

# AGRICULTURE, LIVESTOCK AND FISHERIES

## SECTOR PROFILE 2011



**ZAMBIA DEVELOPMENT AGENCY**



## Table of Contents

1.0.	OVERVIEW OF THE AGRICULTURE SECTOR IN ZAMBIA.....	3
2.0.	POTENTIAL FOR INVESTMENTS IN ZAMBIA’S AGRICULTURE SECTOR.....	3
2.3.1.	<i>COTTON</i> .....	7
2.3.2.	<i>TOBACCO</i> .....	7
2.3.3.	<i>COFFEE</i> .....	8
2.3.4.	<i>TEA</i> .....	9
2.3.5.	<i>MAIZE</i> .....	9
2.3.5.	<i>FLORICULTURE</i> .....	10
2.3.6.	<i>HORTICULTURE</i> .....	11
2.3.7.	<i>OTHER CROPS</i> .....	12
2.3.8.	<i>FISHERIES</i> .....	12
2.3.9.	<i>LIVESTOCK</i> .....	15
3.0	PREFERENTIAL MARKET ACCESS.....	19
4.0.	INVESTMENT INCENTIVES IN THE AGRICULTURE SECTOR.....	19
5.0.	USEFUL CONTACTS OF AGENCIES IN THE AGRICULTURE SECTOR.....	21

## **1.0. OVERVIEW OF THE AGRICULTURE SECTOR IN ZAMBIA**

Zambia is endowed with a large land resource base of 42 million hectares of which only 1.5 million hectares is cultivated every year. There are abundant water resources for irrigation and the country has 40 percent of the water in Central and Southern Africa.

Agricultural output in Zambia increased from 18 percent of the Gross Domestic Product (GDP) in 2008 to about 20 percent of GDP in 2009. This was as a result of increased area planted, good rainfall patterns in the whole country, as well as favorable agriculture policies by the government. The country recorded increased production of major crops during the 2009/10 agricultural season compared to the 2008/09 season, including; sunflower (118 percent increase), soya beans (50 percent increase), rice (39 percent increase), maize (31 percent increase), tobacco (7 percent increase) and wheat (5 percent increase).

The agricultural sector continues to be the backbone of the Zambian economy as it contributes to the growth of the economy and also to exports. Primary agriculture contribute about 35 percent to the country's total non traditional exports (all the country's exports other than copper and cobalt) and about 10 percent of the total export earnings for the country.

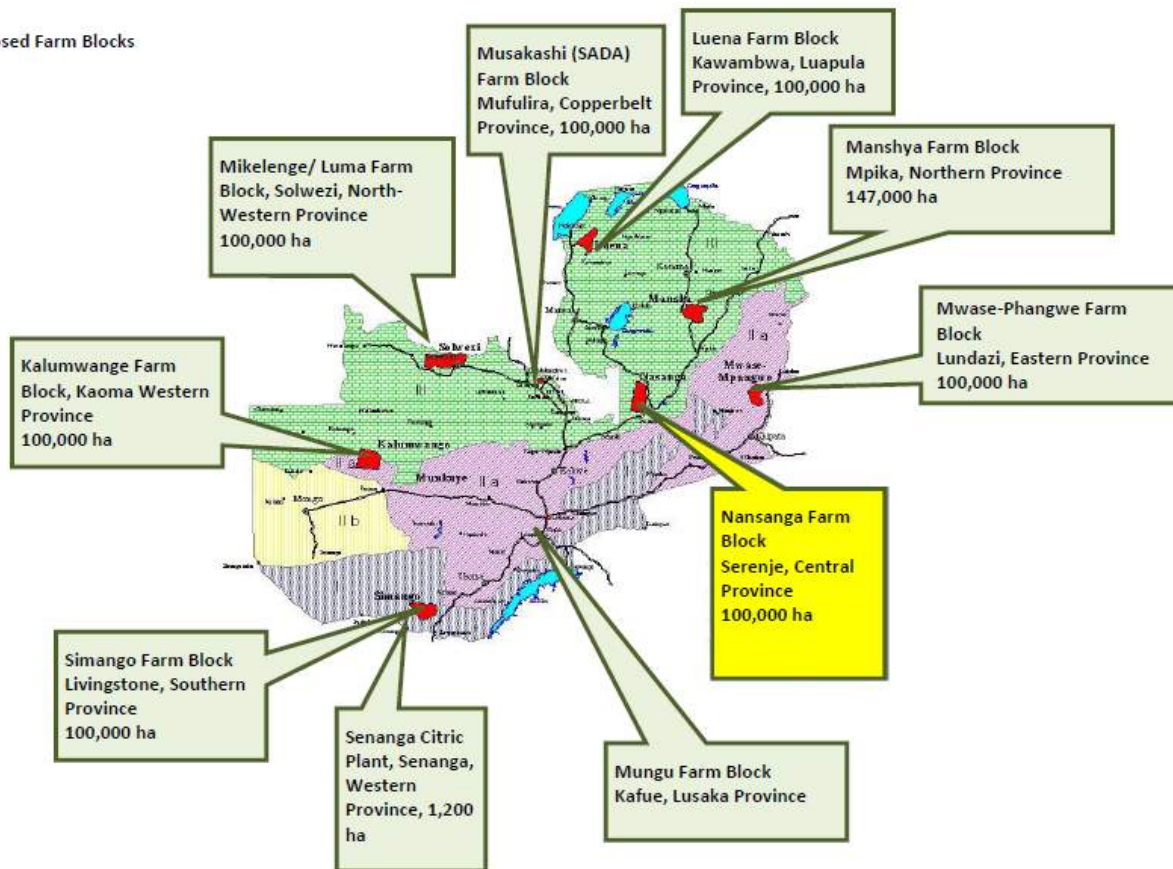
The sector also provides employment to 70 percent of the labour force. As such, agriculture has continued to receive priority attention by the government, through increased budget support aimed at increasing agriculture productivity to ensure food security, income generation, creation of employment opportunities and poverty reduction.

## **2.0. POTENTIAL FOR INVESTMENTS IN ZAMBIA'S AGRICULTURE SECTOR**

Given the vast resource endowment in terms of land, labour and water, Zambia has the potential to expand its agricultural production. Furthermore the country is bordered by eight countries and is a member of the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) it has market access to the European Union through the Everything but Arms (EBA) initiative, access to the US market through the African Growth Opportunities Act (AGOA) and access to the Chinese and Japanese markets through various initiatives.

Furthermore the Government has embarked on a land development programme which involves opening up new farming blocks for commercial development and expansion of the agriculture sector. The following farm blocks have been identified for potential investors:

#### Proposed Farm Blocks



Each farming block is designed to have at least one core large-scale farm (core venture) of 10,000 hectares, several commercial farms of 1,000 to 5,000 hectares and small farm holdings of between 30 to 3000 hectares preferably under out grower arrangements. Farm blocks provide both local and international investors ready access to already surveyed land for agro production purposes.

