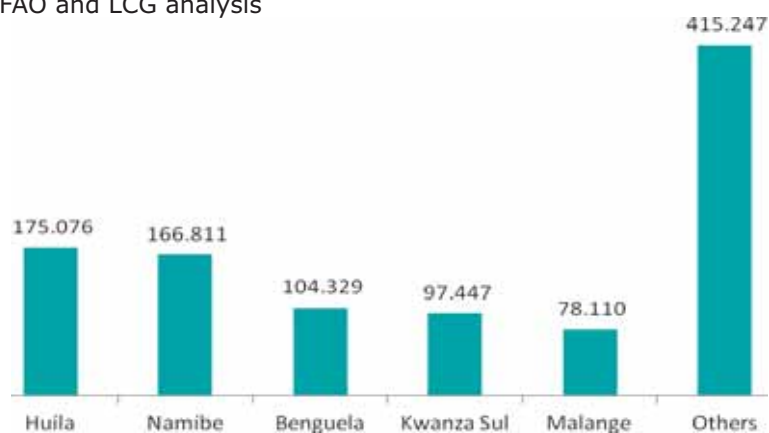
Source: Countrystat FAO and LCG analysis

**Figure 46 – Provinces with the highest ratio of goat living animals per square kilometer**

**Table 19 - Sheep living animals per province, 2008-2012**

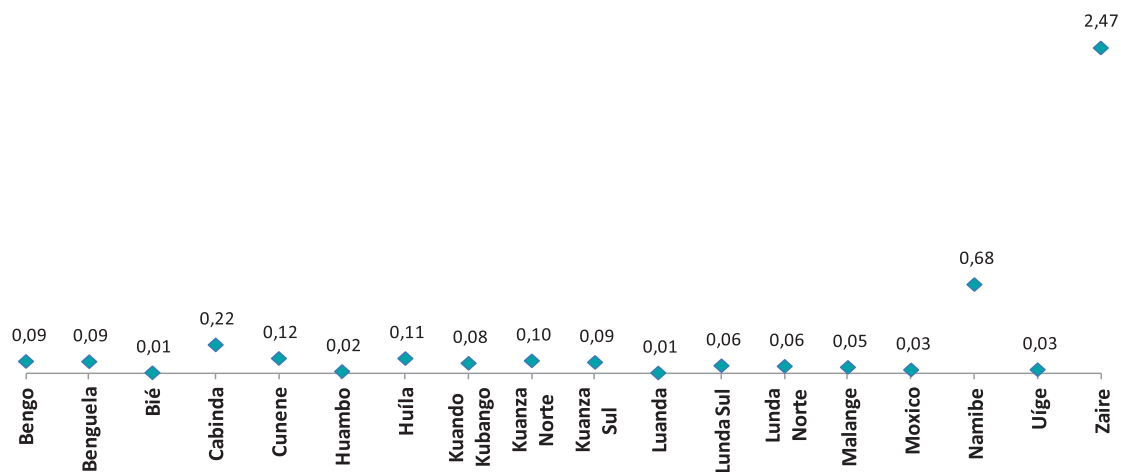
	2008	2009	2010	2011	2012	Units per capita, 2010	Per Sq. Km
Bengo	25.371	26.075	26.799	27.522	28.265	0,09	0,81
Benguela	14.229	14.623	98.915	101.586	104.329	0,09	3,11
Bié	93.646	96.245	13.068	13.421	13.784	0,01	0,19
Cabinda	62.324	64.053	65.830	67.608	69.433	0,22	9,06
Cunene	14.645	15.051	44.541	45.743	46.978	0,12	0,51
Huambo	87.469	89.896	41.993	43.127	44.291	0,02	1,23
Huíla	39.756	40.859	165.991	170.473	175.076	0,11	2,21
Kuando Kubango	15.686	16.121	16.569	17.016	17.476	0,08	0,08
Kuanza Norte	61.245	62.945	64.691	66.438	68.232	0,10	2,68
Kuanza Sul	25.495	26.203	92.390	94.885	97.447	0,09	1,66
Luanda	15.152	15.572	16.005	16.437	16.881	0,01	7,09
Lunda Sul	149.730	153.885	15.029	15.435	15.852	0,06	0,19
Lunda Norte	157.149	161.510	26.930	27.657	28.404	0,06	0,26
Malange	70.112	72.057	74.057	76.056	78.110	0,05	0,76
Moxico	42.168	43.338	15.469	15.886	16.315	0,03	0,07
Namibe	12.372	12.716	158.155	162.426	166.811	0,68	2,72
Uíge	42.251	43.423	44.628	45.833	47.070	0,03	0,76
Zaire	2.035	2.091	2.149	2.207	2.267	2,47	0,05
<b>Total</b>	<b>930.835</b>	<b>956.663</b>	<b>983.209</b>	<b>1.009.756</b>	<b>1.037.020</b>	<b>0,05</b>	<b>0,77</b>

