

REPORT OF YOUR COMMITTEE ON AGRICULTURE FOR THE FOURTH SESSION OF THE ELEVENTH NATIONAL ASSEMBLY APPOINTED ON THURSDAY 25TH SEPTEMBER, 2014

Consisting of:

Mr V Lombanya, MP (Chairperson); Mr M J B Ng'onga, MP; Mr R K Chitotela, MP; Ms A M Chungu, MP; Mr D Kafwaya, MP; Mr K Chipungu MP; Mr C Miyutu, MP; and Mr M Mumba, MP.

The composition of your Committee changed after appointments of Mr D Kafwaya, MP; Mr R K Chitotela, MP; and Mr M J B Ng'onga, MP as Deputy Ministers. Mr J Shakafuswa, MP; Mr G Namulambe, MP; and Mr L Evans, MP were subsequently appointed to the Committee.

The Honourable Mr Speaker
National Assembly
Parliament Buildings
LUSAKA

Sir,

Your Committee has the honour to present its Report for the Fourth 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 twelve (12) 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. the state and management of the fisheries sector in Zambia;
- ii. tours arising from the deliberations on the topical issue; and
- iii. consideration of the Action-Taken Report on your Committee's Report for the Third Session of the Eleventh National Assembly.

Procedure adopted by the Committee

5.0 Your Committee requested detailed memoranda on the topical issue under consideration from various stakeholders and later invited them to appear before it to give verbal submissions and clarifications on issues arising from their submissions. Your Committee also undertook a local tour during the year under review based on the topic of study.

PART I

CONSIDERATION OF TOPICAL ISSUE

STATE AND MANAGEMENT OF THE FISHERIES SECTOR IN ZAMBIA

Background

6.0 The agriculture sector in Zambia has vast potential to be the major contributor to the country's Gross Domestic Product (GDP) if all the sub-sectors were fully exploited.

The lopsided or skewed focus on the crop sector (especially maize) by the Government with little focus on other subsectors had contributed to the untapped potential of other viable options such as the fisheries sector. It is worth noting that successive agriculture budgets over the years have been focused more on the Farmer Input Support Programme (FISP) and the Food Reserve Agency (FRA) respectively.

The fish diet accounts for about 40 percent of annual protein in consumption among the Zambian population. The current estimates for annual fish production from capture fisheries was about 75,000 tonnes, and an additional 20,000 tonnes from aquaculture while the estimated annual demand stood at 140,000 tonnes indicating a deficit of about 45,000 tonnes according to the Department of Fisheries. The 45,000 tonnes deficit provided room for a flourishing fish farming industry in Zambia. The demand for fish had resulted in fishing pressure by prompting fishermen to employ environmentally harmful methods of capturing fish and further reducing the catch in most water bodies in the country. With Zambia having about 40 percent of fresh water in Southern Africa, the fisheries sector had huge potential to not only address the huge national deficit, but also be a source of export to the region and other international markets. The subsector also had potential to improve the country's economy through generation of employment, increasing income as well as reducing poverty, especially in rural areas.

In light of the foregoing, your Committee resolved to carry out a study on the state and management of the fisheries sector in Zambia with the view to understanding its potential and challenges in order to make recommendations to the Government.

Objectives

7.0 The main objective of the study was to understand the state and management of the fisheries sector in Zambia, with emphasis on the opportunities and challenges in the sector. The study was meant to equip your Committee with the necessary knowledge to understand the fisheries sector in the country and enable it to make recommendations to the Executive on the best options available to grow the fisheries sector.

The objectives of the study were to:

- i. learn the state of the fisheries sector in Zambia;
- ii. understand the policy and legal framework of the sector in Zambia;
- iii. learn what measures have been put in place to promote the fisheries sector in the country;
- iv. learn what incentives (if any) were available to fish farmers;
- v. find out the fisheries marketing services in the country;
- vi. learn what strategies the Government had put in place to promote the diversification of agriculture through promotion of fisheries sector for the local and export markets;
- vii. learn the major challenges facing the sector in Zambia; and
- viii. recommend the way forward on the development of the fisheries sector in Zambia.

8.0 Stakeholders

The following stakeholders made submissions to the Committee:

- i. Ministry of Agriculture and Livestock;
- ii. Ministry of Commerce, Trade and Industry;
- iii. Indaba Agriculture Policy Research Institute;
- iv. Zambia National Farmers Union;
- v. Food and Agriculture Organisation (FAO);
- vi. African Development Bank;
- vii. World Fish Centre;
- viii. Lake Kariba Harvest Limited;
- ix. Yalelo Limited;
- x. Capital Fisheries;
- xi. Kafue Fisheries;
- xii. Citizens Economic Empowerment Commission (CEEC);
- xiii. Palabana Fisheries;
- xiv. Tiger Feeds Limited;
- xv. Savannah Streams; and
- xvi. Aquaculture Development Association of Zambia.

CONSOLIDATED SUMMARY OF SUBMISSIONS FROM STAKEHOLDERS

World fisheries and aquaculture overview

8.1 Your Committee was informed that the state of world fisheries and aquaculture in 2010, revealed that fish supply in developing countries was 15.1 kg, and 14.4 kg in low-income food-deficit countries (LIFDCs). In LIFDCs, which had a relatively low consumption of animal protein, the contribution of fish to total animal protein intake was significant at 20.1 percent and was probably higher than that indicated by official statistics in view of the under recorded contribution of small-scale and subsistence fisheries. However, in Zambia this had considerably dropped from a high of 12.5 kg in 1980 to the current 7kg per capita due to diminished sources of fish.

China remained by far the largest fish-producing country in the world, with production of 47.5 million tonnes in 2010 (38.7 and 15.8 million tonnes from aquaculture and capture fisheries, respectively). Global capture fisheries production in 2008, was about 90 million tonnes, with an estimated first-sale value of US\$93.9 billion, comprising about 80 million tonnes from marine waters and a record 10 million tonnes from inland waters. In addition, China was also by far the global leader with production of about 15 million tonnes. Employment in the fisheries sector had grown faster than the world's population in traditional agriculture. The 44.9 million people engaged in the sector in 2008, represented 3.5 percent of the 1.3 billion people economically active in the broad agriculture sector worldwide, compared with 1.8 percent in 1980.

The majority of fishers and aquaculturists were in developing countries, mainly in Asia, which had experienced the largest increases in recent decades, reflecting in particular the rapid expansion of aquaculture activities. In 2010, 85.5 percent of fishers and fish farmers were in Asia, followed by Africa (9.3 percent), Latin America and the Caribbean (2.9 percent), Europe (1.4 percent), North America (0.7 percent) and Oceania (0.1 percent). China has the highest number of fishers and fish farmers, representing nearly one-third of the world total. In 2010, 13.3 million people were employed as fishers and fish farmers in China, equivalent to the population of Zambia, of whom 8.5 million people were in full time employment. In 2010, other countries with a relatively high number of fishers and fish farmers were India and Indonesia.

Regional fish status for Southern Africa Development Community (SADC)

Your Committee learnt that the (SADC) region was rich in fish resources from oceans, lakes, rivers and floodplains as well as fish farming. The region had several island states (Seychelles, Madagascar, Mauritius, and Zanzibar); coastal states (9 out of 15 members) and was home to two great lakes (Lake Malawi and Lake Tanganyika) and major river systems such as the Zambezi River that contained almost 40 percent of Southern Africa's water resources. The region had an estimated population of 3,276,103 fishers and 89,829 fish farmers and accounted for an estimated 3.36 percent of the region's GDP.

Value of fisheries in the SADC region

Country	Total employed (fisheries)	Total employed (aquaculture)	Fisheries, GDP (%)	Fisheries in agric. GDP (%)	Total fish production in 2012 (t)
Angola	452,603	823	1.7	4.25	277,450
Botswana	581	0	0.002	0.16	378
DRC	376,275	2,035	5.53	6.31	222,869
Lesotho	112	602	0.018	0.14	450
Madagascar	166,013	12,210	2.76	8.47	113,547
Malawi	173,328	8,334	3.83	5.87	123,560
Mauritius	6,838	346	0.19	3.76	6,917
Mozambique	374,027	922	3.03	10.0	213,437
Namibia	386,973	1,132	6.5	52.42	469,118
Seychelles	160,249	0	17.73	20.68	204,080
South Africa	499,749	7,168	0.25	6.73	705,710
Swaziland	174	441	0.013	0.094	220
Tanzania	510,876	44,641	4.86	9.69	375,664
Zambia	142,204	6,490	3.2	3.51	89,202
Zimbabwe	26,101	4,685	0,56	2.73	18,510

Table 1; Source: FAO and NEPAD (2014); FishStat (2014)

Zambia accounted for an estimated 4.5% of the region's fishers and fish farmers and like many SADC states, should seriously consider the role of fisheries and aquaculture in achieving the agreed upon Comprehensive Africa Agriculture Development Programme (CAADP) of 6 percent annual growth target, let alone Pillar 1 (Food and nutrition security).

State of the fisheries sector in Zambia

Stakeholders informed your Committee that Zambia is endowed with 12 million hectares of water in form of rivers, lakes and swamps and 8 million hectares of wetlands (ADP, 2009). This endowment represents a huge fisheries and aquaculture resource that is segmented into three major water basins which includes the Congo, Luapula and the Zambezi catchment. The Congo basin is the smallest and is represented by Lake Tanganyika. The Luapula Basin consists of the Chambeshi River and the Bangweulu Lakes and Swamps Complex, Luapula River, Mweru-Wantipa and Lake Mweru. The Zambezi catchment area is the largest and consists of the Luangwa River, Lukanga swamps, Kafue River, Zambezi, the Middle Zambezi (now dominated by Lake Kariba) and lower Zambezi.

The fisheries sector in Zambia consisted of two subsectors namely capture fisheries and aquaculture. The distinction between the two subsectors is as set out below.

1. Capture Fisheries

Capture fisheries involves the harvesting of naturally occurring fish resources in the naturally occurring water bodies such as lakes, rivers and any impoundments. Therefore, emphasis was on fisheries management in order to sustain fish production from natural water bodies.

The production from capture fisheries was not likely to increase from the current 75, 000 tons on average since they were being over - exploited due to the use of destructive methods coupled with an increasing number of fishers. There were 7, 696 fishers in 1976, against 18, 150 fishers in 2013, in the Lake Bangweulu alone. This could explain why the fish production from capture fisheries had been declining since 2010.

2. Aquaculture sector

On aquaculture, your Committee learnt that the sub sector was the fastest growing agriculture subsector in the country. Aquaculture is the cultivation, propagation or farming of fish, aquatic vegetation, or other living aquatic resources whether from eggs, spawn, spat or seed or by rearing fish lawfully taken from the wild or lawfully imported into the country, or by other similar process (*Fisheries Act No. 22 of 2011*). In Zambia, the Tilapia and the Catfish were the main fish types grown either through the cage system or the pond system, the two systems that had been adapted to the country. The latter system had been rapidly expanding since 2004, especially on Lake Kariba. Its upscaling was also being witnessed in Lakes Mweru, Bangweulu and Tanganyika. While fish diseases, theft and pollution were well known challenges, the cages had great advantage in that they had a relatively lower investment cost in that they used the already existing water body compared to pond culture. Furthermore, productivity in cages was higher than in ponds.

