



REPUBLIC OF ZAMBIA

OFFICE OF THE AUDITOR GENERAL

**PERFORMANCE AUDIT REPORT ON
IMPLEMENTATION OF THE FARMER INPUT
SUPPORT PROGRAMME (FISP)
2018 - 2022**



December 2022



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DEFINITION OF KEY TERMS

| Term | Definition |
|------------------------|---|
| Acquittal Sheet | Refers to a schedule submitted by a FISP beneficiary to a Camp Extension Officer (CEO) as evidence of having collected inputs. ¹ |
| Agricultural Inputs | Refers to fertiliser, seeds, chemicals and implements ² |
| Agro Dealer | Suppliers of agricultural inputs to small scale farmers under the E Voucher modality. ³ |
| Agro Ecological Region | A geographical area which exhibits similar characteristics such as rainfall, soil type, temperature and precipitation. ⁴ |
| Area Yield Index | Refers to an insurance cover that insures farmers against a crop yield that is less than a pre-set historical crop yield benchmark ⁵ |
| Authority to Deposit | Document generated for a farmer or a group of farmer organisations to make a deposit of their contribution towards inputs. ⁶ |
| Climate Smart Crops | Crops that can help farmers adapt to specific climate change risks and/or mitigate these risks and include beans, peanuts, cassava, cowpeas, open pollinated maize, sweet potato and yams. ⁷ |
| Cooperative | An autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. ⁸ |
| Crop Cuts Exercise | An exercise whereby sampled farmers in different geographical areas are visited by insurer agents to collect yield samples. ⁹ |
| Diversification Pack | Consists of either soya-beans, groundnuts or sorghum. ¹⁰ |
| Ex gratia | A voluntary payment from an insurance company or other entity such as an organisation or government that is not legally obligated to pay. |
| Farmer Organisation | A group of farmers with common interest belonging to a union led by a set of by-laws and rules to achieve a common, individual or collective goal. ¹¹ |
| Farmer Pack | Inputs containing maize seed, D-Compound, urea fertiliser and may also include a diversification pack. ¹² |

¹Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

²Food and Agriculture Organisation (FAO)

³Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

⁴FISP AYII 2019 Payout Compensation Process- Pula

⁵FISP AYII 2019 Payout Compensation Process- Pula

⁶Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

⁷Climate Smart Agriculture Sourcebook – FAO

⁸Cooperative Development Manual - Ministry of Small and Medium Enterprises

⁹FISP AYII 2019 Payout Compensation Process- Pula

¹⁰https://cuts-lusaka.org/pdf/speech-dr-david-phiri-progress_review_of_the_implementation_of_the_e-voucher_in_2018.pdf

¹¹ Role of Farmer Organisations in Agricultural Transformation in Africa – Overview of Continental, Regional and Selected National Level Organisation – February 2021.

¹²Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

| Term | Definition |
|-------------------------|--|
| Insurance Cover | Refers to the amount of risk, liability, or potential loss that is protected by insurance. ¹³ |
| Insurance package | A combination of insurance policies providing different types of cover. ¹⁴ |
| Mayfair package | Refers to the three (3) distinctive insurance cover offered namely: Early Dry Spell (EDS) which protects against 20 day dry conditions from 1st December to 10th January each agricultural season; Late Dry Spell (LDS) providing protection against 20 and 30 day dry conditions from 11th January to 31st March each agricultural season; and Excess Moisture (EM) providing protection against 10 day excessive rainfall conditions from 1st December to 31st March each agricultural season. ¹⁵ |
| Redeeming inputs | Process of collecting farming inputs from agro dealers ¹⁶ |
| Registered Farmers | A small-scale farmer actively involved in farming within the camp coverage and registered on the ZIAMIS. ¹⁷ |
| Weather Index Insurance | A short duration insurance that covers farmers when germination failure occurs, often due to drought or delayed rains. ¹⁸ |
| ZISC Consortium | The companies comprise ZSIC as leader, Professional Insurance Corporation Zambia as administrator and Madison General as the underwriter. ¹⁹ |

¹³ <https://corporatefinanceinstitute.com/resources/wealth-management/insurance-coverage/>

¹⁴ <https://corporatefinanceinstitute.com/resources/wealth-management/insurance-coverage/>

¹⁵ FISP 2019/2020 Final Report – Review and Results – April 2020

¹⁶ Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

¹⁷ Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

¹⁸ FISP AYII 2019 Payout Compensation Process- Pula

¹⁹ <http://www.daily-mail.co.zm/zsic-others-pay-k5m-worth-of-claims-to-farmers/>

ABBREVIATIONS

| | |
|-----------|--|
| 7NDP | Seventh National Development Plan |
| 8NDP | Eighth National Development Plan |
| ABM | Agribusiness and Marketing Department |
| ACF | Agriculture Consultative Forum |
| ACRE | Agriculture and Climate Risk Enterprise |
| BEO | Block Extension Officer |
| CAC | Camp Agriculture Committee |
| CEO | Camp Extension Officer |
| CFU | Conservation Farming Unit |
| CHIRPS | Climate Hazards Group Infrared Precipitation with Station Data |
| DACO | District Agriculture Coordinating Officer |
| DIS | Direct Input Support |
| DoA | Department of Agriculture |
| DoF | Department of Finance |
| DMDO | District Marketing Department Officer |
| E-VOUCHER | Electronic Voucher |
| FISP | Farmer Input Support Programme |
| HRA | Department of Human Resource and Management |
| IAPRI | Indaba Agricultural Policy Research Institute |
| IFAD | International Fund for Agricultural Development |
| INTOSAI | International Organisation for Supreme Audit Institutions |

| | |
|--------|---|
| MoA | Ministry of Agriculture |
| MoFNP | Ministry of Finance and National Planning |
| OAG | Office of the Auditor General |
| PACO | Provincial Agriculture Coordinating Officer |
| PPD | Department of Policy and Planning |
| SCCI | Seed Control and Certification Institute |
| SDGs | Sustainable Development Goals |
| SZI | Smart Zambia Institute |
| WFP | World Food Programme |
| ZARI | Zambia Agriculture Research Institute |
| ZNFU | Zambia National Farmers Union |
| ZIAMIS | Zambia Integrated Agriculture Management Information System |
| ZCF | Zambia Cooperative Federation |
| ZSIC | Zambia State Insurance Corporation |

PREFACE

I am pleased to publish and submit the performance audit report on the Implementation of the Farmer Input Support Programme (FISP). The Office of the Auditor General is mandated to carry out performance audits in Ministries, Provinces and Agencies (MPAs) and to report the results to the President and Parliament for debate. With this mandate, my Office conducted a performance audit for purposes of establishing whether FISP was implemented in accordance with the principles of Economy, Efficiency and Effectiveness.

The audit on the Implementation of FISP is cardinal as it reflects Governments commitment to invest in the agriculture sector which will not only guarantee food security for citizens but will contribute to the economic development of Zambia. The audit is also timely as Government is undertaking FISP Reforms to improve support for small scale farmers and create conditions to contribute to the growth of the agricultural sector. This is also in line with the Sustainable Development Goals (SDG) No. 2 - Zero Hunger, which also aims to end hunger, end all forms of malnutrition and increase agricultural productivity and incomes of small scale food producers. When implemented, the recommendations of the audit will improve the performance of FISP to enable it achieve its objectives. I wish to thank the Ministry of Agriculture and all stakeholders for the support rendered during the audit.



Dr. Dick Chellah Sichembe

AUDITOR GENERAL

EXECUTIVE SUMMARY

Agriculture employs nearly 70% of the labour force and remains the main source of income and employment for most of the people living in rural areas, who constitute more than 80% of the farming community and an estimated 1.5 million households. Therefore, the growth of this sector is important if Zambia is to become ‘a prosperous middle income nation by 2030 and is in line with Sustainable Development Goals (SDG) No.2 - Zero Hunger, which also aims to end hunger, end all forms of malnutrition and increase agricultural productivity and incomes of small scale food producers.

In 2002, the Government introduced FISP as a means of improving small scale farmers’ access to agricultural inputs and enhance participation and competitiveness of the private sector to supply and distribute agricultural inputs. Since its inception, the programme has increased its beneficiaries from 120, 000 to 1,024,434. The programme was implemented through the DIS modality before operating parallel to the E Voucher in 2017/2018. However, the E Voucher faced challenges and FISP reverted its implementation to the DIS modality in the 2021/2022 agricultural season.

The objective of the audit was to assess the effectiveness of measures put in place by the Ministry of Agriculture (MoA) in the implementation of the FISP to improve supply and distribution of agricultural inputs to small-scale farmers.

Audit criteria was drawn from sources such as Ministry of Agriculture Strategic plan 2019-2021, Second National Agricultural Policy 2016 and Farmer Input Support Programme Implementation Manuals 2018/2019 – 2021/2022 Agricultural Seasons. The audit covered the period 2017 to 2022 and established the extent to which MoA:

- Ensured the existence of adequate policies and legal framework, institutional framework and structures to govern FISP;
- Ensured timely, effective and adequate supply of agriculture inputs to targeted small-scale farmers;
- Facilitated the processes of farmer organisations, monitoring and evaluation, and sensitisation;
- Ensured the expansion of markets for private sector input supplier/Agro dealers; and
- Ensured a risk sharing mechanism is in place to share part of the cost of improving agricultural productivity.

The audit revealed that there was no legal framework to guide the implementation of FISP and policy to support weaning off farmers; supply and distribution of agricultural inputs was not timely, effective or adequate; Despite having farmer organisations at camp level, CACs had challenges monitoring the distribution and utilization of agricultural inputs; delayed payments by MoA to suppliers and agro dealers led to low private sector participation; and the risk sharing mechanism did not improve agricultural productivity as a result of low pay out amounts, inaccurate GPS coordinates, and failure by MoA to verify insurance triggers reports and discharge claims.

The audit concluded that although the Government is committed to ensuring that small scale farmers have access to affordable agricultural inputs through FISP, measures put in place by the MoA to supply and distribute agricultural inputs have not been effective.

The recommendations of the audit include: a policy to wean off farmers from the programme be introduced; quality control tests be conducted on seeds and fertilisers before they are distributed; additional staff be employed to monitor the distribution and utilisation of inputs; ATCs be issued and acquitted by individual farmers; farmer targeting processes be made more stringent such as ensuring that names of beneficiaries under the programme are printed and published prior to distribution of inputs; a review of the insurance policy be undertaken to provide cover on both pre- and post-harvests, floods and army worm attacks; and enhance capacity building of staff regarding the weather index insurance cover.

CHAPTER ONE: INTRODUCTION

1.0. Overview

The introduction highlights the mandate and background of the audit. The audit topic is “The Implementation of the Farmer Input Support Programme (FISP)”. The chapter also highlights the motivation for conducting the audit, the responsible ministry and the significance of the audit.

1.1. Mandate

In accordance with the provisions of Article 250 of the Constitution of Zambia (Amendment) Act No.2 of 2016, Public Audit Act No.13 of 1994 and Public Finance Management Act No.1 of 2018, the OAG is mandated to carry out performance audits in Ministries, Provinces and Agencies (MPAs) and to report the results to the President and Parliament for debate. With this mandate, the OAG conducted a performance audit for purposes of establishing whether the FISP was implemented in accordance with the principles of Economy, Efficiency and Effectiveness.

1.2. Background

Agriculture diversification is one of the Government’s investment strategies to diversify the economy from dependence on copper, which is a declining asset. Investment in the agriculture sector does not only guarantee food security for citizens but can contribute to the economic development of Zambia.²⁰ Agriculture and agribusiness play an important role in the Zambian economy, contributing an estimated 20% of Gross Domestic Product (GDP) and 12% of national export earnings.²¹ Agriculture employs nearly 70% of the labour force and remains the main source of income and employment for most of the people living in rural areas who constitute more than 80% of the farming community²² and an estimated 1.5 million households. Zambian agriculture is comprised of crops such as maize, sorghum, millet, and cassava while exports are driven by sugar, soya beans, coffee, groundnuts, rice, and cotton as well as horticultural produce.²³

²⁰ The Impact of Farmer Input Support Programme on Small Scales Farmers

²¹<https://openknowledge.worldbank.org>

²² Impact of the Farmer Input Support Policy on Agricultural Production Diversity and Dietary Diversity in Zambia 2021

²³ Zambia-Country Commercial Guide, 2021

The country has immense natural resources such as land, water and fertile soils to support agricultural activities. The growth of this sector is therefore important for the attainment of the long-term vision for Zambia, which is ‘to become a prosperous middle income nation by 2030’.²⁴ This is accompanied by results such as reduced rural poverty, increased food security and improved nutrition among the smallholder farmers. Investment in the agriculture sector does not only guarantee food security for citizens but can contribute to the economic development of Zambia.²⁵ The onset of the COVID-19 pandemic in Zambia brought to light the importance of the agriculture sector to the livelihood of citizens. The enactment of health regulations to curb the spread of the pandemic that included movement restrictions, social distancing requirements and stay at home orders highlighted how day to day survival for many requires participation in the agricultural sector for their nutritional needs.²⁶

Nearly three (3) decades after the initiation of agricultural market reforms in Sub-Saharan Africa (SSA), subsidies for fertiliser and seed are once again the cornerstone of many governments’ agricultural development and poverty reduction strategies²⁷. The Government encountered agriculture production challenges such as food insecurity among the resource constrained farmer households and low financial capital for farmers to enhance crop productivity as well as diversify their production. In view of such agricultural production challenges, the Government has committed itself to ensuring that smallholder farmers have access to affordable agricultural inputs through the introduction of the Government supported FISP.²⁸

The Government introduced FISP in 2002 with the aim of improving small scale farmers’ access to agricultural inputs and enhance participation and competitiveness of the private sector in the supply and distribution of agricultural inputs timely and in adequate amounts. During the 2014/2015 farming season, Government increased the number of FISP beneficiaries to 1,000,000 vulnerable but viable farmers from the 120,000 targeted farmers at inception of the programme. This was in the bid to increase crop yields and ensure national and household food security²⁹.