Source: Countrystat FAO and LCG analysis



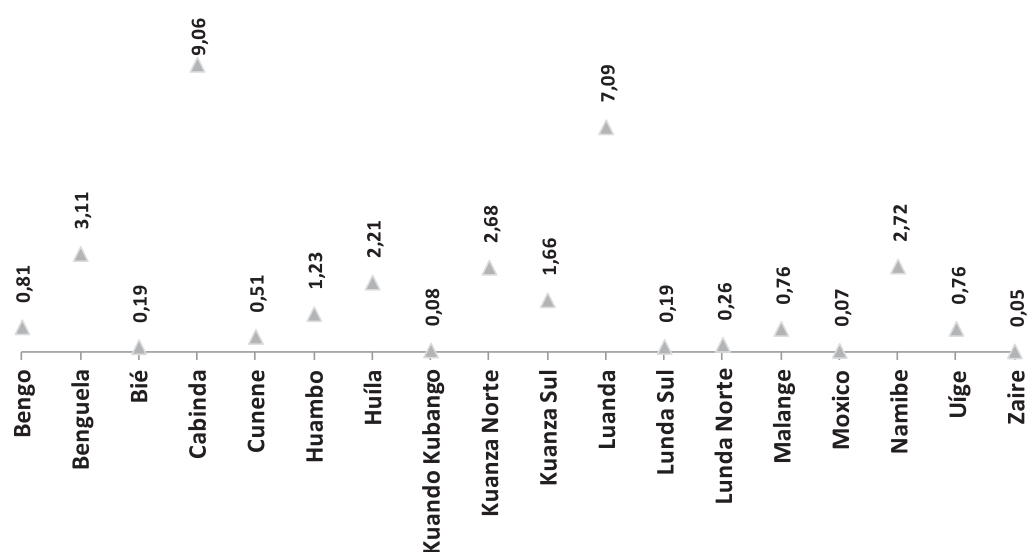
Source: Countrystat FAO and LCG analysis

**Figure 47 – Top 5 provinces for sheep living animals, 2012**



Source: Countrystat FAO and LCG analysis

**Figure 47 – Per capita density of sheep living animals per province, 2010**



Source: Countrystat FAO and LCG analysis

**Figure 48 – Provinces with the highest ratio of sheep living animals per square kilometer**

#### D.2.4.3 Challenges and Opportunities

Based on our on-field assessment (we visited stores of Intermarket, Kero, Casa dos Frescos, Jumbo and Shoprite, in Luanda), goat, lamb and other small ruminants are not commonly seen in formal supermarkets. If this is explained by a difficult to find reliable sources of this type of meat, then there is an opportunity to explore.

### D.2.5 Dairy Products Sub-Sector

#### D.2.5.1 Stakeholder analysis

Fluid milk is highly perishable, despite technological improvements in storage and transportation. For that reason most industrial players in dairy agriculture, transform fresh milk into a variety of low-perishable and more nutrient dense products, namely cheese, butter, yogurt and even dry milk powder.