Optimal fish growing required specific climatic conditions. For Zambia, the best temperatures for growing Tilapia and Catfish were found in lower altitudes (below 1000 m) in the Zambezi valley, the Luangwa River and Lake Tanganyika. Most Zambian waters were sub-optimal temperature for tilapia and catfish (ILO, 2014).

Zambia's aquaculture fish production had, however, significantly grown in the last two decades. From a total production of only 5, 000 tons of fish per annum in 2006, the country now produces about 20, 000 tons in 2013. The increase was mainly due to the rapid adoption of cage fish farming which was a high intensive system. Furthermore, the emerging of the private sector in fish seed and feed production had been a catalyst in the upscaling of fish production in Zambia. Fish demand had also been an attractant to investment in aquaculture.

Policy and legal framework of the fisheries sector in Zambia

With regard to the policy and legal framework, your Committee was informed that in comparison with other countries, there had been a slow evolution of fishery legislation in Zambia. Until 2007, fishery legislation essentially remained unchanged from colonial times and the country had no specific regulations dealing with aquaculture. The Fisheries Amendment Regulations of 2007, introduced, for the first time, regulations for aquaculture. This was mainly because when fisheries legislation was introduced in the country, aquaculture was an insignificant subsector. Fisheries in Zambia were, therefore, governed by several pieces of legislation. The Department of Fisheries, under the Ministry of Agriculture, was mandated through the Fisheries Act to promote the development of fisheries and aquaculture to increase fish production in the country.

Stakeholders emphasised that the fisheries sector did not have a stand-alone policy at the moment. It was, however, covered by the National Agricultural Policy (NAP) (2004

–2015) that govern the development of the agriculture in Zambia. However, the emphasis in the policy was on fish resource management which was related to capture fisheries with little mention of aquaculture which provided great potential to increase the country's fish production. Your Committee also learnt that a stand-alone Fisheries Policy has been formulated by the Government but was currently in draft form awaiting implementation.

It was revealed to your Committee that the *Fisheries Act No. 22 of 2011* was the principal legislation, supplemented by the *Fisheries Regulations No. 24 of 2012*, which provide for the promotion of sustainable development of fisheries and a precautionary approach in fisheries management, conservation and utilization; regulation of commercial fishing and aquaculture. The policy on the fisheries sector in Zambia focus on the promotion of sustainable exploitation of fish and aquaculture production.

The fisheries sector is also governed by the following pieces of legislative:

- i. *The Environmental Management Act (EMA) No. 12 of 2011;*
- ii. *The Water Resource Management Act, 2011;*
- iii. *Local Government Act, Chapter 281;*
- iv. *Bio safety Act No. 10 of 2007;*
- v. *Public Health Act repealed by the Act No. 22 of 1995;*
- vi. *Zambezi River Authority Act No of 17 of 1987;*
- vii. *Lands Act of 1995 (CAP 184);*
- viii. *ZAWA Act No. 12 of 1998;*
- ix. *Animal Health Act No. 27 of 2010;*
- x. *Cooperatives Act No. 20 of 1998; and*
- xi. *The Plant Pests and Diseases Act No. 13 of 1994.*

However, there were overlaps in some of the pieces of legislation which were recipes for confusion in the implementation of the same pieces of legislation. For example, both the *Fisheries Act No. 22 of 2011* and the *Animal Health Act No. 27 of 2010* provide for restrictions of the importation of fish. In this regard, the public is confused as to which institution was the competent authority to deal with the matter.

Furthermore, Zambia was a signatory to a number of international and regional conventions, treaties and protocols which were related to the fisheries and aquaculture development. These include the Convention on Biological Diversity (CBD), the FAO code of conduct for responsible fisheries and aquaculture, the SADC Protocol on fisheries, the SADC protocol on shared water bodies, the SADC treaty on management of water course systems, the RAMSAR conventions and the Convention on the sustainable management of Lake Tanganyika.

Measures in place to promote the fisheries sector

Stakeholders submitted that measures put in place to promote the fisheries sector in the country include the Government's establishment of the Aquaculture Advisory Group. This was aimed at ensuring that more stakeholders were involved in aquaculture and the development and implementation of the National Aquaculture Development Plan. This had resulted in the rehabilitation of fourteen (14) Government Fish Farms and establishment of eight (8) Government Indoor Hatcheries and eleven (11) Community Fingerling Production Centres. This was aimed at promoting the provision and access to

quality fingerlings to fish farmers. The Aquaculture Strategy and its Development Plan had expired. Both documents were being revised with technical assistance from the United Nations Food and Agriculture Organization (FAO).

In order to promote capture fisheries, the Government has also embarked on the development of fishery specific management plans. The emphasis was on the promotion of community based natural resource management strategies in fisheries management and the conducting of community awareness and sensitisation programmes in order to ensure sustainable exploitation of the fisheries resources. Since 2011, three (3) fishery specific management plans had been developed for the Kafue Flats, Bangweulu and Mweru – Luapula fisheries.

The Government through the Ministry of Agriculture and Livestock Strategic Plan (2014 – 2016) and the National Agriculture Investment Plan (2014 – 2018) has also apportioned resources to the promotion of sustainable exploitation of capture fisheries resources and increasing fish production, productivity and value-addition through sustainable and efficient aquaculture management and development.

Additionally, in order to address the challenges of low productivity, fisheries and aquaculture research in Zambia, the Ministry was identifying and developing the culture of indigenous fish species for aquaculture development while enhancing the exploitation of under and un-exploited non-traditional fish species for capture fisheries. To this effect, the Government through the Department of Fisheries was developing fishing gear to exploit the Kapenta stocks from Lake Itzhi-tezhi.

Your Committee also learnt that it was mandatory to conduct an environmental assessment (*EMA Act No. 12 of 2011*) that spelt out the environmental, social, economic and political impacts associated with the project and the mitigation and enhancement measures where necessary when establishing an aquaculture production venture. This requirement was seen as an unnecessary expense to small scale farmers. In this regard, the Ministry of Agriculture and Livestock (MAL) through the Department of Fisheries has been developing the block Environmental Planning Briefs (EPBs) for small scale farmers on Lake Bangweulu and Mweru with the financial support from the Programme for Luapula Agricultural and Rural Development (PLARD II).

Incentives available to fish farmers

Your Committee was informed that the Ministry of Agriculture and Livestock through DoF has extension workers in most parts of the country. Ideally, it should be in every district and camp, but due to inadequate number of staff some areas were unserved. The staffing levels in the Department at the moment stood at 18 percent of the total establishment. It was important to note that the aquaculture section was the sub section that needed extension workers who could effect change in the farming community. Capture fisheries at the moment required enforcement of the existing regulations to avoid unsustainable fish exploitation methods.

In addition, your Committee learnt that the *Fisheries Act No. 22 of 2011*, provides for the creation of an Aquaculture and Fisheries Fund with the aim of developing the fisheries and aquaculture sector and facilitating a community-based approach to fisheries

management and development. Despite this provision, the operationalisation of the Fund had not yet been fulfilled.

Stakeholders informed your Committee that the Citizens Economic Empowerment Commission (CEEC) which was established by the Zambian Government through an Act of Parliament No. 9 of 2006, was mandated to implement various economic empowerment programs across the country. The Commission had been promoting aquaculture in the country. This initiative had motivated small scale fish farmers to scale up their production.

On specific incentives available to fish farmers, your Committee was informed of the following incentives:

- i. provision of extension and capacity building services;
- ii. promotion and facilitation of linkages with financial and lending institutions as well as service providers. In this regard, to attract financial managers to give credit to fish farmers, the Government demonstrated that fish farming was a viable business by developing and testing business plans through FAO-Technical Co-operation Programme (TCP); consequently, the CEEC, ILO/FAO (Rural Youth Enterprise for Food Security) and the International Development Enterprise (IDE) were in the process of giving credit to fish farmers based on these business plans;
- iii. environmental impact assessment costs were borne by the Government in identified potential aquaculture areas/ sites. e.g. Lakes Mweru-Luapula and Bangweulu in order to reduce on the cost of investment in aquaculture;
- iv. promotion and establishment of eleven (11) Community Fingerling production centres in Mpungu in Kasempa, Chibale in Serenje, Kandata in Luwingu, Matipa in Nakonde, Milonso, Nshinso and Malali in Mkushi, Lumba in Luano, Kapatu in Mbala and Mwandu in order to ensure that fish seed was readily available; and
- v. improved availability, accessibility and affordability of quality fingerlings from Government hatcheries/fish farms.

In addition, your Committee was informed that the Ministry of Agriculture and Livestock was also developing an elaborate policy and strategic framework whose focus with respect to fisheries was to enhance fish productivity. Several measures would be put in place to conserve and maintain bio-diversity of aquatic resources through improved monitoring, creation of fish sanctuaries and restocking overfished water bodies.

Under the new strategic framework, marketing, exploitation and movement of endangered and ornamental fish species and trading of fishing gears would be regulated and controlled. Formation of community fishing groups or associations would be promoted and encouraged for effective dissemination of fisheries management information and appropriate fishing techniques. Research in the application of

environmentally sound fishing methodologies and techniques would be intensified. Legislation for sustainable exploitation of fisheries resources would be strengthened and the Government through the Ministry of Agriculture and Livestock would collaborate with neighbouring countries in the management of aquatic resources in shared water bodies.

Marketing services available for the fisheries sector

Your Committee learnt that most of the fish produced in the country went through the informal marketing channels as there was high demand for fish at both fishery and farm levels. However, as the sector grew, there was need to promote a formal marketing mechanism along the value chain to promote more market opportunities for the fish producers and processors. The current state was that fish producers either sold to wholesalers or traders who later sold it to the retailers before the fish reached the consumer. However, it was also common to sell directly to consumers upon fish capture from either a natural water body or an aquaculture facility.

On the specific marketing services available for the fisheries sector in the country, your Committee was informed that:

- i. marketing of fish in the country was largely driven by the private sector; in some places, however, the Government had established infrastructure such as landing sites (e.g. Waya in Lukanga) and fish freezing and storage facilities (e.g. Chipepo on Lake Kariba, Main Harbour in Iteszhi-tezhi and Machiya in Mpongwe District) to improve fish quality and;
- ii. the Government has also developed (through collaboration between the Department of Fisheries and the Zambia Bureau of Standards) fish standards to guide the marketing of fish in Zambia. These standards include:

ZS 743:2011. Fish and Fish Products – Fresh Fish and Chilled Fish

ZS 744:2011. Fish and Fish Products – Quick Frozen Fish Fillets

ZS 745:2011. Fish and Fish Products – Salted Fish and Dry Salted Fish

Strategies in place for diversification of the agriculture sector

Your Committee learnt that the Government was implementing a national diversification programme to promote the diversification of the economy from dependence on the copper mining sector. The agriculture sector was one of the main sectors identified as part of the national diversification programme. Efforts had, however, been made to diversify the agricultural sector from dependence on maize growing to other agricultural related activities such as fisheries, livestock development and crop diversification (i.e. promoting more cultivation of cotton, tobacco, rice, sunflower, soya beans, groundnuts e.t.c). The diversification of the agriculture sector was the mandate of the Ministry of Agriculture and Livestock.

