

REPORT OF THE COMMITTEE ON AGRICULTURE FOR THE THIRD SESSION OF THE ELEVENTH NATIONAL ASSEMBLY APPOINTED ON THURSDAY 26TH SEPTEMBER, 2013.

Consisting of:

Mr M J B Ng'onga (Chairperson); Mr R Muntanga, MP; Ms S Sayifwanda, MP; Dr E C Lungu, MP; Mr K Chipungu MP; Mr C Miyutu, MP; and Mr M Mumba, MP.

The composition of the Committee changed following the appointment of Mr R K Chitotela to the Committee.

The Honourable Mr Speaker
National Assembly
Parliament Buildings
LUSAKA

Sir,

Your Committee has the honour to present its Report for the Third Session of the Eleventh National Assembly.

Functions of the Committee

2.0 The functions of your Committee are as follows:

- i) to study, report and make recommendations to the Government through the House on the mandate, management and operations of the Ministry of Agriculture and Livestock and Government departments and/or agencies under its portfolio;
- ii) to carry out detailed scrutiny of certain activities being undertaken by the Ministry of Agriculture and Livestock, Government departments and/or agencies under its portfolio and make appropriate recommendations to the House for ultimate consideration by the Government;
- iii) to make, if considered necessary, recommendations to the Government on the need to review certain policies and/or certain existing legislation; and
- iv) to consider any Bills that may be referred to it by the House.

Meetings of the Committee

3.0 Your Committee held thirteen meetings during the year under review.

Programme of Work

4.0 Your Committee at its second meeting, considered and adopted the following programme of work:

- i) Potential of the Non-Traditional Crop Sector in Zambia;
- ii) tours arising from deliberations; and
- iii) consideration of the Action-Taken Report on the Committee's Report for the Second Session of the Eleventh National Assembly.

Procedure adopted by the Committee

5.0 Your Committee requested detailed memoranda on the topic under consideration from concerned stakeholders and invited them to appear before it to give verbal submissions and clarifications on issues arising from their submissions. Your Committee also undertook a benchmarking foreign tour to Kenya during the year under review.

PART I: CONSIDERATION OF TOPICAL ISSUE

POTENTIAL OF THE NON-TRADITIONAL CROP SECTOR IN ZAMBIA

Background

6.0 Zambia has vast agricultural potential. The country is endowed with a favourable climate, fertile land and approximately 40 per cent of the water resources in the entire Southern African Region. However, the potential was yet to be fully tapped. Zambia has 58 per cent of land suitable for agricultural production, although only 14 per cent was currently under cultivation. The agriculture sector accounts for 20 per cent of the country's GDP. The sector has potential to contribute more towards the country's GDP when fully maximised. One of the reasons for Zambia's lack of agricultural productivity has been the over dependence on copper. The mining sector has traditionally been prioritised above agriculture in terms of investment despite the fact that over 60 per cent of the country's 13 million people rely on farming for their livelihood.

The crop sector comprises of the traditional and non-traditional crops. Crops that have historically been described as traditional staple crops include maize, sorghum, millet, groundnuts and sweet potatoes, among others. Crops that are not part of the customary diet and grown primarily for their high cash values and export potentials are categorised as non-traditional. These include vegetables and fruits, spices, tobacco, cotton and flowers, among others.

Zambia is endowed with a tropical climate that is ideal for growing most non-traditional crops throughout the year. This is coupled with the increase in consumer demand in developed countries for non-traditional crop products. The recent years had witnessed Zambia going into the production of non-traditional crops in order to diversify its exports and increase foreign exchange earnings. The promotion of non-traditional crop production had been seen as a practical and viable option not only for enhancing the country's foreign exchange earnings, but also for enhancing the fight against rural poverty.

7.0 Objectives

The main objective of the study was to explore the potential of Zambia's crop sector, with emphasis on the non-traditional crop subsector. This was with the view to recommending actions needed by the Government to improve the prospects of the non-traditional subsector in contributing to the economy.

The objectives of the study were to:

- i) establish the potential of the non-traditional crops;
- ii) ascertain the policy and legal framework of the crop sector in Zambia;
- iii) establish the contribution of the non-traditional crop sector to the country's economy;
- iv) identify the key constraints and challenges in the non-traditional crop sub-sector;
- v) find out what efforts have been and are being undertaken to address such constraints;
- vi) learn what strategies the Government has in place to promote the diversification of agriculture through promoting the production of non-traditional crops for local and export markets; and
- vii) make recommendations on the promotion of non-traditional crops.

8.0 Witnesses/Stakeholders

- i) Ministry of Agriculture and Livestock;
- ii) Ministry of Finance;
- iii) Zambia National Farmers Union;
- iv) Agricultural Consultative Forum;
- v) University of Zambia, School of Agriculture;
- vi) Indaba Agricultural Policy Research Institute;
- vii) Zambia Coffee Growers Association;
- viii) Zambia Export Growers Association;
- ix) Tobacco Association of Zambia;
- x) SADC Plant Genetic Resources Centre (SPGRC);
- xi) Zambian Women in Agriculture;
- xii) Cotton Association of Zambia;
- xiii) Zambia Agricultural Research Institute;
- xiv) Seedco Zambia Limited;
- xv) Zambia Seed Company (ZAMSEED);
- xvi) Tombwe Processing Limited;
- xvii) Jesuit Centre for Theological Reflection (JCTR)/Kasisi Agriculture Research Institute;
- xviii) Alliance One Zambia Limited;
- xix) Amanita Zambiana Limited;
- xx) Mount Meru Petroleum Zambia Limited; and
- xxi) Golden Valley Agricultural Research Trust (GART).

SUMMARY OF SUBMISSIONS FROM STAKEHOLDERS

Non-traditional crops

9.0 Your Committee was informed that "non-traditional crop sector" referred to all other crops other than maize. It was stated that Zambia's full potential in the production of non-traditional crops such as wheat and barley, soya beans, groundnuts, rice, coffee, cotton, tobacco, among others, remained largely untapped. It was further explained that crops that were not part of the customary diet of the local population and grown primarily for their high cash values and export potentials were categorized as non-traditional.

In addition, your Committee heard that other crops that could be considered non-traditional included sugarcane, tea, pineapples and Irish potatoes. The non-traditional crops also included floricultural and horticultural products. Your Committee also heard that some of these crops had an already developed market, therefore, emphasis should be on developing markets for high potential crops that were still under utilised in the country.

(a) Potential of the non-traditional crops

With regards to the potential of the non-traditional crop sector in Zambia, your Committee heard that the country was endowed with a vast resource of land, labour and water. The potential to expand its agriculture production particularly the non-traditional crop sector could not be overlooked. The Country's strategic location in Africa and being a member of the Common Market for Eastern and Southern Africa (COMESA) and the Southern Africa Development Programme (SADC) provided easy access to regional markets and positions the country as a food basket for the region. In addition, the country had access to the US market through the African Growth Opportunities Act (AGOA).

Your Committee learnt that the increase in consumer demand in developed countries for "out of the season" fresh fruits and vegetables had opened a niche for African countries to produce these crops for export during the void period at attractive prices. Furthermore, your Committee was informed that increased labour costs in developed countries had made in-season production an attractive proposition. The rising costs of greenhouse heating and labour coupled with pricing pressure in an increasingly global economy had made tropical countries (such as Zambia) to have a favoured alternative for producing greenhouse crops.

Your Committee also heard that the potential of crop production in Zambia was immense as it was estimated that out of 75 million hectares which was Zambia's land size, 43 million hectares (58 per cent) was classified as medium to high potential arable land for agricultural production. So far, it was estimated that only 6.02 million hectares (14 per cent) of agricultural land size was currently utilised. The Country has three ecological regions which support different crops and receive different levels of rainfall per year.

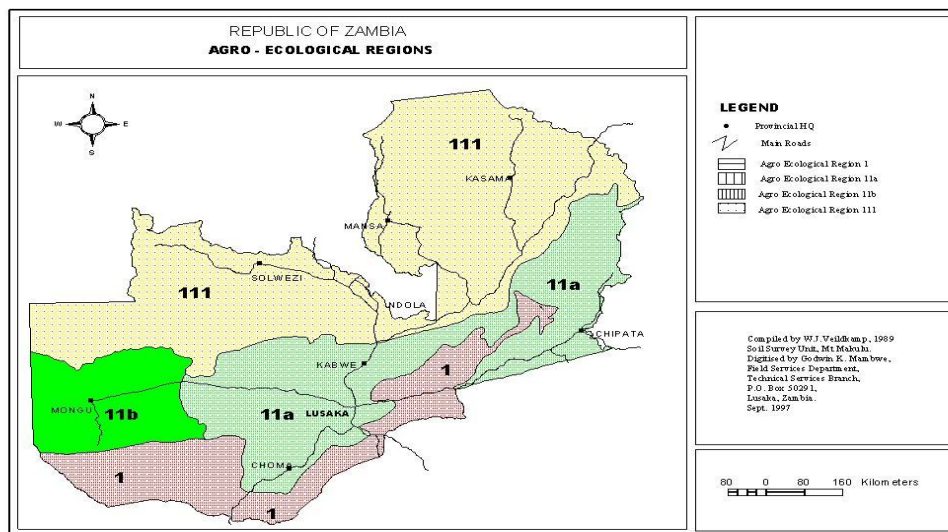
Zambia's Ecological Zones

- i. Region 1 receives less than 800mm per annum;
- ii. region 11: 800 to 1,000mm per annum; and
- iii. region 111, more than 1,000mm per annum.

On the basis of rainfall, over three quarters of the country falls under favourable rainfall of 800mm and above.