In addition, the Government introduced the Electronic Voucher (E-Voucher) modality in the 2017/2018 agricultural season in order to improve beneficiary targeting and promote timely access to inputs through increased private sector participation. The E-Voucher modality was

²⁴SNDP: 2014:65

²⁵ The Impact of Farmer Input Support Programme on Small Scales Farmers

²⁶Zambia Agricultural Status Report, IAPRI, 2020

²⁷IAPRI -Review of Zambia’s Agricultural Subsidy Programs; Targeting, Impact and Way Forward – August 2013

²⁸ Zambia Food Security Issues Paper – Forum for Food Security in Southern Africa – August 2003

²⁹ www.lusakatimes.com /May 11, 2014

implemented in twenty-six (26) districts and was meant to accelerate diversification of the smallholder sector by allowing farmers to purchase a wide range of recommended inputs such as pesticides, veterinary drugs, agricultural equipment, livestock, poultry and fingerlings.³⁰ Appendix 1 shows the list of districts on E-Voucher.

During the period under review, the FISP had a total number of 1,024,434 beneficiaries' country wide as shown in Table 1.1 below.

Table 1: Number of FISP beneficiaries under Direct Input Support and E-Voucher

| Agricultural Season | Direct Input Support (DIS) | E-Voucher | Number of Beneficiaries |
|----------------------------|-----------------------------------|------------------|--------------------------------|
| 2018/2019 | 411,657 | 612,777 | 1,024,434 |
| 2019/2020 | 641,978 | 382,456 | 1,024,434 |
| 2020/2021 | 857,673 | 166,761 | 1,024,434 |
| 2021/2022 | 1,024,434 | - | 1,024,434 |

Source: MoA Farmer Input Support Programme Manual 2021/2022 Agricultural Season

The Ministry of Agriculture (MoA) is responsible for the implementation of the FISP. The MoA aims to facilitate the development of a sustainable and diversified agricultural sector for enhanced food and nutrition security and income generation. Agriculture development is beneficial to the country as it aids the achievement of Sustainable Development Goals (SDGs), specifically SDG 1- No Poverty, which aims to ensure there is an end to poverty in all its forms everywhere and SDG 2- Zero Hunger, which also aims to end hunger, end all forms of malnutrition and increase agricultural productivity and incomes of small scale food producers.

Agriculture has also been prioritised in National Development Plans (NDPs). In the Eighth National Development Plan (8NDP), under the Macroeconomic Policy Objectives, the Government plans to undertake FISP Reforms to improve support for small scale farmers and create conditions for them to more effectively contribute to the growth of the agricultural sector. The Government also plans to implement a comprehensive agriculture support programme beginning in the 2022/2023 farming season aimed at improving production and productivity. The audit on FISP is also linked to the Seventh National Development Plan 2017-2021(7NDP) Pillar 1 Economic Diversification and Job creation, Development Outcome 1 which focuses on a diversified and export oriented agricultural sector.

³⁰<https://www.musika.org.zm/headlines/fisp-electronic-voucher-program-to-promote-diversification/>

1.3. Motivation

FISP was introduced to stimulate the growth of the agricultural sector and to improve the performance of small scale farmers. However, the implementation of the DIS modality has faced challenges resulting in high operational costs and/or dismal impact on small scale farmer performance and graduation from the programme.³¹

The E-voucher modality was introduced between 2017/2018 and 2019/2020 agricultural season to counter some of the challenges reported on DIS modality. However, conflicting reports for its successes and failures have been reported in Zambian print media as well as published research articles.³² For instance a report by MUSIKA revealed that the roll-out of the E-voucher was hampered by the late release of subsidy funds by the Government. Further, there was failure to implement the programme throughout the year which would enable farmers to access inputs at any time of the year. This in essence made the programme to be more maize centric as opposed to incentivizing farmers to engage in livestock and other enterprises.³³ In addition, the Zambia Daily Mail dated 30th June 2017 reported that the FISP faced challenges in its implementation which included delayed activation of E-voucher cards, lost cards and PIN codes, network challenges and delays by MoA to load E-Voucher cards with funds, among others.³⁴

In the Ministerial Statement for the 2019/2020 agricultural season, the Minister of Agriculture stated that the country experienced prolonged dry spells in some parts of the country, particularly the Southern and Western Provinces in the 2018/2019 agricultural season. The prolonged dry spells affected the production of most crops and affected the household food security of most farmers in these areas. The Ministerial statement also highlighted some key challenges in the implementation of FISP such as delayed payment to agro dealers by the MoA as well as agro dealers failing to stock adequate quantities of the agricultural inputs needed by the farmers.³⁵

The implementation of FISP was prioritised in the national budgets during the period under review. According to the Zambia Agriculture Sector Report 2021³⁶, a trend analysis of previous budgets showed that at least 50% of the budget was allocated to FISP and the Food Reserve

³¹World Bank Group – Zambia’s Farmer Input Support Programme and Recommendations for Re-designing the Programme - 2021

³² An Assessment of FISP e-voucher Performance- Article in International Journal of Innovative Research and Development · July 2017

³³ A Review of the Implementation of the Farmer Input Support Programme (FISP)

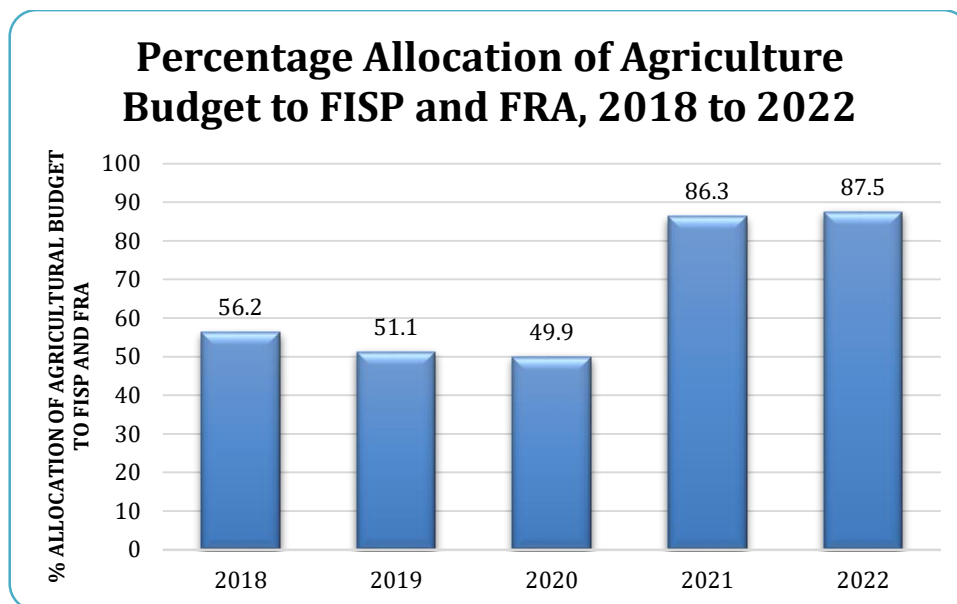
³⁴ <http://www.daily-mail.co.zm/state-to-address-fisp-challenges>

³⁵ Ministerial Statement to National Assembly 2019/2020 Farming Season – 19 January, 2021

³⁶ Indaba Agriculture Policy Research Institute

Agency (FRA) during the period under review. Figure 1.1 shows the percentage allocation of the agriculture budget to FISP and FRA.

Figure 1: Percentage Allocation of Agriculture Budget to FISP and FRA 2017-2022



Source: Zambia Agriculture Sector Report 2021

1.4. Expected Benefit of the Audit to Society

The audit is expected to highlight the implementation challenges that the FISP programme is experiencing thereafter, give recommendations that will provide reasonable assurance that the programme may be implemented in a more efficient, economical and effective manner in serving the intended beneficiaries. It is for this reason that the OAG decided to undertake the audit on the implementation of FISP.

CHAPTER TWO: AUDIT OBJECTIVE AND AUDIT QUESTIONS

2.0. Introduction

This chapter highlights the main and specific audit objectives, scope and audit questions to be answered to achieve the audit objective.

2.1. Main Audit Objective

To assess the effectiveness of measures put in place by the MoA in the implementation of the FISP to improve supply and distribution of agricultural inputs to small scale farmers in the country.

2.1.1. Specific Objectives

In order to meet the main audit objective, the following are the specific objectives:

- 2.1.1.1. To assess the legal and regulatory framework, institutional framework and structures in place to administer the FISP;
- 2.1.1.2. To establish the extent to which the MoA is ensuring the timely, effective and adequate supply of agricultural inputs;
- 2.1.1.3. To assess the extent to which the MoA facilitates the processes of farmer organisations, monitoring and evaluation and sensitisation of small scale farmers;
- 2.1.1.4. To ascertain the extent to which the MoA has expanded markets for private sector input suppliers/dealers and increased their involvement in the distribution of agricultural inputs in rural areas; and
- 2.1.1.5. To assess the extent to which the risk sharing mechanisms put in place by the MoA cover part of the cost of improving agricultural productivity.

2.2. Audit Questions

The audit will answer the following questions:

- 2.2.1. To what extent has the MoA ensured the existence of adequate policies and legal framework, institutional framework and structures to govern the FISP?
 - 2.2.1.1. Has the MoA put in place effective strategies to ensure that farmers benefiting from FISP are weaned off?
- 2.2.2. To what extent has the MoA ensured timely, effective and adequate supply of agriculture inputs to targeted small-scale farmers?
- 2.2.3. To what extent does the MoA facilitate the processes of farmer organisations, monitoring and evaluation, and sensitisation?

2.2.4. To what extent has the MoA ensured the expansion of markets for private sector input supplier/ agro-dealers?

2.2.4.1. To what extent has the FISP promoted agricultural diversification to ensure availability of a wide range of agricultural commodities?

2.2.5. To what extent has the MoA put in place effective measures to ensure a risk sharing mechanism is in place to share part of the cost of improving agricultural productivity

2.2.5.1. Has the MoA put in place effective measures to help small scale farmers to recover their investment losses resulting from weather related events?

2.3. Audit Scope

The audit focused on assessing the effectiveness of measures put in place by the MoA in the implementation of the FISP to improve the supply and distribution of agricultural inputs to small scale farmers. The audit covered the 2017/2018 to 2021/2022 agricultural seasons and focused on both the E-Voucher and DIS modalities in Zambia. This period was selected as it was the period in which the E-Voucher was under implementation parallel to the DIS which allowed the assessment of the implementation of both methods.

Other stakeholders that were engaged in the audit were insurance companies affiliated to FISP namely; Mayfair Insurance and Zambia State Insurance Corporation (ZISC).

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter describes the methodology used during the audit. The methodology includes an explanation and justification of the audit design. It further explains the sample population, sampling techniques, data collection and analysis methods.

3.1 Audit Standards

The audit was conducted in accordance with the International Standards for Supreme Audit Institutions (ISSAIs) and guidelines in the OAG Performance Audit Manual. The Standards require that the audit is planned and executed in a manner which ensures that an audit of high quality is carried out and that sufficient audit evidence is obtained to support the findings.

3.2 Audit Sampling

The sample population was 1,024,434 beneficiary farmers. The farmers are distributed across the ten (10) provinces of Zambia out of which five (5) were sampled, representing 50% of the provinces. The provinces selected and visited for data collection were Lusaka, Central, Eastern, Southern and Western. The audit sampled 1,118 farmers in fifty four (54) agricultural camps in eighteen (18) districts. The criteria used to select the provinces was based on fertiliser and seed (input) distribution pattern i.e. the DIS and the E-Voucher modalities.

Purposive sampling technique was used in selecting the camps. Other considerations were distribution modalities, number of beneficiaries per camp, geographical location and agro ecological region and beneficiary farmers issued with Authority to Deposit (ATD).

3.3 Data Collection Methods

In order to obtain sufficient evidence to support audit findings, the team employed three (3) methods to collect primary and secondary data namely; document reviews, site visitations and interviews with officials from the MoA, beneficiary farmers, agro dealers, insurance companies and other stakeholders. The methods of data collection are detailed below:

3.3.1 Document review

Review of relevant Acts, MoA regulations and guidelines, FISP implementation manuals, MoA Annual Reports, FISP Wrap-up Reports, MoA Monitoring and Evaluation Reports and the MoA Strategic Plan 2019 – 2021 was carried out to evaluate the selection criteria of beneficiary farmers and the programme implementation. This enabled the team establish the extent to which

the MoA had implemented FISP activities to improve the supply and distribution of agricultural inputs.

The documents were also reviewed to obtain assessment criteria on which the performance of the MoA could be based. Appendix 2 shows the list of documents reviewed and the respective purpose of review.

3.3.2 Interviews

Structured interviews were used to gather information necessary to support the audit findings. Officials from the MoA including the Provincial Agricultural Coordinators (PACOs), District Agricultural Coordinators (DACOs) and Camp Agriculture Committees (CACs) were interviewed during the audit. Other stakeholders interviewed included:

- i. Smart Zambia Institute (SZI);
- ii. Food Reserve Agency (FRA);
- iii. Food and Agriculture Organisation (FAO);
- iv. Indaba Agriculture Policy Research Institute (IAPRI);
- v. MUSIKA Zambia;
- vi. Zambia Cooperative Federation (ZCF);
- vii. Conservation Farming Unit (CFU); and
- viii. Agricultural Consultative Forum (ACF).

The interviews were conducted with a view to establish their respective roles in the implementation of FISP and to obtain information on the successes and challenges reported in the implementation of FISP. Interviews were also conducted to confirm and triangulate information gathered through the review of documentation. The officials interviewed were from both management and operational level so as to acquire relevant information. See Appendices 3 (i) for MoA officials interviewed and 3 (ii) for stakeholders interviewed.

3.3.3 Site Visits

Site visits were conducted to verify existence of the FISP beneficiaries, ascertain the extent to which they met the pre-defined criteria and how they benefitted from the programme. Interviews with FISP beneficiaries were also undertaken to establish whether farming inputs obtained through the programme had been utilised and impacted beneficiaries through

increased income, improved food security and nutrition. Appendix 4 shows the camps visited during site inspections.

Site visitations were also conducted to verify: the existence of warehousing facilities for storage of inputs and the status of the facilities in terms of storage space and security; confirm the presence of unredeemed inputs and reasons for non-redemption; verify the extent of crop damage due to adverse weather patterns; and ascertain to what extent agriculture diversification was promoted. Photographic evidence was also collected and corroborated with the data collected from interviews and document reviews.

3.4 Data Analysis

Qualitative and quantitative data was analysed using Microsoft Excel and content analysis while results were interpreted using graphs and charts.