Lactiangol, the biggest national dairy producer with capacity to produce 150.000 liters of milk per week and 10 tons of butter<sup>53</sup>, choose that strategy and moved from a fresh milk producer to a highly integrated player with multiple consumer brands, including "Chocolatinho", their UHT milk added with chocolate and vitamins. The product was designed to children in elementary school, is available in 200 ml package and its formula was approved by UNICEF.

During 2012, Lactiangol sold 25 Million USD in dairy products<sup>53</sup>.

Aldeia Nova, in Waku Kungo, also collects milk from 600 cows, two times per day. The total production is 850 liters per day, but since there were 219 additional births expected, current capacity should be about 2.000 liters per day<sup>54</sup>.

In Huambo province there is potential, accordingly to some government officials such as Mr. Emitério Tiago, to develop a network of small scale producers of fresh milk, if there are available infra-structure to collect milk within 1 to 5 days period and transport it to a process center where it can be pasteurized.

#### **D.2.5.2 Demand and Supply Analysis**

Credible sources (FAO) estimate that during 2010 milk consumption (excluding butter) per capita was around 10 Kg, which represent a total consumption of 190 million kg, but government official's state that production remains only 5% of consumption.

Another relevant fact is that most of the milk production is done by processing milk powder and not by dairy cows<sup>55</sup>.

#### **D.2.5.3 Challenges and Opportunities**

The productivity of milk cows is highly influenced by the quality of feed and temperature. For example, most cows that are kept by small scale farmers produce about 10 liters of milk per day. As a benchmark, some cows in a more professional environment can produce up to 20 liters per day. Another issue that may restrain production is the uncertainty farmers feel about selling fresh milk that after 10 days is inconsumable.

<sup>53</sup> Agência Angop press, edição de 30-01-2013

<sup>54</sup> Exame Angola, edição de 08-06-2013

<sup>55</sup> [www.portalangop.co.ao/angola/pt\\_pt/noticias/economia/2012/6/27/Pais-apresenta-defice-producao-leite,727efb1c-b872-4210-a9f6-fd28696fa84b.html](http://www.portalangop.co.ao/angola/pt_pt/noticias/economia/2012/6/27/Pais-apresenta-defice-producao-leite,727efb1c-b872-4210-a9f6-fd28696fa84b.html)

## E. Investment Opportunities

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### E.1 Opportunities for Dutch Investments

From our on-field talks with livestock players and based on a conservative view of the sector, including the government intention to reduce food imports, there are some opportunities to foreign investors, such as the following:

1. Development and management of commercial oriented abattoirs with retail or shop space in urban areas. This can be a joint-venture investment or a partnership with local players such as the farmer cooperatives, for example the "*Cooperativa de Criadores de Gado do Sul de Angola*" revealed some interest in that project;
2. Distribution and maintenance of livestock equipment for intense explorations of cattle, poultry, pigs or dairy products;
3. Development of local capacity to produce feed grains and negotiation of exclusive distribution agreements with regional players;
4. Development of a national meat brand strongly linked with local producers and cooperatives, that are looking for opportunities to raise quality awareness of their products;
5. Design and implement chicken intense production systems with energy efficient solutions (e.g. solar);
6. Construction of local capacity to produce eggs, because it still the cheapest source of proteins and it's a highly perishable product;
7. Create a retail chain of butcher shops in cities that are focused on premium consumers or professional clients (e.g. restaurants and hotels). These butcher shops should have strong links to producers, offer high quality and certified products, provide advice to meat cuts and guarantee adequate stock.
8. Development of an network of cold-chain distribution services to restaurants, hotels, supermarkets and informal markets that guarantee meat quality;
9. Development and management of unpasteurized milk transportation services, with exclusive agreements with small scale producers;
10. Recovery and management of public facilities (Agriculture Development Stations) to study, test and train students in the agricultural and livestock sector that could be used to provide veterinary services (e.g. improve breeding, bathing, vaccination, etc);



## **F. Conclusions and Recommendations**

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Despite its potential and growth projections, Angola it's still an African country struggling to create a modern and sustainable economy.