It was also stated the Country's irrigation potential for crop production was immense. Zambia as a country was said to hold approximately 40 per cent of SADC water but irrigation had largely remained untapped. The Country's irrigation potential was estimated at 520,000 hectares and out of this only 156,000 hectares had been developed for irrigation.

Map of Zambia's Agro- ecological Zones



In addition, your Committee was informed of the potential of the following non-traditional crops:

Wheat and Barley

With regard to wheat and barley, your Committee was informed that having been a net importer of the wheat commodity, Zambia had now attained self-sufficiency in wheat production levels with surplus for exports. The entire wheat crop in Zambia was produced in winter under irrigation. Wheat and barley production had increased from about 100,000 metric tons and zero metric tons in 2007/08 farming season to reach 315,000 metric tons and 17,500 metric tons in the 2013 season, respectively.

The good performance of wheat and barley production was largely attributed to the availability of favourable rainfall in Zambia, which had a positive effect on the water table in various parts of the country, making wheat irrigation a viable enterprise with high returns on investment under good policy environment.

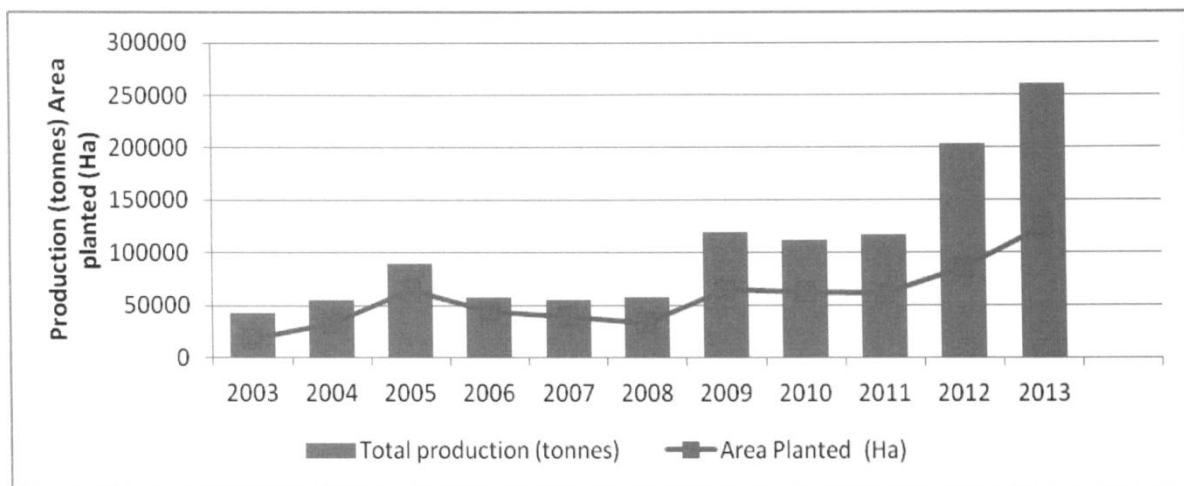
In order to further stimulate expansion of the wheat sector, the Government zero-rated value added tax on wheat and wheat products in 2012. As a result, wheat flour prices had exhibited a downward trend since November, 2012. It was expected that the reduction in wheat flour prices would translate into a reduction in retail prices of confectionery products such as bread, buns, etc over time. According to price statistics obtained from the

Central Statistical Office (CSO), retail prices of bread prices had not yet dropped to respond to the drop in flour prices.

Soya Beans

On soya beans, your Committee was informed that due to the unprecedented growth in the poultry sector driven by the increasing demand for chicken meat in Zambia, soya beans production had increased from 118, 794 metric tons in 2009, to about 203,000 metric tons in 2012. The 2013 Agricultural Production Survey by Zambia National Farmers Union (ZNFU) put soya production at 210,000 metric tons. This upward growth in soya beans production provided more opportunities for feed manufacturing and edible oil processing. Currently, local edible oil production stood at 40,000 metric tons per year against national requirements of 120,000 metric tons per year. The 80,000 metric tons deficit was met by imports.

The table below shows an increasing trend in soya production in terms of hectarage and yield.



Source: Ministry of Agriculture and Livestock Crop Forecast Survey, 2013.

The insufficiently supplied export markets in the Democratic Republic of Congo and other regional markets in the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa (COMESA) provided further opportunities for expanding soya beans production in Zambia, thereby increasing income/liquidity among farmers in Zambia. The increased soya beans exports would greatly increase farmers' productivity and incomes necessary to address the challenge of unemployment and poverty in the country.

Cotton

Your Committee was informed that Zambia was the second largest producer of cotton in the Southern African region after Zimbabwe. Cotton production was largely produced under contract farming with over 272,000 smallholder farmers participating in the sector and supports the livelihood of over 1.4 million people in the country. The major cotton producing areas included Eastern, Southern, Central, Northern and Lusaka Provinces. Cotton production increased to 269,502 metric tons in 2011/2012 season before dropping by 48.2 per cent to 139,583 metric tons in 2012/2013 season due to low prices that ginning companies offered farmers in the 2011/2012 farming season.

According to the Cotton Association of Zambia (CAZ), there were eleven ginning companies (all foreign owned) in Zambia with a total ginning capacity of 361,800 metric tons. The figure was higher than the Country's annual cotton production, and provided an opportunity for more players in the cotton and textiles sector.

The cotton sector generated significant commercial activity throughout the value chain, including distribution of inputs and extension services to smallholder farmers, exportation of lint and unprocessed cotton seed, oilcake and soap production.

Tobacco

On tobacco production in Zambia, your Committee was informed that tobacco production was a very attractive investment opportunity in the country because it was 7.5 times more profitable per hectare than maize production and fourteen times more profitable than cotton. Out-grower schemes, small, medium and large-scale production were also encouraged.

In addition, your Committee heard that there was a minimum of 5000 Virginia tobacco growers in Zambia out of which 5 per cent were commercial farmers. The crop sizes ranged up to 200 hectares, but the majority grew crops under five hectares or between ten and 120 hectares. The Eastern Province best provided mostly burley tobacco production conditions, while Central, Western (Kaoma area) and Southern provinces of Zambia provided the best land and climatic conditions for growing Virginia Tobacco. Annual tobacco production in the country was always fluctuating at around 37, 000 and 40,000 metric tonnes 25,000 to 30,000 metric tonnes of Virginia tobacco and 12,000 to 10,000 metric tonnes of Burley tobacco.

Coffee

On coffee, your Committee learnt that Zambia has the potential to attain an annual production of more than 50,000 metric tons of good handpicked green beans with an average value of US\$ 175 million. The country was well suited for the production of irrigated coffee due to favourable climatic conditions and abundant land resources.

Currently, Zambia produces high quality Arabica Coffee (Triple A Grade Coffee) and employed about 3000 coffee pickers who were contracted for five months of each year. The Zambian specialty coffee had entered global markets trading in Germany, Switzerland, Netherlands, United Kingdom, USA and Japan.

Your Committee further heard that the coffee industry in Zambia had suffered serious production challenges and largely on account of lack of long term finance for interested farmers to grow the crop and also the organisation of small holders as viable cooperatives and providing them with central processing facilities to enable them manage the crop appropriately. It was stated that the industry had now drifted to its lowest bottom in its downward production slide, having also dropped in membership of large scale growers from seventy-five in 2000 to now four; and small scale growers from 500 to now nil. The crop had, however, potential to contribute to the export market of the country.

Rice

Your Committee was informed that rice production in Zambia had increased steadily from about 42,000 metric tons in 2009 to about 45,000 metric tons' in 2013. Most of the rice grown in Zambia came from Western Province and Muchinga Province. Rice production

in Zambia had potential to expand as a result of favourable climatic conditions, coupled with increasing demand among urban dwellers due to the growing population.

Horticultural crops

On the horticultural industry, your Committee learnt that horticulture was an important sector in the Zambian agriculture industry. As such, it played an important role in contribution to food security and poverty reduction through higher income generation potential. It, however, came with risks such as environment degradation due to its intensive nature.

It was stated that the 2007, World bank Value Chain Analysis for Zambia Report found that domestic horticulture sector earnings amounted to US\$ 116 million compared to US\$ 55 million for export horticulture which was also less than that of cotton (US\$81 million), sugarcane (US\$ 65 million) and tobacco (US\$ 63 million) sectors (Anon, 2007). It was stated that the horticultural crops had market not only for the local, but also for the international market.

(b) Policy and legal framework of the crop sector in Zambia

Your Committee was informed that the policy and legal framework of the crop sub-sector in Zambia was the National Agricultural Policy (NAP) 2004 – 2015 which was currently under review.

In addition, your Committee heard that the National Agricultural Policy (NAP) was complemented by the Irrigation Policy and Strategy 2004. In order to operationalise the NAP, the Ministry had developed the National Agriculture Investment Plan (NAIP) and the Ministry Strategic Plan (2013 – 2016).