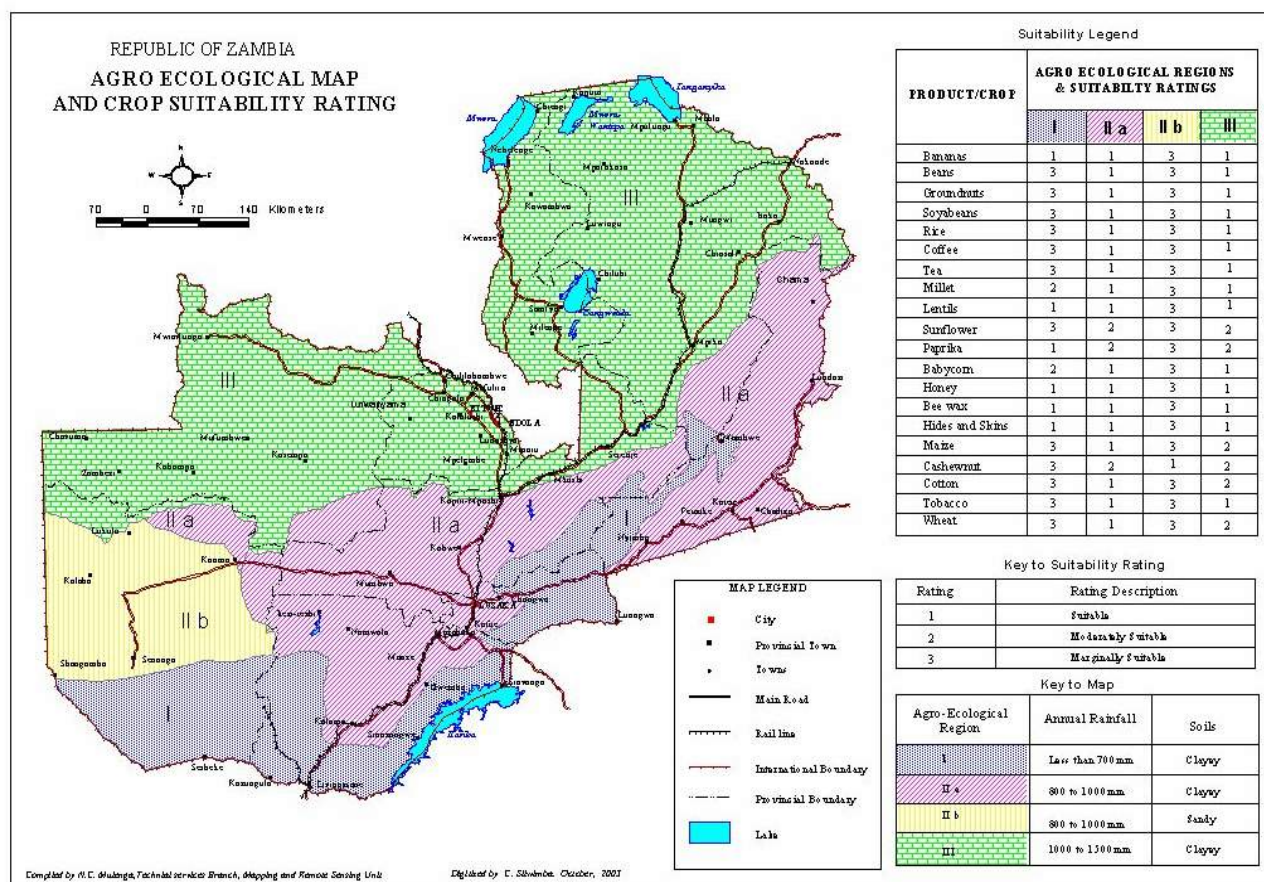
The core investor being the lead investor will be expected to develop the infrastructure within the farm block and to manage the appropriate agro- business activities. The core venture will support the small, medium and large scale farms through an outgrower scheme in producing and marketing their produce. The core venture will establish processing plants for value addition targeted at both the local and international markets.

Currently, the government has identified three priority Farms Blocks - the Nansanga, Kalumwange and Luena blocks. For these three, the government is providing and installing basic infrastructure and facilities such as trunk roads, bridges, electricity, dams, schools and health centres. The other farm blocks will be developed in stages. Among the crops with potential prioritized for investments in the farm blocks include; wheat, sugar, cotton, coffee, tobacco, cashew nuts, cassava and horticultural/floricultural crops.

#### *1.1. Suitability of Zambian Ecology for Investments in Agriculture Sector*

The country's total land area of 75 million hectares (752,000 square Km) is divided into three major agro-ecological regions, namely Regions I, II and III - each suitable for investment opportunities in

the production of various crops. (See map of Zambia's Agro Ecological Map and Crop Suitability Rating.



## 1.2 Agricultural Products

Zambia's strategic location in the COMESA and SADC region makes it have easy access to these regional markets and position the country as a food basket for the region. The regional demand for Zambia's agricultural products is summarized by the tables below;

**Table 2.0.a: Exports of Agricultural Products from Zambia to COMESA region**  
(US\$ '000')

Product	2007	2008	2009
Tobacco	40,875	60,165	63,492
Wheat	22,788	33,030	25,846
Other Cereals	62,948	36,788	17,308
Root and Tuber crops	1,162	1,524	8,239
Cotton	13,232	9,378	7,981
Coffee, tea, mate and spices	1,038	256	2,453
<b>TOTAL</b>	<b>142,043</b>	<b>141,141</b>	<b>125,319</b>

Source: COMTRADE, 2009

**Table 2.0.b: Exports of Agricultural Products from Zambia to SADC region**  
(US\$ '000')

Product	2007	2008	2009
Tobacco	41,690	67,408	64,985
Wheat	22,612	33,036	25,851
Cotton	30,364	20,381	25,047
Other Cereals	71,267	43,416	20,079
Root and Tuber crops	3,897	4,035	9,722
Coffee, tea, mate and spices	3,364	1,566	3,014
<b>TOTAL</b>	<b>173,194</b>	<b>169,842</b>	<b>148,698</b>

Source: COMTRADE, 2009

Exports of agricultural products from Zambia to the COMESA region are between US\$ 125 million to US\$ 140 million per annum, while the exports to the SADC region are between US\$ 140 million to US\$ 170 million per annum. Zambia also has market access to the European Union through the Everything but Arms initiative and access to the US markets through the African Growth Opportunities Act AGOA summarized below.

