THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA
MULTI SECTORAL COMMITTEE ON FARM BLOCK DEVELOPMENT
ZAMBIA DEVELOPMENT AGENCY

Development and Commercialisation of Nansanga Farm Block

Prequalification Information Memorandum

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## MACROECONOMIC OVERVIEW

### ZAMBIA GENERAL STATISTICS

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>12,935,368 (2009 est.)</td>
</tr>
<tr>
<td>Land Area</td>
<td>752,612 square Kilometers</td>
</tr>
<tr>
<td>Water area (% of Land)</td>
<td>11,890 square kilometers</td>
</tr>
<tr>
<td>Terrain</td>
<td>Mostly high plateau with some hills and mountains</td>
</tr>
<tr>
<td>Climate</td>
<td>Tropical, modified by altitude, rainy season (October to April)</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>US$ 12.748 million</td>
</tr>
<tr>
<td>Real GDP Growth</td>
<td>6.3% (2009 est.)</td>
</tr>
<tr>
<td>Per Capita</td>
<td>$ 1,600 (2009 est.)</td>
</tr>
<tr>
<td>Export</td>
<td>ZMK 21.031 billion (2009)</td>
</tr>
<tr>
<td>Import</td>
<td>ZMK 18.941 billion (2009)</td>
</tr>
<tr>
<td>Annual Inflation</td>
<td>13.3% (2009)</td>
</tr>
<tr>
<td>Exchange rate regime</td>
<td>Liberalized</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>45.4 (2009)</td>
</tr>
<tr>
<td>Adult literacy</td>
<td>71%</td>
</tr>
</tbody>
</table>

Exchange Rate @ ZMK 4,700/USD

### HIGHLIGHTS

- Zambia’s population growth averaged 2.1% for the 2003-2008, above the global average of 1.3%
- Foreign direct investment (FDI) levels have risen sharply since the start of 2009
- The Zambian economy is diversified, with no single sector representing more than 20% of GDP in 2008; key components are mining (8.2%), agriculture (12.5%), construction (11.4%) and tourism (9.1%)

### GDP GROWTH

- During the past 5 years, Zambia has experienced relatively strong and consistent levels of real economic growth – average GDP growth of approximately 6%
- GDP per capita in 2008 was US$ 1,112 and US$ 1,392 in PPP terms - among the highest in sub-Saharan Africa
INVESTMENT CLIMATE

| Economic Outlook | • The Government expects real GDP growth of 6.6% in 2010  
|                  | • Growth in non-mining sectors is expected to be stimulated by growth in the agricultural sector  
|                  | • Strong base-metal production during 2009 has positively impacted growth for the economy  
|                  | • Economic policy will be focused on the government’s central budget goal of increased economic diversification  
| Inflation        | • The Bank of Zambia targets inflation using the base rate and foreign exchange reserves  
|                  | • 2009 started with double digit inflation levels of 16 percent but closed the year with single digit inflation at 9.9 percent  
|                  | • Annual inflation average is expected to fall to less than 10% fall from 13.3% in 2009.  
|                  | • It is expected that the decline in inflation in 2011 will be as a result of higher food production output and reduced Kwacha volatility due to an anticipated stabilisation of copper prices (IMF expects)  
| Exchange Rate    | • Zambia has a flexible foreign exchange regime with full convertibility  
|                  | • Zambian kwacha (ZMK) per US dollar in the last five years has been as follows: 5,237.4 (2009), 3,512.9 (2008), 3,990.2 (2007), 3,601.5 (2006), 4,463.5 (2005)  
|                  | • Performance of the exchange rate expected to be stable and mostly will follow the trend of the copper prices.  
| Investment       | • FDI recorded in the first quarter of 2010 amounted to US$1.3 Billion, surpassing the projected US$1 billion.  
|                  | • Investment is expected to rise substantially in 2011 in response to stabilised copper prices  
| Political Climate| • Stable and democratic environment since gaining independence from Britain in 1964 –Zambia has a functioning multi-party system  
|                  | • Three main political parties in Zambia; the ruling MMD (Movement for Multiparty Democracy), Patriotic Front and the UNPD (United Party for National Development)  
|                  | • Parliamentary and presidential elections are likely to be held towards the end of 2011  
| Social           | • There are over 73 different ethnic groups among Zambia’s indigenous population, with no record of ethnic divisions.  
|                  | • The people are highly peaceful and friendly.  
|                  | • Currently, Zambia has a predominantly young and steadily growing population  
|                  | • More than 50% population is Christian  
| Legal and Regulations | • based on English common law and customary law  
|                  | • predictable laws and policies covering Guarantees and Security to investors, labour, competition, investment protection, Environment protection, etc.  

**Government Policy Support**

Government’s general policy on economic development has been to liberalise the economy and promote private sector development. This has been followed up by economy diversification strategies which aim at reducing dependency on mineral resources thereby insulating the economy from shocks that result from metal prices volatility. Agriculture has been part and parcel of the diversification programme that encourages farmers to diversify from the traditional crops: maize and promotion of cash crops such as tobacco, flowers, cotton, coffee, tea, non-traditional crops like paprika and ginger which have higher returns per unit. Some of the strategies that Government is currently implementing to support the Agriculture sector and promote investment include the marketing support, infrastructure support, input support and financing support. Fiscal support has also been provided in the form of subsidies and tax incentives for priority sectors through the ZDA’s investment promotion unit.

**The Priority Sectors**

Incentives applicable to a priority sector under the ZDA Act include:

- Zero percent on profits for a period of five years from the first year the profits are made. From year 6 to 8 only 50% of the profits will be taxed, and from 9 to 10, 75 % will be taxed.
- Zero tax on dividends from for a period of 5 years from the first year dividends are declared.
- VAT deferment on capital equipment and machinery.
- Zero percent import duty on capital goods, machinery including trucks and specialized vehicles for five years.

Under the ZDA Act a number of sectors related to agriculture and the agribusiness have been identified as priority areas in which government has given special fiscal incentive, such sectors include:

- (a) Floriculture fresh flowers and dried flowers
- (b) Horticulture fresh and dried vegetables
- (c) Processed foods wheat flour other processed foods
- (d) Beverages and stimulants
  - (i) Tea and tea products
  - (ii) Coffee and coffee products
- (e) Production and the processing of the following products in the textile sector
  - (i) Cotton
  - (ii) Cotton yarn
  - (iii) Fabric
  - (iv) Garments
- (f) Production and processing of raw timber into wood products
- (g) Production and processing of the following products in the leather sector:
  - (i) Cattle hides
  - (ii) Crust leather
  - (iii) Leather products

**Relevant Procedures**

ZDA facilitates the registration of a company (companies Act 388) and other procedures and also issues an investment license which entitles the investor to certain incentives.

Land in Zambia is given on a 99 year lease and is renewable for a further 99 years provided there’s no breach of condition in the initial agreement. Traditional land can be converted to leasehold – thus allowing it to be used for business purposes.
ZAMBIAN AGRICULTURE SECTOR

2008 Sector GDP Contribution

The Agriculture sector has been increasing its impact on the Zambian economy annually. In the past few years the GDP contribution by the sector has been low due to overdependency on mineral resources. In 2008 the agriculture sector had GDP contribution of 12.5%, however the GDP could be higher considering that the capacity utilisation rate is low in the agriculture sector. For instance the agriculture land utilisation rate is at 15% of arable land whilst of Irrigation is only utilised at a rate of 10% of the irrigatable land. Smallholder farmers account for more than 80% of the national output but because of their dependence on rain fed agriculture, poor access to agriculture inputs and poor produce marketing arrangements – their productivity is still poor.