The following legal framework applies to the crop sub-sector:

No.	Enabling Act	Purpose
01	<i>Plant Breeder's Right Act No. 18 of 2007</i>	Provides for the protection of plant breeders' rights and registration of plant varieties to safe guard and streamline matters of plant variety ownership and use.
02	<i>Agriculture (Fertilizer and Feed) Act No. 13 of 1994</i>	Provides for:- i. the regulation and control of the manufacture, processing, importation and sale of agricultural fertilizer; and ii. minimum standards of effectiveness and purity of such fertilizers.
03	<i>The Cotton Act No. 21 of 2005</i>	Provides for: (i) the regulation of the cotton industry as it related to the production and ginning of seed cotton; and (ii) the control of the production and marketing of cotton.
04	<i>Coffee Act No.13 of 1994</i>	Provides for: (i) the regulation of the coffee industry; and (ii) the control of the production and marketing of

		coffee.
05	<i>Noxious Weeds Act No. 13 of 1994</i>	Provides for the eradication of noxious weeds.
06	<i>The Plant Pests and Diseases Act No. 13 of 1994</i>	Provides for: (i) the eradication and prevention of the spread of plant pests and diseases in Zambia; and (ii) the prevention of the introduction into Zambia of plant pests and diseases.
07	<i>Plant Variety and Seeds Act No. 21 of 1995</i>	Provides for: (i) the regulation and control of the production, sale and import of seed for sowing and of the export of seed; (ii) the testing and for minimum standards of germination and purity thereof; and (iii) the certification of seed.
08	<i>Tobacco Act No. 13 of 1994</i>	Provides for: (i) the promotion, control and regulation of the production, marketing and packing of tobacco in the Republic; (ii) the promotion and control of the export of tobacco from and import of tobacco to the Republic; and (iii) the direction and promotion of research in connection with tobacco.
09	<i>Tobacco Levy Act No. 13 of 1994</i>	Provides for the imposition and control of a levy on tobacco grown in the Republic of Zambia.
10	<i>Biosafety Act of 2007</i>	Regulates the research, development, application, import, export, transit, contained use, release or placing on the market of any genetically modified organism whether intended for use as a pharmaceutical, food, feed or processing, or a product of a genetically modified organism.

Other agricultural legislation that could facilitate the growth of the crop sub-sector includes:

No.	Enabling Act	Purpose
01	<i>Cooperative Society Act No. 20 of 1998</i>	Provides for the law relating to the formation, registration and regulation of co-operative societies.
02	<i>Fertilizer and Feed Act No. 13 of 1994</i>	Provides for:- iii. the regulation and control of the manufacture, processing, importation and sale of agricultural fertilizer; and iv. minimum standards of effectiveness and purity of such fertilizers.
03	<i>Agriculture Credit Act No. 23 of 2010</i>	Provides for: (i) the establishment of the Warehouse Licensing Authority and provide for its functions and powers;

		<ul style="list-style-type: none"> (ii) facilitation of the borrowing of money on the security of charges created on farming stocks and other agricultural assets; (iii) the registration of charges; (iv) the certification of warehouses; (v) the issuance and negotiations of warehouse receipts and the rights conferred by warehouse receipts; and (vi) the rights and obligations of warehouse operators.
04	<i>The Agricultural Statistics Act No. 13 of 1994</i>	Provides for: <ul style="list-style-type: none"> (i) the collection of agricultural statistics; and (ii) the compilation and publication of statistics.

Your Committee also heard that Zambia has developed the National Agriculture Investment Plan (NAIP) under the framework of the Comprehensive Africa Agriculture Development Programme (CAADP). This provides a roadmap for achieving the vision for the agricultural sector. NAIP was a strategic plan covering the period 2013-2016, which highlights the costs and activities necessary for the achievement of agricultural growth and poverty reduction. However, the implementation of the program would require an enabling environment, capacity development, services and partnerships. Further, specific policy documents and strategies needed to be developed for each commodity (cotton, tobacco, rice, maize, etc).

(c) Contribution of the sub-sector to the country's economy

Your Committee was informed that the contribution of the non-traditional crop sector to the country's economy was of great importance to the Zambian economy in that it did not only contribute to poverty reduction through employment creation, but also foreign exchange earnings. In 2012, exports earnings for the majority of non-traditional crops increased. In addition, your Committee also heard that export earnings for burley tobacco increased by 58.5 per cent to US\$ 159.5 million from US\$ 100.6 million recorded in 2011 while cotton lint posted positive earnings of US\$ 134.3 million compared with US\$ 118.2 million registered in 2011. Furthermore, floricultural (flowers) and horticultural (fresh fruits & vegetables) products recorded increased earnings of 15.7 per cent and 86.9 per cent respectively and an illustration was given in the table (see Table below).

Table: Selected Non-traditional Crop Exports (C.I.F.), 2010 – 2012 (US \$' millions)

	2010	2011	2012	%Change 2012/2011
Cane Sugar	148.1	165	143.5	(13)
Burley Tobacco	117.5	100.6	159.5	58.5
Cotton Lint	49.4	118.2	134.3	13.6
Fresh Flowers	22	20.8	24	15.7
Fresh Fruits & Vegetables	11.2	9.2	17.3	86.9

Source: Ministry of Finance

On the contribution of the non-traditional crops to the economy, your Committee heard that GDP composition by sector was: agriculture: 21.5 per cent; (40 per cent of this is from NTEs), industry: 35.2 per cent; services: 43.4 per cent (2011 EST.) As could be

seen, the contribution of agriculture in total was 21.5 per cent while the non-traditional sector contribution to the figure was 40 per cent. Your Committee also learnt that if fully maximised, the agriculture sector could contribute almost double to the country's GDP than its current contribution. This, however, could only be achieved if there was huge investment in the sector.

(d) Challenges facing the promotion of the non-traditional crops

Your Committee was informed that the biggest constraint in the growth of the non-traditional crops was that these crops had been traded on largely informal as opposed to structured markets. It was stated that demand and markets for crops/crop products in informal settings was not well structured and did not attract correct responses at production level. Demand in the market would inspire production in order to satisfy the market. Therefore, forces of production would always positively respond to positive indicators of effective demand in the market, whether local or foreign.

Your Committee also heard that the high cost of production was another constraint which in turn negated cost competitiveness of Zambian agricultural products within the region. This situation in turn resulted in diseconomies of scale associated with very low volumes from subsistence production.

Your Committee further was informed that another stumbling block in the promotion of non-traditional crops was the lopsided or skewed support in favour of maize by the Government. Thus subsidy programs such as the Farmer Input Support Program (FISP) although now promising to include other crops like rice, had traditionally been synonymous with maize.

Small-scale farmers who had been involved in production of the more labour-intensive crops had been faced with challenges of quality and standards, especially when the crops had been destined for the export market e.g aflatoxins in groundnuts.

The following were espoused as the major constraints affecting the growth of the non-traditional crop sector in the country:

Production limitations

- poor production technology
 - (i) inefficient technology development (research system); and
 - (ii) ineffective information dissemination system (extension system).
- failure to harmonize the crops to the land capability status. There were no specific commodity production belts resulting in attempts to grow all crops everywhere;
- low soil fertility necessitating high use of inorganic fertilizers;
- non- existence of local seed industry for the non-traditional crops;
- limited access to agro inputs such as fertilizer and quality seed; and
- the high cost of production compared to other countries in the region.

Infrastructure and value addition

- need for irrigation facilities- most non-traditional crops such as horticultural commodities were grown throughout the year and as such, needed irrigation facilities. Low cost high volume systems such as large river based systems would be more cost effective compared to current water - well bucket or motorized pump

systems;

- inadequate cold chain facilities such as cold storage and handling facilities were a prerequisite for extended shelf life. However, there was a general lack of these facilities especially among small scale farmers resulting in very high losses after harvest;
- lack of processing facilities for value addition severely limited the utilisation and exacerbated post harvest losses;
- lack of scheduled air freight or cargo flights – this required exporters to charter the cargo flights; and
- low investment in irrigation by smallholder farmers.

Seed quality and availability challenges

Conventional seeds

- conditions during distribution, storage and retail were not standardised and, therefore, further compromised seed quality;
- unlike maize, legislation does not allow for detailed inspection throughout the distribution chain. Seed mixtures and contamination were common and the farmers were not adequately protected. Most of the seed for the non-traditional crops was imported as Quality Declared Seed (QDS);
- there was need to enforce sanitary regulations in the production of seedlings for prevention of diseases; and
- for commodities where seed could be produced locally, investment in seed breeding was needed.

Markets and post harvest factors

- lack of quality control mechanisms (Standards);
- high post harvest losses (estimates vary in some cases up to 30 percent); and inefficient marketing system dominated by informal market with exploitative brokers, poor wholesale and storage systems and inadequate or poor agricultural marketing facilities. The EU market, through its preferential trade arrangements; the ACP/ EU Sugar protocol and the Everything–But–Arms (EBA) protocol, made the EU an important export market for Zambian sugarcane producers. However, the recent reforms in the EU sugar markets and changes in the terms of those arrangements such as the removal of the price guarantee point to uncertainty of the sustained profitability of producers and processors on the Zambian market.
- the number of small farms producing crops for export has been steadily declining. Exporters found it convenient to deal with a few large commercial farms than with

many smallholders thus the productivity and production were low and could only be addressed through innovation and research into new products and uses.

- pricing of the commodities on the international market was yet another challenge. The prices for the crops were set by the wholesalers and retailers in Europe which had a negative impact on farmers because production costs were not considered and farmers usually ended up making losses.

Policy

With regard to policy and regulation related constraints, your Committee was informed that the Government policy had substantial, but mostly indirect effects on the sector. Direct Government intervention in production, marketing, or pricing was rare, unlike the widespread direct intervention seen in maize markets. In addition, other major constraints relating to Government policy affecting the subsector include:

- lack of supportive policy for some of the non-traditional crops sector. National policy documents were not specific on all the non-traditional crops (NAP, NDPs). The lack of a sector policy such as the sugar policy, horticultural policy, among others, negatively affected the industry, as there was no strategic policy guidance for the sector;
- land policies that make it difficult for potential private investors in market places to obtain the land needed for such investments;
- neglect of grades and standards that could have raised quality over time and improved price predictability for farmers;
- weak chemical regulations that allowed internationally banned chemicals to be used by farmers frequently who were unaware of their negative environmental or health effects; and
- legal frameworks for the establishment and management of markets that often hindered active private sector engagement and contributed to the progressive decline of public market places.