**Table 2.0.C: Exports of Agricultural Products from Zambia to the European Union**  
(US\$ '000')

Product	2007	2008	2009
Tobacco	9,209	2,220	6,010
Sugars and sugar confectionary	36,807	12,985	2,916
Cotton and cotton Products	11,207	5,481	455
Cut flowers, live trees, roots, bulbs and plants	26,255	22,979	22,050
Vegetable, Root and TuberS	20,430	19,023	10,524
Coffee, tea, mate and spices	4,239	3,759	4,623
<b>TOTAL</b>	<b>173,194</b>	<b>169,842</b>	<b>148,698</b>

Trade between Zambia and the US through AGOA is very negligible as Zambia has not really tapped into this market and taken advantage of the opportunity. However, Zambia still exports some products such as cotton, coffee and tea to this market. Opportunities therefore exist for agriculture production targeted to this market.

### 2.3 INVESTMENT OPPORTUNITIES

The main priority crops for investment in the country are; wheat, sugar, cotton, tobacco, coffee, tea and maize. There are also other crops such as cow peas, groundnuts, cassava, rice, sorghum, soya beans, sunflower, wheat, and dry beans with enormous investment potential.

### **2.3.1. COTTON**

#### ***a. Cotton Production in Zambia***

Zambia's favorable soil and climatic conditions offer high potential for cotton production. Cotton is grown in agro-ecological zones I and II comprising Southern, Central, Lusaka, Eastern, parts of the Copperbelt and Western Provinces. The potential for cotton production in terms of suitable land and climate is vast, over 800,000 hectares but only about 300,000 hectares are currently under cotton cultivation.

The cotton is produced by small scale farmers under outgrower contracts with the ginning companies. Scope exists for commercial farming as vast tracts of land are available in areas where cotton production is conducive such as Eastern, Lusaka, Copperbelt, Western, Central and Southern Province. The government has also set aside 100,000 ha of land in Eastern province for potential investors willing to invest in this sector.

Cotton Lint consumption by Zambia's spinning industry is approximately 14,500 metric tonnes while local lint production of 72,000 metric tonnes exceeds local demand. Therefore, cotton is available for the production of value added products such as fabric and garments.

#### ***b. Cotton Market Analysis***

Zambia is mainly a raw cotton exporter; it was ranked 24<sup>th</sup> in world cotton exports in 2007. Raw cotton exports have been increasing in the last ten years from about US\$ 5 million in 2000, to as high as US\$ 122 million in 2004, and currently around US \$ 30 million per annum. Raw cotton exports from Zambia have been targeted mainly to South Africa, Mauritius and East Asia.

### **2.3.2. TOBACCO**

#### ***a. Tobacco Production in Zambia***

Tobacco production is a very attractive investment opportunity in the country because it is 7.5 times more profitable per hectare than maize production and 14 times more profitable than cotton. Also comprising mainly of out-grower schemes, small, medium and large-scale production is also encouraged.

There are a minimum of 500 Virginia tobacco growers in Zambia now, 25 percent of whom are commercial farmers. The crop sizes range up to 1,000 ha, but the majority grow crops under 5 hectares or between 80 and 120 hectares. The Eastern, Central and Southern Provinces of Zambia provide the best land and climatic conditions for growing the tobacco.

Annual tobacco production in the country is about 27,000 metric tonnes (15,000 metric tonnes of Virginia tobacco and 12,000 metric tonnes of Burley tobacco).

#### ***b. Tobacco Market Analysis***

The tobacco sector in Zambia has made significant improvements in exports in the recent years, due to new investment in the sector leading to high productivity. Annual exports of Virginia tobacco alone are valued at over US \$ 60 million. In the last five (5) years, exports have grown by 50 percent per year on average. In fact Zambia was ranked the 9<sup>th</sup> world largest tobacco exporter in 2007. The exports comprise mostly unprocessed tobacco.

The Tobacco Association of Zambia (TAZ) handles storing, grading and classification, packaging and trading, as well as out-ward logistics on behalf of the farmers. There is no auction floor in the country, but TAZ works as a trading floor. TAZ is moving towards direct exporting in order to be able to negotiate better prices.

### **2.3.3. COFFEE**

#### ***a. Coffee Production in Zambia***

Zambia produces about 1,600 metric tonnes of coffee per annum (peaked at 6,000 metric tonnes in 2004). The number of coffee producers in the country is small - comprising mainly of eleven (11) large-scale and about forty one (41) small-scale farmers.

The average area for large-scale farmers is about 50 hectares and 7 hectares for small-scale farmers. The small-scale farmers produce on contract for the large-scale farmers who have processing facilities. The small-scale farmers are organized in groups. The production areas are Central, Lusaka and Northern Provinces of Zambia.

As a result of the small number of producers in the country there is a potentially lucrative investment opportunity in coffee production in the country. The coffee producers are developing their capacity to roast and brew the coffee bean for the domestic market, in particular the commercial sector (hotels and restaurants), as well as for the regional markets.

#### ***b. Types of Coffee Produced***

Zambia is a high-yield producer of high-quality mild Arabica coffee, including the premier Triple A brand coffee. Global coffee buyers are increasingly responding to consumers' demand for certified decaffeinated coffee.

Consumers are willing to pay a higher premium for the certified coffee. In this regard the Zambian coffee growers are increasingly shifting to growing certified coffee and consolidating their presence in this specialized coffee niche market. This will allow them to receive a price premium on their coffee and overcome the constraints of high production costs.

#### ***b. Coffee Market Analysis***

Zambia exported US\$ 7.8 million worth of raw coffee in 2008 mostly to South Africa, Germany and the United Kingdom. Zambia enjoys duty-free treatment for coffee in its most international markets, except in the Democratic Republic of Congo. Zambian coffee is almost exclusively marketed through the Zambia Coffee Growers' Association (ZCGA).



Zambia is targeting value addition to the green bean, i.e. improving the quality of post-harvesting operations that add value to the exports of green beans. These operations include handling, weighting, drying, grading and packaging.

#### **2.3.4. TEA**

##### ***a. Tea Production in Zambia***

The production levels of tea in Zambia have fluctuated over the past five years with the highest production being in 2004 when the country produced 1,189 metric tonnes of tea. Current production is around 900 metric tonnes per annum. Zambia's tea is grown in Luapula province in Kawambwa District.

##### ***b. Tea Market Analysis***

The export market price for tea is about US\$ 1.0 per Kg while the local market price is around US\$ 2.5 per Kg of tea. Tea exports from Zambia are around US\$ 700,000, with the main export markets being Kenya and the Democratic Republic of Congo. There is one producer of Tea in the country and given the world demand there is scope for other companies to invest in this sector as Zambia has the huge tracts of land and soils suitable for tea cultivation.

#### **2.3.5. MAIZE**

##### ***a. Maize Production in Zambia***

Maize is Zambia's staple crop and is grown in almost all parts of the country, mostly by small scale farmers (80 percent). Commercial farmers only account for about 20 percent of the country's annual total maize production. The commercial maize farms are concentrated mostly along the line of rail.