Your Committee also learnt that among the key strategies implemented by the Ministry of Agriculture and Livestock to promote agriculture diversification through the fisheries sector were:

- i. identification of indigenous fish species for aquaculture;
- ii. establishment of fingerling production centres;
- iii. development and promotion of intensive fish production systems e.g. cage culture;
- iv. exploitation of under-exploited fish species such as Brycinus species (locally known as Chitaka) and Kapenta in Lake Itzhi-tezhi;
- v. promotion of exploitation and export of non-traditional fish species like ornamental fish; and
- vi. development of fish and fish products standards with the view of promoting fish export.

Your Committee was informed that the Ministry of Agriculture and Livestock was in the process of implementing reforms aimed at reducing the subsidy on farm inputs and removing the maize subsidy on maize milling by millers. This was in order to make savings to be used to increase support towards diversification of the agricultural sector from maize to other activities that had a significant potential to contribute to the growth of the agriculture sector such as irrigation development, livestock development, fisheries development, research and extension service delivery.

In addition, the Ministry of Commerce, Trade and Industry, through the Citizens Economic Empowerment Commission (CEEC) had been supporting efforts aimed at promoting the diversification of agriculture through its Aquaculture Development Business Plan (Fish Ponds) 2012-2016. The Commission was implementing an aquaculture investment programme that was supporting fish farmers in Nchelenge, Mpulungu, Kitwe, Rufunsa and Siavonga Districts under the 2013 funding window, while under the 2014 window, the Commission was supporting fish farmers in Chitambo, Mwandu, Chavuma, Kalulushi and Mwanabombwe.

Among the areas earmarked for support in the CEEC programme were the following:

- a. establishment of fish ponds, fish cages and storage facilities;
- b. hiring of experts to impart fish farming skills;
- c. supporting the procurement of refrigerated trucks for transportation of fish; and
- d. facilitating the market for the fresh table fish.

Major challenges facing the fisheries sector

Your Committee was informed that the fisheries sector was facing numerous challenges that required addressing if the sector was to see gains that would benefit the Zambian people.

It was explained that the Ministry of Agriculture and Livestock (MAL) through the

Department of Fisheries was mandated to manage the fish as enshrined in the *Fisheries Act No. 22 of 2011*, through a number of management measures. The measures include imposition of the closed fishing season which runs from 1st December to the last day of February each year, restrictions on gear mesh size and licensing of boats to limit the number of fishing operators thereby maximizing the economic benefits of the fishery. However, due to inadequate financial and human resources, enforcement was very weak encouraging the use of inappropriate fishing methods.

Climate change had also been ignored in the fisheries sector despite its effect being evident in the sector. For instance Lake Bangweulu had been drying up slowly in the last few decades. According to the data obtained from the Department of Water Affairs and reported by the Department of Fisheries, the Lake had reduced in its depth by 0.66m between 1974 and 2011. It was stated that the scenario called for immediate adaptation measures that could address the effect of low water levels in the lake. Clearly as the water level declines the extraction rate of fish increased meaning the over exploitation of the fish would continue. This could be repeated in all other similar fisheries.

In addition to the above, your Committee was also informed of the following challenges:

- i. excessive fishing capacity in capture fisheries;
- ii. the dual role played by fisheries staff between extension service delivery and law enforcement; as the effectiveness and efficiency of enforcing the regulations were compromised by the dual roles of the enforcement and delivery of extension services by the Department of Fisheries;
- iii. there were conflicting institutional arrangements and regulatory frameworks that overlap in the dispensation of the roles and responsibilities regarding management and development in the fisheries sector; for example, the *Zambia Wildlife Authority (ZAWA) Act* and the *Fisheries Act* empower the Department of Fisheries and ZAWA to manage Lake Mweru Wantipa fishery; consequently, inconsistent policies and legal framework had led to the high cost of environmental impact assessment studies for fish farming;
- iv. insufficient human and technical capacity to cover all key areas in the subsector; according to the 2014 Ministry of Agriculture and Livestock Staff Establishment, the Department of Fisheries was supposed to have a total staff establishment of 2,347 i.e, 1,468 Professional and Technical Officers and 879 Support Staff; however, the Department had a total staff assignment of 430 only, thus operating at 18.3% staffing capacity;
- v. limited access to credit and finance for fish farmers and under capitalisation in the sector as currently, there were a few financial players supporting fish farmers resulting into limited access to credit; this is due to the fact that the aquaculture subsector was relatively new and, therefore, still viewed as a high risk investment area, hence the slow entry of financing institutions;

- vi. weak fisheries and aquaculture research and development (R&D) as the capacity to conduct research had diminished over the years due to limited investment and human resource;
- vii. weak extension delivery system as there was inadequate human, financial and infrastructure investment to effectively transfer technologies to fishers and fish farmers which has contributed to low participation and uncoordinated extension service delivery by stakeholders in the sub sector;
- viii. high post-harvest losses which were estimated at 25 – 30% of the annual production from capture fisheries which weakens the role that fish plays in the food and nutrition security;
- ix. inadequate public sector investment in conservation, protection of breeding areas, enforcement of fishing bans, and policing of unsustainable fishing methods;
- x. inadequate private sector and community investment in fish farming technology (fish pens, cages, ponds, boats, etc);
- xi. inadequate private sector investment in fish processing and value addition;
- xii. weak value chain development of supportive industries from supply of improved fish fingerlings, fish feed, fish disease control, pond and cage technology, processing and cold chain facilities, landing sites, boats, diagnostic laboratories, breed certification and quality control systems;
- xiii. weak national information and statistics collection, management and dissemination systems;
- xiv. weak support systems to potential investors such as input and equipment support by the Government; and
- xv. weak accessibility, communication, cold chain facilities and market infrastructure in major fisheries areas.

Stakeholders informed your Committee that the study on the state and management of the fisheries sector by your Committee was timely, given that over the years, the crop subsector (especially maize) had overshadowed other subsectors such as the fisheries sector which had vast potential to transform the country's agriculture profile. In addition, stakeholders also stressed the need for the Government to put in place practical interventions on the agriculture diversification programmes if any meaningful results were to be achieved.

Your Committee notes that transforming the fisheries sector requires a three-pronged strategy to significantly increase fisheries output for the local and international markets which are: improving the management of natural capture fisheries, increasing

investments in expansion of aquaculture and improving value addition, processing and marketing activities as well as improving the regulatory environment.

After a detailed analysis of the written memoranda and careful consideration of oral submissions from the stakeholders, your Committee makes the observations and recommendations set out hereunder.

9.0 Committee's Observations and Recommendations

- i. Your Committee notes that where as the Government has revised and enacted the *Fisheries Act no 20 of 2011*, the Act has not been fully implemented, thereby contributing to the non exploitation of the subsector.

Your Committee, therefore, recommends, as a matter of urgency, that the Ministry of Agriculture and Livestock fully implements the *Fisheries Act no 20 of 2011*.

- ii. Your Committee observes that despite the Government initiating the formulation of a stand -alone fishery policy to deal with issues hampering the full exploitation of the fishery subsector, the policy has not be officially launched and implemented.

Your Committee strongly recommends that the Government launches and implements the fishery draft policy so that stakeholders can have clear Government policy on the fisheries sector.

- iii. Your Committee observes that the inadequacy of the much needed infrastructure for the promotion of the fishery sector such as roads, electricity and other fishery equipment has contributed to the low productivity in the fishery sector.

Your Committee, therefore, recommends that the Government invests heavily in infrastructure that supports the sector, so as to guarantee the growth of the sector.

- iv. Your Committee observes that the merging of the Ministry of Agriculture and the Ministry of Livestock and Fisheries into the Ministry of Agriculture and Livestock has worsened the continued overshadowing of other subsectors in the agriculture sector.

Your Committee urges the Government to re-establish the Ministry of Livestock and Fisheries in order to enhance the support towards the fisheries sector in its growth.

- v. Your Committee notes that the inconsistent statistical data has contributed to the lack of actual production and consumption figures in the sector. Stakeholders have continued to give varying figures due to the fact that collection of data is not only inconsistent, but also characterised by poor management and dissemination. Further, the absence of this data has equally contributed to the

depletion of fish in most water bodies as the Government was unable to know which water bodies had been immensely affected by over fishing when enforcing the fishing ban.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock ensures that the Department of Fisheries in collaboration with the Central Statistical Office conducts periodic surveys in both the capture and aquaculture subsector so as to enable stakeholders have accurate production and consumption figures. Further, the Government must ensure that the data is well managed and disseminated to stakeholders.

- vi. Your Committee observes that the staffing levels of fishery extension officers in the country is very poor. It is worth noting that the current establishment of officers at DoF is 2,347 but had only 430, thereby operating at 18.3%. This has contributed negatively to the stagnation of the sector.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock should ensure that staffing levels for fishery extension officers is commensurate with the existing establishment so as to foster the much needed extension services.

- vii. Your Committee observes that the dual role being undertaken by fishery extension officers for not only offering extension services, but also enforcement of the law has somewhat resulted in poor working relationship between them and fishermen.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock ensures that a separate law enforcement agency conducts the enforcement while the fishery extension officers perform their original mandate of offering extension services.

- viii. Your Committee observes that whereas the issuance of Environmental Impact Assessment (EIA) reports is important so as to safeguard the environment, the process is not only prohibitive in terms of cost and lapse of time, but also tedious especially for the small and medium scale farmers who desire to invest in aquaculture.

Your Committee, therefore, recommends that the Government through the Zambia Environmental Management Agency (ZEMA) creates an enabling environment for investment in the fisheries sector by reducing the bureaucratic procedures associated with accessing the EIA. Furthermore, the Government must facilitate the revision of the *ZEMA Act* in order to empower the Agency or the Minister, by way of Statutory Instruments, to conduct periodic revision of statutory fees and general regulations as and when need arises.

- ix. Your Committee is concerned with the calibre of graduates from institutions offering training in fisheries. The graduates do not seem to have the required

hands-on experience and knowledge due to the non updating of the fishery syllabi to deal with the new and emerging technologies in the sector.

Your Committee, therefore, recommends that the Ministry of Agriculture and Livestock ensures that the current curricula for the fisheries training is revised so as to include current and emerging technologies in the subsector. Furthermore, Government must establish more Institutions of learning for the fisheries sector.

- x. Your Committee observes that the inadequate incentives and poor marketing services for the fishery sector has contributed to the low productivity in the sector.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock introduces fish inputs on the Farmer Input Support Programme (FISP) so as to enable fish farmers benefit from the programme as the case is with farmers in the crop sector.