Financing

Long-term financing was another challenge facing the non-traditional crop sector for both small-scale and large-scale producers and had been the major contributing factor for the progressive downward trend in production of the non-traditional crops in Zambia. Your Committee learnt that borrowing from banks was not easy in Zambia especially for small scale farmers. Credit facilities as well as pre-financing were key in developing the sector, this was because the initial investments in developing these sectors were very high and only national Governments could help in developing these sectors.

(e) Efforts being undertaken to address the constraints

Your Committee was informed that in addressing the challenge of low investments in irrigation by the smallholder farmers, the Government, through the Ministry of Agriculture and Livestock, was constructing smallholder irrigation schemes in different parts of the country to help smallholder farmers diversify into irrigable non-traditional crops.

Furthermore, your Committee was informed of the following irrigation development projects being undertaken by the Government:

- (i) Irrigation Development Support Programme (IDSP) - which was expected to bring up to 6,350 hectares under irrigation. In Lisitu, 250 hectares (Siavonga), Mwomboshi 5,000 hectares (in Mkushi) and Musakashi 1,100 hectares (in Mufulira) under the group one sites. Further, 3,000 hectares was expected to be developed under the project in Mpika, Solwezi and Petauke under the project group 2 sites;
- (ii) Smallholder Irrigation Project (SIP) – The project recently launched the 525 hectare Nega – Nega irrigation scheme in Mazabuka. Further, construction works at the 100 hectare Nzenga irrigation scheme in Sinazongwe had been completed and the bid evaluation of the 100 hectare Sinazongwe irrigation scheme had been completed;
- (iii) Community Based Smallholder Irrigation Project (COBSI) – This was a JICA sponsored project which was expected to bring at least 1,000 hectares of land under irrigation over the next three (3) years in Luapula (Mwense, Milenge and Nchelenge), Muchinga (Isoka and Nakonde) and Northern (Mbala, Mungwi, Kasama, Mporokoso, and Luwingu) Provinces; and
- (iv) Global Agriculture and Food Security Project (GAFSP) – The Ministry of Agriculture and Livestock had secured funding from the Global Agriculture and Food Security Project (GASFP) for implementation of agricultural production and productivity programme. Among these was the expansion of existing irrigation schemes and construction of new irrigation schemes in Serenje – four new irrigation schemes; Sinazongwe – two new irrigation schemes and expansion of Buleya Malima irrigation scheme; Gwembe – two new irrigation schemes and expansion of Siatwiinda irrigation scheme; Chongwe – two new irrigation schemes; Chitambo -two new irrigation schemes; and Rufunsa – one new irrigation scheme. The project was expected to bring 1,030 hectares of land under irrigation in the six districts.

Your Committee also learnt that the Government, through the Agricultural Development Support Programme (ADSP), was improving agricultural marketing - related infrastructure. Furthermore, the ADSP had to date rehabilitated 1,131 kilometres of rural roads used for transportation of agricultural produce. In addition, the rehabilitation of the roads was implemented by the National Road Fund Agency (NRFA) under the Rural Roads Investment Fund.

It was also stated that the Government had embarked on farm block development to facilitate commercialisation of agriculture including the non-traditional crops subsector. Each farming block was 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 outgrower arrangements.

In addition, the 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 was expected to develop the infrastructure within the farm block and to manage the appropriate agro- business activities. It was also stated that the core venture was for the purpose of supporting the small, medium and large scale farms through an outgrower scheme in producing and marketing their produce. In addition, the core venture was also for the

purpose of establishing processing plants for value addition targeted at both the local and international markets.

Your Committee further heard that currently, the Government had identified three priority farm blocks - the Nansanga (Serenje), Kalumwange (Kaoma) and Luena (Kawambwa) blocks. For these three, the Government was providing and installing basic infrastructure and facilities such as trunk roads, bridges, electricity, dams, schools and health centres. The other farm blocks were to be developed in stages. Your Committee also learnt that among the crops with potential prioritized for investments in the farm blocks includes; wheat, sugar, cotton, coffee, tobacco, cashew nuts, cassava and horticultural/floricultural crops.

Your Committee was also informed that the Government, through the Ministry of Agriculture and Livestock, was enhancing capacity for research and development particularly aimed at improving the productivity, production and processing of non-traditional crops such as food legumes (soyabean, groundnuts, beans, cowpea and pigeon pea), rice, sorghum and cassava. This was being done through a number of initiatives including the World Bank supported Project, the Agriculture Productivity Programme for Southern Africa (APPSA), being implemented by the Zambia Agriculture Research Institute (ZARI).

The above project include capacity building in infrastructure rehabilitation and human resource development through training of both research and extension personnel. Research and development programmes and activities were taking the whole value chain approach from production through to strengthening market linkages and addressing quality aspects. Research efforts were for instance being undertaken to address the problem of aflatoxin contamination in groundnuts, which was one of the quality aspects significantly affecting access to export markets for groundnuts.

In addition, your Committee also heard of the following interventions:

Farmer re-organisation

Your Committee heard that in Zambia, organisations such as Organic Producers Association of Zambia (OPAZ) and Non-Governmental Organisations had set up projects to bring more smallholders into export oriented crop production. The idea was to bring many farmers together so that they could produce large volumes of good quality produce for niche markets such as organically grown foods.

Reviving the agriculture sector

Your Committee heard that there were efforts to try and revamp the agriculture sector in the country particularly for crops that had since reduced in terms of productivity, production and export such as coffee, Kawambwa tea and Mwinilunga Pineapples.

World Bank Loans to improve productivity

With regard to World Bank loans to improve productivity, your Committee was informed that the Agriculture Productivity Programme for Southern Africa Project under the Ministry of Agriculture and Livestock and coordinated by Zambia Agriculture Research Institute, assists in developing markets for some crops such as soyabeans, cowpeas, groundnuts, cowpeas, rice, maize and sorghum.

Retraining of scientists

Your Committee was also informed that retraining of scientists and retaining them was being undertaken. Furthermore, linkages to international research centres was taking place so that new technologies could be utilised in the agriculture sector. In addition, biotechnology was vital for agriculture development and research into new products would have also created markets for the non-traditional crops.

Road development

The on-going road developments in Zambia if done properly would significantly ease the transportation problems faced by many rural communities. Your Committee was informed that transportation of produce was one of the many challenges facing viable farmers in remote rural areas.

Economic zones

Your Committee heard that the development of new economic zones would help expand the economy including the agriculture sector.

(f) Strategies in place for the diversification of agriculture through promotion and production of non-traditional crops for local and export markets

Your Committee was informed that the Government has since realised the importance and benefits that would arise if the non-traditional crops were promoted and had, therefore, put up the following strategies:

- the Government has reformed the Farmer Input Support Programme (FISP) to include crops other than maize to promote crop diversification. Groundnuts, cotton and rice have been included in the FISP package. In addition, the Ministry of Agriculture and Livestock would introduce the e-voucher under FISP which would not restrict the inputs that are available to the farmers to further enhance agricultural diversification;
- in order to promote year-round cropping and diversification, the Government would continue with irrigation development;
- the Government, through the Ministry of Agriculture and Livestock, was strengthening agricultural extension delivery to promote Good Agricultural Practices (GAP) which inherently included crop diversification; and
- the Government, through the Ministry of Agriculture and Livestock was implementing IFAD - supported programmes: Smallholder Productivity Promotion Programme (S3P) which promotes improved productivity of cassava, rice and mixed beans and the Smallholder Agribusiness Promotion Programme (SAPP) which promotes value-chain development of mixed beans, rice, cassava and beef. The two programmes were aimed at crop diversification and enhancement of value chains.

Stakeholders informed your Committee that the study on the non-traditional crops by your Committee was timely considering that over the years, maize had overshadowed other crops which could transform the country's huge potential in agriculture. In addition, the stakeholders also stressed the need for the Government to put in place practical interventions on the crop diversification programmes if any meaningful results were to be achieved.

10.0 COMMITTEE'S OBSERVATIONS AND RECOMMENDATIONS

Having carefully studied stakeholders' submissions, your Committee, makes the observations and recommendations set out hereunder.

- i. Your Committee notes that most of the pieces of legislation related to non-traditional crops have become outdated and in some instances, there are no boards in place to promote, market and regulate the various non-traditional crops.

Your Committee, therefore, recommends that the Government reviews all the legislation related to non-traditional crops such as coffee, cotton, tobacco, etc. Furthermore, as a matter of urgency, the Government should appoint board members for all boards which are not in place.

- ii. Your Committee observes that the lopsided or skewed support in favour of maize by the Government has hampered the growth and production of non-traditional crops. It is worth noting that 75 percent of the agriculture budget goes to maize through the Food Reserve Agency (FRA) and the Farmer Input Support Programme (FISP).

Your Committee strongly recommends that FISP, being a poverty reduction programme, be moved to another Government department as it has immensely affected the mandate of the Ministry of Agriculture and Livestock.

- iii. Your Committee observes that the lack of infrastructure for the promotion of non-traditional crops has contributed to the low productivity in the sector.

Your Committee, therefore, recommends that the Government invests heavily in infrastructure development such as irrigation, so as to guarantee the growth of the non-traditional crop sector in Zambia.

- iv. Your Committee observes that despite the availability of agro-ecological data which is important to guide what crops should be grown in the different regions, the data has not been fully utilised thereby affecting the promotion of crops especially non-traditional crops.

Your Committee urges the Government to step up sensitisation programmes to ensure that the general public is enlightened on which crops to grow in particular areas. The Government must also disseminate information on agro-ecological data to the stakeholders in the agriculture sector.