Maize cultivation in the country is mostly rain-fed. Among the nine Zambian provinces, the Eastern province is the largest maize producer, followed by the Southern and Central provinces. The Luapula, Lusaka, North-western and Western provinces only register small amounts of production.

Zambia recorded a bumper harvest in maize production in the 2009/10 agricultural season. The country's maize crop grew by about 27 percent between the 2009 and 2010 harvests, leading to the largest crop recorded in recent history (2.8 million metric tonnes).

##### ***b. Maize Market Analysis***

The Food Reserve Agency (FRA) – a statutory institution; has the mandate to purchase maize from the farmers. The FRA purchases maize on 700 sites nationwide at a uniform market price, currently at K65,000 (\$14) per 50 Kg bag of maize (2009/10 season). However, the private sector can also purchase the maize at an agreed market price.

Cooperatives are responsible for purchasing maize at the buying posts. Transport from the buying posts is contracted out to private companies- basically leaving maize distribution in the hands of the private sector. The purchasing activity by the FRA has the function of ensuring that outlets for small maize farmers living in geographically handicapped areas are also included in the supply chain.

The government also regulates the export and import of maize. Export volumes are determined once domestic maize production has been measured for the year. Only licensed companies are allowed to export maize.

The projected annual national demand for maize is about 1,600,000 tonnes, categorized as follows;

- Home consumption - 1,200,000 metric tonnes
- FRA stockpiling - 250,000 metric tonnes
- Animal feeds - 65,000 metric tonnes
- Brewing - 15,000 metric tonnes
- Seeds Multiplication - 20,000 metric tonnes

### **2.3.5. FLORICULTURE**

#### ***a. Floricultural Production in Zambia***

Floriculture is one of the fastest growing export industries in Zambia. It is usually associated with cut flowers and summer flowers. The cut flowers comprise mainly fresh roses that account for 95% of the sector while the remaining 5% are summer flowers such as atriplex, amaranthus, ammimajus, euphorbia, hypericum, bupleurium, rudbeckia. There are over 60 varieties of roses cultivated including tropical amazon, golden gate, red calypso, first red, poeme, noblesse, prophyta and tyneke. Others are baroness, suplesse, golden times, grandgalla, sapphire and akito.

The sector employs well over 6,000 people of which 50% are women. The women are widely engaged during picking, grading and packing stages of the chain. The sector has immense growth potential in terms of production expansion and value addition, foreign exchange earnings generation, employment creation and contribution to overall socio-economic development.

#### ***b. Floricultural Products Markets***

The Zambian flower industry exports about \$40m worth of roses per year. In 2009, total exports for the floriculture sector amounted to US\$22.6 million, as compared to \$26.9 million in 2008, thereby representing 16 percent reduction. This reduction could be attributed to the slowing global economy in 2009 that hit the demand for roses from Zambia. The main export markets for flowers in 2009 were The Netherlands (Holland), Great Britain and Germany. Others were South Africa, Denmark and Niger Republic.

Flower exporters are dependent on a secure supply chain, with the fresh flowers kept refrigerated and disease-free as they are moved quickly from the farm to markets in Europe within 48 hours. However, Zambian flower exporters face potentially more difficulties than flower exporters in rival economies such as Kenya, Tanzania and Uganda. This is because in Zambia, transport costs are higher, because of the higher cost of petrol and jet fuel that has to be imported into the country. The lack of a substantial scheduled airfreight service has also been a constraint, as exporters have had to charter flights to take their flowers to market.

### **2.3.6. HORTICULTURE**

#### ***a. Horticulture Production in Zambia***

The Horticulture sub-sector in Zambia extensively covers fresh agricultural produce including fresh vegetables such as asparagus, mange tout, sugar snap peas, fine and bobby beans, baby corn, currettes, tender stem broccoli, okra, passion fruit, spring onions, patty pan squash, eggplant, mushrooms, cucumbers, baby carrots, leeks and various types of chillies.

The sector had been expanding overtime reaching its peak in 2003 with export earnings amounting to US \$45,969,290.00 but has since been experiencing a decline in both export volume and earnings. This decline in exports was also evident from the failing revenues from export as can be seen from the table below;

**Table 2.3.6: Trends In Export Revenue From The Horticultural Sector In Zambia (In Us'000)**

<b>Year</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Sector revenue	45,969	35,851	20,508	23,024	37,252	36,350	16,623
(%) of Total Non-Traditional Exports	11.1	7.4	3.6	3.0	4.5	3.0	1.2

This general decrease in exports over the past years had largely been attributed to decline in production volumes following the collapse of a few of the main players in the industry and the subsequent cessation of support to outgrowers by one of the major producers.

The bulk of export vegetables are produced by medium and large-scale farmers under outgrower schemes in limited geographical areas. Big horticultural farmers engage small-scale growers, both individual farmers and cooperatives, as out-growers providing key inputs such as seeds, chemicals and fertilizers, technical support and closely supervise and monitor the growing activities to ensure that European Union phytosanitary standards are met. These outgrower schemes bring small holder producers into the export chain and improve their income earning potential.

#### ***a. Horticulture Market***

Zambia has a ready export market for its horticultural products. The main markets for fresh vegetables in 2009 were the UK, accounting for 47%, followed by Congo DR, which absorbed 15% and South Africa accounting for 13%. Other markets included Angola, Netherlands, Spain and Zimbabwe. Being landlocked, all Zambia's fresh produce exported to Europe is transported by air through chartered freights most facilitated by the Zambia Export Growers Association (ZEGA) which has quality fresh produce handling facilities at the Lusaka International Airport.

Locally, fresh produce is an important component of the diets of many urban households in Zambia who in most instances do not produce their own. According to the CSO/MACO/FSRP Urban Food Consumption Survey (UCS) of 2007/8, fresh produce account for 21% of the food budget of urban households in Lusaka, coming second only to cereals and staples at 24%. The share of household total consumption of fresh produce from own produce is only 7% which means that over 90% of the

value passes through marketing channels as purchases. This therefore demonstrates the readily available market demand and potential to grow the horticultural sector in Zambia.

### 2.3.7. OTHER CROPS

#### a. Production of other Crops in Zambia

Other crops with significant investment potential in Zambia include cow peas, groundnuts, cassava, rice, sorghum, soya beans, sunflower, wheat, and dry beans. Production of these crops is spread throughout the country. A summary of levels of production these crops are shown in a table below:

Product	Annual Production (metric tonnes)
Cow peas	1,200
Groundnuts	74,000
Millet	30,000
Rice	13,000
Sorghum	19,000
Soya beans	90,000
Sunflower	8,000
Cassava	900,000
Wheat	137,000
Mixed Beans	23,000

Source: Ministry of Agriculture and Cooperatives, 2009

Most of the crops are grown for subsistence purposes. Therefore exports of these crops are demand driven. The major markets for these products include; South Africa, the Democratic Republic of Congo, Tanzania, Zimbabwe, Gambia and Botswana. The market potential for these crops is huge because very few farmers are engaged in the production but there is significant demand for the crops both locally and internationally.