CHAPTER FOUR: DESCRIPTION OF THE AUDIT AREA

4.0 Introduction

The chapter describes the mandate, roles and responsibilities, funding arrangements and objectives of the MoA. It also highlights key stakeholders in the agriculture sector and describes how the FISP is intended to operate.

4.1 Mandate

The MoA is mandated to facilitate the development of a sustainable and diversified agricultural sector for food and nutrition security and income generation. The MoA derives its mandate from Government Gazette Notice No. 836 of 2016 with the following portfolio functions:

- i. Agricultural credit;
- ii. Agricultural development;
- iii. Agricultural marketing policy;
- iv. Agricultural research and specialist services;
- v. Agricultural training;
- vi. Agricultural policy;
- vii. Agriculture extension field services;
- viii. Food security;
- ix. Irrigation development; and
- x. Seeds standards and grades.

4.2 Roles and objectives of the Ministry

The MoA is responsible for promoting and facilitating a conducive environment for agricultural development through adoption of smart and innovative ways to improve production and productivity in the agriculture sector. To achieve its mandate, the MoAs objectives are to:

- i. Effectively plan, monitor and evaluate agricultural sector programmes;
- ii. Promote agricultural production by providing policy guidelines to action programmes;
- iii. Facilitate the policies that would ensure national and regional food security through dependable annual production of adequate supplies of basic food stuffs at competitive prices;
- iv. Ensure that the existing agricultural resource base is well maintained and improved upon;

- v. Ensure that policies are formulated and implemented to facilitate the generation of income and employment to maximum feasible levels in all regions through full utilisation of scarce resources realization of domestic and export potential;
- vi. Provide policy and institutional framework that would contribute to sustainable industrial development; and
- vii. Ensure the contribution of the agricultural sector to the national balance of payments expands by among other things, providing incentives that would expand agricultural export in line with international comparative advantage.³⁷

4.3 Organisation of the Ministry

The MoA is headed by a Minister who is assisted by a Permanent Secretary. The MoA has seven (7) departments headed by Directors namely: Department of Agriculture (DoA), Zambia Agriculture Research Institute (ZARI), Seed Control and Certification Institute (SCCI), Department of Agri-business and Marketing (ABM), Department of Policy and Planning (PPD), Department of Finance (DoF) and the Department of Human Resources and Administration (HRA). Appendix 5 shows the organisation structure of the MoA.

Relevant to this audit is the Department of Agri-business and Marketing which is responsible for ensuring improved supply and delivery of agricultural inputs to small scale farmers. The roles of the department are as detailed below:

- i. Expansion of markets for private sector input suppliers/dealers and increase their involvement in the distribution of agricultural inputs in rural areas, which will reduce the direct involvement of Government;
- ii. Ensuring timely, effective and adequate supply of agricultural inputs to targeted small scale farmers;
- iii. Improved access of small scale farmers to agricultural inputs;
- iv. Ensuring competitiveness and transparency in the supply and distribution of inputs serving as a risk-sharing mechanism for small scale farmers to cover part of the cost of improving productivity and facilitating the process of farmer organisation; and
- v. Dissemination of knowledge and creation of other rural institutions that will contribute to the development of the agriculture sector.³⁸

³⁷ www.agriculture.gov.zm , Vision, Mission and Values

³⁸ DIS/E-Voucher Manuals 2021/2022

4.4 Funding Details

During the period under review, the FISP budget allocation under the ABM totalled K17,517,301,740 out of which the MoA received K8,258,073,122.07 representing 47% of the total budget, resulting in a deficit of K9,259,228,618. The total expenditure during the period under review amounted to K8,251,345,112.29. Table 4.1 shows the budget and actual funding allocated to FISP for the period 2018-2022.

Table 4.1: Budget Vs Actual Funding – FISP 2018-2021

| Year | Budgeted K | Actual funding K | Expenditure K | Variance (Budget-Actual Funding) K |
|--------------|--------------------------|-------------------------|-------------------------|------------------------------------|
| 2022 | 5,372,670,459.00 | 1,000,000,000.00 | 998,560,449 | 4,372,670,459 |
| 2021 | 5,701,404,933.00 | 3,629,200,925.00 | 3,628,038,532.00 | 2,072,204,008 |
| 2020 | 1,202,865,843.00 | 825,633,352.00 | 824,792,977.00 | 377,232,491 |
| 2019 | 2,313,487,425.00 | 946,220,951.00 | 946,099,549.00 | 1,367,266,474 |
| 2018 | 2,926,873,080.00 | 1,857,017,894.07 | 1,853,853,605.29 | 1,069,855,186 |
| Total | 17,517,301,740.00 | 8,258,073,122.07 | 8,251,345,112.29 | 9,259,228,618 |

Source: Extract from MoA³⁹

4.5 Key Stakeholders

In implementing the FISP, the audit undertook stakeholder mapping and identified the following key stakeholders. Table 4.2 below shows the stakeholders and their respective roles and responsibilities.

Table 4.2: Key Stakeholders and their Roles/Responsibilities

| Ministry/ Institution | Roles/ Responsibilities |
|-------------------------------------|--|
| Smart Zambia Institute (SZI) | Operates the Zambia Integrated Agriculture Management Information System (ZIAMIS) - an online and integrated platform that facilitates Ministry of Agriculture's management of various processes such as farmer registration, data input, monitoring of farmer activities and reporting |
| Food Agriculture Organisation (FAO) | A specialised agency of the United Nations leading international efforts to defeat hunger. FAO's goal is to achieve food and security for all and make sure that people have regular access to adequate high-quality food and lead active, healthy lives. The FAO coordinates with the MoA in the development and review of national agriculture policies and legal framework. |

³⁹ Zambia's Farmer-Input-Support-Programme-and-Recommendations-for-Re-designing-the-Programme

| Ministry/ Institution | Roles/ Responsibilities |
|--|--|
| Agriculture Consultative Forum (ACF) | Conducting studies/research to devise strategies to improve FISP and plays an advisory role on agriculture related issues, including FISP. |
| Food Reserve Agency (FRA) | Managing the national strategic food reserve and provision of market access to small scale farmers through the procurement of various crops, maize being the major crop. |
| Conservation Farming Unit (CFU) | Training MoA staff and farmers (including FISP beneficiaries) on climate smart agriculture techniques such as conservation farming with the aim of efficiently using available farming inputs to maximize crop production. |
| Zambia Co-operative Federation (ZCF) | Promotes, coordinates and establishes co-operatives. |
| Indaba Agriculture Policy Research Institute (IAPRI) | Conducts agricultural policy research, outreach activities and serves the agricultural sector in Zambia to achieve sustainable and broad-based pro-poor agricultural development. It also provides recommendations to the MoA on matters of agriculture policy. |
| MUSIKA Zambia | Stimulates and supports private investment in the agricultural market, with a particular focus on small scale and emerging farmers. They work with all stakeholders in the agricultural market system including the MoA, with an emphasis on private sector entities that are committed to working with the rural poor as their suppliers, consumers, clients or employees |
| National Input Suppliers (Nerias Investments Limited, Alpha Commodities Limited, Nitrogen Chemicals of Zambia, Rockliffe Trading, Zambian Fertiliser and Nyimba Investments Limited) | Supply agriculture inputs to targeted beneficiaries and to FISP recommended Agro-dealers under the conditions set out by the MoA. They also bear the market risk of purchase and transportation of agricultural inputs. |
| Insurance Companies (Mayfair and ZSIC) | Provide financial pay-outs to help small scale farmers to recover investment losses resulting from weather related events. They coordinate with the MoA by providing data on farmers that have been affected by adverse weather patterns and facilitate payments to affected farmers. |

Source: Performance Audit Report 2022

4.6 Systems Description

The FISP operates under two (2) modalities which are DIS and the E-voucher. The E-voucher was introduced in the 2018/2019 agricultural season when the MoA migrated from conventional

FISP (manual system) to Zambia Integrated Agricultural Management Information System (ZIAMIS).

The ZIAMIS is a web-based database used to manage key and routine management information collected such as beneficiary, supplier and agro dealer registration; farmer and government contribution management; insurance payouts and input redeeming. This system is accessible at national, provincial and district level and comprises a central database; various access portals for the various stakeholders such as suppliers, agro-dealers and banks; a set of associated applications (windows and android) for farmer registration; market price collection; e-extension; routine food security and nutrition data collection.

The following are the respective processes for the identification and registration of FISP beneficiaries, selection of suppliers and the weather index insurance cycle:

4.6.1 Identification and Registration of FISP beneficiaries and Farmer organisations

- Farmers are identified within their jurisdiction by farmer organisations in all districts to ensure that they are registered and their records maintained in farmer registers accessible on the ZIAMIS.
- Individual beneficiaries are required to be members of a registered farmer organisation. The farmer should be selected and approved by the CAC on recommendation of the farmer organisation they belong to and meet the prescribed guidelines in the set criteria.
- The FISP uses farmer organisations as the main channel in the distribution of agricultural inputs. Qualifying farmer organisations should meet the necessary requirements such as:
 - being duly registered by the Registrar of Co-operative Societies or Registrar of Societies;
 - being active for at least one year after registration, unless in specially defined circumstances;
 - should have an executive committee with appropriate powers to act;
 - a track record of using agricultural inputs on farming activities;
 - not be organised on partisan lines; or as a family business or private partnership;
 - have written by-laws or constitution to manage their funds and have appropriate accountability mechanisms;
 - not be defaulters with outstanding loans from previous seasons, either from FRA or any other lending institution;

- have a proven track record either as a cooperative, farmer organisation or as individual members of the organisation committee and/ ability to distribute inputs to their members; and
 - located in a designated agricultural camp and be engaged in agricultural production.
- Beneficiary farmers and farmer organisations are selected by the CACs in each district in a transparent and open manner. All the targeted small scale farmers who qualify to be beneficiaries to the programme are registered on ZIAMIS.
 - The selected beneficiary farmers will deposit K400.00 in the FISP account at selected integrated service providers for any combination of packs. The payments meant for agricultural inputs are deposited in designated banks by targeted beneficiaries either as a group or individually. Each district has a main depot established for the purposes of distributing agricultural inputs to designated satellite collection points for respective cooperatives, farmers or farmer organisations.
 - Selected beneficiary farmers are then issued with ATDs in ZIAMIS before making a deposit to the MoA through the District Office. All deposit receiving service providers are integrated with ZIAMIS thereby enabling the transmission of deposit information to ZIAMIS, after which the ZIAMIS issues the Authority to Collect (ATC) as acknowledgment of receipt.

4.6.2 Selection of Suppliers and Distribution of Inputs

- Fertiliser suppliers are selected through a tender using open national bidding, limited bidding or direct bidding (depending on the circumstances and procurement authorisation on procurement methods) and position inputs at designated depots in districts.
- Seed suppliers are selected through a tender using open national bidding, limited bidding or direct bidding and position inputs at designated depots in districts.
- Once inputs are delivered at designated depots, the DACO's office engages Warehouse Managers for storage and distribution of fertiliser and seed.
- On receipt of stocks, the Warehouse Manager will be required to issue a Goods Received Note (GRN) immediately.
- The Warehouse Manager will be required to maintain a file where all copies of GRNs from each supplier will be kept chronologically. This will enable the Programme to establish total quantities received from each respective supplier as per contract.

- The MoA will announce to the public the distribution of inputs.

The distribution procedure under DIS and E-Voucher is as shown below:

Redeeming Inputs under Direct Input Supply:

- i. The DACO issues the ATC to each recipient instructing the Warehouse Manager to issue the specified quantity of inputs.
- ii. After submission of the ATC to the Warehouse Manager, the Manager is required to confirm authorised quantities against the quantities indicated on the ATC.
- iii. Having confirmed that the quantities are correct, the Warehouse Manager then issues an Input Release Note (IRN) and ensures that all details are complete on the release note before issuing the inputs.

Redeeming Inputs under E-Voucher:

- i. The MoA sends a payment receipt confirmation to the beneficiary farmers using the registered mobile numbers.
- ii. ZIAMIS updates and reflects the total amount of the farmer E-Voucher entitlement.
- iii. The FISP beneficiary redeems the inputs.

4.6.3 Weather Index Insurance Cycle

- i. **Mayfair Insurance**

Mayfair Insurance offers Weather Index Insurance products which is satellite based, to monitor triggers arising from deviations from the normal level of rainfall which may cause crop loss.

Mayfair Insurance provides three (3) distinct types of cover which include:

- Early Dry Spell (EDS) which protects against 20day dry conditions from 1st December to 10th January each agricultural season;
- Late Dry Spell (LDS) providing protection against 20 and 30day dry conditions from 11th January to 31st March each agricultural season; and
- Excess Moisture (EM) providing protection against 10day excessive rainfall conditions from 1st December to 31st March each agricultural season.

Mayfair uses the ZIAMIS to establish the number of farmers that have paid premiums for a particular agricultural season. The system is also used to aid with uploading of claims from

affected areas and automatically allocates the claims amount per camp to active farmers in areas where triggers may have been recorded.

ii. **Zambia State Insurance Corporation Consortium**

The Zambia State Insurance Corporation (ZSIC) Consortium depends on the Weather Index trigger to determine insurance claim pay-outs. The Consortium manage the policy and determine the losses across the insured camps and offers a hybrid product made up of:

- Weather Index Insurance (germination failure often due to drought or delayed rains);
- Area Yield Index Insurance (failure by farmers to harvest expected yield as per benchmark); and
- Loss due to army worm attacks.

Weather and Area Yield Index are different for each Agro Ecological Region (AER). ZISC Consortium uses Weather Index data from the satellite to monitor triggers for a pay-out while for Yield Index insurance, crop cut exercises in the selected fields are conducted to establish the potential yield, which is then compared to a historical average yield for an area.

Weather Index pay-outs are due immediately a trigger occurs while Yield Index comes into effect after harvest season.

Satellite data is used to determine the cumulative rainfall using the Climate Hazards Group Infrared Precipitation with Station data (CHIRPS), which consists of over 30 years of rainfall dataset. It collects daily rainfall data across each agricultural camp on a 5x5 km grid. For each camp, the cumulative rainfall over a 21day period is compiled and pay-outs computed paid relative to the extent of the loss.⁴⁰

Like Mayfair, ZSIC Consortium uses data for FISP beneficiaries extracted from the ZIAMIS database. Updated farmer beneficiary data is extracted from the beneficiary list according to the number of beneficiaries and camps allocated in each agricultural season. The beneficiary list is then used to prepare the insurance pay-out schedule (discharge sheet).