- xi. Your Committee observes that there is lack of adequate credit facilities for the fisheries sector, especially for the small and medium scale fish farmers. Further, although CEEC is offering financial support, the fund is not adequate as it also includes funding other sectors.

Your Committee recommends, as a matter of urgency, that the Ministry of Agriculture and Livestock effects the operationalisation of the Aquaculture Development Fund, which is anticipated to contribute significantly to the growth of the fisheries sector.

- xii. Your Committee is concerned with the fish stocks in trans-boundary water bodies in riparian countries due to varying fishery regulations across borders.

Your Committee strongly recommends that the Government engages the countries in trans-boundary shared water bodies with Zambia so as to foster integrated management systems and harmonised enforcement strategies.

- xiii. Your Committee observes that the newly established Aquaculture Development Association of Zambia (ADAZ) will play a significant role in championing the growth of the fisheries sector in the country.

Your Committee, therefore, recommends that the Ministry of Agriculture and Livestock develops modalities for supporting ADAZ in order to enable the Association have a national presence.

- xiv. Your Committee observes that the lack of certification for hatcheries in the sector has contributed to the low quality of fingerlings which has resulted in low productivity by actors in the sector.

Your Committee recommends that the Ministry of Agriculture and Livestock initiates mandatory guidelines on the certification of hatcheries before fingerlings

are delivered on the market, so as to reduce the high attrition rate arising from poor services by most hatcheries.

- xv. Your Committee observes that the introduction of levies being charged on farmed fish production (aquaculture) has somewhat contributed to the reluctance by the private sector to invest in fish farming. It is worth noting that the measure was originally introduced for those involved in capture fishery.

Your Committee recommends that the Ministry of Local Government and Housing reverses the charging of levies on farmed fish (aquaculture) so as to reduce the cost of doing business in the subsector.

- xvi. Your Committee observes that the weak value chain development of supportive industries from supply of improved fish fingerlings, fish disease control, pond and cage technology, processing and cold chain facilities, landing sites, boats, diagnostic laboratories, breed certification and quality control system has contributed to the continued stagnation of the sector.

Your Committee recommends that the Ministry of Agriculture and Livestock must develop and implement fish values chain to further enhance the potential of the sector.

- xvii. Your Committee observes that the advent of climate change, environmental degradation and deforestation have resulted in pollution which has led to invasive species and sedimentation of water bodies. In addition, your Committee notes that with the projected changes in rainfall patterns, the fisheries sector is bound to experience more challenges arising from floods and droughts.

Your Committee recommends that the Ministry of Agriculture and Livestock enhances and supports programmes by various stakeholders championing climate change mainstreaming for sustained fish production.

- xviii. Your Committee observes that the weak Monitoring, Control and Surveillance (MCS) systems to fight illegal fishing through construction of surveillance stations equipped with the necessary communication equipment and provision of patrol boats has contributed to the high depletion of fish in most water bodies.

Your Committee, therefore, recommends that the Ministry of Agriculture and Livestock sets up and implements the Monitoring, Control and Surveillance (MCS) systems in order to curb the high illegal fishing on most water bodies.

- xix. Your Committee observes that the high level of importation of fish in the country is not only limiting the growth of the fisheries sector but is also creating an artificial growth of the aquaculture sector.

Your Committee recommends that the Ministry of Agriculture initiates measures of regulating fish imports in the country so as to allow the growth of aquaculture subsector in the country.

PART II

TOUR REPORT

10.0 In its quest to appreciate what was obtaining on the ground as regards the fisheries subsector, your Committee toured selected public and private institutions in Southern, Copperbelt, Luapula, Northern and Lusaka Provinces involved in the fisheries subsector. To further appreciate the concerns and views the communities had on the state and management of the fishery sector, your Committee also held a public hearing in Nchelenge District, Luapula Province.

Institutions visited

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

1. Department of Fisheries Headquarters;
2. Kafue Fisheries;
3. Yalelo Limited;
4. Lake Harvest Limited;
5. Savannah Streams;
6. Palabana Fisheries;
7. Tiger Feeds Limited;
8. Mpende Fisheries;
9. National Aquaculture and Research Development Centre (NARDC);
10. Simutenda Farm; and
11. Fiyongoli Research Station.

Department of Fisheries Headquarters

Your Committee was informed that the Department of Fisheries located in Chilanga District, had a mission to facilitate and support a sustainable and competitive fisheries sector to assure food security, nutrition and increased incomes at household and national levels and to maximise the sector's contribution to Gross Domestic Product (GDP). The vision was to attain sustainable exploitation of the fishery resources at the highest possible levels without compromising availability of fish for both present and future generations and without degrading the environment and double the current aquaculture production by 2030.

Key programs and activities

On the key programmes being undertaken, your Committee learnt that on capture fisheries, the Department was establishing and strengthening collaborative management structures, revision of fisheries legislation; development of a stand-alone national fisheries and aquaculture policy; and the development of fishery specific management plans. In addition, your Committee heard that the Department was also conducting sensitization and training of fishers; dissemination of technologies; licensing and registration of fishers; fisheries surveillance and enforcement as well as management of transboundary fisheries resources.

On aquaculture, your Committee was informed that the Department was promoting aquaculture management and development; extension visits to fishermen; cage and pen culture promotion; promotion of best aquaculture practices; revision of National

Aquaculture Development Plan (NADP) and aquaculture strategy; development of lake-based hatcheries; and the development of aquaculture Packs and fish farmer clusters. In addition the Department was also inspecting the licensing of aquaculture facilities as well as conducting inspections and certification of aquaculture facilities.

Your Committee was also informed that there was inadequate human, financial and infrastructure investment to effectively transfer technologies to fishers and fish farmers. This had contributed to the low participation and uncoordinated extension service delivery by stakeholders in the sub sector.

Committee's Observations and Recommendations

- i. Your Committee observes that the location of the Department of Fisheries Headquarters in Lusaka's Chilanga area has contributed to the ineffectiveness of the Department due to area encroachments and emission from Chilanga Cement.

Your Committee recommends that the Ministry of Agriculture and Livestock should urgently relocate the Department of Fisheries Headquarters to a more suitable location with adequate space, water resources and modern infrastructure in order to enhance its technical support to stakeholders in the sector.

- ii. Your Committee observes that the reliance of the Department of Fisheries on the Treasury for funding in order to meet its objectives is not only making the Department a spectator in the industry, but also making it ineffective given the challenges the Department is facing.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock should ensure that the Department is adequately funded with seed money in order for it to be fully involved in the high production of fingerlings and undertake cage fishing so as to enable it become self sustaining in its operations.

Kafue Fisheries

Your Committee was informed that Kafue Fisheries, located in Kafue District was a relatively small fish farm producing between 1,300 – 1,500 tonnes of fish per year which were all consumed locally. The farm was established in 1981 and was currently keeping about 2 million fingerlings for their production. Your Committee learnt that Kafue Fisheries was believed to be the largest integrated farm in Africa sitting on a farmland of 1500 hectares. The farm was establishing a new hatchery to produce about 6 million fingerlings for their own production by the end of 2015.

Yalelo Limited

Your Committee learnt that Yalelo, located in Siavonga District was a relatively new, but rapidly developing aquaculture producer. The Company was founded in 2011, and as of 2015, it was the largest fish producer in Zambia. The Company had aspirations of being a best-in-class tilapia farm which also catalyses the growth of a broader industry through its contributions to local know-how, input availability, and aquaculture supply chains. Your Committee was informed that the Company was the 3rd largest aquaculture producer in Africa.



Hatcheries- Yalelo

Furthermore, your Committee was informed that Yalelo was not only a commercial fish-farming organisation, but also a socially-oriented investment which aimed to facilitate job creation through the development of the local fisheries sector. The company was committed to creating an environment in which fish production was economical and widespread, allowing Zambia to be self-sufficient while preserving wild fish stocks. In terms of their direct involvement in the sector, the company was maximising their own production, supplying quality inputs to emerging farmers, and supporting development of the industry's structure and knowledge base.



Fish cage on Lake Kariba



Cages for smallholder fish farmers – Lake Kariba

Lake Kariba Harvest Limited

Your Committee heard that Lake Kariba Harvest was formed in 1997 to produce high quality Tilapia for the European and Southern African markets. The fish farms were situated in Siavonga on Lake Kariba in Zambia and (Kariba) in Zimbabwe. The business has enjoyed 17 years of fish farming experience in sub-Saharan Africa and enjoyed access to partnership with world-renown fish producers e.g. Brazilian farmers, Costa Rica farms, Regal Spring etc. Your Committee heard that Africa had been isolated as far as aquaculture knowledge was concerned, hence these strategic links have always worked as arteries for technological transfer. As the largest tilapia producer in Africa, Lake Kariba Harvest was committed to provide sustainably reared fish and strive to be a leader in social, commercial and environmental terms.



Fish cage on Lake Kariba

The business strives to fill in the knowledge gap by transferring knowledge through

graduate trainee program. Undergraduate and graduate students are engaged for a period of 2 years for which they gained both theoretical and practical skills of fish farming. Kariba Harvest was a fully integrated business with operations from Feed Manufacturing through to sales and distribution. This provides the business with the ability to manage and control the value chain and influence the quality of fish produced.

Palabana Fisheries

Your Committee was informed that the Company was established as an integrated farming project at the waterfalls farm in Chongwe District. The organisation was involved in the production of fingerlings for sale to emerging farmers. Run by youths, the Company was expanding to start growing fish up to consumption stage for the local market. Your Committee was also informed that the Company was producing fingerlings and also producing vegetables, breams and cat fish fingerlings.

The fish farm was producing approximately 95,000 fingerlings for sale to the local farmers in Chongwe and surrounding areas.

Committee's Observations and Recommendations

- i. Your Committee observes that the role of the private sector in the promotion of aquaculture is critical considering the huge investment that has been put in by most private actors in the fishery sector.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock through the Department of Fisheries facilitates collaboration between the private sector and the Government so as to stimulate mutual technological sharing by both the Government and the private sector.

- ii. Your Committee observes that the lack of a national strategic hatchery policy has compromised the quality of fingerlings on the market. The development and implementation of this document will reduce the reliance of the nation on imported seeds which have a high risk of importing pathogens that might destroy the national stock.

Your Committee recommends that the Ministry of Agriculture and Livestock develops and implements the national strategic hatchery policy which will not only be critical for the supply of quality fingerlings, but also for disease management.

Savannah Streams

Your Committee learnt that Savannah Streams Limited was a wholly Zambian owned Company; primarily an aquaculture business. The Company was incorporated as a Limited Company in 2009 and has several sites for fish farming. These were:

- i. at Siavonga on the banks of Lake Kariba for fish hatchery, nurseries and fish cage operations;
- ii. at NegaNega in Mazabuka for fish hatchery and pond culture on the banks of Kafue

river; and

- iii. fish hatchery, dam and fish cages operations in Chongwe District in Lusaka Province.