Increasing capacity in terms of these factors has the potential of making Zambia a leader in agriculture production in the region.

The vast majority of the country’s farmers are smallholders (about 75 percent), Large-scale commercial farming accounts for most of the commercial crop production and most of the livestock.

The sector employs 92 per cent of the rural and 20 per cent of the urban working populations (70% of Labour Force).

The government has continued to support the agriculture sector as a way of enhancing its economic diversification programme. Zambia has for some time designed and implemented programmes aimed at developing her agriculture sector. Some notable ones though not conclusive include the Food Reserve Agency (FRA) and the Fertiliser and Input Support Programme (FISP) whose combined budgetary allocations account for more than 35% of the total budget allocation to the agriculture sector. Other initiatives include creation of the Irrigation fund, the Agriculture Support Programme (ASP) and the World Bank supported Market Improvement and Innovation Facility (MIIF) managed by Africare just to mention a few.
Agriculture Industry Analysis

AGRICULTURE SECTOR PROFILE & STATISTICS

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arable Land</td>
<td>43 million hectares</td>
</tr>
<tr>
<td>Cultivated Arable</td>
<td>16%</td>
</tr>
<tr>
<td>Irrigatable land</td>
<td>2.7 million hectares</td>
</tr>
<tr>
<td>Irrigated land</td>
<td>156,000 hectares</td>
</tr>
<tr>
<td>Natural water supply</td>
<td>45% of Southern Africa</td>
</tr>
<tr>
<td>Employment</td>
<td>70% of Labour force</td>
</tr>
<tr>
<td>Products</td>
<td>Corn, sorghum, rice, peanuts, sunflower seed, vegetables, flowers, tobacco, cotton, sugarcane, cassava (tapioca), coffee; cattle, goats, pigs, poultry, milk, eggs, hides, etc</td>
</tr>
<tr>
<td>% of GDP</td>
<td>21.2</td>
</tr>
<tr>
<td>Agriculture Annual Growth</td>
<td>4%</td>
</tr>
<tr>
<td>Exports</td>
<td>25% of Total Exports</td>
</tr>
<tr>
<td>Regional Markets</td>
<td>COMESA, SADC</td>
</tr>
<tr>
<td>Oversea Markets</td>
<td>AGOA, EU, Asia</td>
</tr>
</tbody>
</table>

From 2007 the Agriculture sector has register positive growth in real GDP, with the 2009 growth estimated at 7.1%. Exports in 2009 were dominated by primary agriculture and processed foods.

PERFORMANCE HIGHLIGHTS

- Zambia Agriculture potential still remains under utilised in terms of: land and water utilization; exploitation of domestic and international markets; and value addition for profit maximization.

- Over the last years GDP contribution of the Agric sector has been below par i.e. between 10% - 20%, largely because of seasonal farming.

- The most outstanding trends in terms of production and potential economic growth come from the commercial sector. Increases in the yields and production of sugar cane have been exponential over the last five years, with other high-value crops like tobacco, wheat, coffee and cotton showing similar patterns.

- In terms of export production, growth in horticulture and floriculture production are especially exciting.
### Agriculture Industry Composition

<table>
<thead>
<tr>
<th>Primary Industry</th>
<th>Major Companies/Firms</th>
<th>Main Products</th>
<th>Key export markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Agriculture</td>
<td>Large scale Commercial Farms, Small holder farms, Zambia Coffee Growers Association, Kaleya Holdings, Kasama Coffee Company (22 members), Cotton Association of Zambia Kawambwa sugar plantation, etc</td>
<td>Tobacco, Cotton, Coffee, Maize and Tea. Other crops include Sorghum, Bean, Millet, Groundnuts, Rice, and wheat.</td>
<td>COMESA, Asia, EU and America</td>
</tr>
<tr>
<td>Animal Sector</td>
<td>Zambeef, Hybrid, Flamingo farms Limited, etc</td>
<td>fresh milk, frozen meats, and fresh eggs</td>
<td>Congo DR, Angola, Tanzania and Malawi</td>
</tr>
<tr>
<td>Floriculture</td>
<td>Zega, Khal Amazi, Gwaza Holdings, Scimitar Farming and Revays Farms, etc</td>
<td>Over 60 varieties of roses cultivated including tropical amazon, golden gate, red calypso, first red, poeme, noblesse, prophyta and tyneke.</td>
<td>Netherlands, Holland, Great Britain and Germany. Others are South Africa, Denmark and Niger Republic</td>
</tr>
<tr>
<td>Horticulture</td>
<td>ZEGA, Agriflora, Masstock Africa Ltd, Cheetah Zambia Ltd, etc</td>
<td>fresh agricultural produce: asparagus, mange tout, sugar snap peas, fine and bobby beans, baby corn, curettes, tender stem broccoli, okra, passion fruit, spring onions, patty pan squash, eggplant, mushrooms, cucumbers, baby carrots, leeks and various types of chilies.</td>
<td>UK, accounting for 47%, followed by Congo DR, which absorbed 15% and South Africa which contributed 13%. Other markets included Angola, Netherlands, Spain and Zimbabwe</td>
</tr>
<tr>
<td>Leather and Leather products</td>
<td>Zambeef, Crocodile farmers, Zamleather And Leather Products Limited, Zambia Bata Shoe Company, etc</td>
<td>crocodiles skins, wet blue leather, finished leather, footwear and protective shoes</td>
<td>Malawi (48%), Singapore (17%), the Democratic Republic of Congo (14%) and South Africa (5.3%). Other markets included Zimbabwe, India, Japan, Honk Kong, Turkey and Great Britain.</td>
</tr>
<tr>
<td><strong>Secondary (Manufacturing)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar processing</td>
<td>Zambia Sugar plc, Kafue Sugar, Kawambwa Sugar</td>
<td>Sugar</td>
<td>Great Lakes region and the European Union (EU)</td>
</tr>
<tr>
<td>Millers (Cereal processing)</td>
<td>National Million, Antelope Milling, Choma Milling, Tiger Animal Products Feeds</td>
<td>Maize meal, Flour, Animal Feed</td>
<td>COMESA</td>
</tr>
</tbody>
</table>
### Farmer Categories 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small-scale farmers</td>
<td>480,800</td>
</tr>
<tr>
<td>Emergent farmers</td>
<td>119,200</td>
</tr>
<tr>
<td>Medium Scale farmers</td>
<td>2,000</td>
</tr>
<tr>
<td>Large-scale farmers</td>
<td>100,000</td>
</tr>
</tbody>
</table>

**Note:** The above industry composition is not exhaustive.

### Major Companies/Firms

<table>
<thead>
<tr>
<th>Industry</th>
<th>Major Companies/Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy processing</td>
<td>Parmalat, Zambeef</td>
</tr>
<tr>
<td>Tobacco Processing</td>
<td>British American Tobacco Zambia Plc</td>
</tr>
<tr>
<td>Other food processing</td>
<td>Amanita Zambia Limited</td>
</tr>
<tr>
<td>Brewing</td>
<td>National Breweries</td>
</tr>
</tbody>
</table>