- v. Your Committee notes that whereas the current agriculture policy is a good and comprehensive document, there have been no practical steps to implement it.

Your Committee strongly recommends that the Government ensures that the National Agriculture Policy (NAP) is implemented once the review process is concluded, so as to motivate other market players to come on board and complement the Government efforts.

- vi. Your Committee observes that the crop diversification programme by Government was a mere pronouncement without any tangible and practical interventions to include agriculture inputs for non-traditional crops on programmes such as FISP.

Your Committee recommends that the Government ensures that other non-traditional crops are included on the FISP programme, so as to actualise the diversification programme.

- vii. Your Committee observes that the absence of a clearly defined value chain for non-traditional crops has contributed to the untapped potential of the crops. Further, the lack of consistent market demand and information whether internally or externally (sale before you sow) has not helped matters.

Your Committee strongly recommends that the Government establishes well defined value chains for all the non-traditional crops as was the case with maize which would have a clearly defined market system whether locally or internationally.

- viii. Your Committee observes that the lack of sustainable financing in the non-traditional crop sector has contributed to the stagnation of the sub-sector. Some crops such as coffee are tree crops which require a longer period before harvesting hence, most small and medium scale farmers have no financial support to participate in the growing of the crop.

Your Committee, therefore, recommends that the Government establishes a fund specifically to support sustainable financing of small and medium scale farmers in the growing of the non-traditional crops such as coffee, tobacco, etc so as to grow the sub-sector.

- ix. Your Committee observes that the non-availability of seed for most of the non-traditional crops such cotton and tobacco has resulted in the monopoly of the crops by ginners and merchants. In addition, this has caused problems on pricing which has most often affected the small scale farmers.

Your Committee recommends that the Government, in collaboration with seed companies, ensures that all seed for non-traditional crops is made available on the market.

- x. Your Committee observes that the lack of investments by the Government in extension services and research has contributed to the low productivity in the sub-sector.

Your Committee, therefore, recommends that the Government heavily invests in extension, research and development which is critical in promoting non-traditional crops.

- xi. Your Committee observes that the absence of agriculture officers to monitor the non-traditional crops at the Ministry of Agriculture as was the case in the past has contributed to the decline in the support required in the non-traditional crop sector.

Your Committee, therefore, recommends that the Government recruits new officers to be monitoring the growth of each of the non-traditional crops, as was the case in the past.

- xii. Your Committee observes that the lack of supportive policies for the non-traditional crops such as coffee, sugar cane, etc has negatively affected the industry.

Your Committee, therefore, recommends that the Government generates specific policies to support the growth of non-traditional crops.

- xiii. Your Committee observes that the lack of processing facilities for value addition has severely limited the full utilisation of the crop and contributed to the post harvest losses which stand at about 30 percent.

Your Committee recommends that the Government recapitalises and facilitates the establishment of agro processing industries such as textiles so as to guarantee value addition and further reduce post harvest losses. In addition, the Government must create an enabling environment for private sector involvement to invest in agro processing industries so as to encourage value addition and reduce the huge post harvest losses. This may be by way of tax incentives to the investors.

- xiv. Your Committee observes that the huge cost of production in Zambia has negated the cost competitiveness of agriculture products within the region. This situation has resulted in the very low values from subsistence production.

Your Committee, therefore, recommends that the Government ensures that the cost of production is reduced by heavily investing in research and development as well as extension services which are key for high crop yield.

- xv. Your Committee observes that the quality of produce in Zambia is often of poor quality thereby affecting its competitiveness on the international market.

Your Committee recommends that the respective boards established to regulate the various non-traditional crops must also be ensuring that standards and crop quality are maintained so as to make the produce competitive at international level.

PART II

TOUR TO KENYA

11.0 Your Committee undertook a benchmarking tour to Kenya to appreciate how the country has managed to explore the potential of non-traditional crops such as horticultural crops, vegetables, fruits, coffee, cotton, etc.

The specific objectives for undertaking the study tour were:

- to enable your Committee to learn how the non-traditional crop sector was being handled which includes horticultural crops and other crops such as coffee, cotton, tobacco, etc;

- to learn the contribution of the non-traditional crop sector to the country's economy;
- to learn the policy and legal framework for the non-traditional crop sector;
- to learn what strategies were in place for the promotion of the non-traditional crop sector; and
- share best practices on the potential of the non-traditional crop sector.

Institutions visited

During the tour, your Committee visited the following Government and private institutions:

- i. Kenya Agriculture Research Institute (KARI) Headquarters;
- ii. KARI-Kabete Centre (Land Resources and Analytical Centre);
- iii. Samini Coffee Centre;
- iv. Coffee Research Foundation;
- v. Kevian Enterprises;
- vi. KARI- Thika, Centre on horticultural research;
- vii. Wildfire Farm (flouriculture); and
- viii. KARI-Naivasha Dairy Centre of Excellence.

Your Committee also held meetings with the Kenyan Parliamentary Committee on Agriculture, Livestock and Fisheries and the Cabinet Secretary (Minister) responsible for Agriculture, Livestock and Fisheries.

Key Findings

The following were the key findings during the tour:

- i. agriculture contributes 26 per cent to Kenya's GDP directly and another 25 per cent indirectly; it employs over 40 per cent of the total labour force and over 70 per cent of the rural population;
- ii. cash crops (non-traditional crops) contribute 55 per cent to agricultural exports, which was 17 per cent of GDP;
- iii. the Government was reforming institutions by transforming agriculture organisations into complementary and high performing entities that facilitate growth in the sector;
- iv. the country was increasing productivity through facilitating access to affordable and quality inputs and services;
- v. the country was expanding its local and international markets for the non-traditional crops through value addition;
- vi. arable land in Kenya is only 8.1 percent of its total surface area of 582,650 square kilometres which has not affected the growth of the sector;

- vii. Kenya has 115 seed companies that made available the much needed seed for all the non-traditional crops;
- viii. fertiliser prices have been reduced by over 30 percent, so as to enable farmers produce more for the country;
- ix. the country has embarked on an ambitious irrigation programme of irrigating one million acres of land to reduce the over reliance on rain-fed agriculture;
- x. the country has introduced insurance and access to credit schemes aimed at not only providing farmers with the start up capital for their produce, but also safeguard their produce;
- xi. Kenya was currently reviewing all legislation related to agriculture in an effort of making them relevant to the current agriculture demands for the growth of the sector especially for the non-traditional crops;
- xii. the country was in the process of merging all the parastatal bodies related to the non-traditional crop which was expected to reduce the bureaucracy and costs associated with running the Government parastatals. It was also expected that the umbrella body would promote, market and regulate all the non-traditional crop sub-sectors;
- xiii. Kenya has taken leave from COMESA for an additional one year, restricting entry of sugar into the country in an effort to promote the sub-sector;
- xiv. the country has a well established international market for its non-traditional crops which include USA, Middle East and Europe, among others;
- xv. extension services have been liberalised by allowing private sector involvement resulting in an effective extension system that was demand driven;
- xvi. quality control measures have been put in place for all its agriculture exports in the value chain thereby maintaining the required international standards for its international market;
- xvii. the presence of a national airline and cargo planes have made the country have easy transportation for most of its produce to the international market;
- xviii. the country has utilised and implemented agro ecological data by promoting the growing of specific crops in specific areas;
- xix. all public academic institutions in Kenya have a faculty of agriculture there by maintaining the needed human resource for the sector;
- xx. Kenya Agriculture Research Institute (KARI) has twenty-three research institutions, each specialising in specific crops for the region. The research institutions also include research of all non-traditional crops with research on improved seed varieties, yield rates, etc;

- xxi. Kenya has established an Agriculture Development Fund, a Government department with the sole mandate to mobilise resources for agriculture research;
- xxii. 2 per cent of the country's GDP goes towards Research and Development (R&D);
- xxiii. the country has invested heavily in agriculture research which has contributed to the growth of the sector;
- xxiv. KARI produces seed and planting material for all the orphaned crops, which also include some non-traditional crops;
- xxv. the country has one of the biggest soil labs in Africa which can sample about 700 soil samples in a day;
- xxvi. all KARI research institutions are self sustaining; the Government only funds administrative costs such as salaries, etc; and
- xxvii. all KARI research institutions were headed by an officer possessing a minimum of PhD in their field of specialisation.

Your Committee's benchmarking tour to Kenya validated the importance of investment in agriculture research and development vis-a-vis the growth in the sector. Your Committee also learnt that although Kenya's land size and arable land compared to that of Zambia was small, i.e 8.1 per cent compared to Zambia's 58 per cent, the country produces more non-traditional crops than Zambia. Agriculture is the mainstay of Kenya's economy and accounts for 65 per cent of Kenya's total exports and provides more than 70 per cent of informal employment in the rural areas. The agriculture sector was not only the driver of Kenya's economy, but also a means of livelihood for the majority of Kenyan people. Your Committee, therefore, makes the following observations and recommendations:

COMMITTEE'S OBSERVATIONS AND RECOMMENDATIONS

- i. Your Committee observes that non-traditional crops in Kenya contribute about 17 per cent of GDP due to the huge investment by the country in the sector. Your Committee further notes that in Zambia, the non-traditional crops contribute about 8 per cent to the country's GDP.

Your Committee recommends that the Government invests heavily in the non-traditional crop sector in order to raise its contribution to the country's GDP as is the case in Kenya.

- ii. Your Committee observes that although Kenya has only 8.1 per cent arable land of its total surface area of 582,650 square kilometres, the country has maximised its potential for non-traditional crops. Further, your Committee notes that Zambia's arable land of 58 per cent of the total surface area of 752,640 square kilometres has only 14 per cent being utilised.