Savanna Streams together with its affiliates was an integrated organisation and had its own feed, feed ingredients and production factories, together with fish processing and refrigeration facilities and a Tilapia Hatchery capable of producing 100 million fingerlings annually.

Savanna Streams provides complete solutions for the inputs required by the anticipated development of the aquaculture model. Savanna Streams also provides consulting programmes through its one stop aquaculture shop.

The Company was developing an aquaculture park in its Siavonga area, to undertake fish cage farming using innovative techniques to achieve a sustainable production of fish all year round. Furthermore, Savanna streams was in the process of setting up out grower programmes.



Fish feed plant- Savannah Streams

Currently Savanna Streams was providing the fisheries sector with quality fingerlings, fish feed which was critical to the overall success and sustainability of aquaculture industry in Zambia.

The Company also supplies auxiliary gear such as pond liners, nets and technical support to medium and small scale enterprises in the sector. The firm intended to utilise the increasing local water and fishery resources and break into the export market to neighboring countries.

Tiger Feeds Limited

Your Committee learnt that Tiger Animal Feeds was a stock feed manufacturing Company that had been operating in Zambia for the past sixteen (16) years. Tiger Animal Feeds manufactures stocked feeds covering a large range of animal species including fish.

Tiger Animal Feeds manufactures the following range of fish feeds:

- Fry Meal;
- Grower Pellets; and
- Finisher Pellets (Pond Finisher 18%CP for green water systems and 30% CP for open water systems).

On the organisation's role in the promotion of the fisheries sector in Zambia, your Committee was informed that Tiger Animal Feed's goal was to ensure that fish farmers had access to high quality of feed for fish. It was explained that this would ensure that from a feeding management point, farmers were able to achieve good growth rates for their fish and would thus be able to take their fish to market earlier to improve their profitability. The Company has twelve (12) outlets across the country and twenty-five (25) agents for supply to the market. On the number of staff employed by the Company, your Committee was informed that the Company has a total of 376 staff.

Committee's Observations and Recommendations

- i. Your Committee observes that the high cost of ingredients imported in the formulation of feed has contributed to the limited investment in the aquaculture sector and the high cost of fish feed.

Your Committee recommends that the Government zero rates tax on the ingredients that are imported in the formulation of feed such as fish meal, methionine, lysine amongst others, so as to reduce the high cost of fish feed on the market.

- ii. Your Committee observes that the lack of national standards in feed formulation has compromised the quality of feed available on the market.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock through the Zambia Bureau of Standard (ZABS) establishes national standards of fish feed formulation so as to improve the quality of feed on the market. Further, ZABS must be conducting periodic laboratory verifications of the fish feed on the market to guarantee quality fish feed.

National Aquaculture and Research Development Centre (NARDC)

Your Committee was informed that Mwekera fish farm was established in the 1950's. In 1994, the National Aquaculture Research and Development Centre (NARDC) was established. Initial studies implemented by the Centre included developing techniques for mass production of fingerlings, fish feed formulation and studies on pond environments. Further, your Committee learnt that the Japanese Government's

assistance through Japan International Cooperation Agency (JICA) in 1998 further improved the capacity of NARDC to carry out aquaculture research.

NARDC was a national centre for aquaculture research in Zambia. The mandate was to:

- i. conduct aquaculture research;
- ii. develop and disseminate aquaculture technologies;
- iii. supply good quality fish seed and brood stock; and
- iv. offer training in aquaculture.

Your Committee learnt that the major facilities at the Centre included eighty-four (84) Ponds covering 5.4hactares pond area, laboratories, hatcheries, feed workshop, poultry houses and accommodation facilities (hostels and chalets).

It was also revealed that NARDC research areas include:

- i. fish genetics and reproduction;
- ii. fish production systems;
- iii. fish nutrition; and
- iv. fish health.



Mobile fish hatchery- NARDC

With regard to the services offered at NARDC, your Committee was informed of the following:

- i. provision of quality fish seed and brood stock to farmers;
- ii. provision of quality training to fish farmers through the training wing; and
- iii. offers accommodation and hosts seminars and workshops.

On staffing levels, your Committee learnt that there were currently twenty (20) staff against the staff establishment of fifty (50).

On funding, your Committee was informed that not only was the funding from the Government inadequate, but also the releases were generally poor over the years. It was revealed to your Committee that in the 2014 financial year, the research station only received about 20% of the actual funds allocated.

Government Funding to NARDC

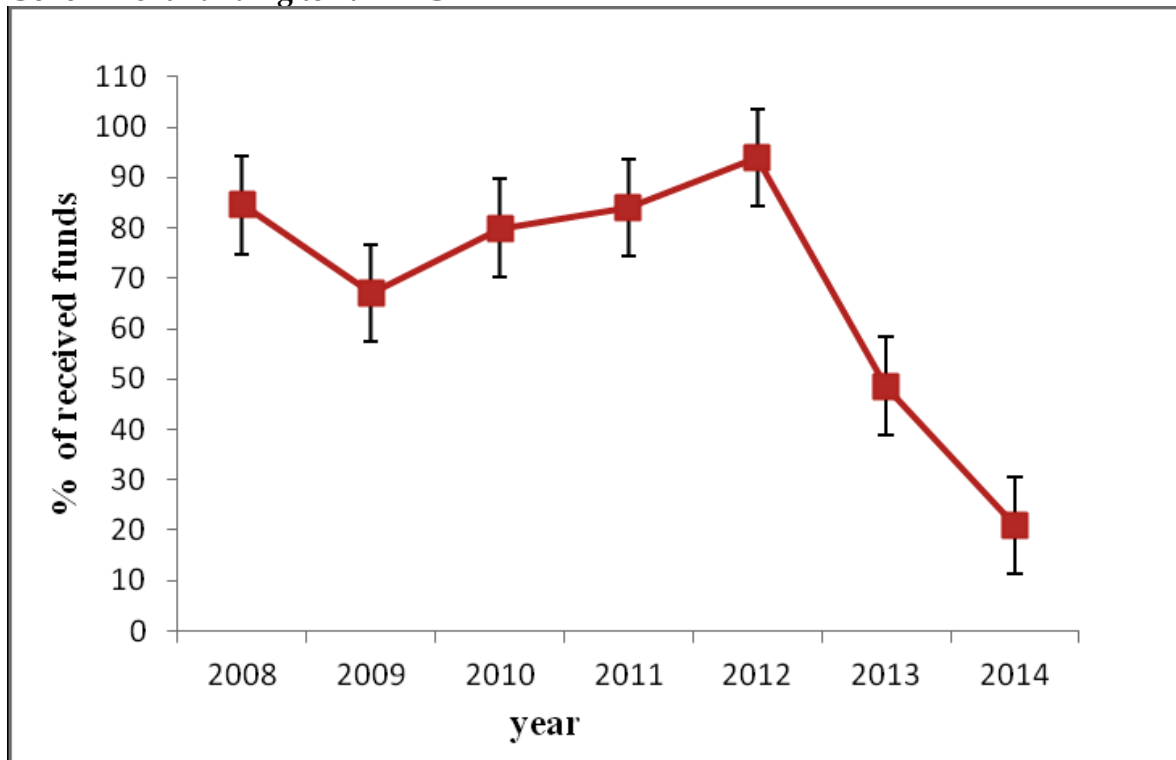


Figure 1: Percentage of received funds to what is approved in the yellow book

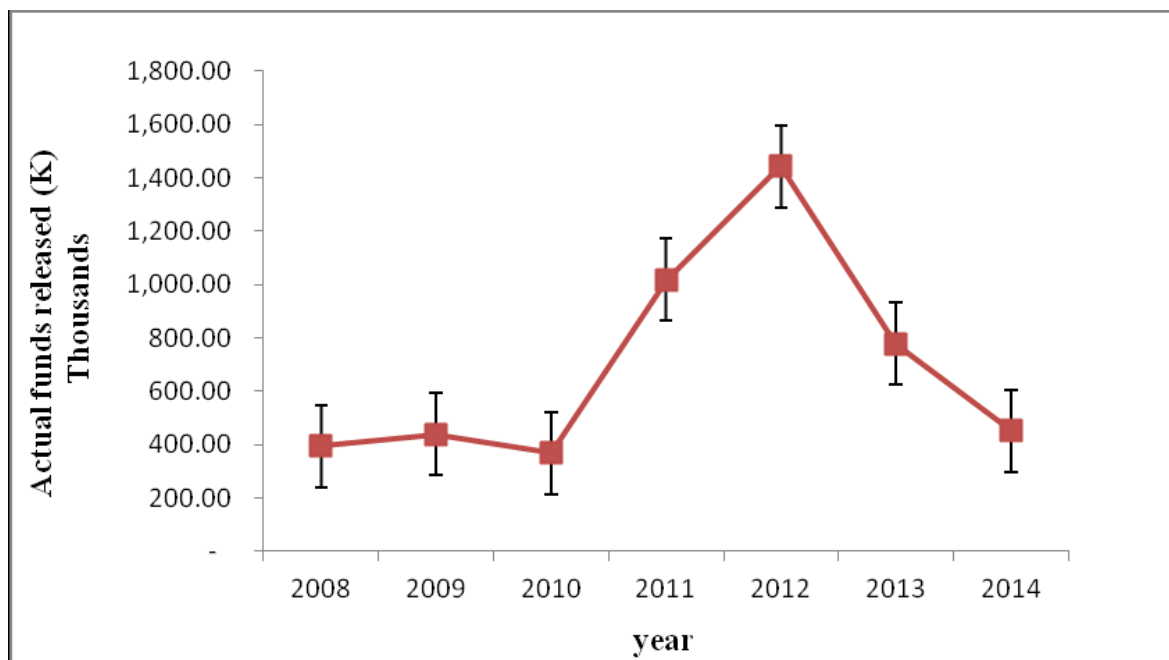


Figure 2: Actual funds released in each year

The Research Centre was also conducting some income generating activities at the centre which include:

- i. accommodation and conference facilities;
- ii. sale of fish seed and brood stock;
- iii. sale of poultry products; and
- iv. student practicals and research fees.

Your Committee also learnt that the Research Centre had no fish disease and fish nutrition laboratory. Additionally, your Committee was informed that a number of countries with a flourishing aquaculture subsector in Africa had learnt a lot from the Centre during their visits to Zambia. Kenya was cited as one such country that had implemented what they learnt from the Centre in Zambia.

Committee's Observations and Recommendations

- i. Your Committee is concerned with the state of the National Aquaculture Research and Development Centre (NARDC), which was established to be the main player in the development of the aquaculture sector. The institution has remained a mere spectator due to the challenge of inadequate funding and staff to discharge its mandate.

Your Committee recommends that the Government must not only increase funding to NARDC, but also ensure that the releases of the allocations are on time so as to enable the fisheries sector have the much needed information on research and development. Furthermore, the Government is urged to ensure that the staff establishment of NARDC is filled so as to enable the institution operate at full capacity.

- ii. Your Committee observes that the lack of a fish disease and fish nutrition laboratory at NARDC poses as a serious threat on information for fish diseases and nutritional needs for the subsector.