### 2.3.8. FISHERIES

While agriculture is the most important source of livelihood, Zambia has 15 million hectares of water in the form of rivers, lakes and swamps, which provide the basis for extensive freshwater fisheries. However, demand for domestic fish for consumption still outstrips production. The sector, because of its mostly rural setting, continues to contribute significantly to rural development in terms of employment and income generation and reducing poverty. It is estimated that the sector supports more than 300 000 people deriving their livelihood directly as fishers and fish farmers, or indirectly as traders, processors and other service providers.

The contribution to GDP of fisheries and aquaculture as a subsector of the agricultural sector has averaged 3 percent out of the 18 percent share that agriculture, forestry and fishing contribute to GDP.

Zambia has 15 million hectares of water in form of rivers, lakes and swamps. The fisheries of Zambia are classified into major and minor fisheries (which include fisheries of small water bodies). There are 11 main fisheries; four belong to the Congo River basin and seven to the Zambezi River basin. The fisheries in the Congo basin include Bangweulu, Mweru-Luapula, Mweru Wantipa and Tanganyika. Kafue, Kariba, Lukanga, Upper Zambezi, Lower Zambezi, Itezhi-tezhi and Lusiwashi

belong to the Zambezi basin. The Congo basin fisheries accounts for approximately 43 percent of annual production. Fishing in Zambia is carried out by two distinct groups: industrial operators and traditional or artisanal fisheries.

However, the future of the sector now depends on raising the scale of operations. This will require attracting investments in the sector to help realize the country's fisheries and aquaculture potential, by transforming the agricultural output mix, thus supporting the country's food needs and contributing significantly to growth of exports.

#### ***a. Demand and Supply for Fish***

Population density, supplies and income determine the demand for marketed fish. The current estimates for annual fish production from capture fisheries ranges between 60 000 and 70 000 tonnes, with an estimated 5 000 produced through aquaculture. The national demand for fish is conservatively estimated at 120 000 tonnes/year, and this gap between supply and demand is foreseen to increase further with population growth. Investment opportunities therefore exist to produce more fish on a sustainable basis with the development of aquaculture and rational management of capture fisheries. Industrial fishing activities are limited to Lake Tanganyika and Kariba, and are associated with production of kapenta.

#### ***b. Fish Exports***

Exports in limited quantities are usually carried out by individuals for target markets. Regional export markets are mostly for consumption, while international markets trade in ornamental species. Regional destination markets include Botswana, Democratic Republic of Congo, Republic of South Africa and Zimbabwe. At international level, and specific to live fish for ornamental purposes, the common destinations are Belgium, Canada, Denmark, UK, Germany, Russia, Sweden and the United States of America.

***Table 2.3.8.a: Exports of Fish Products from Zambia to the rest of the World  
(US\$ '000')***

<b>Product</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Live Fish	287	266	636
Fish, cured or smoked and fresh meal fit for consumption	76	836	241
Fish, fresh, whole	16	66	2
Fish, frozen, whole	9	76	33
Fish fillets and pieces, fresh, chilled or frozen	0	1	32
<b>TOTAL</b>	<b>388</b>	<b>1,245</b>	<b>944</b>

*Source: COMTRADE, 2010*

***Table 2.3.8.b: Fish Exports and Import in Zambia for the Period 2000 – 2010***

<b>Year</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Exports (metric tonnes)	263.46	239.47	1,810.22	665.59	394.40
Imports (metric tonnes)	4,625.55	4,241.55	3,240.70	2,784.09	3,622.97

*Source: Department of fisheries, 2009*

Zambia's current supply of fish does not meet the domestic demand and as such the market is a 'sellers' market and therefore requires little additional effort. Since health and safety requirements for exports to regional and other fish markets are not restrictive, anyone with cold storage, packaging and transportation facilities can export.

### ***c. Investment Opportunities in the Fisheries Sector***

#### ***i. Cold storage and fish Haulage***

The long distance between catching and consumption areas and limited cold storage and transport facilities means that 65 percent of production is dried, most of which is kapenta, smoked or simply sun-dried, and rarely salted breams. This creates immense opportunities in cold storage and haulage of fresh fish using refrigerated trucks.

#### ***ii. Aqua-culture***

Zambia is a country richly endowed with natural resources ideally suited to aquaculture production. Aquaculture promotion in Zambia has a long history, dating back over forty years. Considerable work by the Department of Fisheries in cooperation with international assistance agencies and NGOs in promoting aquaculture practices in the country has resulted in some 6 000 small-scale farmers now operating over 13 000 fish ponds throughout the country. At the same time, 16 large commercial fish farmers have taken up the activity in the Copper belt, Lusaka and Southern Provinces, where ideal conditions for such business exist. The subsector produces about 5 000 tonnes per year of fish. Of this, 75 percent comes from small-scale aquaculture, while commercial fish farmers produce the other 25 percent. Aquaculture is expanding in all nine provinces of the country, and as a result, Zambia is now one of the largest aquaculture producers in sub-Saharan Africa.

This presents immense investment opportunities as the government has stepped up efforts to promote aquaculture as it believes that exploitation of opportunities in aquaculture will reduce pressure on capture fisheries and provide opportunities for increased incomes for the rural poor. Further, the development of commercial-scale aquaculture will contribute positively to economic growth.

Other emerging research opportunities include the ecology of exploited species, fisheries ecology, bio-economics, fisheries economics, limnology, fishing gear, fishing technology, systematics and fisheries law. Fisheries research in Zambia has mainly dealt with the two areas of fish biology and ecology.

#### ***iii. Education***

Training in fisheries aims at meeting the aspirations of the industry and to provide skilled workers capable of participating in development programmes. The Department of Fisheries has been providing tertiary training since the early 1990's, however the level of training is limited and does not meet the needs of the growing industry technologies. Most of this training is provided through the extension services provided by the department of fisheries. Investment opportunities are therefore available for the private sector to meet this industry and technological gap.

#### *iv. Fish Ornaments*

Owing to the large variety of types of fish in Zambia, opportunities exist for the processing of fish for ornamental purposes. The rare and beautiful fish which are less than 20 centimetres long can be bred and kept in aquariums for sale.

#### *v. Fishmeal*

Owing to the fact that the demand for fish in Zambia is greater than the supply, it is very rare that fish is processed into fishmeal for the production of animal feed. The little fishmeal that is produced is on a subsistence level and comes from the residue that remains from the sun-drying of fish.