Its geography and demographic trends suggest unique and attractive conditions to foreign investments in the livestock sector, but a close look to industry players, consumers and retailers suggest considering each sub-sector with caution. For example, while in poultry sub-sector there is a substantial gap between national production and local demand, in dairy products the technical requirements and the know-how essential to collect fresh milk and pasteurize it, make it more difficult to achieve profitable production.

Also, most foreign investments in local production should analyze value chain players in each industry or sub-sector because agriculture producers and livestock farmers are a very disperse and domestic oriented group. The availability of services and inputs such as feed, water and energy at high prices increase production costs, and also protects current players (importers or famers) from new entrants that lack scale, business connections or distribution channels.

Therefore is strongly advisable that a foreign investor should analyze, select and negotiate a business agreement that guarantee efficient means of production and offer know-how training in return.

## Appendix A – "Who's Who" in the livestock sector

Ministry of Agriculture – National Directorate of Agriculture, Livestock and Forestry (NDALF) Av. Comandante Gika 42, Largo António Jacinto Edifício B, Cx. Postal 1257, Luanda			
Name	Job Description	Email	Mobile Phone
Mr. Toscano Lebastião Lengo	Head of Secretariat of NDALF	toscanoseng@yahoo.com.br	+244 923 575 384 +244 937 905 707
Dr. Virgílio Silva	Veterinarian - Head of the Department of Livestock	virgisilva64@gmail.com	+244 912 209 975 +244 925 315 137
Dr. José António	Director of Veterinary Services	lenine-vet@hotmail.com	+244 924 637935
Dr. Norberto Pinto	Veterinarian	eubeto2002@yahoo.com	n.a.
Mr. Domingos Silva	Head of Study, Plan and Statistics Office	n.a.	+244 933 178 576

Private Players and Livestock Cooperatives				
Name	Job Description	Email	Contact	Address
Mr. Álvaro Sampaio	CEO of HuilaVet	alvarosampaio@portugalmail.pt	+244 923 645 506 +244 261 225 400	R. Deolinda Rodrigues nº151/153, Lubango
Mr. Henk Van Zyl	Commercial Executive, Agromundo	h.vanzyl@agromundo.biz	+244 938 377 935	R. Rainha Ginga nº74, 13º, Luanda
Eng. Álvaro Fernandes	Director of Cooperativa dos Criadores de Gado do Sul Angola	ccgsangola@gmail.com	+244 927 809 045	Complexo turístico de nossa Senhora do monte, Lubango
Dr. Rui Cruz	President of Cooperativa do Planalto de Camabatela	ruicruz.ang@gmail.com	+244 923 507 948	R. Fernão Sousa, Luanda
Dr. Luis Gata Gonçalves	Director, Farmovet	luis88gata@gmail.com	+244 946 544 844	R. Deolinda Rodrigues, nº88, Lubango
Mr. José Bettencourt	Director of Aldeia Nova (dairy producer)	jcbetta02@gmail.com	+244 928 317 567	Waku kungo, Kwanza Sul
Eng. Susana Carbó	Commercial Executive, Nutrivet Angola	scarbo@nutrivet-angola.com	+244 923 364 142	R. N Dunduma, Miramar
Mr. Arthur Cruvinel	Financial Director, BrasAfrica	rodrigo@brasafrika.com	+244 937 405 488	Estrada Viana – Catete, Km 53 Bengo
Mr. José Brasil	Owner of SulCarnes	sulcarnesdgrande@gmail.com	+264 81 124 0250 +264 81 128 6913	Fazenda 17 Angostrich, Cunene

## Appendix B – Consumer Survey

During this study, a survey was made to investigate the preferences in consumption of meat and dairy products in Angola.

The survey had mainly 14 questions and was conducted online and through telephone interviews on distinct regions of Angola.