Your Committee recommends, as a matter of urgency, that the Government allocates funding for the establishment of a fish disease and fish nutritional laboratory at NARDC.

- iii. Your Committee observes that support towards research and development in the fisheries sector is generally poor resulting in limited growth in modern technology.

Your Committee recommends that the Ministry of Agriculture and Livestock heavily invests in research and development in order to promote modern technologies for the growth of the sector.

Fiyongoli Research Station

Your Committee was informed that the Research Station was established to deal with aquaculture research. The premises for the Research Station were initially a farm owned by white settlers soon after independence. The place was taken over by the Government in 1974 and is located in Mansa, Luapula Province.

The Research Station was initially being used as a breeding centre and was closed for some time until 2004, when it was re-opened by the Government. The Research Station has eighteen (18) ponds but only sixteen (16) were operational. The Station has an indoor hatchery where the production of fingerlings is done.

The vision of the Research Station was to become a model integrated fish farm with enterprises such as fish, livestock and crops.

Your Committee was also informed that following the Citizens Economic Empowerment Commission (CEEC) funded fishery projects in the area, the Research Station was scaling up its production of fingerlings for the supply to fish farmers. The Research Station would also provide the much needed technical assistance to the emerging farmers. It was further brought to the attention of your Committee that the Programme for Luapula Agricultural Rural Development (PLARD) which was a joint programme between the Zambian Government and the FINNISH Government had been operational for eight (8) years in Luapula province. Your Committee learnt that the programme had since ended. The Programme had among other achievements, resulted in the support of the co-management structures such as Village Fisheries Management Committees.

Your Committee also learnt the Lake Mweru-Luapula Fishery had about 46,000 fishermen against twenty-two (22) staff for enforcement in the entire province. This has immensely affected the operations of the Department.

Committee's Observations and Recommendations

- i. Your Committee observes that the lack of provincial fish research centres has contributed to the rapid decline of local fish species in most water bodies.

Your Committee recommends that the Ministry of Agriculture and Livestock establishes provincial fish research centres to deal with research on the local species of fish that have been depleted in most water bodies.

- ii. Your Committee observes that the state of Fiyongoli Research Station in Mansa requires attention given the state of the infrastructure and the cadre of staff at the institution.

Your Committee recommends that the Ministry of Agriculture and Livestock upgrades the infrastructure at Fiyongoli Research Station and employs more qualified staff to increase the number of researchers at the institution.

Simutenda Farm

Your Committee was informed that the proprietor of Simutenda Farm had been in fish farming over the past twenty 20 years. The farm is located in Luanshya District. The proprietor was one of the beneficiaries of the Citizens Economic Empowerment Commission (CEEC) funding under the economic clusters, by the Ministry of Commerce, Trade and Industry. Your Committee was informed that the CEEC projects had not yet commenced due to the poor administrative procedures on accessing the fund. It was stated that CEEC did not guide the fish farmers on the conditions for them to access the funds. He bemoaned that the lack of information on the need for Environmental Planning Briefs (EPB's) from the Zambia Environmental Management Agency (ZEMA) had resulted in most fish farmers not accessing funds on time. Most beneficiaries had failed to pay back the loans due to the above challenges. Your Committee was informed that most fish farmers had been given fish feed without access to fingerlings.



Small holder fish ponds- Simutenda Farm (Luanshya)

Your Committee was also informed that fish farmers who got loans for less than K80,000 were not required to give collateral as a condition for accessing the loans. In addition,

your Committee learnt that out of the K80,000 the farmers received, K20,000 was used for administrative costs, leaving the farmers with only K60,000 for actual investment.

Committee's Observation and Recommendation

- i. Your Committee notes that while CEEC has been providing financial assistance to fish farmers, the process and procedures being used have not helped matters. In some instances, CEEC has provided fish feed without the farmers accessing fingerlings.

Your Committee strongly recommends that the Government through the Ministry of Commerce Trade and Industry should ensure that CEEC revises the process and procedures on accessing funding by the fishery farmers in order to avoid the confusion that has characterised the currently funding to the aquaculture projects. In addition, the Government must ensure that CEEC employs more staff to strengthen the monitoring of the projects.

Mpende Fisheries

Your Committee was informed that Mpende Fisheries was established some twenty-five (25) years ago in Sumbu, Nsama District. The Company was initially involved in capture fisheries, but had in the last four years ventured into aquaculture production through cage farming on Lake Tanganyika. This was due to reduced fish stocks on the Lake. The Company had its own hatchery which was producing the local species of bream native to Lake Tanganyika. This has resulted in managing and preserving of the local species of fish which would have otherwise been extinct. Your Committee also learnt that the Company bought feed for bigger fish from the local market while fish feed for the fingerlings was imported from Mauritius due to the limited supply of quality fingerlings feed on the local market.

Your Committee learnt that the Company had nine (9) outlets countrywide through which the distribution of fish was done. Your Committee was informed that Mpende Fisheries was the only supplier of fingerlings on Lake Tanganyika. Furthermore, your Committee learnt that the lack of national fish standards had contributed to the poor quality of fish feed on the market. Your Committee was also informed that there was need for the Government to regulate fish imports if any progress in the fish sub sector was to be registered. The Company was currently producing over 500 MT of fish per annum, but was targeting to increase to 1000 MT by the end of 2015.

Lake Tanganyika Project

Your Committee was also appraised by the Village Conservation and Development Committee (VCDC) on the implementation of the phase I of the Lake Tanganyika Project that was being implemented in the four countries sharing Lake Tanganyika, i.e Burundi, Tanzania, Congo DR and Zambia by the African Development Bank (ABD). The objective of the Project was to offer alternative livelihood to the people in order to reduce fishing pressure on the lake.

It was revealed that the Project focused on forestry, agriculture (livestock and fruits) and education. The Phase I Project which commenced in 2010, has not been a success due to the top-down approach in its administration.

Your Committee learnt that the local leadership in Nsama District was not engaged in phase I. This has resulted in the poor sensitisation of the project in the area as well as weak monitoring of the projects. It was emphasised that as ADB planned to implement phase II, there was need to evaluate the challenges in phase I so as to ensure phase II was a success.

Committee's Observations and Recommendations

- i. Your Committee observes that the level of commitment by Mpende Fisheries in the growth of the aquaculture sector is encouraging. Despite the infrastructural challenges such as the poor state of the Kaputa- Sumbu Road and erratic electricity supply, the Company has continued to provide the much needed fish across the country.

Your Committee recommends that the Government must prioritise the upgrading of the Kaputa-Sumbu Road in Nsama District so as to enhance the huge potential the area has in fish production.

- ii. Your Committee observes that the fish levies being charged on Mpende Fisheries by the Nsama District Council are an impediment to the growth of the aquaculture subsector given the huge operational costs the Company has, arising from the poor state of infrastructure in the area.

Your Committee recommends that the Ministry of Local Government and Housing engages the Nsama District Council to make exemptions on fish levies on Mpende Fisheries in order for the Company to break even considering the huge operational costs the company experiences, emanating from infrastructural challenges.

- iii. Your Committee observes that the plans by the Northern Co-operative Union to set up a fish feed production plant will not only enable fish farmers in the area to have easy access to fish feed easily, but also reduce the cost of doing business in the area.

Your Committee strongly recommends that the Government supports and engages the Co-operative Union with the view to ensuring that this plan is actualised in the area given the huge demand for fish feed in the area.

- iv. Your Committee observes that while the objectives of the phase I of the Lake Tanganyika Integrated Project were very progressive in achieving alternative livelihood for the local communities in the four riparian countries sharing the lake with the view to ease pressure on fishing on Lake Tanganyika, the implementation of the project in Zambia was very poor.

Your Committee recommends that the Ministry of Agriculture and Livestock ensures that the local leadership in Nsama District is fully involved in the implementation of phase II of the project that is scheduled to commence in 2015.

- v. Your Committee observes that the Lake Tanganyika Integrated Project is a good model for practical intervention on the depleted fish stocks in water bodies. Further, if well implemented, the Project has potential to deal with the major challenge facing most communities that depend on fishing as the major source of livelihood in that it provides for other alternatives source of survival other than fishing.

Your Committee strongly recommends that the Ministry of Agriculture and Livestock collaborates with the African Development Bank (ADB) to extend the implementation of this Project to other water bodies in the country in order for the communities to have other sources of livelihood other than fishing.

PUBLIC HEARING IN NCHELENGE DISTRICT

11.0 The objective of the public hearing was to enable the community to air their views and concerns on the state and management of the fishery subsector in the country. The public hearing was broadcast live on Radio Luapula which had a listenership in Mwense, Nchelenge, Mwansabombwe, Chiengi and Kawambwa Districts of Luapula Province.

Concerns raised by stakeholders

Your Committee was informed that in the 1950 -1970s, the Department of Fisheries (DoF) was under the Ministry of Environment and Natural Resources. During this period, the Department was effective, as it was training fish guards who were being deployed in the various fishing camps to monitor the operation of fishermen as well as control the use of their equipment. The situation had since changed following the movement of DoF to the Ministry of Agriculture. The subsequent restructuring at the Ministry resulted in all the fish guards being retrenched leaving only officers at the District level.



Committee Chairperson, Hon V Lombanya speaking during the public hearing

Furthermore, your Committee was informed that the separation of the Ministry of Agriculture and the Ministry of Livestock and Fisheries in 2010, was a welcome move as attention was given to all the sub sectors. It was, therefore, prudent to have the Ministry of livestock and fisheries re-instated as a stand-alone Ministry.

Stakeholders also expressed concern on the staffing levels in the Province. It was revealed that only 22 officers were managing all the 8 districts in the province. Chiengi - 1 staff, Nchelenge - 4, Mwansabombwe - 2, Kawambwa - 1, Mwense - 3, Mansa -5, Milenge - 1, Samfya - 3 and Lunga - 2.

Stakeholders also expressed concern on the lack of support by traditional leaders in curbing bad fishing practices. It was stated that some traditional leaders were encouraging fishers to settle in fish breeding areas as well as fishing during the fishing ban.



A local resident stressing a point during the public hearing

Your Committee learnt that the co-management groups that were established following the enactment of the *Fisheries Act No. 22 of 2011*, have not been operational due to lack of funding to the committees. Despite the Province generating the Fisheries Management Plan for the Province, the document had not been implemented.

In addition, stakeholders emphasised the need for the Government to regulate the type and sizes of fish gear to be allowed in the province. The Government was urged to ban the use of certain sizes of nets in the area.

Your Committee was also informed that the major challenge that had contributed to the depletion of fish in Mweru - Luapula was that local people had no alternative livelihood other than fishing. There was, therefore, need for the Government to initiate programmes for alternative livelihood for local people who solely depend on fishing for survival.



Members of the public following proceedings at the public hearing

It was also emphasised that there was need for the Government to impose a two year fishing ban on all major water bodies as was the case in Malawi. This was the only way that the capture fisheries was going to be revamped in the country.