#### *d. Fishing Regulations in Zambia*

The Department of Fisheries in the Ministry of Agriculture and Cooperatives is mandated through the Fisheries Act, Cap 200 of the Laws of Zambia, to manage the fisheries resources of the country. In order to ensure the sustainable utilization of the fisheries resources in line with the provisions of the Act, the following control measures are employed:

- Annual Fishing Closure, from 1 December to 28 February the following year. This coincides with the rainy season and was introduced to protect the breeding of the commercially preferred species (mostly Tilapia species) whose breeding peaks in this period. The flooded plains provide ideal breeding grounds and nurseries for the juveniles.
- Mesh size restriction of not less than 50 mm for all stationary gillnets. This restriction allows for new recruits to attain a minimum size before being exploited.
- Introduction of permanently closed areas as sanctuaries and breeding grounds for commercially important species.
- A complete ban on use of some destructive fishing methods such as forcefully driving of fish into set nets (locally known as kutumpula), using explosives, use of weirs targeting migratory fish, and beach seine nets operated in shallow waters, which incidentally destroy fish nests and foul the water by stirring up silt.

#### **2.3.9. LIVESTOCK**

##### *a) Cattle, Goats and Sheep*

There are about 2.5 million cattle, 1,000,000 goats and just over 600,000 sheep in the country, out of which 83%, 97% and 68% of national cattle, goats and sheep, respectively, are found in the smallholder farming system or traditional sector. The quantity and quality of leather and leather products depend, therefore, on the quantity and quality of raw hides and skins coming from the traditional sector. The cattle population growth is estimated at 5-10 % per annum.

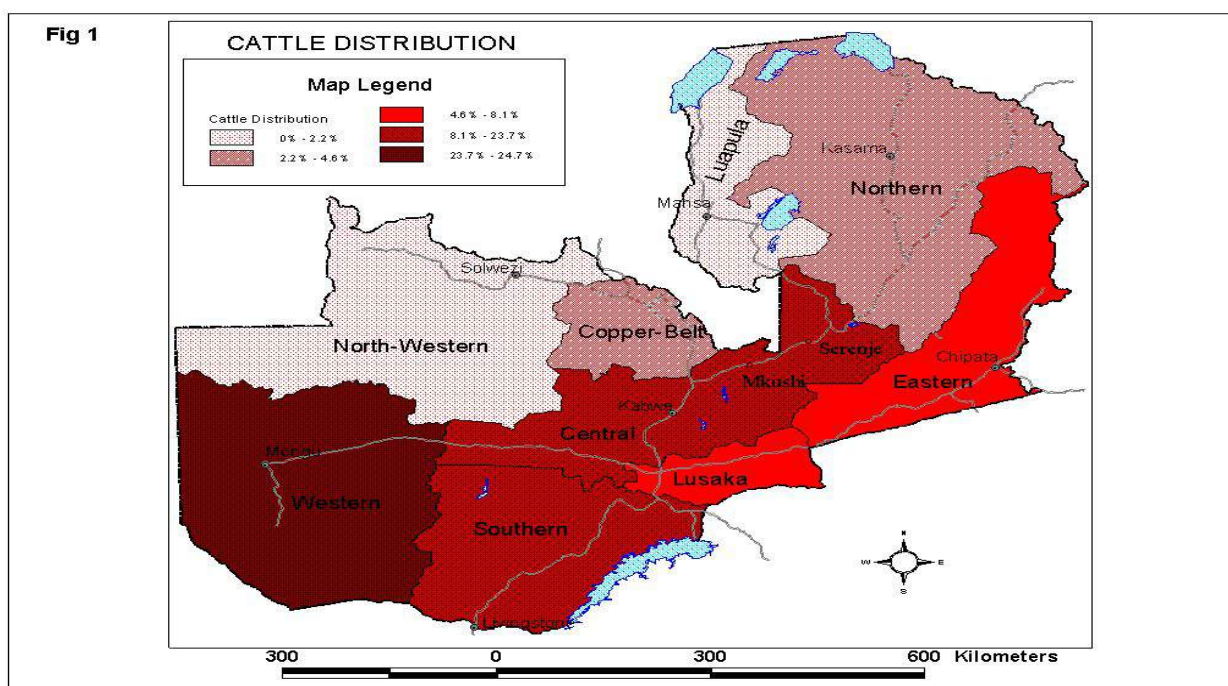
Figure 1, 2 and 3 below show the availability of cattle, goats and sheep in Zambia. There is potential to increase livestock numbers by five folds, given the feed, land, water resources.