Thereafter, beneficiary Summary reports and discharge sheets for pay-out triggers recorded in a particular period are submitted to MoA for approval. The MoA reviews the data in the report before it is submitted to ZSIC Consortium to ensure that information received matches information in the ZIAMIS database. ZSIC Consortium remits the insurance pay outs to MoA who later pay out to selected beneficiaries.

⁴⁰Basis risk report for FISP (Ministry of Agriculture) - 2020 /2021

5.0 Introduction

The chapter introduces the criteria that were used to assess the performance of the MoA in respect to its set targets and objectives.

5.1 Sources of Audit Criteria

The audit criteria for which the MoA was assessed was drawn from the following sources:

- i. Ministry of Agriculture Strategic plan 2019-2021
- ii. Second National Agricultural Policy 2016
- iii. Farmer Input Support Programme Implementation Manuals 2018/2019 – 2021/2022
Agricultural Seasons

The detailed criteria for the selected audit questions is shown below:

5.1.1. Existence of adequate policies and legal framework, institutional framework and structures to govern the Farmer Input Support Programme

The objective of the MoA is to improve management systems by reviewing legal and policy framework for a sustainable, competitive and diversified agriculture sector.⁴¹

5.1.1.1. Strategies in place to ensure that farmers benefiting from FISP are weaned off

FISP was set up to help vulnerable small scale farmers improve their productivity and be weaned off the programme after three years.⁴² In the original design of FISP, beneficiaries were to receive agricultural inputs for three (3) agricultural seasons and that the quantities would be reduced by 25% per year for each beneficiary.⁴³

5.1.2. Provision of timely, effective and adequate supply of agriculture inputs to FISP beneficiaries

According to the FISP Manual 2020/2021 agricultural season, the objective of FISP is to ensure timely, effective and adequate supply of agricultural inputs to targeted small scale farmers.⁴⁴ Further, the MoA Strategic Plan stipulates that the Ministry will enhance access to agricultural inputs.⁴⁵

⁴¹MoA Strategic plan 2019-2021, objective 4.2, page 20

⁴²Report of the Committee on Agriculture, Land and Natural Resources for the first session of the thirteenth National Assembly – June 2022.

⁴³ The Zambia Co-operative Federation's Submission to the Committee on Agriculture – A Review of the Implementation of the Farmer Input Support Programme (FISP) 2021

⁴⁴ FISP 2021-2022 Farming Season Manual

⁴⁵MoA Strategic plan 2019-2021, objective 1.7, page 19

According to the FISP Manual, the agro-dealers shall ensure an adequate stock of agricultural inputs conforming to MoA specifications and national quality standards are appropriately and accurately labelled. The agro-dealers will also ensure the availability of certificates that verify that the agricultural inputs meet MoA technical specifications.

According to the MoA Strategic Plan 2019-2021, one of the thematic areas of focus and related strategic results is agricultural development resulting into enhanced income generation, food and nutrition security.

5.1.3. Facilitation of farmer organisation processes, monitoring and evaluation, and sensitisation

The MoA should develop a Monitoring and Evaluation (M&E) framework for effective implementation and ascertaining the impact of various interventions in the Ministry. The M&E Framework is to be developed to track progress and evaluate performance against set targets.⁴⁶

The MoA should improve agricultural development services by enhancing extension service delivery.⁴⁷ In addition, the MoA should harmonise the public and private extension delivery systems⁴⁸

The MoA should also ensure harmonised record keeping and real time monitoring and auditing.⁴⁹ Further, the MoA should effectively provide appropriate agricultural information in order to increase awareness for small scale farmers.

5.1.4. Expansion of markets for private sector participation

According to the FISP Manual 2019/2020, one of the objectives of the FISP is to expand markets for private sector national input suppliers/agro dealers and increase their involvement in the distribution of agricultural inputs in rural areas which will reduce the direct involvement of Government.⁵⁰

The MoA should improve the efficiency of agricultural markets for inputs and outputs by promoting private sector participation in agricultural markets for inputs and outputs⁵¹

⁴⁶MoA Strategic plan 2019-2021, objective 1.5, page 19

⁴⁷MoA Strategic plan 2019-2021, objective 1.5, page 19

⁴⁸ Second National Agricultural Policy 2016, objective 1.5, page 15

⁴⁹ FISP Manual 2021-2022 Farming Season

⁵⁰ibid

⁵¹ Second National Agricultural Policy 2016, objective 4.1, page 16

The MoA should also strengthen private sector participation and efficient logistics and movement of inputs closer to the farmers.⁵² This will be done by enhancing promotion of Public Private Partnerships (PPPs) in the agriculture sector.

The MoA should increase private sector participation in agricultural development by promoting private sector investment in agro-processing and marketing through strengthening linkages with stakeholders.⁵³

5.1.4.1. Promotion of agricultural diversification

The mission of the MoA is to facilitate the development of a sustainable and diversified agricultural sector for enhanced income generation, and food and nutrition security. Further, the MoA is expected to enhance promotion of crop diversification using the E- Voucher as one of the strategies to ensure availability of a wide range of agricultural commodities.⁵⁴

5.1.5. Measures in place to ensure a risk sharing mechanism

In its Strategic Plan 2019 -2021, one of the objectives of the MoA is to provide strategies to develop synergies with other institutions by facilitating credit and insurance support. Further, one of the objectives of FISP is to serve as a risk sharing mechanism for small scale farmers to cover part of the cost of improving agricultural productivity.⁵⁵

5.1.5.1. Measures in place to help small scale farmers recover investment losses resulting from weather related events

The MoA should promote availability of and accessibility to agricultural credit finance and facilitate insurance of agricultural commodities.⁵⁶ In addition, the MoA should promote weather-based insurance schemes especially among small scale farmers.⁵⁷

⁵² FISP Manual 2021-2022 Farming Season

⁵³ Second National Agricultural Policy 2016, objective 6.3, page 17

⁵⁴ MoA Strategic plan 2019-2021, objective 1.11, page 19

⁵⁵ FISP 2021-2022 Farming Season Manual

⁵⁶ Second National Agricultural Policy 2016, objective 5.4, page 17

⁵⁷ Second National Agricultural Policy 2016, objective 9.5, page 19

6.0 Introduction

This chapter highlights the findings generated by the audit by comparing sufficient and appropriate evidence to criteria, verifying the problem(s) and analysing causes to the problems based on audit criteria.

6.1 Policy and Legal Framework to govern the implementation of the Farmer Input Support Programme

FISP was set up to help vulnerable small scale farmers improve their productivity and be weaned off the programme after three years.⁵⁸ In the original design of FISP, beneficiaries were to receive agricultural inputs for three (3) agricultural seasons and that the quantities would be reduced by 25% per year for each beneficiary.⁵⁹

Government designed and launched the FISP in 2002 as a measure aimed at improving access to inputs by small scale farmers as well as to encourage private sector participation in input supply and distribution of agriculture inputs in good time and adequate amounts. Despite the FISP supporting over one million farmers with inputs worth K8,251,345,112.29 during the period under review, the audit revealed that there was no specific legal framework and policy to govern the weaning off of farmers that had benefitted from the programme for three (3) years.

A further review of documents showed that some of the supportive legal documents in place and utilised by the MoA such as the Agriculture (Fertilizer and Feed) Act No. 13 of 1994 (Cap 226)⁶⁰ and the Plant Variety and Seed Act (CAP 236)⁶¹ did not provide guidance on the implementation of the FISP. In addition, a review of the FISP Manuals for the period under review revealed that MoA did not provide mechanisms for weaning farmers off the programme.

Interviews with officials at the MoA headquarters and eighteen (18) district offices revealed that the Ministry had not weaned off beneficiary farmers from the inception of the FISP. Further, interviews conducted with 1,188 FISP beneficiaries from the fifty four (54) camps visited revealed that a total of 347, 451, 227 and 163 farmers had benefited for less than three (3), four to six (4-6), seven to ten (7-10) and over ten (10) years respectively. See Appendix 4

⁵⁸Report of the Committee on Agriculture, Land and Natural Resources for the first session of the thirteenth National Assembly – June 2022.

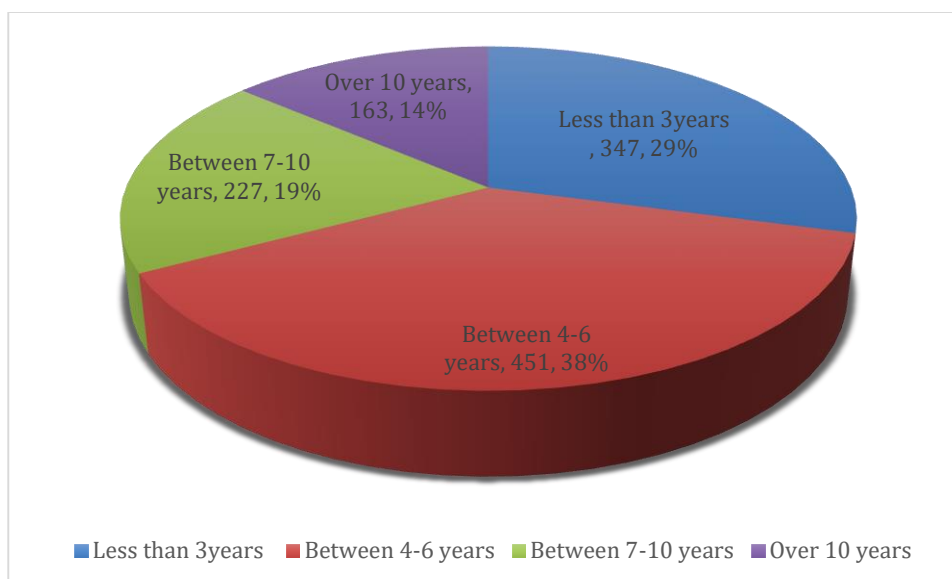
⁵⁹ The Zambia Co-operative Federation's Submission to the Committee on Agriculture – A Review of the Implementation of the Farmer Input Support Programme (FISP)

⁶⁰ provides for the regulation and control of manufacturing, processing, importation and sale of agriculture fertilizers

⁶¹which provides for the regulation and control of the production, sale and import of seed for sowing and export, and also provides regulations for testing and minimum standards of germination and purity

for the camps visited and the number of beneficiary farmers interviewed. Chart 6.1 below shows the range of years farmers benefited from the FISP.

Chart 6. 1: Range of Years Farmers Benefited from FISP



Source: OAG Analysis 2022

As can be seen in Chart 6.1 above, 29% of the farmers benefitted from the programme for less than three (3) years, 38% for four (4) to six (6) years, 19% of the farmers benefitted for seven (7) to ten (10) years whilst 14% benefitted for over ten (10) years.

Interviews revealed that some of the reasons for not weaning off farmers was due to MoA not having strategies in place to wean off farmers such an automated function in the ZIAMIS which would deactivate farmers that had benefitted for three (3) agricultural seasons. In addition, farmer organisations and cooperatives did not identify farmers that have benefitted for more than three (3) years at the time of registration. Further, a directive from the MoA Headquarters was not issued to PACOs and DACOs to enable the weaning off farmers in districts.

It was also mentioned during interviews with officials from the MoA and beneficiary farmers that the number of bags of inputs in the pack received by farmers was not adequate to wean them off the programme. At inception of the programme in 2002, farmers received a total of nine (9) bags comprising a one (1) x 10kg maize bag and eight (8) x 50 kg bags of fertiliser. This however reduced to six (6) x 50kg bags of fertiliser for farmers on the DIS and four (4) bags x 50 kg of fertiliser for farmers on the E-Voucher. Further, the number of bags of fertiliser collected by the farmers under the E-Voucher reduced due to fluctuating prices. This was also coupled with the adverse weather conditions experienced in some districts which resulted in poor yields on the part of the farmers.

This had resulted in farmers benefitting perpetually from the programme thereby disadvantaging eligible registered farmers that had not benefited from the programme. Further, the objective of the MoA to improve the livelihood of farmers may not be attained.

6.2 Provision of Timely, Effective and Adequate Supply of Agriculture Inputs to Beneficiary Small-Scale Farmers

According to the FISP Manual 2020/2021 agricultural seasons, the objective of FISP is to ensure timely, effective and adequate supply of agricultural inputs to beneficiary small scale farmers.⁶² Further, the MoA Strategic Plan stipulates that the MoA will enhance access to agricultural inputs.⁶³

According to the FISP Manual, agro-dealers should ensure an adequate stock of agriculture inputs conforming to MoA specifications and national quality standards which are appropriately and accurately labelled. The agro-dealers should ensure that certificates verifying quality of agricultural inputs meeting MoA technical specifications and quality standards are available.

6.2.1 Supply of Inputs under the Electronic Voucher and Direct Input Support

The audit revealed that there was inadequate and unequal distribution of inputs to farmers under the E-voucher as compared to the farmers on the DIS. A review of documents revealed that while the E voucher pack was valued at K2,100, the DIS offered farmers six (6) by 50 Kg bags of fertilizer and a 10 kg bag of maize seed. A bag of fertilizer was selling for approximately K650 per 50kg bag and a 10kg bag of seed was pegged at K360 during the 2020/2021 agricultural season. This meant that the DIS subsidy value was about K 4,260, that is, K2,160 more than the value of the E voucher. Consequently, agro dealers reportedly hiked input prices to the disadvantage of many farmers. This resulted in the E voucher losing popularity amongst most farmers, as they preferred the DIS modality.

Interviews with farmers also revealed that 404 out of 606 farmers, representing 67% preferred DIS, 116 farmers representing 19% preferred the E voucher, whilst 86 farmers representing 14% had not benefitted from the E voucher and were unable to make a comparison of the two. Further, interviews revealed that out of the 404 farmers that preferred DIS, 341 farmers representing 84% did so because they were assured of the quantity they would get whilst the remaining 63 farmers representing 16% attributed their preference to reduced transportation costs and the ease of use of this modality. However, it must be emphasised that the farmer did

⁶² FISP 2021-2022 Farming Season

⁶³ MoA Strategic plan 2019-2021, objective 1.7, page 19

not have the option of selecting the modality through which to receive agricultural inputs. In light of this, the Government considered issues of equity, which led to policy change of discontinuing the E voucher at the start of the 2021/2022 agricultural season.⁶⁴

Interviews with officials at the MoA further revealed that under the DIS, Government bore the costs of warehousing, transportation and loading and offloading of inputs at the main depot. This meant that the Government subsidy of K1,700 was understated as it did not include these costs. It was also reported that transportation costs varied from one agricultural camp to another owing to disparities in distances covered to deliver the inputs and associated quantities which may require additional transport.