### Key export markets

- South Africa, China, Switzerland, Singapore and United Kingdom
- SADC
- (Local farmers)
- (Local Markets)

### Agro Services: Research

<table>
<thead>
<tr>
<th>Sector</th>
<th>Service Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>Zambia National Farmers Union, ASTI, etc</td>
</tr>
<tr>
<td>Government</td>
<td>Ministry of Agriculture Agencies, Zambia Agriculture Research Institute (ZARI),</td>
</tr>
</tbody>
</table>

### Agro Services: Marketing

<table>
<thead>
<tr>
<th>Sector</th>
<th>Service Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>Agriculture Commodity Exchange (ZAMACE), ZNFU</td>
</tr>
</tbody>
</table>

### Main Products

- Cotton, Textiles
- Meat, Milk
- Cigarettes
- Opaque traditional beer
- Marketing and Research services
- Agriculture research services
- Commodity exchange services such as Pricing, Trading and Market Access. ZNFU provided market information to its members

### Key export markets

- South Africa, China, Switzerland, Singapore and United Kingdom
- SADC
- (Local farmers)
- (Local Markets)

**The major component of the industry is made up of primary producers who produce for local processing and also export products in raw state.**

**The composition presents a lot of opportunities for agro-processing as evidenced by a narrow processing sector. Performance of the processing industries has been very exceptional in the last five years.**

**Other key players in the agriculture industry are the service providers, characterized of highly qualified agriculture experts.**
Research and Market Information Services

The Zambia Agriculture Commodity Exchange provides an opportunity to industry players to reduce risks through mechanisms that guarantee settlement, transparency of transaction and market information such as pricing.

ZAMACE

The Zambia Agriculture Research Institute (ZARI) is one of the departments in the Ministry of Agriculture and Cooperatives. The overall objective of the department is to provide a high quality, appropriate and cost effective service to farmers, generating and adapting crop, soil and plant protection technologies. This department is comprised of the Research Management Team which co-ordinates, manages and controls the human, physical and financial resources of four technical divisions, Central Services and Administration.

ZNFU's mission is to promote and protect the interest of members as farmers, individuals, corporation/companies and other organisations involved in the business of farming in order to achieve sustainable economic and social development.

ASTI

Facilitated by the International Food Policy Research Institute (IFPRI), Agricultural Science and Technology Indicators (ASTI) is a comprehensive and trusted source of information on agricultural research and development (R&D) statistics.

Ministry of Agriculture is leader research institution and provides services through a number of institutions. These include: Central Veterinary Research Institute (CVRI), Central Fisheries Research Institute (CFRI), Forestry Research Branch (FRB), is administered by the Ministry of Environment and Natural Resources, Food Technology Research Unit (FTRU), the Livestock and Pest Research Centre (LPRC), and the Water Resources Research Institute (WRRU)—fall under the National Institute for Scientific and Industrial Research (NISIR),
Agriculture Production Yield by Product

Productivity Data on different crops for the 2007/08 Agricultural Season, Zambia

<table>
<thead>
<tr>
<th>Product</th>
<th>Area planted (ha)</th>
<th>Area Harvested (ha)</th>
<th>Expected Production (mt)</th>
<th>Yield (mt/ha)</th>
<th>Expected Sales (mt/ha)</th>
<th>Basal fertiliser applied (mt)</th>
<th>Top Fertiliser Applied (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>916,738</td>
<td>539,873</td>
<td>1,141,429</td>
<td>1.95</td>
<td>473,163</td>
<td>48,646</td>
<td>49,386</td>
</tr>
<tr>
<td>Sorghum</td>
<td>24,350</td>
<td>16,170</td>
<td>9,993</td>
<td>0.46</td>
<td>764</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Rice</td>
<td>25,176</td>
<td>17,367</td>
<td>24,023</td>
<td>1.58</td>
<td>13,151</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>Millet</td>
<td>45,510</td>
<td>34,871</td>
<td>33,934</td>
<td>0.77</td>
<td>7,709</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Sunflower</td>
<td>32,495</td>
<td>26,767</td>
<td>12,662</td>
<td>0.72</td>
<td>764</td>
<td>78</td>
<td>61</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>144,200</td>
<td>121,365</td>
<td>9,993</td>
<td>0.66</td>
<td>27,661</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>Soya bean</td>
<td>25,840</td>
<td>23,928</td>
<td>43,715</td>
<td>0.87</td>
<td>35,070</td>
<td>3,285</td>
<td>488</td>
</tr>
<tr>
<td>Cotton</td>
<td>111,307</td>
<td>83,657</td>
<td>71,821</td>
<td>0.74</td>
<td>355</td>
<td>82</td>
<td>68</td>
</tr>
<tr>
<td>Irish potatoes</td>
<td>1,058</td>
<td>1,099</td>
<td>10,196</td>
<td>4.53</td>
<td>9,515</td>
<td>495</td>
<td>147</td>
</tr>
<tr>
<td>Burley tobacco</td>
<td>1,816</td>
<td>1,691</td>
<td>4,659</td>
<td>1.89</td>
<td>777</td>
<td>322</td>
<td>221</td>
</tr>
<tr>
<td>Virginia tobacco</td>
<td>9,299</td>
<td>9,076</td>
<td>17,005</td>
<td>2.33</td>
<td>11,159</td>
<td>2,838</td>
<td>1,332</td>
</tr>
<tr>
<td>Mixed beans</td>
<td>59,590</td>
<td>55,755</td>
<td>44,464</td>
<td>0.67</td>
<td>20,754</td>
<td>38</td>
<td>13</td>
</tr>
<tr>
<td>Bambara nuts</td>
<td>2,204</td>
<td>1,866</td>
<td>2,513</td>
<td>0.84</td>
<td>1,116</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cowpeas</td>
<td>3,688</td>
<td>2,121</td>
<td>1,506</td>
<td>0.52</td>
<td>411</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Velvet beans</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>0.32</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sweet potatoes</td>
<td>32,437</td>
<td>29,828</td>
<td>106,523</td>
<td>4.02</td>
<td>52,309</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Cassava</td>
<td>400</td>
<td>205</td>
<td>773</td>
<td>3.02</td>
<td>737</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cashew nuts</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.35</td>
<td>.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paprika</td>
<td>434</td>
<td>420</td>
<td>995</td>
<td>1.44</td>
<td>639</td>
<td>88</td>
<td>72</td>
</tr>
<tr>
<td>Castor beans</td>
<td>13</td>
<td>13</td>
<td>11</td>
<td>0.8</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wheat</td>
<td>11,471</td>
<td>11,394</td>
<td>63,879</td>
<td>4.28</td>
<td>61,294</td>
<td>6,302</td>
<td>5,320</td>
</tr>
</tbody>
</table>

In the cases where the production yield has been low, research by the Agriculture Consultative Forum and the Food Security Research Project reveal that four major factors contributed to this, and these are: (i) low access to technology and information (research on crops/livestock, management practices, extension, processing improvements), (ii) low access to Markets (property rights, standards, contract law, adjudication, market facilities, market price and supply information, marketing extension ), (iii) lack of Infrastructure ( roads, irrigation, rural electrical power, ports, communications), and Poor access to inputs (fertiliser, pesticides)
The Zambia Agricultural commodity exchange (ZAMACE) ensures that trading methods are formal, transparent and the underlying product are of high or standard quality. From 2007 trading activities have been increasing steadily on the exchange as more traders adopt the ZAMACE as the pricing mechanism. Lessons in the region have shown that centralized market places with their associated perception of transparency and integrity can enhance activity. As at September 2010, ZAMACE had traded $71 million worth of turnover. Though this represents a fraction of the national production volume it gives a reasonable indication of the price and production trends during the year.
The Agro-processing sector is one of the highest performing sectors as evidenced by the companies listed on the Lusaka stock exchange. All the listed companies showed strong and stable stock performance throughout 2009.
### Zambia’s ranking