Your Committee, therefore, urges the Government to ensure that the Country increases its productivity in the sector considering that the country's arable land is

almost six times than that of Kenya. Despite having 8.1 per cent arable land, Kenya produces more non-traditional crops than Zambia.

- iii. Your Committee observes that Kenya has expanded its local and international markets for its non-traditional crops due to value addition and maintaining of standards for the crops.

Your Committee recommends that the Government ensures that there is value addition for the non-traditional crops in order to maximise the much needed market for both the local and international market.

- iv. Your Committee observes that the growth of the seed industry in Kenya has by and large depended on the huge investment that has been made in agriculture by the Kenyan Government. This has resulted in competition by the seed companies to produce seed for the non-traditional crops.

Your Committee recommends that the Government provides the necessary conducive environment for seed companies to produce seed for the non-traditional crop sector by way of tax incentives to those companies that will be producing seed.

- v. Your Committee observes that the heavy subsidising of fertiliser companies by the Kenyan Government has reduced the cost of fertiliser by over 30 per cent. This has reduced the cost of production for the non-traditional crop sector.

Your Committee recommends that the Government increases the subsidies for fertilizer and other inputs so as to reduce the cost of production which is very high in the country.

- vi. Your Committee observes that the ambitious irrigation programme of irrigating one million acres that the Kenyan Government has embarked on will further enhance the production of the non-traditional crops. Rain-fed agriculture is not sustainable in light of the climate change that has not spared the agriculture sector.

Your Committee recommends that the Government scales up its programmes on irrigation farming, by targeting to irrigate the country's 520,000 hectares irrigation potential in order to fully promote non-traditional crops.

- vii. Your Committee observes that the introduction of agriculture insurance schemes and access to credit schemes in Kenya has not only provided farmers with the capital to invest in the non-traditional crops, but also safeguarding their yields.

Your Committee, therefore, recommends that the Government introduces credit schemes for farmers to invest in the non-traditional crops which often require Government support in financing. Furthermore, your Committee recommends that the Government engages insurance companies to integrate agriculture insurance in order to safeguard the produce of the farmers.

- viii. Your Committee observes that the active involvement of the Kenyan Government in the promotion of the non-traditional crops has led to quality control measures in the

value chain for all the non-traditional crops resulting in well maintained standards for its international markets.

Your Committee, therefore, recommends that the Government through the various boards ensures that the quality for the non-traditional crops is maintained in the value chain so as to maintain the required standards for the international market.

- ix. Your Committee observes that the presence of a national airline and cargo planes in Kenya has contributed to the promotion of the non-traditional crops especially for the international market.

Your Committee strongly recommends that the Government expedites the establishment of the national airline and invest in cargo planes to enhance the promotion of non-traditional crops for the international market.

- x. Your Committee observes that the policy of having an agriculture faculty in every public learning institution in Kenya has contributed to the growth of the agriculture sector by having the much needed human resource as well as adequate researchers involved in the promotion of non-traditional crops.

Your Committee recommends that the Government mainstreams agriculture in all public institutions by having an agriculture faculty in each of the public colleges and universities. Further, your Committee urges the Government to upgrade and maintain the existing agriculture academic institutions.

- xi. Your Committee observes that Kenya has twenty-three research institutions which specialise in specific crops for the sub-sectors of agriculture including the non-traditional crops. Further, Kenya has heavily invested in research which has contributed to growth of the agriculture sector.

Your Committee recommends that the Government revamps the research stations in the country so as to enhance the promotion and production of non-traditional crops for research on improved seed varieties, yield rates, etc.

- xii. Your Committee observes that the establishment of an Agriculture Development Fund (ADF) by the Kenyan Government with the sole mandate of mobilising resources for agriculture has further enhanced the investments in agriculture research.

Your Committee urges the Government to establish an Agriculture Development Fund, a body which will have the mandate to mobilise resources for agriculture development.

- xiii. Your Committee observes that 2 per cent of Kenya's GDP goes towards research and development. This ambitious programme has contributed to the growth of general research in Kenya such as medical, agriculture, academic research, among others.

Your Committee recommends that the Government ensures that 10 per cent of the agriculture budget goes towards research and development. This will guarantee the growth of the agriculture sector in the country.

- xiv. Your Committee observes that all the agriculture research institutions in Kenya are self sustaining. The Kenyan Government only supports the administrative costs such as salaries, etc.

Your Committee recommends that the Government ensures that once agriculture research institutions are revamped, they must be self sustaining through their respective research programmes.

- xv. Your Committee observes that all agriculture institutions in Kenya are headed by an officer possessing a minimum of PhD in their respective fields. Furthermore, researchers are well remunerated and in some instances, special contracts are given to other researchers despite reaching retirement age.

Your Committee strongly recommends that the Government ensures that researchers who had since left the country for greener pastures are brought back and well remunerated. In addition, your Committee recommends that the country retains researchers with the vast experience in agriculture who have since retired, so as to ensure that the country benefits from their vast experience. Your Committee also recommends that all research institutions be headed by an officer with a minimum of a PhD qualification in their respective field.

LOCAL TOUR

12.0 Your Committee undertook a local tour to institutions that are involved in the promotion of non-traditional crops. The tour also enabled your Committee to acquire practical experiences on the challenges and opportunities facing the non-traditional crop sector.

TOUR OF THE ZAMBIA AGRICULTURAL RESEARCH INSTITUTE (ZARI)

12.1 Your Committee toured the ZARI headquarters situated in Lusaka's Chilanga area which is responsible for agriculture research in the Ministry of Agriculture and Livestock. Your Committee learnt that ZARI fell under the Technical Division of the Ministry of Agriculture and Livestock and its Director reported directly to the Permanent Secretary of the Ministry. Your Committee was also informed that ZARI conducts its research based on the agro-ecological data model it generated. ZARI has twelve research stations established in all the provinces save for Muchinga province. Your Committee learnt that ZARI has been conducting research that resulted in new varieties for crops including non-traditional crops since 1992.

Your Committee learnt that through its research, ZARI has released over fifty varieties of seed which include seven new varieties for sorghum, four for rice and three for finger millet. Your Committee further learnt that ZARI has a national database for soil survey, evaluation and classification. It was further revealed that ZARI also conducts research activities for international organisations.

COMMITTEES OBSERVATION AND RECOMMENDATIONS

- i. Your Committee observes that the cadre of researchers at ZARI must be supported. The number of PhD and Masters holders is limited given the enormous task of

providing the much needed research for the growth in the agriculture sector including non-traditional crops.

Your Committee recommends that ZARI be staffed with officers with adequate academic credentials, so as to enhance agriculture research in the country. Your Committee further recommends that the Government ensures that staff at ZARI with limited qualifications are sent for further studies especially for PhD and Masters Programmes.

- ii. Your Committee observes that the establishment of ZARI as a department under the Technical Division of the Ministry has contributed to the ineffectiveness of the research institution.

Your Committee strongly recommends that the Government initiates legislation for ZARI to be an autonomous institution established by an Act of Parliament to fully discharge its mandate of agriculture research.

- iii. Your Committee observes that the continued erratic funding to ZARI has contributed to the inactivity of the once vibrant agriculture research Institute.

Your Committee recommends that Government increases funding towards ZARI and ensure that funds are released in full and on time to enable the institution enhances its research. Furthermore, your Committee recommends that 10 percent of the agriculture budget goes towards agriculture research.

- iv. Your Committee observes that the location of a cement plant near ZARI headquarters which emits dust particles has affected field trials being conducted at the institution. Your Committee recommends, as a matter of urgency, that the Government relocates ZARI field trials to a new area so as to enable the institution conduct field trials in a conducive area.
- v. Your Committee observes that the current system where resources generated by researchers at ZARI is going to the Ministry of Agriculture and Livestock has not only demotivated staff, but also limited the Institution's resource mobilisation.

Your Committee recommends that the Government must ensure that at least 30 percent of income generated by researchers at ZARI, goes towards the institution's account to enable it address various challenges it is facing such as infrastructure and transport among others.

TOUR OF TOMBWE PROCESSING LIMITED

12.2 Your Committee toured the Tombwe Processing Plant situated in the heavy industrial area of Lusaka city.

Your Committee learnt that Tombwe Processing limited was among the five Tobacco merchants operating in Zambia which included the Zambia Leaf Tobacco (ZLT), Alliance One International (AOI), Associated Tobacco Company (ATC) and the Japanese Tobacco International (JTI). Tombwe Processing Limited (TPL) commenced its operations in 1996, when it acquired the then Lusaka Tobacco Processing plant during privatisation. Your

Committee learnt that TPL was the only processing facility in Zambia offering processing services to various merchants. TPL also provides some farmers with finance. On the labour force, your Committee learnt that the company has 223 employees during normal level processing and an additional 611 during the seasonal period.

Your Committee also learnt that TPL has a total of 3,328 small scale farmers based in Eastern, Central, Western and Southern Provinces.

COMMITTEES OBSERVATION AND RECOMMENDATIONS

- i. Your Committee observes that the issuance of floor licences by the Tobacco Board of Zambia is not transparent which in turn has created confusion in the sector.

Your Committee recommends that the Government normalises the current status of issuing licences so as to ease the purchasing of tobacco by merchants.

- ii. Your Committee observes that the current *Tobacco Act* has become outdated and has contributed to the challenges currently facing the industry and subsequently the growth of the crop's production.

Your Committee strongly recommends that as a matter of urgency, the Government reviews the current *Tobacco Act* so as to bring on board matters that are affecting the full potential of the crop.