The unequal distribution of agricultural inputs between the two FISP modalities poses a risk that farmers on E Voucher may not access adequate inputs which may result in food insecurity at household level.

6.2.2 Availability of Pre- Recommended Agricultural Inputs by Agro – dealers

Agro dealers are expected to stock pre-recommended and adequate agricultural inputs conforming to MoA specifications and national quality standards.⁶⁵ The audit established that while agricultural inputs met MoA specifications and quality standards, stocks were inadequate to meet farmer demand. A review of documents revealed that some agro dealers, particularly in rural areas did not have the adequate inputs causing shortages in most of the E voucher operating districts.

Further, interviews with agro dealers revealed that stock was limited due to limited space for storage, inadequate financial capacity and delayed payments by the MoA. This resulted in some farmers redeeming inputs after the onset of the agricultural season. For example, in interviews with farmers it was revealed that during the period under review, out of a total of 637 farmers, 373 farmers representing 58 % had fully redeemed their inputs, 109 farmers representing 17% had partially redeemed and 32 farmers representing 5% did not redeem any inputs whilst 123 farmers representing 18 % had not benefitted from the E voucher. Interviews with Food and Agriculture Organisation (FAO) also revealed that although the E voucher contributed to addressing two major policy objectives of diversification and private sector participation, the capacity of agro dealers to adequately supply beneficiary farmers was a challenge.

⁶⁴ FISP performance report 2021/2022 farming season

⁶⁵ FISP Manual 2019/2020 farming season

Failure by farmers to fully redeem inputs may result in farmers not having enough to sustain their livelihood, thereby compromising their food security, whilst the failure by the agro dealers to house adequate stock of the required inputs poses a risk that the FISP objective to ensure that inputs are timely, effectively and adequately distributed will not be attained.

6.2.3 Distribution of Inputs to FISP beneficiaries in Agro-ecological Regions

The audit revealed that the distribution of fertilisers and maize seed under the DIS was uniformly done for all FISP beneficiaries regardless of their agro ecological region.⁶⁶

This was despite the MoA receiving submissions from PACOs on the required types of seed and prevalent soil type in the respective AER. Interviews with the Zambia Co-operative Federation (ZCF) and Conservation Farming Unit (CFU) also revealed that one of the challenges faced in the implementation of FISP was that the distribution of inputs under the DIS was unilaterally done without taking into account the AERs in terms of soil type, weather and other factors.

For instance, in Chongwe district in Lusaka province, interviews with farmers and the DACO revealed that most farmers had experienced poor sorghum yields in the 2020/2021 agricultural seasons and this resulted in some farmers not collecting sorghum seeds in the 2021/2022 agricultural season as the crop was not compatible with the soil type. Figure 6.1 shows uncollected sorghum seed in Chongwe district which remained uncollected as of October 2022.

Figure 6.1: Uncollected Sorghum in Chongwe District



Source: Performance Audit Team Field Visit Picture 2022

Further, it was revealed that farmers in Kabwe district were displeased with the maize seeds received, arguing that the Zambezi seed was not compatible with their soil. This was evidenced

⁶⁶<https://diggers.news/business/2021/10/21/all-farmers-will-receive-6-bags-of-fertilizer-govt/>

by the stunted growth of the maize plants observed during physical inspections. Below is an image of the stunted maize plants in Kabwe district.

Figure 6.2: Stunted Maize Plants in Kabwe District



Source: Performance Audit Field Visit Picture 2022

Interviews with beneficiary farmers in fifty-four (54) camps visited revealed that 71 out of 639 farmers, representing 11% expressed disappointment with the maize seed received while 89% did not express any concerns with the maize seed quality. In the case of Chibombo district in Central province, Zambezi maize seed was unpopular and as such farmers opted not to collect the seed in 2021/2022 agricultural season. Figure 6.3 below shows the unclaimed bags of seed in Chibombo district.

Figure 6.3: Unclaimed Bags of Seed in Chibombo District



Source: Performance Audit Field Visits 2022

The failure by MoA to distribute farming inputs in accordance with the relevant parameters in AERs exposes beneficiary farmers to the risk of low crop yield. Furthermore, the FISP objective to effectively distribute inputs to farmers may not be met.

In a response dated 24th January 2023, the Ministry stated that the stunted growth of the maize plants observed during physical inspections in Kabwe could be attributed to many other factors other than incompatibility of the seed such as weather patterns and crop management practices by the farmers. However, without ZARI conducting the soil tests, the Ministry could not ascertain the cause of the stunted growth.

6.2.4 Impact of FISP on the Livelihood of Farmers

According to the MoA Strategic Plan 2019-2021, one of the thematic areas of focus and related strategic results is agricultural development resulting into enhanced income generation, food and nutrition security.

FISP is meant to improve crop production and productivity in order to ensure sustainable household food and nutrition security and increased incomes among small holder farmers.⁶⁷ However, the audit established that the MoA had not conducted an impact assessment of FISP since its inception to ascertain if the programme had achieved the desired outcomes of sustainable household, food and nutrition security, and increased incomes among beneficiary farmers. Despite the failure of the MoA to assess the FISP impact, document review revealed that other institutions had carried out an assessment of the FISP. A study by MUSIKA revealed that the impact of FISP on poverty alleviation was unclear. Whilst there had been a significant increase in the distribution of inputs (fertilizers and maize seed), rural poverty levels had remained stagnant over the implementation period of the FISP. However, overall poverty levels were observed to have reduced over the past years, largely driven by urban areas who were seen to have increased national production levels. Therefore, it was difficult to ascertain if this improvement could be attributed to FISP as some farmers also obtained inputs from other sources.⁶⁸

The failure by the MoA to assess the impact of FISP poses a risk that the MoA will not be able to make an informed decision on how to better alleviate poverty among the small scale farmers and whether the small scale farmers have contributed to food security. For instance, a review of the Parliamentary Committee Report revealed that in Malawi, an impact assessment was

⁶⁷ FISP manual 2019/2020

⁶⁸ FISP Review Report - MUSIKA

conducted on the Affordable Input Programme (AIP) in which Government established that through the AIP, small scale farmers had contributed to household food security in Malawi and had increased maize production by 21%. In addition, in the 2020/2021 farming season, Malawi had a surplus of 1000 metric tons of maize as a result of the AIP.⁶⁹

Notwithstanding, interviews with beneficiary farmers were conducted to ascertain if the programme had impacted their household security, food nutrition and income generation. The interviews revealed the following:

6.2.4.1 Income Generation

According to the MoA Strategic Plan 2019-2021, one of the thematic areas of focus and related strategic results is agricultural development resulting into enhanced income generation.

During the period under review, it was found that many farmers earned an income from their produce. Interviews with farmers revealed that 365 out of 558 farmers representing 65 % had surplus to sell whilst 193 farmers, representing 35% did not harvest enough to sustain their livelihood. This was attributed to various reasons such as inadequate inputs arising from sharing farmer packs, failure to fully redeem inputs, unfavourable weather conditions and poor farming techniques arising from weak extension service delivery. However, despite many farmers being able to sell their produce, interviews also revealed that 295 out of 365 farmers, representing 59% sold only a few bags to meet their basic needs. This resulted in farmers earning low income from sales. Therefore, there is a risk that the beneficiary farmers' incomes may not improve and thus not achieve the desired outcome of poverty alleviation.

6.2.4.2 Food and Nutrition security

According to the MoA Strategic Plan 2019-2021, one of the thematic areas of focus and related strategic results is agricultural development resulting into enhanced food and nutrition security.

The audit established the following:

6.2.4.2.1 Food Security

The audit revealed that food security was compromised as some farmers on the DIS modality realised poor yields due to limited inputs as a result of sharing farmer packs, delayed distribution of agricultural inputs and uniform distribution of inputs regardless of the AER, among others. In addition, document review revealed that despite efforts by MoA to distribute

⁶⁹Report of the Committee on Agriculture, Land and Natural Resources for the first session of the thirteenth National Assembly – June 2022

diversification packs i.e. soya beans, groundnuts and sorghum, the packs were not distributed to all FISP beneficiaries.

On the other hand, the E voucher was introduced to enable farmers' access various inputs including climate smart crops. Food security was also compromised under the E voucher as farmers did not redeem climate smart crops which would withstand adverse weather conditions. Interviews further revealed that 292 out of 630 farmers interviewed representing 46% did not use the E voucher to redeem climate smart crops as a means of attaining food security while 308 farmers representing 49% used the E voucher to attain food security and 30 farmers representing 5% had never benefited from the E voucher. The 292 farmers received less inputs of four (4) bags of fertiliser and one (1) bag of maize seed as opposed to six (6) bags of fertiliser and one (1) bag of maize which negatively affected their food security.

Therefore, failure to grow climate smart crops may result in beneficiary farmers being food insecure. This poses the risk that the FISP objective to alleviate poverty amongst the small scale farmers by increasing food security will not be achieved as FISP will have little or no impact on food security of the small scale farmers.

6.2.4.2.2 Nutrition Security

Food nutrition was largely driven by the E voucher as it allowed farmers' access to optional agricultural inputs such as vegetable seed, sunflower and animal feed which was in contrast to the DIS that was dominated by the maize seed. However, the audit established that 287 out of 630 farmers interviewed, representing 46% did not redeem optional inputs, 313 farmers representing 50% improved their nutrition by redeeming optional inputs while 21 farmers representing 4% had not benefited from the E voucher. As a result, failure by farmers to include optional inputs may compromise nutrition as diets may not be balanced increasing the risk of malnutrition.

6.2.5 Certification of Agricultural Inputs

National suppliers and Agro-dealers should ensure availability of certificates verifying that quality of agricultural inputs meet MoA technical specifications and quality standards.⁷⁰ The audit established that two (2) national suppliers namely Alpha Commodities and Rockliffe Trading and four (4)⁷¹ namely Twatibanji, Piyo Investment, Palpet and Sinks Enterprises agro

⁷⁰ FISP Manual 2020/2021

⁷¹ The E voucher was discontinued at the time of the audit. Therefore, the agro dealers were inactive.

dealers interviewed were unable to avail the certificates as the MoA did not test the agricultural inputs to certify that quality standards were met.

Further, document review revealed that Neria Investment Limited, Alpha Commodities Limited and Rockcliffe Trading supplied poor quality fertiliser in the 2021/2022 agricultural season. This was established through a test and analysis by ZARI in January 2022 which revealed that the quality of fertiliser distributed was of substandard quality. This is contrary to the MoA obligation to test the quality of agricultural inputs before distribution.⁷² Table 6.1 below shows the affected provinces and respective districts.

Table 6.1: Details of Provinces and Districts Supplied with Poor Quality Fertiliser

| No. | Province | District |
|-----|----------|---|
| 1. | Northern | <ul style="list-style-type: none"> • Lupososhi • Senga Hill • Mbala • Luwingu • Mpulungu |
| 2. | Muchinga | <ul style="list-style-type: none"> • Isoka • Shiwangandu • Mpika |
| 3. | Lusaka | <ul style="list-style-type: none"> • Lusaka • Rufunsa |
| 4. | Southern | <ul style="list-style-type: none"> • Pemba • Gwembe • Mazabuka • Kalomo • Livingstone • Kazungula • Monze • Zimba |

Source: Synopsis Report on FISP Fertiliser 2021/2022 Inspections - Report compiled by ZARI, January 2022

In addition, some Agro dealers, namely Farmers Barn, Kamano Seed and Zambezi Ranching were cited for supplying poor quality groundnuts seed during the 2021/2022 farming season.⁷³ In confirmation, interviews with farmers revealed that 223 out of 639 farmers, representing

⁷²Synopsis Report on FISP Fertiliser 2021/2022 Inspections, Sampling and testing for Neria, Rockcliffe and Alpha Commodities (Report compiled by ZARI, January 2022)

⁷³ FISP performance report 2021/2022 farming season

35% were displeased with the groundnuts seed received, citing poor quality and near expiration at the time of distribution. The distribution of poor quality seeds resulted in low yields amongst the affected farmers and consequently threatened their food and nutritional security including their income. This poses the risk that the objective of FISP to effectively distribute inputs to farmers will not be met.

6.2.6 Condition of Storage Facilities

According to the DIS Manual, the MoA should ensure that agricultural inputs are properly stored in readiness for distribution. Further, local leadership will monitor the implementation of the FISP by ensuring that all the inputs allocated to the provinces and districts reach the designated depots and targeted farmers in a timely and transparent manner. In addition, during the time of storage, they will ensure that all inputs are secured and that no individual steals, diverts or sales the fertiliser or seed.⁷⁴

Interviews with DACOs and agro dealers revealed that the MoA did not inspect warehouses and agro dealer shops to ascertain the security, storage capacity and physical state of the infrastructure before the delivery of inputs. The failure to carry out inspections was attributed limited funds and human resource as the available staff prioritised the delivery of extension services to all farmers in agricultural camps. As a result, warehouses with limited storage capacity, poor maintenance and security were utilised during the implementation of FISP. The observations relating to storage capacity, maintenance and security are shown below:

6.2.6.1 Storage Capacity

Interviews with six hundred forty (640) farmers revealed that one of the major challenges of the FISP was the delay in the delivery of agricultural inputs which should ideally be delivered before the onset of the rain season. The audit established that late deliveries were necessitated by the limited storage capacity of some warehouses. For instance, two(2) of the (3) warehouses inspected in Chongwe district of Lusaka province were found to be limited in storage capacity as they were required to supply over 1000 beneficiary farmers. This resulted in partial delivery of inputs to farmers while the remaining stock was delivered after collection of the first consignment by farmers which reportedly took up to 90 days and in some cases, farmers did not redeem their inputs at all. Interviews with farmers revealed that 109 farmers partially redeemed their inputs while 32 did not redeem any inputs. This meant that most farmers did not accrue the benefits of early planting, whilst others experienced wilting stems due to late

⁷⁴Direct Input Supply Implementation Manual 2021-2022 Agricultural Season

fertiliser application. In the case of 2019/2020 agricultural season, late delivery was coupled with poor rainfall resulting in low yields.