Table below shows the highest rankings of Zambia amongst all other countries, for each agricultural commodity, for the year 2008 by value at applicable International commodity prices.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Commodity</th>
<th>Rank</th>
<th>Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Game meat</td>
<td>52</td>
<td>Chillies and peppers, dry</td>
</tr>
<tr>
<td>15</td>
<td>Fruit, tropical fresh nes</td>
<td>57</td>
<td>Indigenous Goat Meat</td>
</tr>
<tr>
<td>16</td>
<td>Spices, nes</td>
<td>58</td>
<td>Vegetables fresh nes</td>
</tr>
<tr>
<td>17</td>
<td>Tobacco, unmanufactured</td>
<td>67</td>
<td>Barley</td>
</tr>
<tr>
<td>24</td>
<td>Artichokes</td>
<td>71</td>
<td>Fruit Fresh Nes</td>
</tr>
<tr>
<td>25</td>
<td>Maize</td>
<td>72</td>
<td>Wheat</td>
</tr>
<tr>
<td>25</td>
<td>Cottonseed</td>
<td>80</td>
<td>Hen eggs, in shell</td>
</tr>
<tr>
<td>26</td>
<td>Pulses, nes</td>
<td>89</td>
<td>Oranges</td>
</tr>
<tr>
<td>28</td>
<td>Cotton lint</td>
<td>91</td>
<td>Indigenous Cattle Meat</td>
</tr>
<tr>
<td>29</td>
<td>Cassava</td>
<td>92</td>
<td>Rice, paddy</td>
</tr>
<tr>
<td>30</td>
<td>Millet</td>
<td>94</td>
<td>Indigenous Chicken Meat</td>
</tr>
<tr>
<td>33</td>
<td>Sweet potatoes</td>
<td>94</td>
<td>Onions, dry</td>
</tr>
<tr>
<td>36</td>
<td>Pepper (Piper spp.)</td>
<td>95</td>
<td>Indigenous Pig meat</td>
</tr>
<tr>
<td>36</td>
<td>Tea</td>
<td>100</td>
<td>Natural honey</td>
</tr>
<tr>
<td>37</td>
<td>Sugar cane</td>
<td>103</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>37</td>
<td>Groundnuts, with shell</td>
<td>113</td>
<td>Bananas</td>
</tr>
<tr>
<td>45</td>
<td>Coffee, green</td>
<td>123</td>
<td>Indigenous Sheep Meat</td>
</tr>
<tr>
<td>46</td>
<td>Sunflower seed</td>
<td>124</td>
<td>Cow milk, whole, fresh</td>
</tr>
<tr>
<td>46</td>
<td>Soybeans</td>
<td>127</td>
<td>Potatoes</td>
</tr>
<tr>
<td>48</td>
<td>Sorghum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Zambian poultry industry has seen steady export growth, as market access has improved through trade arrangements with the Common Market for East and Southern Africa and the Southern African Development Community. In 2009, the animal products sector recorded export earnings of US$28.9 million, indicating an increase of 139 percent over the 2008 figure of US$12.1 million. The sector’s contribution to total NTEs (Non-traditional exports i.e. non-metals) in 2009 was 2.3 percent.

In 2009 total exports for the floriculture sector amounted to US$22.6 million, as compared to $26.9 million in 2008, thereby representing a 16 percent reduction. This reduction could be attributed to the slowing global economy in 2009 hit the demand for roses from Zambia.

In 2009 the Floriculture sector export earnings in the sector recorded a 50 percent decrease from US$36.3 million recorded in 2008 to US$18.3 million in 2009, making a contribution of 0.8% to overall Non metal exports.

The increase in exports in the Leather sector is largely attributed to an increase in leather products prices in the world. An increase in demand in the Chinese market due to production expansion in particular has contributed as Zambia has increased its exports to that market.

Primary agriculture (excludes horticulture and...
floriculture) in 2009 remained a critical sector contributing about US$ 231 million of the total US$2.12 billion Non-traditional Exports earnings in 2009. The sector comprises of all agricultural products except for the Floriculture and Horticulture products. This includes Tobacco, Cotton, Coffee, Maize and Tea. Other crops include Sorghum, Bean, Millet, Groundnuts, Rice, and wheat.

**Agriculture Top Exports Zambia in 2008**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Commodity</th>
<th>Quantity (tonnes)</th>
<th>Value (1000 $)</th>
<th>Unit value ($/tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maize</td>
<td>190,513</td>
<td>51,089</td>
<td>268</td>
</tr>
<tr>
<td>2</td>
<td>Sugar Raw Centrifugal</td>
<td>98,216</td>
<td>57,850</td>
<td>589</td>
</tr>
<tr>
<td>3</td>
<td>Flour of Wheat</td>
<td>32,593</td>
<td>27,055</td>
<td>830</td>
</tr>
<tr>
<td>4</td>
<td>Bran of Maize</td>
<td>31,317</td>
<td>2,782</td>
<td>89</td>
</tr>
<tr>
<td>5</td>
<td>Tobacco, unmanufactured</td>
<td>24,375</td>
<td>71,749</td>
<td>2,944</td>
</tr>
<tr>
<td>6</td>
<td>Cotton lint</td>
<td>22,743</td>
<td>33,568</td>
<td>1,476</td>
</tr>
<tr>
<td>7</td>
<td>Flour of Maize</td>
<td>17,046</td>
<td>5,828</td>
<td>342</td>
</tr>
<tr>
<td>8</td>
<td>Beverage Non-Alc</td>
<td>8,784</td>
<td>6,888</td>
<td>784</td>
</tr>
<tr>
<td>9</td>
<td>Cottonseed</td>
<td>8,508</td>
<td>1,427</td>
<td>168</td>
</tr>
<tr>
<td>10</td>
<td>Bran of Wheat</td>
<td>6,968</td>
<td>408</td>
<td>59</td>
</tr>
<tr>
<td>11</td>
<td>Molasses</td>
<td>6,423</td>
<td>355</td>
<td>55</td>
</tr>
<tr>
<td>12</td>
<td>Cake of Cottonseed</td>
<td>4,809</td>
<td>1,089</td>
<td>226</td>
</tr>
<tr>
<td>13</td>
<td>Vegetable Frozen</td>
<td>4,467</td>
<td>23,731</td>
<td>5,313</td>
</tr>
<tr>
<td>14</td>
<td>Sugar Confectionery</td>
<td>4,139</td>
<td>5,963</td>
<td>1,441</td>
</tr>
<tr>
<td>15</td>
<td>Cotton Linter</td>
<td>2,665</td>
<td>3,508</td>
<td>1,316</td>
</tr>
<tr>
<td>16</td>
<td>Coffee, green</td>
<td>2,533</td>
<td>7,041</td>
<td>2,780</td>
</tr>
<tr>
<td>17</td>
<td>Food Prep Nes</td>
<td>1,684</td>
<td>1,818</td>
<td>1,080</td>
</tr>
<tr>
<td>18</td>
<td>Beans, dry</td>
<td>1,504</td>
<td>291</td>
<td>193</td>
</tr>
<tr>
<td>19</td>
<td>Pastry</td>
<td>1,210</td>
<td>1,918</td>
<td>1,585</td>
</tr>
<tr>
<td>20</td>
<td>Food Wastes</td>
<td>1,200</td>
<td>619</td>
<td>516</td>
</tr>
</tbody>
</table>