### Survey Format

1. Please specify the province where you live:

Bengo	<input type="checkbox"/>	Huíla	<input type="checkbox"/>
Benguela	<input type="checkbox"/>	Luanda	<input type="checkbox"/>
Bié	<input type="checkbox"/>	Lunda Norte	<input type="checkbox"/>
Cabinda	<input type="checkbox"/>	Lunda Sul	<input type="checkbox"/>
Quando-Cubango	<input type="checkbox"/>	Malanje	<input type="checkbox"/>
Kuanza Norte	<input type="checkbox"/>	Moxico	<input type="checkbox"/>
KuanzaSul	<input type="checkbox"/>	Namíbe	<input type="checkbox"/>
Cunene	<input type="checkbox"/>	Uíge	<input type="checkbox"/>
Huambo	<input type="checkbox"/>	Zaire	<input type="checkbox"/>

2. Indicate your gender:

Male  Female

3. How many people live in your household, including the respondent?

1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
6	<input type="checkbox"/>
7	<input type="checkbox"/>
8	<input type="checkbox"/>
9 or more	<input type="checkbox"/>

4. In the process of buying meat, your preference is:

Chicken	<input type="checkbox"/>	
Other birds (turkey, ostrich, etc.)	<input type="checkbox"/>	
Cow	<input type="checkbox"/>	
Pig	<input type="checkbox"/>	
Goat	<input type="checkbox"/>	
Other	<input type="checkbox"/>	Specify: _____

5. When you buy chicken, your preference is:

Whole animal	<input type="checkbox"/>
Leg	<input type="checkbox"/>
Wing	<input type="checkbox"/>
Chest	<input type="checkbox"/>

6. When buying meat from cattle, your preference is:

Rib eye steak	<input type="checkbox"/>
Tenderloin	<input type="checkbox"/>
Sirloin	<input type="checkbox"/>
Round	<input type="checkbox"/>
Chuck	<input type="checkbox"/>
ShankRound Cap	<input type="checkbox"/>

7. On average, how often eat meat per week?

Every day	<input type="checkbox"/>
From 4 to 6 times a week	<input type="checkbox"/>
From 1 to 3 times per week	<input type="checkbox"/>
Rarely (less than 1 time per week)	<input type="checkbox"/>

8. What is the preferred location to buy meat?

Formal market (Kero, Jumbo, Shoprite, Intermarket, House of frescos, etc.)	<input type="checkbox"/>
Informal market	<input type="checkbox"/>

a. If you indicated the formal market, please specify: \_\_\_\_\_

9. Which factor is more important when buying meat?

Confidence in the producer or brand	<input type="checkbox"/>
The visible aspect of meat (color, texture, hygiene, no fat, etc.)	<input type="checkbox"/>
Price-quality relation	<input type="checkbox"/>
Geographical proximity of the store or supermarket	<input type="checkbox"/>
Choice of the animal (informal market	<input type="checkbox"/>

10. How often you buy meat?

Every week (between 4-5 times per month)	<input type="checkbox"/>
From 1 to 4 times per month	<input type="checkbox"/>
From 1 to 2 times per quarter	<input type="checkbox"/>
From 1 to 5 times per semester	<input type="checkbox"/>

11. How often you consume milk or derivatives such as cheese or yogurt?

Every day	<input type="checkbox"/>
From 4 to 6 times a week	<input type="checkbox"/>
From 1 to 3 times per week	<input type="checkbox"/>
Rarely (less than 1 time per week)	<input type="checkbox"/>

12. What is your preferred location to buy milk and derived products such as cheese or yogurt?

Formal market (Kero, Jumbo, Shoprite, Intermarket, House of frescos, etc.)	<input type="checkbox"/>
Informal market	<input type="checkbox"/>

a. If you indicated the formal market, please specify: \_\_\_\_\_

13. Which of the following factors is more important when buying milk or derivatives such as cheese or yogurt?

Shelf life	<input type="checkbox"/>
Confidence on the brand or producer	<input type="checkbox"/>
Value for money	<input type="checkbox"/>
Physical appearance of the package	<input type="checkbox"/>
Products on sale	<input type="checkbox"/>
Nutritional Information	<input type="checkbox"/>
Other:	<input type="checkbox"/>