**Table 2.3.9.a: Exports of animal Products from Zambia to the rest of the World**

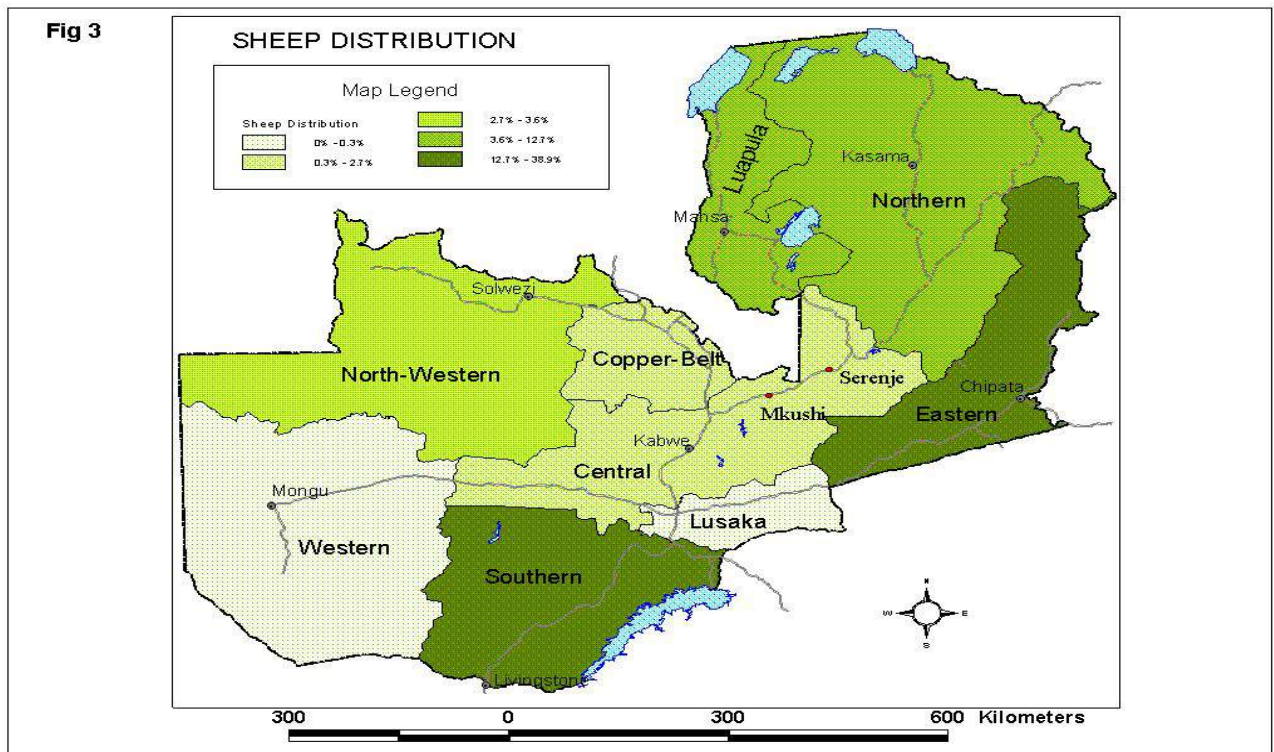
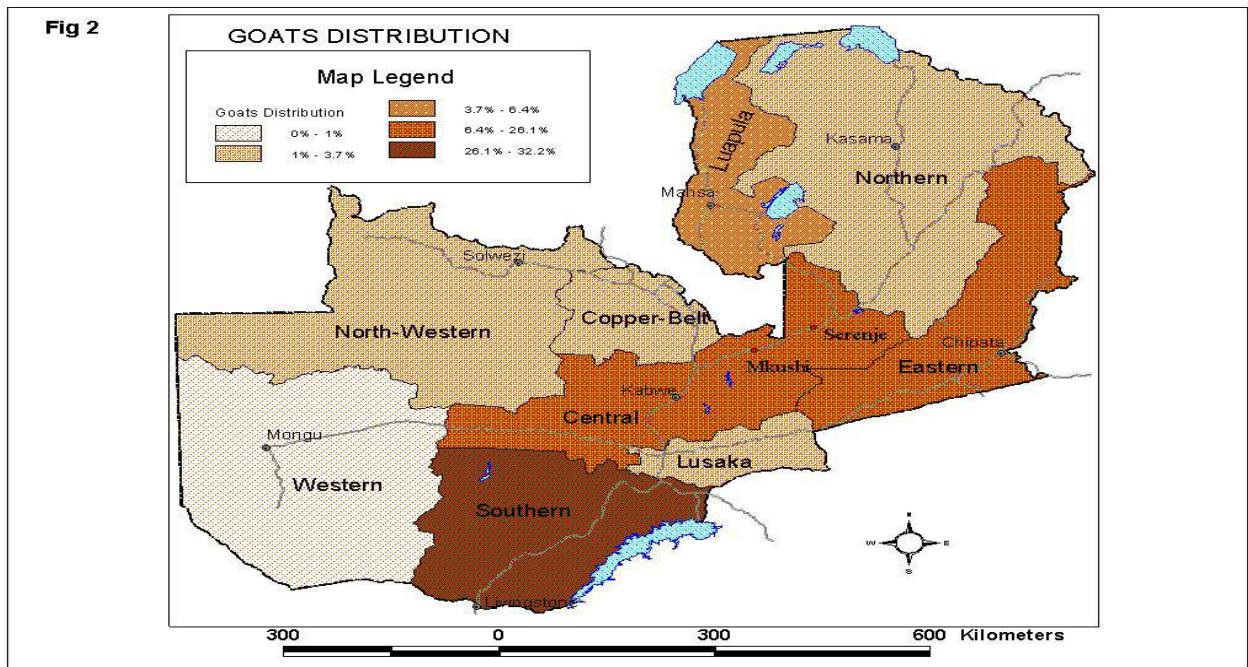
Product	2007	2008	2009
Live poultry	17,395	595	751
Live animals, nes	208	260	614
Live bovine animals	38	78	0
Live horses, asses, mules and hinnies	0	7	2
Live sheep and goats	0	0	3
<b>TOTAL</b>	<b>17,641</b>	<b>940</b>	<b>1,470</b>

Source: COMTRADE, 2010

The abundance of livestock in Zambia also presents opportunities for the production of leather from the livestock hides and for further value addition to raw hides and skins to wet blue and beyond in order to enhance the availability of raw hides and skins to the local tanneries. Currently, Zambia exports approximately 80% of the total wet blue and 20% is further processed to various finished leathers for the manufacture of shoes and leather goods.







**b) Poultry**

The Zambian poultry sector is one of the fastest growing sectors in Zambia despite the setbacks that it faced in 2009, when poultry production fell by 35 percent. This was attributed to the declining demand and the high prices for poultry and livestock feed. With 70 percent of poultry feed comprising soybeans, the low crop yields in 2009 greatly affected production of chickens resulting in the skyrocketing of poultry products. During the same period, of the 20 million chicks that were hatched, 18.5 million were sold while 1.5 died or were destroyed.

The Zambian food service sector uses large quantities of locally produced raw bulky cuts from major poultry producers. These producers include Verino, Crest, Eureka and Zamchick that grow chickens from day old chicks from own hatcheries or import from hatcheries outside the country. Despite the stiff competition that chicken products face from fish products and pork, the sector has maintained its competitive edge overtime. This is because, poultry products in Zambia remain the most affordable and sustainable form of animal protein thereby ensuring continued demand and investment potential of the sector.

### *c) Pigs*

Pig production in Zambia is done by both small scale and commercial producers. Statistics indicate that 605,000 pigs were grown commercially in 2008 with about 140,000 households being involved in production throughout the country. Of this, 43.7 percent households were located in Eastern Province, 20.7 percent in Northern, 9 percent in Lusaka while the remaining 27 percent were dispersed over the other six regions in the country. These 2008 statistics indicate a marked growth in production relative to a low of 110,070 household producers and 497,318 pigs in 2003.

Almost 65 percent of the total Zambian pig herd consists of pigs from indigenous breeds. The difficulties associated with obtaining commercial feeds and drugs has made many rural pig producers to turn to indigenous breeds with little management requirements and natural resistance to diseases compared to exotic counterparts. While commercial breeds mostly large white and landrace and their crosses are confined to medium and large scale livestock farming in more densely populated areas. Though the situation has improved recently, pig producers continue to lose their animals to diseases like African swine fever, pneumonia and other factors. Prior to the decline in production in 2003, pork was the second most popular meat behind beef consumed by the majority of people in urban centres. However, due to intermittent production and supply, poultry consumers have slowly shifted their taste to other meats like poultry and beef. Given the vast demand for pork, investment in production and measures like disease control and feed production promise favorable returns.

### **2.3.10. DAIRY FARMING**

Dairy farming is one of the most rewarding agri-businesses activities in Zambia. The industry is driven mainly by small-scale farmers who contribute 60% of the total milk production in Zambia. The dairy industry has recorded numerous improvements over the years.