FAO 2008
### Agriculture Top Imports Zambia in 2008

<table>
<thead>
<tr>
<th>Rank</th>
<th>Commodity</th>
<th>Quantity (tonnes)</th>
<th>Value (1000 $)</th>
<th>Unit value ($/tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wheat</td>
<td>29,955</td>
<td>17,988</td>
<td>601</td>
</tr>
<tr>
<td>2</td>
<td>Soybeans</td>
<td>23,752</td>
<td>10,884</td>
<td>458</td>
</tr>
<tr>
<td>3</td>
<td>Palm oil</td>
<td>20,399</td>
<td>26,135</td>
<td>1,281</td>
</tr>
<tr>
<td>4</td>
<td>Oil Hydrogenated</td>
<td>19,577</td>
<td>32,532</td>
<td>1,662</td>
</tr>
<tr>
<td>5</td>
<td>Rice Broken</td>
<td>13,549</td>
<td>9,607</td>
<td>709</td>
</tr>
<tr>
<td>6</td>
<td>Soybean oil</td>
<td>13,366</td>
<td>21,043</td>
<td>1,574</td>
</tr>
<tr>
<td>7</td>
<td>Flour of Oilseeds</td>
<td>9,959</td>
<td>17,133</td>
<td>1,720</td>
</tr>
<tr>
<td>8</td>
<td>Cake of Soybeans</td>
<td>9,033</td>
<td>5,941</td>
<td>658</td>
</tr>
<tr>
<td>9</td>
<td>Oranges</td>
<td>8,299</td>
<td>1,713</td>
<td>206</td>
</tr>
<tr>
<td>10</td>
<td>Malt</td>
<td>7,225</td>
<td>8,001</td>
<td>1,107</td>
</tr>
<tr>
<td>11</td>
<td>Beverage Non-Alc</td>
<td>6,749</td>
<td>5,589</td>
<td>828</td>
</tr>
<tr>
<td>12</td>
<td>Glucose and Dextrose</td>
<td>5,478</td>
<td>3,948</td>
<td>721</td>
</tr>
<tr>
<td>13</td>
<td>Food Prep Nes</td>
<td>5,325</td>
<td>9,833</td>
<td>1,847</td>
</tr>
<tr>
<td>14</td>
<td>Apples</td>
<td>5,152</td>
<td>2,758</td>
<td>535</td>
</tr>
<tr>
<td>15</td>
<td>Beer of Barley</td>
<td>4,612</td>
<td>3,800</td>
<td>824</td>
</tr>
<tr>
<td>16</td>
<td>Fruit Juice Nes</td>
<td>4,597</td>
<td>5,048</td>
<td>1,098</td>
</tr>
<tr>
<td>17</td>
<td>Potatoes</td>
<td>4,187</td>
<td>1,464</td>
<td>350</td>
</tr>
<tr>
<td>18</td>
<td>Margrine Short</td>
<td>3,993</td>
<td>7,427</td>
<td>1,860</td>
</tr>
<tr>
<td>19</td>
<td>Pastry</td>
<td>3,329</td>
<td>5,535</td>
<td>1,663</td>
</tr>
<tr>
<td>20</td>
<td>Sugar Raw Centrifugal</td>
<td>2,906</td>
<td>1,647</td>
<td>567</td>
</tr>
</tbody>
</table>

FAO 2008

The above data shows the existence of import substitution opportunities at both primary production and agro-processing levels which can be exploited by the private sector.
Seasonal calendar and critical events (centred around maize production)

*Note the calendar above represents a typical agriculture season and not the inevitable.*
COMPETITIVENESS OF ZAMBIA AGRICULTURE

✓ Favorable agriculture fundamentals

✓ Import duties on most agriculture inputs are low and do not attract VAT

✓ For other inputs like fertiliser and herbicides, the current tax regime (0% duty, 0% VAT) is an important advantage to agriculture competitiveness

✓ High production yield per hectare

✓ DRC’s Katanga Province is the one geographic area where Zambia, especially the Nansanga Farm block enjoys a transport advantage over all other competitors in the region (worth noting of all export markets, the DRC has favorable veterinary importing standards for Beef)

✓ Zambia has a strong incentive to produce maize and is extremely competitive to imports

✓ Regional markets are the most important to Zambia’s Agriculture sector and her central location is an advantage

✓ Most high value Zambia Crops are able to cover logistical costs and compete favorably on the global market making high returns (notable ones being Sugar, cotton, coffee, paprika, tobacco, horticulture and fresh fruits)

✓ Good value realisation exists at both primary and processed stage in most products
Value Chain Analysis of Zambian Typical Agribusiness

As per *Zambian Competitiveness Report 2007* by the World Bank, the Agriculture Sector value chain performance is enhanced by factors analyzed below:

<table>
<thead>
<tr>
<th>INPUT SUPPLY</th>
<th>FARM PRODUCTION</th>
<th>ASSEMBLY</th>
<th>PROCESSING</th>
<th>LOGISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero or low duty/VAT on most inputs</td>
<td>High production yield per hectare especially for large Commercial farms</td>
<td>Pirate pricing mostly affects small scale farmers but on the decline</td>
<td>VAT deferment on capital equipment and machinery.</td>
<td>Good access to major markets Lusaka &amp; Copperbelt</td>
</tr>
<tr>
<td>VAT registered firms can reclaim VAT or apply for a deferment</td>
<td>Yield Inhibiting factors are constantly being addressed in terms of improving infrastructure</td>
<td>Emergent and Large scale farmers have better access to transportation</td>
<td>Zero percent import duty on capital goods, machinery including trucks and specialized vehicles for five years</td>
<td>Unrivaled access to neighboring markets especially DR Congo</td>
</tr>
<tr>
<td>Low duty and VAT on pesticides and Equipment</td>
<td>Zambian soils are highly productive and irrigatable</td>
<td>Transportation costs heavily dependent on fuel prices</td>
<td>Competitive domestic prices compared to imported goods</td>
<td>Competitive Prices</td>
</tr>
<tr>
<td>Fertilizers and herbicides qualify for (0% duty,0% VAT)</td>
<td>Some crops at this stage can be stored for future trading</td>
<td>Road network fairly favorable</td>
<td>Abundant raw material supplies (e.g. through Out-grower scheme opportunities)</td>
<td>Globally reputable varieties of crops e.g. coffee, tobacco and floriculture</td>
</tr>
<tr>
<td>Access to research services</td>
<td>Available scientifically tested fertilizers and seeds</td>
<td></td>
<td></td>
<td>Growing Commodity exchange facilitating formal trading, price discovery, etc</td>
</tr>
</tbody>
</table>
Industry Key Success Opportunities

✓ Zambia is a member of organizations such as Common Market of East and Southern Africa as well as the Southern Africa Development Community which provides the industry free markets with access to over 400 million people.