TOUR OF LUSAKA CITY MARKET

12.3 Your Committee toured the Lusaka City Market which facilitates the selling of horticultural products from various parts of the country. Your Committee interacted with traders of vegetables and fruits at the market and appreciated the challenges they faced. Your Committee learnt that the market was the centre of horticultural products both for the wholesale and retail traders. The market was also a hub for horticultural products for the many areas in the country as well as the region.

Your Committee also noted the high post harvest losses due to poor storage facilities at the market.

COMMITTEES OBSERVATIONS AND RECOMMENDATIONS

- i. Your Committee observes that the lack of a horticultural policy to improve the value chain of the various products has affected the full potential of the sub-sector.

Your Committee recommends that the Government puts in place a horticultural policy to outline the value chain and establishment of the horticultural markets to further stimulate production and reduce post harvest losses.

- ii. Your Committee observes that the fragmented marketing system for horticultural produce and the large presence of agents at each level of the value chain has contributed to the limited production of fruits and vegetables in the country.

Your Committee recommends that the Government ensures that there is a well structured marketing system for horticultural products so as to enhance the production of the horticultural produce.

- iii. Your Committee observes that the set up at Lusaka City Market is not conducive and inadequate for the sale of horticultural product.

Your Committee recommends that the Government establishes a new market specifically for horticultural products to allow for designated entry and exit points, loading and offloading bays, storage facilities and roofing among other things to further enhance the production of the horticultural products.

PART III

CONSIDERATION OF THE ACTION-TAKEN REPORT ON THE REPORT OF THE COMMITTEE FOR THE SECOND SESSION OF THE ELEVENTH NATIONAL ASSEMBLY

Re-instatement of the Ministry of Livestock

13.0 Your previous Committee had recommended that the development of the livestock sector should not be limited to cattle, but also take it to account other animals.

Your Committee had noted that the creation of the Department of Livestock Development was not going to help matters. Your Committee had recommended that the Government should, as a matter of urgency, re-instate the Ministry of Livestock in order to improve support to the livestock sector; that would promote proper and sustained livestock production in the country.

Executive's Response

In its response, the Government had noted your Committee's recommendation that it should take into account other animal species as opposed to limiting livestock development to cattle. As such, Government was promoting the development of other livestock species such as goats, sheep, pigs and poultry through the following programmes and activities:

- (a) development of different extension services materials such as booklets, manuals, pamphlets, for all livestock species;
- (b) establishment of livestock breeding centres for small ruminants e.g in Kanchindu and Mukulaikwa as well as pig breeding at Keembe;
- (c) development of a thermo stable new castle vaccine for poultry; and
- (d) in conjunction with other stakeholders in the Livestock subsector, building the capacity of smallholder livestock farmers in good management practices such as feed formulation, pasture management, stocking densities, artificial insemination, castration, dehorning and de-worming.

Regarding the re-instating of the Ministry of Livestock and Fisheries Development, the Executive stated that the decision to create any Ministry was the preserve of higher authorities and, therefore, beyond the mandate of the Ministry of Agriculture and Livestock.

Committee's Recommendation

Your Committee resolves to await a progress report and urges the Government to re-instate the Ministry of Livestock.

Service delivery in the Livestock sector

13.1 Your previous Committee had recommended that the Government should ensure improved disease control by improving service delivery, which should be done through the provision of better extension services by employing more extension staff and reducing distances that farmers had to travel to access veterinary and extension services.

Executive's Response

In the Action-Taken Report, the Government stated that in order to improve disease control through improved service delivery, the Government had embarked on the following programmes:

- (a) Treasury Authority had been granted for recruitment of 116 veterinary and livestock assistants in the newly created Districts. The recruitment process had since commenced. The Ministry was also revising the structure to respond to the needs of the livestock sector in line with the Ministry's Strategic Plan;
- (b) the Government was re-demarcating veterinary camps into smaller sizes in order to reduce the distances covered by the camp officers during vaccinations and extension delivery. Out of the budgeted amount totaling ten million kwacha (K10,000,000), the Ministry had so far received one million and two hundred thousand kwacha (K1,200,000) for this activity. The mapping process had since commenced in Mumbwa District. As a start, the re-demarcation of veterinary camps would be targeted at high livestock population density areas and eventually rolled out to other areas;
- (c) the Government was finalizing the procurement process of 150 motor cycles under the Livestock Development and Animal Health Project for effective extension and livestock disease control programmes; and
- (d) considerable progress had been made in the construction of Livestock Service Centers (LSC). To date, a total of ninety-three service centers mostly in Eastern, Southern, Central and Western Provinces had been completed and were now operational. The centers would provide various services such as artificial insemination, embryo transfer, de-worming, branding, de-horning, castrations, sampling, dipping facilities, marketing services, demonstration plots, biogas plants and vaccinations services to the livestock farming communities. The programme was on-going and targeted to construct a total of 1,400 LSCs country-wide by 2015 as indicated in the Sixth National Development Plan (SNDP).

The construction of eighty-seven Livestock Service Centres (Level 1) budgeted for in the 2013 National budget would commence once the KR2,395,000 was released.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter

Re-classifying of livestock diseases

13.2 Your previous Committee had recommended that the Government should consider re-classifying some management diseases into DNEI, as many small scale farmers were unable to manage them.

Executive's Response

In responding to your Committee, the Government stated that it was considering re-classifying management diseases such as east coast fever, anthrax, rabies as diseases of National Economic Importance (DNEI). Diseases of National Economic Importance were those diseases that were highly contagious and whose death rates could reach up to 100 per cent. To that effect, Government had started the production of the much needed vaccines for the control of east coast fever. Further, Government was up-scaling the production of rabies and anthrax vaccine at Central Veterinary Research Institute (CVRI).

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Laboratory and Diagnostic services

13.3 Your previous Committee had urged the Government to decentralize laboratory and diagnostic services which should be implemented as a matter of urgency.

Executive's Response

In its response, the Government indicated that it had started the process of decentralizing the laboratory and diagnostic services from CVRI in Lusaka to provincial centres. The plan was to construct regional laboratories in Choma, Chipata, Mongu, Kasama, Solwezi and Ndola. Construction of Choma regional laboratory was near completion. Furthermore, the construction of regional laboratories in Mongu and Solwezi were progressing well and works were at slab level. The Chipata regional laboratory had also been rehabilitated. In Northern Province, the foundation for the lab had been done. The plan was for all the ten provinces to have modern laboratories like the one in Choma. The regional laboratories would lessen the work that was currently being done at CVRI as most of the samples from the provinces were sent there.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Livestock Development Policy

13.4 Your previous Committee had recommended that the Government should, as a matter of extreme urgency, finalise the livestock development policy as the livestock sector was an important industry that needed a well formulated policy to direct its growth and development.

Executive's Response

In its response to your Committee, the Government stated that the Ministry of Agriculture and Livestock was currently undertaking stakeholder consultations on the Draft Livestock Development Policy. So far, consultative workshops had been held in Southern and Western Provinces. A well-defined roadmap had been drawn and all consultative workshops in the remaining provinces would be completed by February, 2014. The finalization of the Policy was targeted for the second quarter of 2014. Adequate resources would be allocated in the 2014 National Budget towards the completion of the development of the policy.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Livestock Census

13.5 Your previous Committee had recommended that the Government should undertake a livestock census as soon as possible, as this would make planning in the sector easier.

Executive's Response

Responding to your Committee, the Government acknowledged the importance of a comprehensive livestock census as it would make decision-making and planning for animal health and husbandry interventions very easy. However, conducting a comprehensive livestock census required a lot of resources. In that regard, the Ministry of Agriculture and Livestock was actively mobilizing resources from cooperating partners to actualize the census. While awaiting a comprehensive livestock census, Government planned to conduct an annual livestock audit this year. To that effect, the Ministry in conjunction with the Central Statistical Office had developed a data collection manual and questionnaire. The pre-testing would be done in Southern, Western and Eastern provinces. The Ministry had so far received five hundred thousand kwacha (K500,000) out of the allocated six million kwacha (K6,000,000) in the 2013 budget to facilitate this activity.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter regarding the balance of funds required to conduct the Livestock Census and when the census will be conducted.

TOUR REPORT

PALABANA DIARY TRAINING INSTITUTE(PDTI)

Management of the cattle at PDTI

13.6 Your previous Committee had recommended that there should be improved management of the cattle at PDTI as they were an integral part of the functioning of a livestock college or university and an important source of income.

Executive's Response

In its response, the Government stated that it had taken note of your Committee's recommendation and would ensure that there was improved management of the cattle while consultations on the future of PDTI were being finalized.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

NATURAL RESOURCES DEVELOPMENT COLLEGE (NRDC)

Funding to NRDC

13.7 Your previous Committee had recommended that, as a matter of urgency, funding to the NRDC should be improved. Your Committee had urged the NRDC management to work out a sustainable mechanism that would make the College productive enough to provide the entire food requirements for the Institution with enough surpluses for sale to generate income. Further, your Committee had urged the Government to ensure proper management of

the College in order to address problems existing there which were as a result of poor management.

Executive's Response

In its response, the Government stated that at the moment, the College was faced with a number of challenges namely, the lack of operational funds and an unskilled labour force. For the College farm to improve its operations and become sustainably productive, there was need for it to be run on a commercial basis. This would entail capital investment in tractors and other necessary farm implements such as irrigation equipment for the crops section, extensive infrastructure development such as construction of an abattoir, as well as the recruitment of skilled permanent staff as opposed to using casual labour.

There would be need to employ two farm managers instead of one, as the amount of work performed was overwhelming for one person. One farm manager could be in charge of the livestock section while the other would be in charge of the crops section. Additionally, the lack of permanent staff at the College had led to the numerous theft of crops grown on the farm as a result of poor security.