Specify: \_\_\_\_\_

14. How often buy milk, or derived products as cheese or yogurt?

Every week (4 to 5 times per month)	<input type="checkbox"/>
From 1 to 4 times per month	<input type="checkbox"/>
From 1 to 2 times per quarter	<input type="checkbox"/>
From 1 to 5 times per semester	<input type="checkbox"/>

<b>BENGO</b>					
<b>PRODUCER</b>	<b>INSTALLED CAPACITY</b>	<b>USED CAPACITY</b>	<b>FEED INPUTS (in Tons)</b>		
			<b>CORN</b>	<b>SOYBEAN</b>	<b>PREMIX 5%</b>
AGRIDUDA	3.000	2.800	40	17	3
FAZENDA LUÍS & IRMÃO	30.000	25.000	350	140	27
AVIÁRIO DE QUICABO	1.080	800	10	4	1
AVIÁRIO DA AÇUCAREIRA	1.080	800	10	4	1
<b>TOTAL</b>	<b>35.160</b>	<b>29.400</b>	<b>410</b>	<b>165</b>	<b>32</b>

<b>BIÉ</b>					
<b>PRODUCER</b>	<b>INSTALLED CAPACITY</b>	<b>USED CAPACITY</b>	<b>FEED INPUTS (in Tons)</b>		
			<b>CORN</b>	<b>SOYBEAN</b>	<b>PREMIX 5%</b>
AVIPAL	13.000	10.000	140	60	11
AGROPEC	4.500	4.500	65	25	6
NOVOS HORIZONTES	11.000	8.000	110	45	10
SIMÃO	6.000	6.000	100	35	7
SEFOCAR	4.000	4.000	60	23	6
<b>TOTAL</b>	<b>38.500</b>	<b>32.500</b>	<b>475</b>	<b>188</b>	<b>40</b>

<b>BENGUELA</b>					
<b>PRODUCER</b>	<b>INSTALLED CAPACITY</b>	<b>USED CAPACITY</b>	<b>FEED INPUTS (in Tons)</b>		
			<b>CORN</b>	<b>SOYBEAN</b>	<b>PREMIX 5%</b>
AVIÁRIO SANT FILOMENA	15.000	12.500	300	70	14
AFROAVE	7.500	2.000	30	12	2
BATISTA	3.500	3.000	45	20	3
CAPUSSO	8.000	5.000	70	30	6
AUGUSTA FERREIRA	2.500	2.000	30	12	2
<b>TOTAL</b>	<b>36.500</b>	<b>24.500</b>	<b>475</b>	<b>144</b>	<b>27</b>

<b>LUBANGO</b>					
<b>PRODUCER</b>	<b>INSTALLED CAPACITY</b>	<b>USED CAPACITY</b>	<b>FEED INPUTS (in Tons)</b>		
			<b>CORN</b>	<b>SOYBEAN</b>	<b>PREMIX 5%</b>
AVIPAL	12.500	6.000	100	35	7
JOÃOZINHO	2.000	2.000	30	12	1
ALCINO	2.000	2.000	30	12	1
<b>TOTAL</b>	<b>16.500</b>	<b>10.000</b>	<b>160</b>	<b>59</b>	<b>9</b>