There is a risk that late delivery as a result of inadequate storage space will result in the failure of the FISP programme to ensure the timely distribution of farming input to small scale farmers ultimately leading to the risk of low yield for farmers as inputs are not available when required.

6.2.6.2 Storage of Inputs

Through interviews with the DACO, it was revealed that some fertiliser bags contained caked fertiliser as a result of poor storage as some suppliers would store the fertiliser directly on the floor, exposing it to moisture and pests. However, some farmers were reported to have collected the fertiliser in desperation despite the caked condition whilst others declined to collect the compromised bags due to uncertainty of the effect the fertiliser would have on crops. Poor storage facilities increase the risk of input loss which consequently results in low yields thereby affecting the farmers' food security. Figure 6.4 shows the caked fertilisers inspected at the DACOs office in Chikankata district, Southern Province.

Figure 6. 4: Caked Fertiliser in Chikankata District



Source: Chikankata District Agriculture Office

6.2.6.3 Security of Inputs

Through interviews with DACOs, it was found that warehouse insecurity although not common was a concern in some districts and that in a few cases, thefts had been experienced. Document review revealed that there was suspected pilferage by warehouse managers in most theft incidences. For example, in Kanchibiya district, Muchinga Province, there was a report of a

warehouse manager having stolen assorted seeds in the 2020/2021 agricultural season. The case was reported to the police and is in court.⁷⁵

Further, during FISP implementation 2021/2021 farming season, 633x50kg bags of fertilizer, 32x10kg bags of maize seeds, 4x20kg bags of groundnut seeds, 31x25kg bags of soya beans seeds and 3x5kg of sorghum seeds all valued at K529,190 were reported stolen by three MoA officers who at the time of the audit in 2022 were appearing in the courts of law.⁷⁶ A review of the MoA Monitoring Report for the 2021/2022 agricultural season revealed that other reported theft incidences reported included: Mpulungu – 219x10kg maize seeds and 25x25kg soya beans; Mwense - 235x10kg maize seeds; and Kabwe - 202x25kg soya beans and 7x10kg maize seeds collectively valued at K222,710.

Although in this instance beneficiary farmers received their inputs after replacement by warehouse managers, the distribution of inputs was not timely.

The lack of security at warehouse facilities increases the likelihood of theft and may result in farmers not collecting their inputs on time while awaiting replacements, collecting fewer than expected inputs, or not collecting inputs at all. Lack of security at warehouse facilities also poses a risk that the FISP objective to ensure agricultural inputs are timely, effectively and adequately supplied to the farmers may not be attained.

6.2.7 Redeeming Inputs on the E voucher.

Beneficiary farmers shall redeem inputs under the E voucher by presenting their National Registration Card (NRC) and E voucher card to an agro dealer. The agro dealer shall ensure that the details provided match the details on the system after which the agro dealer proceeds to redeem inputs on the ZIAMIS window which prompts the beneficiary farmer to provide an E voucher code. Where funds are sufficient, the redemption of inputs is successful and an invoice is generated for the agro dealer while a text is sent to beneficiary's mobile.⁷⁷

Document review revealed that beneficiary farmers experienced challenges during the implementation of the E voucher.⁷⁸ Farmers explained that they were unable to redeem inputs due to network challenges, forgotten pin codes and delays by the MoA to load E voucher cards with funds which resulted in frequent visits to agro dealers. As a result, farmers reported lost time and resources. Further investigations revealed that farmers were not adequately sensitised

⁷⁵ Ministry of Agriculture - Consolidated FISP Monitoring Report 2020

⁷⁶ FISP Wrap up report, Lusaka Province, 2020/2021

⁷⁷ FISP E voucher Manual 2020/2021 Agricultural season

⁷⁸ FISP wrap up 2018/2019 – 2021/2022

on card security as in some cases would leave their E voucher cards and pin codes to allow agro dealers redeem inputs on their behalf. As a result, agro dealers reportedly took advantage of MoA's delay to load funds by redeeming inputs without issuance to farmers. This was also confirmed in the FISP 2019/2020 performance report in which it was stated that despite farmers allegedly swiping E voucher cards to redeem inputs, they had not been issued with inputs. For instance, in Chongwe district, four (4) agro dealers⁷⁹ were suspected to be redeeming inputs without issuance to farmers during the 2019/2020 agricultural season. It was reported that approximately 1,172 farmers were not provided with inputs.

The audit also established that during the period under review, out of a total of 637 farmers interviewed, 373 representing 58% had fully redeemed inputs, 109 representing 17% partially redeemed, 32 representing 5% did not redeem inputs while 123 representing 18% had not benefitted from the E voucher. Failure by farmers on E voucher to fully redeem inputs resulted in the affected farmers delaying the planting process while others experienced wilting stems due to late fertiliser application. There is a further risk that FISP may not attain its objective to timely, effectively and adequately supply inputs and to ensure food security among the small scale farmers.

6.3 Promotion of Agricultural Diversification

According to the Strategic Plan 2019-2021, the MoA should facilitate the development of a sustainable and diversified agricultural sector for enhanced income generation, food and nutrition security. Further, the MoA should promote diversification of agricultural production and utilisation⁸⁰ to ensure availability of a wide range of agricultural commodities.⁸¹

The E-voucher was meant to accelerate diversification of the agricultural inputs by allowing farmers to purchase a wide range of recommended inputs such as veterinary drugs, agricultural equipment, livestock, poultry and fingerlings.⁸² However, through interviews with farmers, it was established that many beneficiary farmers did not utilise the modality as a way to promote diversification but preferred to redeem fertiliser and maize seed from Agro dealers.

Questionnaires were administered to farmers to obtain information on whether they were knowledgeable on diversification. It was found that 175 out of 635 farmers interviewed representing 28% were not knowledgeable on the concept of diversification while 460

⁷⁹ChagweAgro, Mutalisa General Dealers, MahachiAgro Dealers and R.K Wholesale

⁸⁰ Second National Agricultural Policy 2016, objective 7.1, page 18

⁸¹https://www.agriculture.gov.zm/?page_id=710-, objective 12

⁸²<https://www.musika.org.zm/headlines/fisp-electronic-voucher-program-to-promote-diversification/>

representing 72% were knowledgeable. Despite many farmers being knowledgeable about diversification, it was revealed that many of them had not implemented the concept through the E voucher. It was further established that 465 out of 634 farmers interviewed, representing 73% did not use the E voucher as a means of diversification while 169 farmers representing 27% used E voucher for diversification.

The audit established that low diversification was attributed to the low monetary value of the E voucher card prompting farmers to redeem the conventional FISP package of maize seed and fertiliser. Further, in some instances, farmers allowed cooperative leaders access to their E voucher cards who then collected inputs on their behalf with the view to share the inputs with other farmers within the cooperatives who were not FISP beneficiaries. This did not only interfere with the farmers' choice of inputs but also defeated the positive impact of FISP on the livelihood of beneficiary farmers. Furthermore, the Mayfair package only provided compensation for the maize crop to the exclusion of crops in the diversification pack.

On the other hand, MoA endeavoured to promote diversification among small scale farmers by distributing groundnuts, soya beans or sorghum⁸³ in diversification packs through the DIS modality. However, efforts of the MoA to promote diversification faced the following challenges:

6.3.1 Distribution of the Diversification Pack

During the period under review, it was revealed that not all FISP beneficiaries received diversification packs in addition to the farmer pack as interviews with farmers revealed that: 275 out of 637 farmers interviewed, representing 43% had not received groundnuts, 430 out of 633 farmers interviewed, representing 68% had not received sorghum and 313 out of 640 farmers interviewed, representing 49% did not receive soya beans. Failure to distribute diversification packs to all FISP beneficiaries poses a risk that some farmers will not diversify their crops and possibly not benefit from increased income and improved nutrition and food security.

⁸³https://cuts-lusaka.org/pdf/speech-dr-david-phiri-progress_review_of_the_implementation_of_the_e-voucher_in_2018.pdf

6.3.2 Agro Ecological Region Distribution of Inputs

The audit established that diversification packs were distributed without consideration of the different agro ecological regions in the country. Low diversification among the small scale farmers threatens the objective of FISP to realise a diversified agricultural sector for enhanced income generation, nutrition and food security.

6.4 Facilitation of Farmer Organisations

Farmer organisations are the main channel in the distribution of agricultural inputs. At camp level, the Camp Agricultural Committee (CAC) is responsible for identification of individual FISP beneficiary farmers in accordance with the selection criteria and the rational allocation of agricultural inputs to participating farmer organisations within a camp. On the other hand, Camp Extension Officers (CEOs) serve as secretariat. A FISP beneficiary is required to be a member of a registered farmer organisation and is selected and approved by the CAC on recommendation of the farmer organisation they belong to.

The following observations were made regarding the facilitation of farmer organisations:

6.4.1 Submission of Monthly Reports by CACs

According to the FISP Manual, the CACs shall submit monthly reports on input distribution and other matters relating to the implementation of FISP to the DACO through the BEO.

In interviews conducted with DACOs in eighteen (18) districts visited, it was revealed that CACs held meetings to deliberate on FISP activities in the districts. However, through document review it was established that CACs did not meet monthly as only two (2) districts visited namely Katete and Sinda of Eastern province provided minutes of meetings held for audit scrutiny. The minutes provided showed evidence that three (3) meetings were held between 2020 and 2021.

Irregular meetings by CACs were attributed to inadequate staffing of CEOs who were the secretariat and CAC supervisors. Failure to conduct meetings and produce minutes of meetings held may result in MoA not obtaining information on challenges faced during the implementation of FISP and ways in which to improve performance. Further, failure to conduct meetings made it difficult to establish whether all the FISP guidelines were followed. For instance, it was difficult to ascertain whether the two (2) year tenure of office for CAC members was adhered to.

6.4.2 Coordination and Monitoring of FISP Input Distribution

According to the FISP manual, CACs are to coordinate and monitor the FISP input distribution exercise at district level. The audit revealed that CACs had challenges in monitoring input distribution in five (5) districts visited namely; Mumbwa, Shibuyunji, Sinda, Katete and Chipata. Interviews with farmers revealed that despite the presence of CACs during distribution of inputs at agricultural camps, cooperative leaders devised a strategy of beneficiary farmers sharing inputs with non FISP beneficiaries who were members of a cooperative. In this instance, a farmer pack was shared between two or more members of a cooperative instead of the recommended one pack per farmer. The sharing of agricultural inputs may result in low crop yields hence defeating the objective of FISP to improve the livelihood of small scale farmers.

The audit also revealed that acquittal sheets for the collection of inputs were not available to confirm whether only eligible farmers benefitted from FISP. Further, a scrutiny of ATCs showed that a beneficiary would sign on behalf of other beneficiaries in a cooperative while in some instances ATCs were not signed making it difficult to ascertain whether the beneficiary farmer collected inputs. For instance, through interviews with farmers it was revealed that one ATC was issued to all farmers in a particular district to facilitate the collection of inputs. A review of the ATC showed that under DIS, cooperative leaders collected inputs on behalf of beneficiary farmers which posed a risk that farmers may not have been issued inputs as CACs did not effectively monitor the distribution process. Furthermore, interviews with the DACOs revealed that there were no records to verify that the CACs monitored the utilisation of inputs after distribution. Therefore, there is a risk that beneficiary farmers may not use farmer packs for the intended purpose.

6.5 Monitoring and Evaluation Framework

The MoA planned to develop a Monitoring and Evaluation (M&E) framework to effectively implement and ascertain the impact of various interventions. The M&E Framework was to be developed to track progress and evaluate performance against set targets.⁸⁴

Document review and interviews conducted with MoA, revealed that FISP did not have an M&E framework. This was attributed to lack of a FISP focal person who would be responsible for overseeing the management of FISP and late release of funds by the Treasury. The lack of M&E Framework resulted in the failure of the MoA to conduct an impact assessment of the

⁸⁴MoA Strategic plan 2019-2021, objective 1.5, page 19

FISP. Without an impact assessment, the MoA may not be able to ascertain whether FISP achieved its objective to improve livelihood of small scale farmers.

6.6 Provision of Extension Services

According to the FISP Manual, FISP will promote agricultural extension services for improved production and productivity. Extension services should be conducted at least once a month for each agricultural camp.

The audit revealed that extension services were not frequently carried out. The audit also established that there were no annual plans for extension services. Further, in instances where CEOs revealed that extension services were delivered, there was no evidence to show the frequency and type of extension services provided. Interviews revealed that 121 out of 629 farmers received monthly extension services, 213 received quarterly, 170 received bi-annual while 125 received no services. Failure to provide monthly extension services was attributed to vast agricultural camps assigned to each CEO which in some instances would be as vast as 200km from the CEO's office. In addition, document review revealed that there was inadequate funding for extension services as approximately 80% of the MoA budget allocated to FISP was for purchases of inputs. Interviews with Agriculture Consultative Forum (ACF) revealed that there was a low budget for extension services to train farmers on how to efficiently use the available inputs to maximise their yield.

It was further revealed that staffing was a challenge and as such, CEOs were required to play a dual role of providing extension services to all farmers and implementation of FISP activities. A review of staffing levels showed that the ratio of the CEOs to the number of farmers in an agricultural camp exceeded the recommended ratio of 1: 400. Tables 6.2 and 6.3 below depict the ratio of CEOs against the number of FISP beneficiaries in Katete, Sinda and Chisamba Districts.