The Government further stated that in order to address some of those challenges, the College through the Ministry had written to the Public Service Management Division (PSMD) to fill the vacant positions at the College. The Government would also seriously consider increasing the budgetary allocation to the College in 2014, in order to improve its operations.

Committee's Recommendation

Your Committee resolves to wait a progress report on the matter.

Conversion of equipment sheds into classrooms at NRDC

13.8 Your previous Committee had recommended that the converting of former equipment sheds into classrooms should be stopped immediately and that the farm area should be reserved for practical training and production;

Executive's Response

In its response, the Government stated that the conversion of former equipment sheds into classrooms at the farm offices was meant to cater for Parallel Programmes that were introduced in response to the increased demand for training as well as an increase in student population. In view of the recommendation from your Committee and taking into account the importance of practical training, the college would discontinue the Parallel Programmes and integrate all parallel students into Open and Distance Learning Programmes so as to immediately stop converting former equipment sheds into classrooms and consequently leave farm area for practical training.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter on whether NRDC Management has reverted the former equipment sheds to their original purpose.

MAZABUKA AGRICULTURAL RESEARCH STATION

Fencing of the Institute

13.9 Your previous Committee had recommended that the Station should be fenced to ward off encroachment.

Executive's Response

In its response, the Government stated that it had taken note of the recommendation by your Committee and would, therefore, source for funds to have the Station fenced off in order to avoid encroachments.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

BATOKA LIVESTOCK DEVELOPMENT CENTRE IN CHOMA

Management of breeding programmes at BLDC

13.10 Your previous Committee had recommended that BLDC should ensure that the proper management of the breeding programme and grass to improve on its goat and chicken rearing schemes. Further, the centre should improve its dairy cattle breed so that farmers were provided with high milk producing breeds.

Executive's Response

Your Committee was informed that the Government supported the recommendation by your Committee on the need to improve the Batoka Livestock Development Trust at Golden valley Agricultural Research Trust (GART) in Choma. This was one of the largest dairy breeding centres in Zambia with the capacity to supply more than 1,000 dairy breeding stock to the needy smallholder dairy farming communities per year. Government in consultation with GART management would develop a strategic plan for the Centre and assist in financial and technical resource mobilization to revamp the operations of the Centre.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Planting of improved species of grass at BLDC

13.11 Your previous Committee had recommended that BLDC should improve its pastures by planting nutritious legumes and other improved species of grass.

Executive's Response

Responding to your Committee, the Government stated that it supported your Committee's view that there was need to improve pasture at BLDC by planting nutritious legumes and other improved species of grass. The Government, through the Ministry of Agriculture and Livestock would, therefore, ensure that there was proper management of pasture at the Centre.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

MOCHIPAPA LIVESTOCK DEVELOPMENT CENTRE (MLDC)

Enrolment of students at MLDC

13.12 Your previous Committee had urged the Government to seriously reconsider its decision to stop enrolling students at Palabana Dairy Training Institute (PDTI) as it was more suitable as a dairy training institute than Mochipapa Research Centre.

Executive's Response

Your Committee was informed in the Action-Taken Report that the Government had noted the observation that PDTI was more suited to conduct trainings in dairy production than Mochipapa Livestock Development Centre. In light of that, the Government through the Ministry of Agriculture and Livestock would take the issue to the higher authorities to make a decision as there was a Presidential directive to construct a university at Palabana, of which the Ministry had no powers to rescind.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter and urges the Government to ensure that the enrolment of students at PDTI was continuous.

Human resource at Mochipapa Livestock Development Centre (MLDC)

13.13 Your previous Committee had recommended that Ministry of Agriculture and Livestock should, as a matter of urgency, employ as many of the livestock assistants that had graduated over the years as possible to deploy throughout the country to provide the extension services that were greatly required by many farmers.

Executive's Response

Your Committee was informed that the Public Service Management Division (PSMD) had approved the recruitment of Livestock Assistants.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

LOCAL FARMERS IN NAMWALA

Subsidies in the Livestock Sector

13.14 Your previous Committee had urged the Government to assist livestock farmers in general and farmers in Namwala in particular by providing proper subsidies and incentives to the livestock sector, as was the case in the crop sector. Subsidies should be on drugs, dipping chemicals, fencing wire and pasture seed, as this would help curb diseases and stock theft and improve animal nutrition. Incentives should be in the form of the provision of training on best practices and on the benefits of good quality breeds that could be obtained through AI and embryo transfer.

Executive's Response

The Government informed your Committee that through the E-voucher system, farmers would be subsidized. Targeted farmers would access inputs such as drugs, dipping chemicals and feed through this facility.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

ZAMBIA INSTITUTE OF ANIMAL HEALTH IN MAZABUKA

Continuation of training programmes at PDTI

13.15 Your previous Committee had urged the Government to look into the possibility of continuing the training at Palabana Dairy Training Institute.

Executive's Response

Your Committee was informed that Government had, through the Ministry of Agriculture and Livestock, engaged in discussions with the Ministry of Education to consider the continuation of the dairy training programme at Palabana.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

MAJORU INVESTMENTS LIMITED IN LUSAKA

Effect of rustling and bush fires on the livestock sector

13.16 Your previous Committee had observed that cattle rustling and bush fires had a detrimental effect on the growth of the livestock sector and urged the Government to carry out sensitisation drives on the negative effect of those vices. Your Committee had further urged the Government to ensure that the two vices carried stiffer penalties.

Executive's Response

In its response, the Government stated that it had developed a draft Livestock Development Act which was under stakeholder consultation. The Act had taken care of the concerns raised by your Committee on the stiffer punishment to cattle rustlers and persons setting up bush fires.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

PART IV

CONSIDERATION OF THE ACTION-TAKEN REPORT ON THE REPORT OF THE COMMITTEE FOR THE FIRST SESSION OF THE ELEVENTH NATIONAL ASSEMBLY

The Agricultural Marketing Act

14.0 Your previous Committee had resolved to await a progress report on the enactment of the new law.

Response

The Government stated that the Zambian Agricultural Sector was faced with a number of challenges in agricultural marketing such as the underdeveloped infrastructure in terms of secure storage facilities and the limited capacity among small and medium scale traders and farmers in agricultural marketing.

In addition, it was stated that in order to address those challenges in agricultural marketing, in 2011, Government through the Ministry of Agriculture and Livestock started the process of formulating a comprehensive agricultural marketing legal framework (Agricultural Marketing Bill) whose main objectives among others was to:

- (i) to increase access to markets by persons in the agriculture sector; and
- (ii) promote the efficiency of marketing agricultural products and services.

The Agricultural Marketing Bill was discussed at sector level to build consensus with all

stakeholders. Subsequently, a Draft Bill was prepared by the Ministry of Justice in readiness for presentation to the legislative Committee of Cabinet Office. However, following the change of Government, the Bill was withdrawn in order to align it with the new Patriotic Front Government's manifesto. Currently, the Ministry of Agriculture and Livestock was reviewing the Bill.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Cost of doing business

14.1 Your previous Committee observed that the cost of doing business in the Agricultural Sector countrywide was still very high and not only restricted to permits, but also included the cost of inputs and other related costs. Your Committee, therefore, urged the Executive to take that into consideration. Your Committee resolved to await a progress report on the matter.

Response

In its response, the Government stated that in the 2013/2014 farming season, it would implement the Electronic Voucher System whose objective, among others, was to encourage the participation of private sector agro-dealers in agricultural input delivery and supply. Under this system, farmers would have the opportunity to purchase agricultural inputs of their choice from agro dealers of their choice. In the long run, it was expected that the competition this would create among agro dealers would bring down the prices of agricultural inputs. Furthermore, in the short term, the Ministry had been exploring the possibility of directly procuring fertilizer from the source, eliminating the middleman and thereby reducing the cost of the commodity.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

Operationalisation of the Warehouse Receipt System

14.2 Your previous Committee had sought clarification on whom the Executive's recommendation regarding the Zambia Agricultural Commodity Exchange was directed. Your Committee had, therefore, awaited a progress report on the matter.

Response

The Government stated that at a stakeholders consultative forum held in Siavonga in 2011, it was recommended that whilst the Ministry organised the formation of a Warehouse Licensing Authority (as provided for in the *Agricultural Credit Act*) to facilitate the operationalisation of the *Agricultural Credit Act*, it was quicker to appoint an already existing institution. In that respect, the Zambia Agricultural Commodity Exchange (ZAMACE) was agreed as the institution to be appointed as an authorized Agency to perform the functions of the Licensing Authority. The Minister of Agriculture and Livestock is yet to sign the statutory instrument to appoint ZAMACE to begin the operations of the Warehouse Receipt System.

Committee's Recommendation

Your Committee resolves to await a progress report on the matter.

CONCLUSION

15.0 Your Committee wishes to pay tribute to all stakeholders who appeared before it and tendered both oral and written submissions. The members also wish to thank you, Mr Speaker, for affording them the opportunity to serve on your Committee for the Third Session of the Eleventh National Assembly. Your Committee also appreciates the services rendered by the Office of the Clerk of the National Assembly. Your Committee is very hopeful that the observations and recommendations contained in this Report will go a long way in promoting the non-traditional crop sector in Zambia and subsequently result in the growth of the agriculture sector.

M J B Ng'onga, MP
CHAIRPERSON

June, 2014
LUSAKA

APPENDIX

List of Officials

National Assembly

Mr S M Kateule, Principal Clerk of Committees

Mr S C Kawimbe, Deputy Principal Clerk of Committees

Ms M K Sampa, Committee Clerk (SC)

Mrs S C Samuwika, Assistant Committee Clerk

Ms A Maluwa, Typist

Mr R Mumba, Committee Assistant

Mr C Bulaya, Committee Assistant