## Appendix C – List of major chicken breeders by province<sup>56</sup>

LUANDA					
PRODUCER	INSTALLED CAPACITY	USED CAPACITY	FEED INPUTS (in Tons)		
			CORN	SOYBEAN	PREMIX 5%
AVINOVA	125.000	75.000	1.500	500	80
ANGOLAVES	380.000	170.000	2.200	900	180
AVICAOP	6.000	6.000	100	35	7
FAZENDO MATO GROSSO	30.000	10.000	150	60	11
GRANJA AV. DO CAZENGA	5.760	5.000	70	30	6
GRANJA SANTA MARIA	34.000	25.000	350	140	27
MEU SOL	6.000	5.000	70	30	6
MENGUI LDA	10.000	10.000	150	60	11
MUXIMA	n.a.	35.000	480	200	38
PECAC	30.000	40.000	560	240	44
RACAR	4.200	4.200	60	23	5
SOCEAVE	30.000	7.500	100	35	8
SOCOPRAVES	30.000	10.000	150	60	11
PÉROLA DO KICUXI	20.000	20.000	260	100	21
<b>TOTAL</b>	<b>710.960</b>	<b>422.700</b>	<b>6.200</b>	<b>2.413</b>	<b>455</b>

KWANZA SUL					
PRODUCER	INSTALLED CAPACITY	USED CAPACITY	FEED INPUTS (in Tons)		
			CORN	SOYBEAN	PREMIX 5%
ALDEIA NOVA	241.920	100.00	1.300	540	110
AVIÁRIO HORIZONTE	5.000	5.000	70	30	6
FAZENDA 7 QUINTAS	5.760	5.000	70	30	6
MÁRIO FERREIRA	2.000	2.000	30	12	2
AVIÁRIO CAPOEIRA	1.100	1.000	15	6	1
<b>SUB-TOTAL</b>	<b>255.780</b>	<b>113.000</b>	<b>1.485</b>	<b>618</b>	<b>125</b>
AVIÁRIO DA MUNENGA *	360.000	100.000	250	100	20
FAZENDO 16 *	60.000	20.000	270	120	21
<b>SUB-TOTAL</b>	<b>420.000</b>	<b>120.000</b>	<b>520</b>	<b>220</b>	<b>41</b>
<b>TOTAL</b>	<b>675.780</b>	<b>233.000</b>	<b>2.005</b>	<b>838</b>	<b>166</b>

\* Broiler chickens (breed for meat)

<sup>56</sup> Source: Gabinete de Estudos, Planeamento e Estatística do Ministério da Agricultura



<b>BENGO</b>					
<b>PRODUCER</b>	<b>INSTALLED CAPACITY</b>	<b>USED CAPACITY</b>	<b>FEED INPUTS (in Tons)</b>		
			<b>CORN</b>	<b>SOYBEAN</b>	<b>PREMIX 5%</b>
LUANDA	710.960	422.700	6.200	2.413	455
BENGUELA	36.500	24.500	475	144	27
KWANZA SUL	255.780	113.000	1.485	618	125
BIÉ	38.500	32.500	475	188	40
BENGO	35.160	29.400	410	165	32
LUBANGO	16.500	10.000	160	59	9
NAMIBE	8.000	6.000	80	33	7
MALANGE	5.000	3000	40	17	3
LUNDA SUL	3.000	2.000	30	12	2
UÍGE	5.000	4.000	60	23	5
HUAMBO	17.000	2.000	30	12	2
PIAFOM	1.200.000	600.000	4.800	1.500	240
OUTROS	30.000	30.000	1.400	162	32
KWANZA SUL *	420.000	120.000	520	220	41
<b>TOTAL</b>	<b>2.070.440</b>	<b>976.400</b>	<b>9.965</b>	<b>3.153</b>	<b>565</b>

\* Broiler chickens (breed for meat)



## Questions

1. Please specify the province where you live:
2. Indicate your gender:
3. How many people live in your household, including the respondent?
4. In the process of buying meat, your preference is:
5. When you buy chicken, your preference is:
6. When buying meat from cattle, your preference is:
7. On average, how often eat meat per week?
8. What is the preferred location to buy meat?
- 8.1 If you indicated the formal market, please specify:
9. Which factor is more important when buying meat?
10. How often you buy meat?
11. How often you consume milk or derivatives such as cheese or yogurt?
12. What is your preferred location to buy milk and derived products such as cheese or yogurt?
- 12.1 If you indicated the formal market, please specify:
13. Which of the following factors is more important when buying milk or derivatives such as cheese or yogurt?
14. How often buy milk, or derived products as cheese or yogurt?





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