Stakeholders also called for stronger collaboration among Government departments such as CEEC and ZEMA if the aquaculture sector was to grow. The lack of information on aquaculture in the province had resulted in limited growth of the sub sector.

It was also revealed that majority of leaders in the country including Members of Parliament from the area were educated through the fish industry. Therefore, there was need to revamp the sector if future generations were to benefit from the resource.

Committee's Observations and Recommendations

- i. Your Committee observes that the lack of alternative livelihood activities for most people who live near water bodies has contributed to the huge depletion of fish in capture fisheries as fishing is their main source of survival.

Your Committee recommends that the Government should promote other sources of livelihood to people who live near water bodies so as to reduce the over reliance on capture fisheries as the main source of survival.

- ii. Your Committee observes that the magnitude of depletion of fish in most water bodies is worrying given the failure to implement co-management strategies as promulgated in the *Fisheries Act no 22 of 2011*.

Your Committee recommends that the Government should, as a matter of urgency, implement a two year fishing ban on all the major water bodies so as to allow the fish to reproduce. This measure will require a comprehensive audit of fish stocks on all the water bodies across the country.

- iii. Your Committee is concerned with the number of Zambian fishermen being arrested in riparian countries even when the fishermen are fishing on the Zambian side.

Your Committee recommends that the Government enhances trans-boundary meetings with affected countries in order to protect the Zambian fishermen from unnecessary arrests.

- iv. Your Committee is concerned with the behaviour being exhibited by some of their Royal Highnesses along water bodies across the country. In some instances, some chiefs are supporting illegal fishing practices by encouraging some fishermen to catch fish in fish breeding areas with impunity.

Your Committee recommends that the Government through the Ministry of Chiefs and Traditional Affairs and Department of Fisheries conducts periodic sensitising campaigns with chiefs in order for them to appreciate the importance of good fishing practices on water bodies.

- v. Your Committee observes that the poor monitoring and surveillance on most water bodies has contributed significantly to the decline of fish in capture fisheries.

Your Committee recommends that the Ministry of Agriculture and Livestock establishes a Marine to be conducting monitoring and surveillance on water bodies in order to curb bad fishing practices and adherence to the annual fishing ban.

- vi. Your Committee observes that the weak collaboration among Government institutions has contributed to the lack of implementation of the CEEC funded projects in some parts of the country.

Your Committee recommends that the Government ensures that there is consistent collaboration among Government institutions in the implementation of Government policies and programmes.

- vii. Your Committee observes that the lack of national presence by ZEMA both at provincial and district level has contributed to the bureaucratic and long processes of obtaining both Environmental Impact Assessment (EIA) and Environmental Planning Briefs (EPB's) reports by most stakeholders in the country.

Your Committee recommends that the Government must ensure that ZEMA is decentralised by facilitating the establishment of offices in all the provinces and

districts so as to easy accessibility by stakeholders. This will reduce the longevity of accessing licences from ZEMA.

- viii. Your Committee observes that the poor information dissemination to stakeholders in the fishery subsector on the environmental legal requirements and implementation of fishery best management practices has contributed to bad fishing practices in both capture and aquaculture subsector.

Your Committee recommends that the Ministry of Agriculture and Livestock ensures that the Department of Fisheries in collaboration with ZEMA conducts countrywide sensitisation programmes to stakeholders in the fishery subsector on environmental legal requirements and implementation of fishery best management practices which would positively contribute to environmental sustainability.

PART III

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

Legislation and regulation of non traditional crops

11.0 Your previous Committee had noted that most of the pieces of legislation related to non-traditional crops had become outdated and in some instances, there were no Boards in place to promote, market and regulate the various non-traditional crops.

Your Committee had, therefore, recommended 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 were not in place.

Executive's Response

Your Committee was informed that the Government was in the process of finalising the revised National Agricultural Policy, which takes into account the promotion of high value, non-traditional crops such as coffee and tobacco. The policy highlighted areas of investment and increased production of other crops in order to diversify agricultural production. The Ministry of Agriculture and Livestock was in the process to reviewing all the boards under the Ministry of Agriculture and Livestock with the view of having them operationalised.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the review of the legislation and policies as well as the appointment of Boards for the various institutions in the agriculture sector.

Agriculture infrastructure

Your previous Committee had observed that the lack of infrastructure for the promotion of non-traditional crops had contributed to the low productivity in the sector.

Your Committee had, therefore, recommended 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.

Executive's Response

It was reported in the Action-Taken Report that the Government had embarked on a programme to upscale investments in infrastructure particularly for small holder farmers country wide. The Small Scale Irrigation Project has constructed Manyonyo Irrigation scheme in Mazabuka (495 Ha), Nzenga Irrigation scheme (98 Ha) and Sinazongwe Irrigation scheme (100 Ha). The World Bank supported Irrigation Development Support Program would put 4,500 Ha in Lusitu (Siavonga), Mwomboshi (Chisamba) and Musakashi (Mufulira) by 2016. In November 2014, Government identified areas for irrigation investment in Gwembe, Sinazongwe, Rufunsa, Serenje and Chitambo Districts. This was done under the Agriculture Productivity and Market Enhancement Program (APMEP) supported by Global Agriculture Food Security Programme (GAFSP) through the African Development Bank. In February 2014, the Government with the support of the Embassy of Finland identified sites in Eastern (Lundazi-3; Chipata-2; Chadiza-1; and Petauke-2) at which over 1,000 hectares could be put under small holder irrigation. Similarly, in Northern Province, Kasama (1 site), Luwingu (2 sites) and Mbala (1 site) were identified and would contribute about 2,000 Ha. In Muchinga Province, the identification mission found a site each in Isoka, Chinsali and Shiwang'andu which would be developed on 1,100 hectares of land. The Government would continue identifying similar sites for commercial irrigation schemes in Luapula, Copperbelt, North-western, Western, Southern, Lusaka and Central Provinces from July 2015 onwards. This exercise would be mainstreamed into annual GRZ activities. Annually, the information would be dated so as to have an up to date Zambia Irrigation infrastructure Plan. These heavy investments would be run on commercial basis.

Committee's observation and recommendation

While noting the response, Your Committee requests a progress report on the commitment by the Government to irrigate the targeted places.

Implementation of the National Agriculture Policy

Your previous Committee had noted that where as the current agriculture policy was a good and comprehensive document, there had been no practical steps to implement it.

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

Executive's Response

It was stated in the Action- Taken Report that the Government was committed to ensuring that the draft National Agriculture Policy was finalized and implemented once the review process was concluded. The National Agricultural Investment Plan which was currently being implemented had prioritized implementation programmes and strategies that were in the draft Policy. The draft Policy had an accompanying draft National Agriculture Policy Implementation Plan, which spelled out the roles of various

stakeholders during the implementation of the Policy. The Policy and the Policy Implementation Plan would be disseminated to various stakeholders once finalized.

Committee's observation and recommendation

Your Committee notes the response and requests an update on the finalisation and implementation of the National Agriculture Policy and Plan.

Inclusion of other crops on the FISP programme

Your previous Committee had observed that the crop diversification programme by the 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 had recommended that the Government ensures that other non-traditional crops were included on the FISP programme, so as to actualise the diversification programme.

Executive's Response

It was stated in the Action- Taken Report that FISP was designed to gradually include other crops apart from maize. Currently, the following crops, maize, sorghum, groundnuts and rice were currently being supported under the Programme. There were plans by the Ministry of Agriculture and Livestock to include other crops under the Programme. This would be actualised once the electronic voucher system was implemented as farmers would be able to get various inputs of their choice from agro dealers in the benefiting districts.

Committee's observation and recommendation

Your Committee requests a progress report on the actualisation of the electronic vouchers so as to include other crops on the FISP programme.

Agriculture officers to monitor the non traditional crops

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

Your Committee had, therefore, recommended 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.

Executive's Response

It was reported in the Action-Taken Report that the Government recently recruited extension officers who had since been deployed and this was helping to reduce the extension officer to farmer ratio.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the recruitment of crop specialist to be based at the Ministry Headquarters.

TOUR TO KENYA

Markets for non traditional crops

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

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

Executive's Response

It was reported by the Executive that in collaboration with other players in the sector, the Government was supporting the development of selected value chains for non-traditional crops. These included: Cassava Value Chain, Bean Value Chain and Groundnuts Value Chain. Plans were also underway to develop a Rice Value Chain. The Ministry was also working to establish a robust on-line Market Information System under the Department of Agribusiness and Marketing. Training of district staff in the management of market information system was currently on going.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the implementation of the robust online Market Information System to address the Markets for the non traditional crops.

Fertiliser Subsidies in Kenya

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

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

Executive's Response

It was reported in the Action-Taken Report that the Government was recapitalising Nitrogen Chemicals of Zambia (NCZ) and providing an enabling environment for private players in the production of fertiliser. The recapitalisation of NCZ and the coming in of other players such as Zambian Fertiliser, would increase the amount of fertiliser on the market and in the long run, reduce the cost of fertiliser and hence reduce the cost of production in the agriculture sector.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the subsidising of fertiliser across the board in the country to reduce the high cost of production.

Agriculture Insurance in Kenya

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

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

Executive's Response

It was reported by the Executive that your Committee's recommendation was noted. The Government would look at ways in which the above mentioned issues could be addressed.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the introduction of credit schemes for farmers.

Participation of the Kenyan Government in the Agriculture sector

Your previous Committee had observed that the active involvement of the Kenyan Government in the promotion of the non-traditional crops had 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 had, therefore, recommended that the Government through the various boards ensures that the quality for the non-traditional crops was maintained in the value chain so as to maintain the required standards for the international market.

Executive's Response

It was explained in the Action-Taken Report that the Ministry was in the process of reviewing all the boards under it with a view to having them operational. Once the boards were operational, they would be able to ensure that the quality of non-traditional crops produced was maintained in the value chain in order for them to compete on the international market.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the appointment of new Boards to facilitate standards of crops for the international market.

National Airline in Kenya

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

Your Committee had strongly recommended 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.

Executive's Response

It was explained by the Executive that they noted your Committee's recommendation. However, the acquisition of cargo planes would be a costly investment. Nonetheless, consultations were on-going to review the re-establishment of a national airline, which may have cargo planes in its fleet, which could be used to transport agricultural commodities such as non-traditional crops to international markets.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the establishment of a national airline by the Government to ease transportation of agriculture commodities.

Research institutions in Kenya

Your previous Committee had observed that Kenya had twenty-three research institutions which specialised in specific crops for the sub-sectors of agriculture including the non-traditional crops. Further, Kenya had heavily invested in research which had contributed to growth of the agriculture sector.

Your Committee recommended 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.

Executive's Response

It was explained by the Executive that it welcomed the recommendation on the need to revamp the research stations throughout the country. In line with the decentralization policy, the Government planned to expand the network of research stations by building a research station in Muchinga Province and technology assessment sites in all districts. This would also include equipping laboratories. In particular, there were plans to strengthen research in horticultural crops by revamping research facilities at Nanga Research Station in Mazabuka, Mt. Makulu Research Station in Chilanga and Copperbelt Research Station in Mufulira, to be main horticultural research centres as part of the efforts towards supporting the development of the non-traditional crop sector.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the revamping of the research institutions.