✓ Through AGOA, Zambia has access to USA markets and other overseas markets like Canada, Japan and China through the respective market access Initiative.

✓ The government has committed itself to the farm block development programme through Presidential intervention and the formation of the Committee of the Permanent secretaries to oversee the implementation of the Farm Block Development.

✓ Selected areas for proposed development have good arable land suitable for agriculture. The Ministry of Agriculture and Cooperatives has undertaken necessary soil tests and analyzed the soils and is satisfied with the results.

✓ The weather pattern in the selected areas is favourable and adequate for all kinds of agriculture crops in the tropics. These areas have adequate rainfall for the envisaged agricultural activities.

✓ Zambia has readily available skilled and unskilled labour. The government has universities and colleges where agriculture courses are offered in all fields and produce highly trained personnel to manage all types of farm activities.

✓ Existence of various agriculture support programme by Government and Cooperating partners

✓ Favorable Government policy aimed at developing the agriculture sector exists in the form of substantial government budgetary allocations, fiscal incentives and infrastructure support.

✓ Bulk food commodities like cassava, beef, maize, and rice are all in great demand in the DRC and typically trade for about 20-30% more compared with domestic prices.
The National Farm Block Development Programme is a Government initiative to commercialize agricultural land in Zambia and aims at creating a suitable environment that enables both local and foreign investment to fully exploit the agricultural potential in under developed areas, with an ultimate objective of reducing poverty.
Key Objectives of Farm Block Development

- To commercialize agricultural land and exploit its full potential in order to attain economic diversification and growth.
- To enhance food security through production of adequate food for the nation and export.
- To open up undeveloped rural areas, reduce poverty and minimize rural to urban migration.

The programme is being managed by the Technical Multi-disciplinary and Muti-sectoral Committee (TMMC) on Farm Block Development (FBD) and supervised by the Committee of Ministry Permanent Secretaries. The TMMC is pivotal in the establishment of commercialized new and existing farm blocks (FBs) and ensuring optimum returns from the synergies within the commercialization of agricultural land portfolio. The committee is also responsible for agricultural land identification and land advocacy including sensitization, dissemination of information on farming blocks, conducting an agricultural land baseline data, designing layout plans and undertaking a strategic environmental impact assessment.

Government has identified nine viable farm blocks at the moment, one in each province as shown in the map above. Government shall develop the following farm block in phase 1 of the national farm block development programme, and these are:

- Nasanga farming block in Serenje District, Central Province
- Kalumwange farm block in Kaoma District, Western Province
- Luena farm block in Kawambwa District, Luapula Province
Proposed Farm Blocks

- **Manshya Farm Block**
  - Mpika, Northern Province
  - 147,000 ha

- **Mwase-Phangwe Farm Block**
  - Lundazi, Eastern Province
  - 100,000 ha

- **Mikelenge/Luma Farm Block**
  - Solwezi, North-Western Province
  - 100,000 ha

- **Musakashi (SADA) Farm Block**
  - Mufulira, Copperbelt Province
  - 100,000 ha

- **Luena Farm Block**
  - Kawambwa, Luapula Province
  - 100,000 ha

- **Kalumwange Farm Block**
  - Kaoma Western Province
  - 100,000 ha

- **Mungu Farm Block**
  - Kafue, Lusaka Province
  - 100,000 ha

- **Simango Farm Block**
  - Livingstone, Southern Province
  - 100,000 ha

- **Musakashi (SADA) Farm Block**
  - Mufulira, Copperbelt Province
  - 100,000 ha

- **Nansanga Farm Block**
  - Serenje, Central Province
  - 100,000 ha

- **Senanga Citric Plant**
  - Senanga, Western Province
  - 1,200 ha
NANSANGA FARM BLOCK PROFILE

Location and Map

Nansanga is located in Serenje District between longitudes 30°01’ E and 30°12’ E and latitudes 12°35’ S and 12°55’ S north-west of Serenje about 45km to 85km for the nearest and furthest points from Serenje respectively on the Serenje - Mapepala - Nabowa road. The southern boundary is the Nkulumashiba stream while the western boundary is the Luwombwa in areas north of the Kanshinke and the Munte in areas south of the Kanshinke.

Climate

The closest meteorological station is at Serenje which is 1384 metres above sea level (m.a.s.l.). The climate of the district is strongly seasonal with rainfall starting late November, lasting until mid April. The total growing period at Serenje is 135 days, with a mean annual rainfall of 1161 mm. Whereas Serenje experiences the highest mean annual rainfall the mean at Nansanga is slightly lower averaging 1159. There are two rainfall peaks, one in December and the other in February. Serenje has a high average number of 0.4 to 10 mm rain days (42). Occasional dry spells lasting up to 10 days are common during the growing season in subzone 18.
From June to August, it is cool and dry. High temperatures are recorded during the dry season starting in August reaching their highest in October. A brief cold season is recorded during June and July. The mean annual temperature is 19.0°C. The absolute minimum temperatures during the coldest month (July) is -3.2°C and absolute maximum temperatures reaches 36.0°C in October, (Muchinda, 1985).

Potential Evapotranspiration (PET) during the rainy season is highest in October (151 mm) but is more than the mean monthly rainfall from May to October. During the rainy season due to high cloud cover, evaporation is lower than precipitation.
Soil Analysis

Zambia is divided into three different agro-ecological zones, differentiated by variable rainfall and water quality.

Region I receives less than 800 millimetres of rainfall annually and constitutes 14 per cent of Zambia’s total land area. The soil is mostly clay-like and it covers the Southern Province and parts of the Eastern and Western provinces. This region has recurrent drought and floods, but shows potential for cattle production, except in the valley areas where the heat and humidity attract tsetse flies, which makes cattle rearing difficult.

Region II (Zone IIA) receives 800–1,000 millimetres of rainfall annually and constitutes 28 per cent of the total land area of Zambia. The soil here is the most fertile in the country, and the area covers the Lusaka, Southern, Central and Eastern provinces of Zambia.

Region II (Zone IIB) receives more than 800 millimetres of rainfall annually and comprises 12 per cent of the land area of Zambia. The soil is sandy and alluvial, and shows potential for poultry and cattle rearing.

Region III, which comprises of Northern, Luapula, and North-Western province, receives more than 1,200 millimetres of rainfall per annum and comprises 46 per cent of the land area of Zambia. The soil is mainly acidic and has low fertility. This area has shown great potential for the fisheries sector.

Nansanga falls in the Region III where a greater part of the area consists mainly of quartzitic sandstones, Moore’s (1976). Fine grained phyllitic siltstones and shales are scattered occurrences. Also present are shallow areas with laterite beds or gravelly topsoil or sheets.

The soils of the area were described by Woode (1980), in the Reconnaissance Soil Survey of Chief Muchinda’s Area (at 1:50,000 scale) as comprising deep, well drained sandy loam to sandy clay loam soils having a clear clay increase with inclusions of well drained sandy clay loam to clay. Soils classes ranged from excessively drained sand soils at hill footslopes, moderately well drained sandy loam soils to imperfectly-drained sandy loam soils. Other soils found were the shallow soils and dry dambos. The soils were noted to be acidic to very strongly acidic, and having low to high base saturations.