Table 6.2: Number of Extension Officers against Number of Farmers per Camp

| No. | Name of Camp | No. of Camp Extension Officers | No. of FISP Beneficiaries |
|-----|-------------------------|--------------------------------|---------------------------|
| | Eastern province | | |
| | Katete | | |
| 1. | Mwanamphangwe | 1 | 2,109 |
| 2. | Mphangwe | 1 | 2,157 |
| 3. | Chilingondi | 1 | 563 |
| | Sinda | | |
| 1. | Chafula | 1 | 629 |
| 2. | Chindeza | 1 | 425 |

| 3. | Munyamanzi | 1 | 354 |
|-----|-------------------|--------------------------------|---------------------------|
| | Lusaka | | |
| | | | |
| No. | Name of Camp | No. of Camp Extension Officers | No. of FISP Beneficiaries |
| 1. | Chainda | 1 | 438 |
| 2. | Barlastone | 1 | 1,621 |
| | Chongwe | | |
| 1. | Palabane A | 1 | 1,951 |
| 2. | Kanakantapa | 1 | 2,480 |
| | Mumbwa | | |
| 1. | Nangoma | 1 | 743 |
| 2. | Mulendema | 1 | 617 |
| 3. | Shimbizi | 1 | 452 |
| | Shibuyunji | | |
| 1. | Kapyanga | 1 | 749 |
| 2. | Nampundwe | 1 | 1,062 |
| 3. | Mamvule | 1 | 892 |
| | Chikankata | | |
| 1. | Nansenga | 1 | 749 |
| 2. | Namalundu | 1 | 751 |
| 3. | Nameebo | 1 | 1,246 |

Table 6.3: Number of Extension Officers against Number of Farmers per Camp

| No. | Name of camp | No. of camp extension officers | No. of FISP beneficiaries |
|-----|--------------------------|--------------------------------|---------------------------|
| | Chisamba District | | |
| 1 | Chipembi | 2 | 2903 |
| 2 | Chisamba | 1 | 3104 |
| 3 | Kanakantapa | 1 | 3238 |
| 4 | Chankumba | 1 | 3061 |
| 5 | Ploughman's B | 2 | 1810 |
| 6 | Kamano | 1 | 1142 |
| 7 | Momboshi | 1 | 1514 |
| 8 | Bombwe | 1 | 1469 |
| 9 | Chikonkomene | 1 | 1968 |
| 10 | Chowa | 1 | 3698 |
| 11 | Lifwambula | 1 | 1517 |
| 12 | Mulungushi Agro | 1 | 1244 |
| 13 | Muswishi | 1 | 2506 |
| 14 | Lukoshi | 1 | 506 |
| 15 | Lwamabwe | 1 | 1409 |
| 16 | Nalufwi | 1 | 1493 |

Source: Chisamba District Agriculture ZIAMIS Database 2022

Without effective extension services, there is a risk that farmer packs may not be used for the intended purpose. There is also a risk of underutilizing of inputs due to inappropriate farming techniques such as incorrect application of top and basal dressing fertiliser and inadequate spacing when planting.

This may ultimately result in the MoA not achieving FISP objectives of improving farmer livelihood.

6.7 Farmer Sensitisation on Matters Relating to FISP

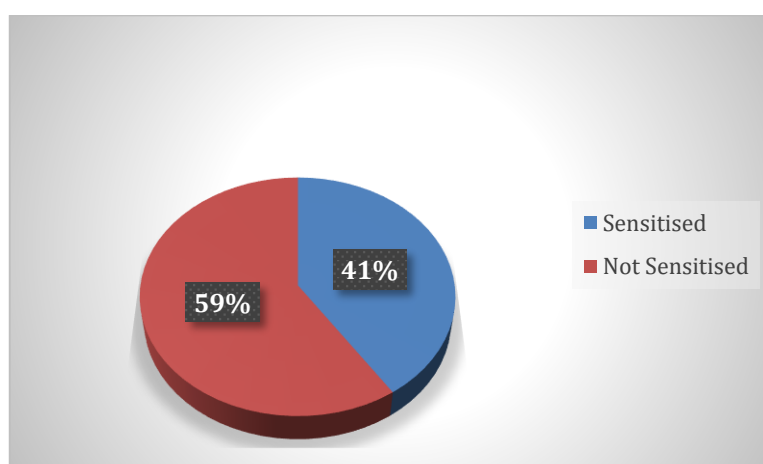
MoA should effectively provide appropriate agricultural information to small scale farmers in order to increase awareness. Further, DACOs are responsible to ensure that, through the BEOs and CEOs, all farmers are sensitised on matters relating to FISP such as farmer registration, contribution, insurance and diversification.⁸⁵

Interviews with DACOs revealed that sensitisation on the requirement for registration under the National Farmer Support Register and matters relating to FISP had been carried out.

6.7.1 Sensitisation on Insurance

Despite sensitisations being conducted on farmer registration, it was revealed that farmers were not knowledgeable about the embedded weather index insurance scheme for which they paid K100 under the E-voucher and DIS modalities. An analysis of the data obtained from the questionnaires administered indicated that out of 643 farmers, 261 representing 59% were sensitised on farmer insurance while 381 representing 41% were unaware. Chart 6.2 below shows the extent of sensitisation on farmer insurance.

Chart 6.2: Sensitisation of Farmers on Insurance



Source: Performance Audit Analysis 2022

⁸⁵ FISP Manual 2019/2020 farming season

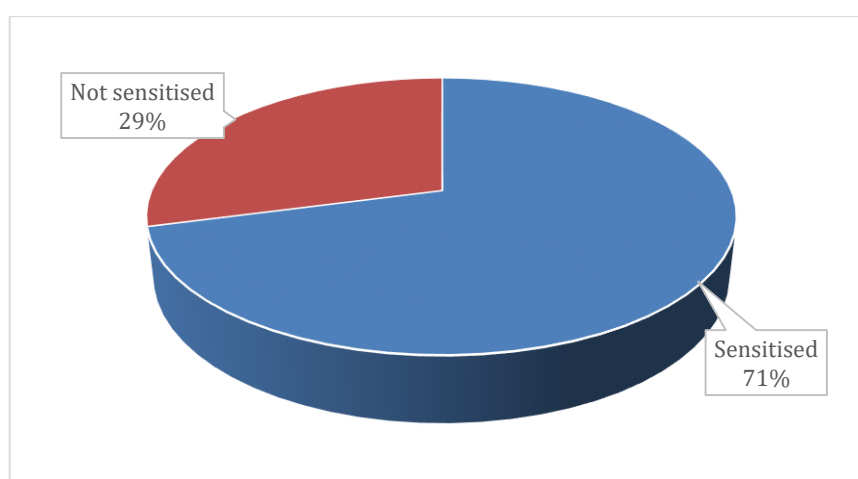
Interviews with Mayfair and ZSIC revealed that they had challenges in that, while some beneficiary farmers were knowledgeable about insurance cover, they were not knowledgeable about the composition of insurance cover provided.

Document review also revealed that Mayfair reported challenges with the Weather Index product provided as the insurance product and pay-out system was not fully understood by CEOs and beneficiary farmers. For instance, farmers on the Copperbelt, Central and Muchinga Provinces expressed doubt on how compensation was arrived at using satellite coordinates as they felt areas of crop damage did not match compensation. They also expressed little or no knowledge on process of indexing/triggers and pay-outs.⁸⁶

6.7.2 Sensitisation on Diversification

Interviews with 635 farmers revealed that 450 representing 71% were sensitised on crop diversification under the E-voucher while 185 representing 29% were not sensitised. Chart 6.3 below shows the levels of farmer sensitisation on diversification.

Chart 6.3: Sensitisation of Farmers on Diversification under E-Voucher



Source: Performance Audit Analysis 2022

Failure by the MoA to conduct farmer sensitisation posed a risk that farmers will not be knowledgeable on the benefits of diversification which may improve nutrition, generate income and make the agricultural system more resilient to climate change. Further, lack of knowledge on insurance may result in farmers being unable to follow up on weather related insurance in instances where loss was suffered as a result of bad weather conditions resulting in low yields.

⁸⁶ Weather Index challenges and expectations – Mayfair Report

6.8 Expansion of Markets for Private Sector Participation

One of the objectives of FISP is to expand markets for private sector input suppliers/agro-dealers and increase their involvement in the distribution of agricultural inputs in rural areas, which will reduce the direct involvement of Government. The players in the private sector participation include suppliers, agro dealers, warehouse managers and transporters among others.

The audit revealed there was significant difference in the level of involvement of the private sector as far as FISP implementation was concerned under the two (2) modalities. A review of documents showed that the level of private sector participation under the E voucher was higher compared to the DIS. Table 6.4 below shows the level of involvement by Government and the private sector under the E voucher and DIS.

Table 6.4: Levels of involvement by Government and Private Sector under DIS and E-voucher

| Activity | DIS | E-Voucher | |
|--------------------------------------|------------|-----------|---|
| | Government | Private | |
| Pre-planning | ✓ | ✓ | |
| Tendering | ✓ | | |
| Procurement | ✓ | | ✓ |
| Distributing to districts | ✓ | | |
| Distributing to satellite depots | ✓ | | |
| Selecting beneficiaries | ✓ | ✓ | |
| Facilitating the collection of money | ✓ | | ✓ |
| Storage of inputs | ✓ | | ✓ |
| Distribution of inputs | ✓ | | ✓ |

Source: IAPRI 2009

As shown in Table 6.4 above, under DIS, MoA was involved in pre-planning, tendering, procurement, distribution to districts and satellite depots, selection of beneficiaries, facilitating the collection of money, storage and distribution of inputs. However, under the E voucher, MoA was only involved during pre-planning and selection of beneficiaries. Therefore, the role of MoA under the E voucher was to oversee and monitor the programme, while the private sector managed key FISP processes such as procurement, storage and distribution of inputs.

With the phasing out of the E voucher in the 2021/2022 agricultural season, private sector participation was reduced which exposed the MoA to the risk of incurring additional costs of transportation and storage of inputs.

The following observations were made regarding private sector participation during the period under review:

6.8.1 Agro Dealer Participation

The audit revealed that there was low participation by agro dealers in some districts. Through document review, it was found that some districts had no active agro dealers which resulted in farmers travelling to nearest districts to redeem inputs. A review of FISP wrap up reports 2019 – 2021 for Nalolo and Limulunga districts revealed that farmers travelled to Mongu district to redeem inputs. A review of documents revealed that agro dealers experienced delayed payments by the MoA ranging from ninety (90) to days in excess of one thousand. A review of the 2018/2019 schedule for agro dealer invoices revealed that there were 1,270 unpaid invoices totalling K85,202,123.33 while a review of the FISP performance report for the 2019/2020 agricultural season revealed outstanding balances amounting to K348,635,850.71. These balances were unpaid as of October 2022.

Consequently, agro dealers were unable to stock adequate agricultural inputs in readiness for timely distribution to farmers. For instance, it was noted that in Luangwa district, agro dealer participation was low as agro dealers declined to supply agricultural inputs due to unpaid invoices for 2019/2020 agricultural seasons. In Northern Province, agro dealers complained that they had not been fully paid by MoA to facilitate the supply of inputs while in Mumbwa, it was revealed that agro dealers delivered inputs late. It was also revealed that most agro dealers in Chikankata were in short supply of urea. This disadvantaged farmers in that inputs were delivered beyond the onset of the agricultural season.

Document review also revealed that apart from agro dealers, there was delayed payments for warehouse facilities in Kaoma and transporters were reluctant to participate in the programme in North Western and Muchinga Provinces owing to outstanding payments with the MoA. This resulted in farmers incurring costs to ferry inputs. This may negatively affect the ability of private players to participate in the supply of agricultural inputs.⁸⁷

6.8.2 National Input Supplier Participation

During the 2021/2022 agricultural season, the MoA engaged six (6) companies to supply fertiliser countrywide, namely; Nerias Investment Limited, Alpha Commodities Limited, Nitrogen Chemicals of Zambia (NCZ), Rockliffe Trading, Zambian Fertiliser and Nyimba Investment Limited.

⁸⁷FISP performance report 2019/2020 farming season

However, a review of documents showed that there was failure by Neria Investments Limited to supply the total contracted quantity 142,027.50 Metric Tonnes (MT) of fertiliser. The audit established that Neria supplied 122,607.30 MT leaving a balance of 19,420 MT not supplied. Appendix 6 refers. As a result, Northern, Muchinga, Eastern and part of Central provinces did not receive fertiliser in the 2020/2021 farming season. Interviews with farmers also revealed that in Katete district, Neria Investment had not supplied fertiliser to the farmers despite paying the farmer contribution. A review of documents also showed that forty-nine (49) farmer groups did not receive urea in the 2020/2021 farming season.

A review of documents revealed that there were delayed payments to suppliers which resulted in delayed distribution of fertiliser to farmers in Chisamba, Iteshitezi, Kabwe, and Chibombo which emanated from the temporary closure of warehouses by Rockcliffe Trading during 2021/2022 agricultural season. This poses a risk of low yields and ultimately food insecurity.

6.9 Risk Sharing Mechanism to Improve Agricultural Productivity

The MoA has provided strategies to develop synergies with other institutions to facilitate provision of credit and insurance support.⁸⁸ Further, one of the objectives of the MoA is to serve as a risk sharing mechanism for small scale farmers to cover part of the cost of improving agricultural productivity⁸⁹

Documentary reviews revealed that the MoA contracted Mayfair Insurance and Zambia State Insurance Corporation – ZISC Consortium to cover beneficiary farmers as a risk sharing mechanism through an insurance premium of K100 which was embedded in the K400 contribution per farmer in each agricultural season.

A review of the ZIAMIS for the period under review showed that the number of farmer beneficiary farmers provided with insurance cover for weather related perils by two (2) contracted insurance companies ranged between 900,297 and 1,024,422 as shown in Table 6.5 below.

⁸⁸Strategic Plan 2019 - 2021

⁸⁹ FISP Manual, objective 1.5, page 4

Table 6. 5: Summary of Number of Farmers Insured for Weather Index Insurance

| No. | Land Preparation | Number of farmers allocated to: | | Total Number |
|-----|------------------|---------------------------------|-----------|-------------------|
| | | Mayfair | ZISC | |
| 1 | 2017 - 2018 | 900,297.00 | - | 900,297.00 |
| 2 | 2018 - 2019 | 900,297.00 | - | 900,297.00 |
| 3 | 2019 -2020 | 863,056 | 145,190 | 1,008,246 |
| 4 | 2020 - 2021 | 621,179 | 405,013 | 1,026,192 |
| 5 | 2021 - 2022 | - | 1,024,422 | 1,024,422 |

Source: Zambia Integrated Agriculture Management Information System 2022

6.9.1 Administration of Insurance

6.9.1.1 Mayfair Insurance Company

A triggers report indicating details of beneficiaries to a pay- out for a particular agricultural season is submitted to MoA within 10 days after the end of either early or late dry spell and/or excessive rainfall (moisture) phase. The report is then approved by the Permanent Secretary with a discharge for claims prepared by Mayfair after which the lump sum amount is paid to MoA based on the number of affected beneficiary farmers as shown on the ZIAMIS module.