The total output of the Zambian dairy industry is around 70 million litres per annum (having increased by over 100 percent in the last 5 years due to growing demand for milk in the country. The price of unprocessed milk in Zambia ranges between US\$ 0.50 to US\$ 0.60 per litre.

**Table. 2.3.10. Zambia's Annual Output of Unprocessed Milk**

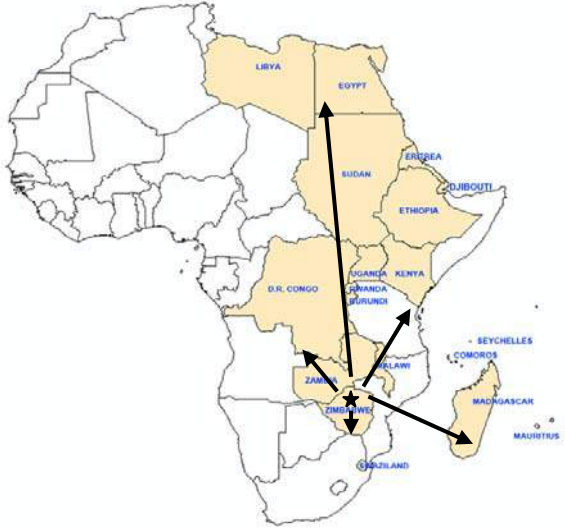
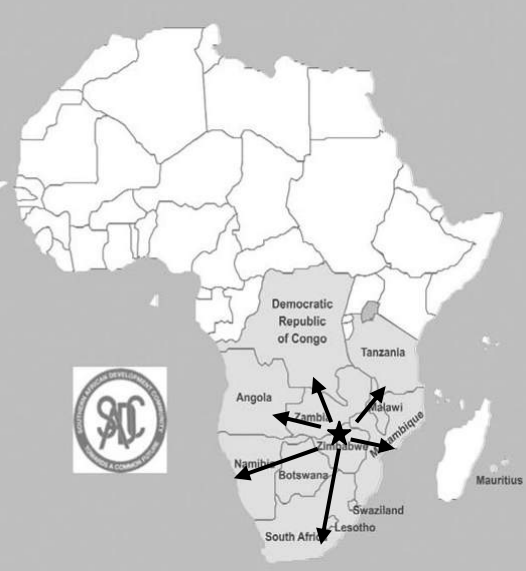
<b>Year</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Millions of Litres	28	38	42	61	70

*Source: Dairy Association of Zambia (2010)*

### 3.0 PREFERENTIAL MARKET ACCESS

Zambia is privy to preferential market access to a number of key markets. As a member of the Common Market for East and Southern Africa (COMESA) the country is part of a Customs Union and in SADC a Free Trade Area. The country is also a beneficiary under the African Growth Opportunities Act (AGOA) and the EU Everything But Arms.

Given the current regional integration agenda under both COMESA and SADC, and in particular the tripartite FTA between the two blocs and the East African Economic Community (EAC), it can be anticipated that intra-regional trade will be enhanced both through intra-industry as well as inter-industry trade. According to the African Union, the three Regional Economic Communities have an estimated combined population representing 57% of Africa’s population 58% of its GDP.

COMESA: Common Market for Eastern and Southern Africa	SADC: Southern African Development Community
	
<p><b>Total Population: 580 million*</b>      <b>Total GDP: US\$ 870 billion*</b>      * Including Zambia</p> <p><b>Access to <u>25</u> national markets:</b>            Angola, Botswana, Burundi, Comoros, Djibouti, DRC, Egypt, Eritrea, Ethiopia, Kenya, Lesotho, Libya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Sudan, Swaziland, Tanzania, Uganda, and Zimbabwe.</p>	

#### 4.0 INVESTMENT INCENTIVES IN THE AGRICULTURE SECTOR

Government has provided the following general investment incentives and allowances for the agricultural sector;

- Corporation tax at 15 percent on income from farming and non-traditional exports;
- Farm works allowance of 100 percent of expenditure on stumping, clearing, prevention of soil erosion, bore holes, aerial and geophysical surveys and water conservation;
- Development allowance of 10 percent of the cost of capital expenditure on growing of coffee, banana plants, citrus fruits or similar plants;
- Farm improvement allowance - capital expenditure incurred on farm improvement is allowable in the year of incurring the expenditure;
- Dividends paid out of farming profits are exempt for the first five years the distributing company commences business;
- Carry Forward Losses for 5 years

Furthermore the Zambia Development Act provides additional incentives for investors investing not less than US\$500,000 in the following agricultural related priority subsectors; -

- Floriculture
- Horticulture
- Processed foods
- Beverages and Stimulants
- Production and the processing of the following products in the textiles sector:
  - Cotton
  - Cotton yarn
  - Fabric
  - Agro processing
- Production and processing of the following products in the leather sector:
  - Cattle hides
  - Crust leather
  - Leather products
  - Garments

The priority sector incentives provided for under the ZDA Act are;

- A corporate tax of 0% for an initial period of 5 years from the first year profits are made. For years 6 to 8 corporate tax will be paid on 50% of profits and in year 9 to 10 on 75% of the profits.
- Dividends shall be exempted from tax for 5 years from the year of first declaration.
- Capital Expenditure on improvement or for the upgrading of infrastructure shall qualify for improvement allowance of 100% of such expenditure.
- Suspended Customs Duty to zero for 5 years on machinery and equipment

## 5.0. USEFUL CONTACTS OF AGENCIES IN THE AGRICULTURE SECTOR

NAME	ADDRESS	TELEPHONE	FAX	EMAIL
1. Zambia Development Agency (ZDA)	P.O. Box 30819, Lusaka	260-1-220177	260 1 293223	<a href="mailto:zda@zda.org.zm">zda@zda.org.zm</a>
2. Ministry of Agriculture And Cooperatives (MACO)	P.O. Box 50197, Lusaka	260-1- 250504	260-1- 250504	<a href="mailto:infor@maff.gov.zm">infor@maff.gov.zm</a>
3. Organic Producers and Processors Association of Zambia (OPPAZ)	P.O Box 35317, Lusaka	260-1-263070	260-1-265208	<a href="mailto:oas@organic.org.zm">oas@organic.org.zm</a>
4. Zambia Agricultural Commodities Exchange (ZAMACE)	P.O. Box 51373, Lusaka	260-1-231420	260-1-236067	<a href="mailto:info@zamace.com">info@zamace.com</a>
5. Zambia Export Growers Association (ZEGA)	P.O. Box 31024, Lusaka	260-1-233295	260-1-271167	<a href="mailto:zega@zamnet.zm">zega@zamnet.zm</a>
6. Zambia National Farmers Union (ZNFU)	P.O. Box 30395, Lusaka	260-1-252649	260-1-252648	<a href="mailto:zfnfu@zamnet.zm">zfnfu@zamnet.zm</a>