Nansanga Snapshot

<table>
<thead>
<tr>
<th>Location</th>
<th>Serenje, Central Province, 450 km north of Lusaka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Soil type</td>
<td>deep, well drained sandy loam to sandy clay soils</td>
</tr>
<tr>
<td>Average Rainfall</td>
<td>1,161 mm</td>
</tr>
<tr>
<td>Rainfall days</td>
<td>135 days</td>
</tr>
<tr>
<td>Water</td>
<td>Rivers and Good watershed areas</td>
</tr>
<tr>
<td>Temperature</td>
<td>19.0°C</td>
</tr>
<tr>
<td>Total Farm block size</td>
<td>100,000 ha</td>
</tr>
<tr>
<td>Land Size: Core Venture (1)</td>
<td>9,350 ha</td>
</tr>
<tr>
<td>Land Size: Commercial Farms (3)</td>
<td>1,620 ha; 2,571 ha and 3,959 ha</td>
</tr>
<tr>
<td>Land Size: Small and Medium (356)</td>
<td>10 ha to 900 ha</td>
</tr>
<tr>
<td>Business Model</td>
<td>Core venture, Out-grower scheme, value addition (agro-processing)</td>
</tr>
</tbody>
</table>
### Potential Crops and Livestock in Nansanga

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
</table>
| Coffee       | • Zambian Coffee is a high value crops and Zambian coffee is made from one of the high quality beans in the region i.e. the Arabica beans and has long-term sustainability.  
• Coffee production in Zambia is yet to fulfill its full potential as current demand exceeds supply. Most of the coffee is supplied in a raw state; hence there is further potential for value addition through processing. In 2004 – 05 Zambia produced about 7000 tons worth about $ 16.8 million.  
• The price trend has been favorable from 2004/05 to date. In 2009, the total export earnings from coffee amounted to US$ 23 million.  
• The Zambia expects over 10,000 mt of in 2010 (Zambia Coffee Growers Association). Major markets include buyers for the South Africa, UK, Germany and USA. |
| Maize        | • Maize is the most widely farmed crop in Zambia and as a staple food is the base crop for national food security. Production is predominantly dependent on rainfall with only a few commercial farms able to produce irrigated maize.  
• Zambia produced about 2.8 million metric tonnes of maize in 2009/10 farming season.  
• In periods of bumper harvest, Zambia exports maize to neighboring countries.  
• The immediate markets for maize production comprised of mainly local milling companies who process maize into finished products such as Maize meal, Animal Feeds, etc. |
| Wheat        | • Wheat production in the 2009/2010 season rose to 216,000 tonnes from 190,000 tonnes in the 2008/2009 season, Zambia’s annual wheat consumption is about 160,000 mt.  
• Major exports markets are the neighboring countries |
| Beans        | • Beans are predominantly produced in the Northern Provinces (at least 70 percent).  
• Production dropped from 27,697MT in 2005/06 season to 24,164MT in 2006/07 (13 percent reduction), despite a slight (2 percent) increase in area planted. The reduction in production can be attributed to reduced yields in parts of Northern Province due to excessive rainfall. |
| Soya beans   | • Production in 2009 increased by 52% from 2008  
• Highly driven by continued growth in the food and poultry industry  
• Processing opportunities in form of production of soya oil, soya cake and soya chunks  
• Huge markets in South America |
**Sorghum**
- Production of sorghum is concentrated in Southern, Western and North-western.
- The production of sorghum dropped significantly by 39 percent from 21,047MT in the 2005/06 season to 12,773MT in the 2006/07 production season. This was in line with the 25 percent drop in area planted. The highest producers of sorghum in the 2006/07 season were Southern Province (3,680MT) and Western province at 2,172MT.
- Sorghum increased by 54% to 21,829 MT in 2009 from 9,992 MT in 2008

**Groundnuts**
- Groundnuts are predominately produced in Eastern and Northern Provinces. Nansanga production can benefit from immediate market in the northern areas and neighboring DRC.
- Although the hectarage planted marginally increased (2 percent) in the 2006/07 season, the production dropped by 34 percent falling from 84,010MT in 2005/06 season to 55,215MT. This could be mostly attributed to the negative impact of excessive rainfall in the high producing areas of Eastern and Northern provinces.
- Production in 2009 increased by 42% from 2008

**Tobacco**
- Two varieties are grown in Zambia Virginia and Burley.
- Virginia tobacco, the more widely grown variety in the country remained relatively stable in terms of production only increasing marginally (6 percent) over the previous season from 14,685MT to 15,562MT.
- Burley production fell from 7,742MT in 2005/06 season to 1,901MT in 2006/07 season marking a 75 percent reduction. This followed the large drop in areas planted to the crop by 72 percent. This variety is predominately produced in Eastern province (83 percent) while production in the other burley tobacco growing areas of Southern and Central Province is insignificant.
- In 2009, total production for tobacco increased from 14 million kgs in 2008 to 16 million kgs
- Leading markets have continued to be Malawi, Zimbabwe, South Africa, Mozambique, Belgium, Philippines and Turkey. Others are Bangladeshi, Israel, Germany and Russia.

**Sweet Potatoes**
- Production mainly seasonal and dominated by subsistence farming
- Huge consumer market in Lusaka and Copperbelt provinces
- Production in 2009 increased by 47% from 2008

**Irish Potatoes**
- Zambia potato production and consumption has risen gradually, and is becoming of increasing importance.
- Increasing demand for potatoes driven by the fast food service sector and supermarkets

**Finger Millet**
- Millet is produced by small scale farmers both as a staple food in a few parts of northern Zambia as well as for brewing local beer in different parts of the country.
- The limited demand has contributed to the continued low production levels averaging around 38,000MT
During the 2006/07 season, production dropped to 21,707MT from 48,259MT attained in 2005/06 production season marking a 55 percent reduction which could be partly attributed to reduced heceterage (18 percent) and reduced yields.

### Sunflower
- Production in 2009 increased by 62% from 2008

### Cassava
- Cassava is a food security crop whose main market is for local trade and sale to urban consumers in Lusaka and the Copperbelt.
- Cassava production is on an upward trend, steadily increasing over the last five years. This trend could be partly attributed to the deliberate distribution of planting material in the last few years through the crop diversification program.
- Cassava production increased by 12 percent in the 2006/07 season from 1,059,887MT in 2005/06 to 1,185,600MT (flour equivalent)

### Horticulture
- Zambia’s horticulture sector comprises Baby Corn, Fine Bean, Sugar Snaps, Spring Onion, Patti Pans, Chilies, Mange Tout (Snow Peas), Okra, Baby Carrots, Green Asparagus and Courgettes.
- In 2009, export earnings in the sector recorded a 50 percent decrease from US$ 36.3 million recorded in 2008 to US$ 18.3 million in 2009
- The main markets for fresh vegetables in 2009 was the UK, accounting for 47%, followed by Congo DR, which absorbed 15% and South Africa which contributed 13%, Other markets included Angola, Netherlands, Spain and Zimbabwe.

### Floriculture
- Over 60 varieties of rose flowers and 7 varieties of summer flowers are grown in Zambia.
- Approx. 145 hectares of land, in the form of greenhouses, is dedicated to growing rose flowers whilst summer flowers are grown in expansive, open fields.
- Cut flowers, especially roses, are mostly (70%) exported to Holland for re-export to international markets and the remaining 30% is exported to South Africa.
- 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.
- The main export markets for flowers in 2009 were Netherlands, Holland, Great Britain and Germany. Others were South Africa, Denmark and Niger Republic.