Establishment of an Agriculture Development Fund in Kenya

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

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

Executive's Response

It was stated in the Action- Taken Report that the National Agricultural Investment Plan (NAIP) under the Comprehensive Africa Agriculture Development Plan (CAADP) highlighted key areas for investment in order to increase agricultural production. This Plan required massive capital investment from both the Government and other key stakeholders. With concerted efforts from all parties, the mobilisation of resources needed for agricultural development would be enhanced.

Under the new Agriculture Policy which was awaiting approval, it was proposed to promote availability and accessibility to agricultural finance and credit facilities. The following were the measures proposed:

- i. Promotion of broad based smallholder credit and financial delivery systems (establish Savings & Credit Cooperatives, train farmers in village/rural banking services);
- ii. Promotion of warehouse receipt system (establish warehouse licensing authority);
- iii. Promotion of a pay-back culture in agricultural credit management particularly among smallholder farmers; and
- iv. exploring lessons learnt world over and provide incentives that will make financial institutions to extend credit to small holder farmers

Committee's observation and recommendations

Your Committee notes the response and requests for an update on the finalisation and implementation of the draft National Agricultural Investment Plan (NAIP).

LOCAL TOUR

TOUR OF THE ZAMBIA AGRICULTURAL RESEARCH INSTITUTE (ZARI)

Operations of ZARI

Your previous Committee had observed that the establishment of ZARI as a department under the Technical Division of the Ministry had contributed to the ineffectiveness of the research institution.

Your Committee had strongly recommended 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.

Executive's Response

The Executive explained that the Government was considering ways of ensuring that ZARI does discharge its mandates of agriculture research fully.

Committee's observation and recommendation

While noting the response, your Committee requests for an update on the establishment of ZARI as an autonomous institution.

TOUR OF TOMBWE PROCESSING LIMITED

Issuance of Tobacco Floor licences by TBZ

Your previous Committee had observed that the issuance of floor licences by the Tobacco Board of Zambia was not transparent which in turn had created confusion in the sector.

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

Executive's Response

It was explained by the Executive that the Tobacco Act was currently under review. Once this piece of legislation was completed, it would clarify on the issuance of licences to tobacco merchants.

Committee's observation and recommendation

Your Committee notes the response and await the revision of the *Tobacco Act*.

TOUR OF LUSAKA CITY MARKET

Lack of a horticultural policy

Your previous Committee had observed that the lack of a horticultural policy to improve the value chain of the various products had affected the full potential of the sub-sector.

Your Committee had recommended 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.

Executive's Response

It was explained by the Executive that the Ministry of Agriculture and Livestock was in the process of revising the National Agricultural Policy (NAP), which would provide comprehensive policy guidelines intended to increase agricultural production and productivity, diversification and agricultural marketing. The NAP would be supported by the already developed National Agricultural Investment Plan (NAIP).

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the revised National Agriculture Policy.

Status of the Lusaka City Market

Your previous Committee had observed that the set up at Lusaka City Market was not conducive and inadequate for the sale of horticultural product.

Your Committee had recommended 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.

Executive's Response

Under the NAIP, the Government through the Ministry was creating an enabling environment that would facilitate an efficient supply of agriculture inputs, increase private sector participation and improve the functioning of markets. This policy aims at facilitating the improvement of the quality and enhance the competitiveness of potential agricultural exports in order to fully utilize markets (regional and international), thereby increase agricultural contribution to foreign earnings.

Committee's observation and recommendation

Your Committee requests for an update on the implementation of the revised National Agriculture Investment Plan.

PART IV

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

Recruitment of more frontline staff

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was explained that the livestock extension officer to farmer ratio was still very low. The Ministry had sought authority from the Treasury to recruit more staff. Recently, the creation of new districts and the subsequent granting of treasury authority had increased the number of frontline staff, most especially the much needed Livestock Assistants (LA's). However, with the re-demarcation of veterinary camps and the establishments of livestock breeding centres and livestock service centres, more frontline staff would still need to be recruited.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the recruitment of more frontline staff.

Livestock Development Policy

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was reported in the Action- Taken Report that stakeholder consultations on the development of the Livestock Development Policy had taken place in Western and Southern provinces. There were plans to hold a further stakeholder consultations in other provinces that would culminate into the national stakeholder consultations. The process was taking long to be finalized as planned due to the erratic flow of funds.

Committee's observation and recommendation

Your Committee notes the response and requests for an update on the finalisation of the Livestock Development Policy.

Livestock Census

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

Executive's Response

It was stated that the Ministry was still eager to conduct a comprehensive livestock census. However, the resources for this exercise (estimated at around K80 million) were yet to be sourced. Nevertheless, the Ministry in collaboration with the Central Statistical Office (CSO) had been undertaking the post-harvest survey which had a component for collecting livestock statistics. In the interim, the Ministry would continue to lobby for funds from the Ministry of Finance and other cooperating partners to fund a comprehensive livestock census.

Committee's observation and recommendation

Your Committee requests for an update on the execution of the livestock census.

TOUR REPORT

MAZABUKA AGRICULTURAL RESEARCH STATION

Fencing of the Institute

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was stated that the Ministry had not yet fenced off the Institute due to the large amount of money required. However, the Institute was still sourcing funds to carry out the works. Once the funds had been sourced, the Institute would be fenced off.

Committee's observation and recommendation

Your Committee requests for an update on the fencing of the institution.

LOCAL FARMERS IN NAMWALA

Subsidies in the Livestock Sector

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was reported in the Action- Taken Report that under the Electronic Voucher System, farmers would be able to access inputs such as drugs, dipping chemicals and feed through this facility. The system was yet to be implemented.

Committee's observation and recommendation

Your Committee requests for an update on the implementation of the E-voucher system.

ZAMBIA INSTITUTE OF ANIMAL HEALTH IN MAZABUKA

Continuation of training programmes at Palabana Dairy Training Institute (PDTI)

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was reported in the Action-Taken Report that discussions with the Ministry of Education, Vocation Training and Early Education were still going on with the Ministry of Agriculture and Livestock on the matter.

Committee's observation and recommendation

Your Committee requests for an update on the continuation of training programmes at PDTI.

PART V

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

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

The *Agriculture Marketing Act* was finalised but awaits submission to Cabinet for approval before it could be tabled on the floor of the House at Parliament.

Committee's observation and recommendation

Your Committee requests for an update on the enactment of the Agriculture Marketing Bill.

Operationalisation of the Warehouse Receipt System

Your previous Committee had resolved to await a progress report on the matter.

Executive's Response

It was reported in the Action-Taken Report that the Warehouse Receipt System would become operational once the Agriculture Marketing Bill was enacted.

Committee's Observation and recommendation

Your Committee notes the response and requests for an update on the matter.

12.0 CONCLUSION

Your Committee wishes to pay tribute to all stakeholders who appeared before it and tendered both oral and written submissions. It also wishes to thank you, Mr Speaker, for affording it the opportunity to serve on your Committee for the Fourth 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 fisheries sector in Zambia and subsequently result in the growth of the agriculture sector.

V Lombanya, MP
CHAIRPERSON

May, 2015
LUSAKA

APPENDIX I

List of Officials

National Assembly

Mr S C Kawimbe, Principal Clerk of Committees

Ms M K Sampa, Deputy Principal Clerk of Committees

Mr F Nabulyato, Committee Clerk (SC)

Mr F M Kateshi, Committee Clerk (FC)

Mrs S C Samuwika, Assistant Committee Clerk

Ms A Maluwa, Typist

Mr R Mumba, Committee Assistant

Mr C Bulaya, Committee Assistant

Mr M Chikome, Parliamentary Messenger

APPENDIX II

List of Witnesses

Ministry of Commerce Trade and Industry

Mr Siazongo Siakalenge, Permanent Secretary
Mr Mateyo C Kawba, Director
Mr Tobias Mulubwa, Director
Mr Mwila M Daka, Principal Planner
Mr Mike Chivumo, Economist

Ministry of Agriculture and Livestock

Mr J J Shama, Permanent Secretary
Mr Patrick Ngalande, Director
Mr John Mwango, Deputy Director - Aquaculture
Mr Harris Phiri, Deputy Director - Capture Fisheries
Mr M Mbewe, Chief Fisheries Research Officer
Mr A S Kefi, Chief Aquaculture Research Officer
Mr Evans Mutanuka, Chief Fisheries Officer
Mr Chansa E Kasuba Senior Agric-Economist
Mr Musadabwe Cthulu Agric Economist

Food and Agriculture Organisation (FAO)

Mr George Okech, Country Representative
Mr Gregory Chilufya, Assistant Representative FAO (Programmes)

African Development Bank

Mr Lewis Bangwe, Senior Agric Officer

Kafue Fisheries Limited

Mr Jurre Zaal, Fish Farm Manager
Mr Brian Goodwin, General Manager

Capital Fisheries

Mr D Roberts, Managing Director
Mr G Thomas, Director

Kariba Harvest

Mr Evans Chibiliti, Board Member
Mr Kumbirai Malanita, General Manager

Zambia National Farmers Union (ZNFU)

Ms Evelyn Nguleka, President
Mr Ndambo Ndambo, Executive Director
Ms Ellah Chembe, Deputy Executive Director
Mr Humphrey Katotoka, Scientist/Economist
Mr Florence Phiri, Head Outreach, Membership & Gender
Mr Hamusimbi Collard, Head Member Services

Palabana Fisheries

Mr Aubrey Williey, Manager
Mr Sammy Williey, Director
Mr Anderson Kakonga, Operations Manager

Tiger Animal Feeds

Mr Herman Nievaber, Chief Operating Officer
Mr Thompson Banda, Public Relations and Administrative Manager

Aquaculture Development Association of Zambia (ADAZ)

Mr Fisho P Mwale, Chairman
Mr Martin Chilala, Secretary
Ms Shuko Mwanza, Committee Member

Yalelo Limited

Mr Fisho P Mwale, Director
Ms Mwelwa Konie Penza, Head - Commercial Operations
Mr Mukelabai Kabukabu, Human Resources Manager

Citizens Economic Empowerment Commission (CEEC)

Mr Likando Mukumbuta, Director General
Mr Kingsley H Cheelo, Manager - Enterprise Development

Savanna Streams

Mr M S Dawood, Chief Executive Officer
Mr G Pande, Accountant

Indaba Agricultural Policy Research Institute (IAPRI)

Dr Anthony Chapoto, Research Director
Mr Ballard A M Zulu, Acting Executive Director
Dr Rhoda Mofya Mukuka, Research Fellow

World Fish Centre

Mr Simbotwe Mwiya, Regional Program Manager - Africa
Ms Tendayi Marguanyika, Scientist - Africa Office
Mr Albert Nsonga, Aquaculture Scientist
Mr Gordon Mudenda, Lecturer - Department of Biological Sciences