### Livestock
- The Zambian cattle herd currently stands at 2.9 million animals. Annually, they produce 128.4 million litres of milk and 21 000 tonnes of meat. Zambian beef is reasonably competitive and has potential to perform very well on the global market if markets are opened up.
- Pig production is limited in Zambia. The national herd comprises 481 000 animals, and produces 1 100 tonnes of meat a year.
• Although Zambia has about one million goats, 97 percent of them are kept by smallholders and have no relevance to the feed industry. The small size of the national sheep herd - 80 thousand sheep.
• The poultry industry is the largest livestock industry in Zambia, and accounts for over 80 percent of the formal feed sector's production.
• Approximately 16 million broiler chickens are produced per annum - 14 million and 2 million in the formal and informal sectors, respectively.
• In 2009, the sector recorded export earnings of US$28.9 million, indicating an increase of 139 percent over the 2008 figure of US$12.1 million. Exports performance limited by stringent Sanitary and Phyto-sanitary conditions and other non-tariff barriers.
• DRC offers the best opportunity for export growth because animal health requirements and sanitary controls are little problem in that market.

Current Agriculture activities in Serenje District

Agriculture is the major economic activity in Serenje district. A number of commercial producers are known to be growing maize, tobacco, cassava, and groundnuts. These are mostly to be found in the TAZARA Corridor along the TAZARA rail-line. The majority of the people in the Nansanga Farm Block area are small scale producers growing mainly maize, finger millet, sorghum cassava, groundnuts and beans. Within the survey area only a few farmers own livestock (cattle and goats). Some farmers keep local chickens at very low non commercial scales. Important agricultural farms within the survey area include the commercial property employing more than 70 workers the Mutende Mumpanga Farm at Nkulumashiba growing coffee, running fish ponds and a ranch, and Sherrif’s Farm growing tobacco, agro-forestry and commercial groundnuts production >30ha.
**Land Demarcations in the Farm Block**

<table>
<thead>
<tr>
<th>Farm</th>
<th>Size (ha)</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Venture</td>
<td>9350</td>
<td>1</td>
</tr>
<tr>
<td>Large Commercial farms</td>
<td>900 – 4130</td>
<td>3</td>
</tr>
<tr>
<td>Large Commercial farm (Owned by Local Chief)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Stallholders (Displaced Households)*</td>
<td>10-15</td>
<td>43</td>
</tr>
<tr>
<td>Stallholders</td>
<td>10-50</td>
<td>259</td>
</tr>
<tr>
<td>Medium farms</td>
<td>51-100</td>
<td>22</td>
</tr>
<tr>
<td>Medium farms</td>
<td>101-250</td>
<td>18</td>
</tr>
<tr>
<td>Medium farms</td>
<td>251-500</td>
<td>9</td>
</tr>
<tr>
<td>Medium farms</td>
<td>501-900</td>
<td>2</td>
</tr>
<tr>
<td>Service Centres**</td>
<td>70-100</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>361</td>
</tr>
</tbody>
</table>

*This represents settlers who originally stayed in the land designated for the Core Venture. These households have been allocated alternative land (10 - 15 ha) outside the Core Venture and Government will meet the resettlement cost.

**This represents land designated for immediate and future social amenities such as schools, clinics, etc. Government will invite private sector participation as well as use Public Private Partnerships on the establishment of these common services centres.
Infrastructure Support development

It is expected that the core venture will supplement government infrastructure development efforts by setting up relevant infrastructures within the Core Venture area and investing in irrigation canals/systems for itself for the benefit of the small, medium and large scale farms surrounding the Core Venture.

The farm block infrastructure development and status is as follows:

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Size</th>
<th>Target</th>
<th>Achieved</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dams</td>
<td>7 – 12 metres deep</td>
<td>3</td>
<td>3</td>
<td>• Core Venture is expected to finance and construct its own dam.</td>
</tr>
<tr>
<td>Boreholes</td>
<td></td>
<td>32</td>
<td>23</td>
<td>• No boreholes have been sunk in the Core Venture</td>
</tr>
<tr>
<td>Irrigation schemes</td>
<td>5 km</td>
<td>32</td>
<td>23</td>
<td>• 5 km Furrow currently under construction from Musangashi dam, expected to supply 50 ha of land</td>
</tr>
<tr>
<td><strong>Roads and Bridges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main roads</td>
<td>151 km</td>
<td>1</td>
<td>1</td>
<td>• Connects farm block to Serenje (on the Great North Road) and Luombwa farm block</td>
</tr>
<tr>
<td>Farm access road</td>
<td>171 km road net work</td>
<td>171 km</td>
<td>107 km</td>
<td>• 64 km road network remains and expected to be completed in November 2010. Currently 60% of farm block is accessible</td>
</tr>
<tr>
<td>Bridges</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Electrification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95 km, 33 KV power line erected</td>
<td></td>
<td>29 km 11kv erected to service commercial farms, service lines for small farms and service centres yet to be erected</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service centers</strong></td>
<td>70 – 100 ha</td>
<td>4</td>
<td>0</td>
<td>• Land has been demarcated</td>
</tr>
</tbody>
</table>
FARM BLOCK DEVELOPMENT MODEL

The Nansanga Farm block is envisaged to employ a cluster approach to agricultural production and marketing. This will ensure sustainable growth and profit maximization from the linkages and synergies that would be created. The agricultural activities in the farm block will mainly aim at providing food security for the nation, exploiting export markets, substantially contributing to economic diversification and opening up rural areas to development and employment opportunities. Commercialization of the farm block will employ an integrated approach of production that will seek to maximize, diversify, add value and effectively market the agricultural produce.

Advantages of the Model

✓ Creates better economies of scale and minimize transaction costs of bringing product to formal commercial local and export markets.

✓ Assist small scale farmers meet international standards in production.
CORE VENTURE MAJOR ACTIVITIES

- The core venture will be expected to develop its own irrigation system and infrastructure.
- The core venture and commercial farmers are expected to meet their own land clearing costs.
- The Core Venture (9,350ha farm) will be the center for industrial development of the area as it will provide the marketing thrust by purchasing the major products in the farm block and adding value for local and export markets.
- The Core Venture is expected to operate an out grower scheme with the expected 310 small to medium scale farms.
INDICATIVE TENDERING PROGRAMME

The following activities will be undertaken in the implementation of the tendering process for the CV and commercial farms investors:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invitation to Pre-Qualify</td>
<td>24 Dec 2010 – 18 Feb 2011</td>
</tr>
<tr>
<td>Short listing of Prequalified Bidders</td>
<td>28 Feb 2011</td>
</tr>
<tr>
<td>Issue Request for Proposals to Prequalified Bidders</td>
<td>14 Mar 2011</td>
</tr>
<tr>
<td>Due diligence period</td>
<td>14 Mar 2011 – 14 April 2011</td>
</tr>
<tr>
<td>Submission of proposals</td>
<td>22 Apr 2011</td>
</tr>
<tr>
<td>Evaluate proposals, Approvals, Negotiation with Preferred Bidders</td>
<td>25 April 2011 – 31 May 2011</td>
</tr>
<tr>
<td>Sign agreement with investor</td>
<td>Not later than 30 June 2011</td>
</tr>
</tbody>
</table>