However, the audit revealed that MoA did not validate information provided in the insurance triggers reports and discharge for claims submitted by Mayfair before approval and as such were unable to make any adjustments to submitted information. Interviews revealed that the MoA did not have expertise to validate information submitted such as pay-out computations. Interviews also revealed that reliance on remote sensing and weather station data led to a mismatch between data collected and actual damage suffered by farmers in case of extreme bad weather. Consequently, some affected farmers were not selected for pay-outs, thus reducing the number of farmers that should have been compensated.

According to reports, inaccurate readings of GPS coordinates resulted in triggers not captured in areas where there were no coordinates yet farmers suffered similar losses. In other instances, while GPS coordinates were available, they were unable to capture data on triggers with some farmers in close proximity not being selected despite experiencing the similar losses.

For instance, triggers on weather index parameters were not detected in locations such as Siavonga, Sinazongwe, Gwembe and Kazungula and as a result, all beneficiary farmers in the mentioned districts were not compensated. Similarly, sixteen (16) districts in Western Province were affected by drought in which case, Mayfair compensated eleven (11) districts. The audit

further established that Mayfair did not provide information as to why five (5) districts in close proximity were not compensated.

The audit also revealed that the Mayfair package only covered germination failure and as such, farmers affected by yield failure were not compensated. Additionally, drought, floods, pests and crop diseases which had an impact on viability of crops were not covered. It was further established that the package only covered the maize crop to the exclusion of the diversification pack. In this regard, there is a risk that the inaccurate capture of triggers may result in farmers not benefitting from insurance cover despite paying premiums.

6.9.1.2 ZISC Consortium

ZSIC provides insurance cover against germination and crop failure, and loss due to army worm invasions.

A review of documents revealed that ZSIC faced difficulties in conducting assessments in all affected areas as most camps were not GPS referenced.⁹⁰ As such, there were challenges in aligning mapping activities to accommodate agricultural camps that were not GPS referenced. Further, some camps were omitted from the list of beneficiaries despite experiencing the same or similar weather patterns. As a result, a lesser number of farmers who suffered loss were compensated. Interviews with farmers also revealed that 562 beneficiary farmers out of the 642 representing 88% were not compensated despite suffering loss while 79 representing 12% were compensated. However, farmers were unable to provide an accurate timeline within which pay-outs were made.

Interviews conducted with ZISC further revealed that insurance pay-out ranged from K160 to K500 under Yield Index per farmer while under the Weather Index, the minimum pay-out ranged from K165 to K400 per farmer/hectare in 2020/2021 agricultural season.

A review of documents revealed that the weather and yield indices were inaccurate in detecting farmer loss and as such, claims were reviewed by the consortium to consider making ex gratia payment of K165/per affected farmer on weather index and K431 for yield index.⁹¹ For example, in 2020/2021 agricultural season, ZSIC received complaints from Itezhi-tezhi and Shibuyunji in which case it was reported that despite the occurrence of adverse weather conditions, it was not captured by the satellite resulting in an ex gratia payment of K231,200 to farmers.

⁹⁰ FISP AYII 2019 Pay-out Computation Process

⁹¹ WP11 – Interview guide with ZSIC -10th June, 2022

Further, a review of documents showed that yield index also had inadequacies as selection of the secondary crop at time of compensation was not clearly done as pay-outs were based on a composite index of two (2) crops comprising primary and secondary crops. It was revealed that maize was considered to be the primary crop while other crops such as groundnuts, sorghum and soya beans were considered as secondary crops. In determining pay-outs, it was established that ZISC did not distinguish farmers by the crops they grew and as such provided uniform insurance cover regardless of the secondary crop planted thus making compensation on yield index inaccurate. Consequently, the farmer faces the risk of not being compensated based on the specific crop loss and, in proportion to the loss suffered.

6.9.2 Insurance Pay-Outs

6.9.2.1 Mayfair Insurance Company

The MoA shall promote availability of and accessibility to agricultural finance credit and facilitate agricultural insurance.⁹²

Document review revealed that pay-outs were remitted to MoA who further disbursed payments to registered agro dealers in affected areas who then compensated affected farmers in form of farming tools and/or inputs. The minimum compensation was K85 in 2017/2018 and later adjusted to K200 in the 2020/2021 agricultural season while the maximum compensation was adjusted from K1700 to K2000 during the same period. Despite the said maximum compensation, the audit established that pay-outs ranged from K85 to K778 during the period under review. A total pay-out of K96,079,312 to cover triggers due to excessive rainfall and dry spells was made to 500,670 farmers that had suffered adverse weather conditions. For the 2019/2020 farming season, a total pay-out of K26,733,742 for the triggers caused by excessive rainfall, early dry and late dry spells was made to cover 253,984 farmers in 670 Camps.

⁹² Second National Agricultural Policy 2016, objective 5.4, page 17

Table 6.6: Pay out Amounts 2018/2019 – 2019/2020 Agricultural Season

| Province | Agricultural Season | |
|-----------------|---------------------|-------------------|
| | 2018/2019 | 2019/2020 |
| | K | K |
| Southern | 70,361,146 | 5,108,696 |
| Western | 5,532,665 | 45,518 |
| Lusaka | 4,767,884 | 7,436,714 |
| North - Western | 4,778,046 | 1,993,764 |
| Muchinga | 3,478,628 | 416,415 |
| Luapula | 1,334,626 | 205,615 |
| Northern | 2,108,799 | 851,752 |
| Central | 2,377,745 | 10,397,743 |
| Copperbelt | 892,054 | 277,525 |
| Eastern | 447,719 | |
| Total | 96,079,312 | 26,733,742 |

Source: Mayfair Insurance Company

A review of documents also showed that ten (10) farmers in Mapala 1 agricultural camp in Chipata District received pay-outs of K155.76 per farmer for the 2018/2019 agricultural season. Further, document review of ATCs showed that each of these farmers collected two (2) pairs of gum boots, machetes with either de-wormers, vegetable seeds, pesticides, hoes, grain bags or shovels from Agro dealers.

Furthermore, a review of a Mayfair report⁹³ revealed that some complaints raised by farmers in the ten (10) provinces visited included:

- Low pay-out value of K85 per farmer to cover loss suffered.
- Delayed insurance pay-outs as most farmers received notification to redeem inputs long after the end of a particular agricultural season in which loss was suffered. For instance, insurance pay-outs for 2019/2020 and 2020/2021 agricultural seasons had not been paid to affected farmers as of October 2022 while some affected farmers gave up on redeeming pay-outs.

Further, interviews with farmers also confirmed the findings highlighted above, with additional complaints presented as shown below:

- Farming inputs and implements provided as compensation, in most cases, had no direct relation with the loss suffered and as such compensated items such as gum boots and machetes did not compensate for the crop loss suffered;

⁹³Ministry of Agriculture report on summary of challenges

- Farming inputs and implements provided as compensation were mostly imposed on farmers by Agro dealers;
- Some farmers who received notifications for insurance pay-outs did not collect inputs from Agro dealers as compensation amounts were low compared to transport costs that a farmer would incur to collect inputs;
- Prices set by Agro dealers for redeeming inputs related to compensation were higher than prevailing market prices; and
- Farmers could not confirm if the value of inputs redeemed corresponded with the insurance pay-out as they were unable to access pay-out records.

During the period under review, interviews with farmers revealed that out of 614 farmers interviewed, 79 were compensated for loss suffered. It was further revealed that 24 farmers received compensation worth K100 or less representing 30%, 43 received compensation between K100 and K300 representing 55% while 12 received compensation above K300 but not more than K700 representing 15%.

6.9.2.2 ZSIC Consortium

The audit established that insurance pay-out cover ranged from K85 to K2000 per farmer for the weather and yield indices for the 2018/2019 and 2019/2020 agricultural seasons while the lowest pay-out was K160 and highest amount was K400 for weather Index and K433 for yield index for the 2020/2021 season respectively. Further, although the maximum compensation was said to be K2,000, a review of documents revealed that no beneficiary farmer was compensated up to the highest amount of K2,000 since 2018 when the insurance component was incorporated in the programme.

Documentary review revealed that the MoA raised concerns regarding Agro dealers that compelled farmers to redeem inputs costing less than the actual pay-out amount per farmer, thereby denying the farmers an opportunity to get the full value of their claim.

As a result, pay-out amount could not exceed the set compensation amounts due to method of payment adopted by insurance companies. This posed a risk that the sharing mechanism to cover the cost of improving agricultural productivity would not be achieved

Document review revealed that during the 2020/2021 season a total of 405,013 farmers were insured across 750 camps located in 44 districts at an insured sum of K162, 005, 200. A total

pay-out of K2, 045,200 was made to 5,113 farmers from twenty-one (21) camps in three districts of Luapula and North-Western respectively⁹⁴.

6.9.3 FISP Technical Working Group on Index Insurance

The MoA formed a FISP technical working group on index insurance⁹⁵ to co-process design an improved index insurance product for FISP beneficiary farmers for the 2021/2022 season. The Inter-ministerial technical working group focuses other matters besides the index insurance being implemented on the FISP⁹⁶. The group was initiated in 2020 following concerns raised by MoA regarding the performance of both indices which stated that:

- The index pay-out did not always reflect farmers' losses, especially during excess rainfall periods;
- Index coverage windows did not always reflect key periods of vulnerability for farmers;
- Farmers in neighbouring areas sometimes received very different pay-outs; and
- The frequency and expected value of pay-outs were not transparent to farmers.

The goal of the co-design process was to address concerns raised by involving affected farmers and government representatives in improving the index. Using crowd sourced data collection method from 1,000 camps countrywide on cropping and historical risks, training and workshops on index insurance design principles where government as well as FISP insurance partners were in attendance, resolutions were made to design the 2021/2022 FISP index insurance product. This product was a 'blended insurance product' that reflected successful aspects of the current product and best practices by part of technical team members.

However, document review revealed that ZSIC Consortium still applied the old index methods instead of the blended insurance product agreed upon to assess farmer losses for the 2021/2022 agricultural season. This was attributed to limited resources provided through premiums paid per farmer which was reportedly inadequate to cover costs associated with the blended package. As a result, affected farmer pay-outs may not reflect accurate loss suffered, while there may be disparities in pay-outs between farmers within same areas who suffered similar losses. The frequency and expected value of pay-outs to farmers may also not be transparent resulting in farmers not seeking compensation in the event of loss.

⁹⁴ 2020/2021 Season Weather Index Insurance Claims Report for FISO submitted to FISP Insurers Consortium

⁹⁵ Comprises MoA, International Fund for Agricultural Development (IFAD) and World Food Programme (WFP), with support of the International Research Institute for Climate and Society (IRI) and financial partners: Mayfair; ZEP-RE and Agriculture and Climate Risk Enterprise (ACRE)

⁹⁶ Ministry of Agriculture Response dated 24th January, 2023

CHAPTER SEVEN: CONCLUSION

The audit concludes that measures put in place by the MoA in the implementation of the FISP have not been effective in improving the supply and distribution of agricultural inputs to small scale farmers.

The legal framework to govern the implementation of FISP is not in place. This means that there is no systematic approach to provide for the weaning off of farmers as the implementation manuals used for the programme do not provide guidelines. This has resulted in the MoA being unable to offer the programme to other small scale farmers in need of the support. MoA has also not carried out an impact assessment of the FISP since inception in 2002. Without an impact assessment, the MoA will be unable to ascertain whether the FISP is meeting its intended objective of improving the livelihood of small scale farmers.

For the period under review, the implementation of FISP to supply agricultural inputs was neither timely, effective nor adequate. In that; values of inputs for the two FISP modalities are not harmonised as the DIS offers superior advantage over the E voucher. Farmers on DIS receive inputs to the value of K4,260 while those on E Voucher can only redeem inputs up to the value of K2,000 (after the insurance payment of K100). This has resulted in farmers on E voucher accessing fewer inputs, producing less and may be more susceptible to food insecurity compared to the farmers on DIS contrary to the FISP objective to supply adequate agricultural inputs. On a positive note, to ensure equitability in the supply of inputs to all FISP beneficiaries, government has discontinued the E-Voucher to resolve some of the challenges presented during its implementation.

The MoA has not ensured that warehouses and Agro dealer shops used during the distribution of inputs have adequate storage, are secure and that inputs are properly stored. This has resulted in delayed delivery of inputs due to inadequate storage space, loss of inputs due to moisture and pests as well as theft. This has in turn affected the FISP objective to ensure timely supply of agricultural inputs. In addition, analytical tests on seeds and fertilisers have not been conducted before distribution to farmers hence the a Agro dealers have not been issued with any certificates to certify agricultural inputs being distributed meet the technical specifications and quality standards. Some Agro dealers have been cited for distributing poor quality seeds such as expired groundnut seeds while some suppliers have been cited for supplying substandard quality of fertilisers to farmers. Therefore, the FISP objective to supply agricultural inputs effectively has not been achieved.

Although the MoA has received submissions from the provinces on the type of seed required for each AER, the MoA has continued to take a uniform approach in distributing fertilisers and seeds to all beneficiary farmers regardless of the AER. This has resulted in farmers experiencing poor yields due to unfavourable conditions while some farmers do not collect some crop seeds which is wasteful expenditure on the part of MoA. Therefore, the FISP objective to effectively supply inputs to improve the livelihood of small scale farmers has not been attained.

Despite the MoA facilitating the process of disseminating information on FISP to the farmers, there is need to intensify sensitisations especially on FISP requirements such as insurance and diversification. In addition, in as much as the processes of farmer organisation are carried out, the frequency of these meetings is not clearly guided in the implementation of the programme. Without CAC meetings and proper membership, the selection of FISP beneficiaries, removal and replacement of beneficiary farmers, as well as collection of inputs cannot be said to be transparent thereby posing a threat to the effectiveness of the programme.

Extension services are carried out to a less extent due to inadequate funding and staffing challenges. This is attributed to most of the agriculture budget being allocated to FISP and FRA and the exceeded ratio of one officer to 400 farmers found in most camps. This has resulted in ineffective participation of CEOs in the distribution, collection and utilisation of inputs by farmers, including underutilisation of inputs and inappropriate farming techniques. Therefore, the implementation of FISP has not been effective.

The objectives of FISP to expand markets for private sector input suppliers/ Agro dealers and increase their involvement in the distribution of agricultural inputs in rural areas has been attained in both E-Voucher and DIS modalities. However, despite the attainment of private sector participation in both modalities, the programme continues to experience challenges such as late delivery of inputs and inadequate stock by the Agro dealers as a result of delayed payment to transporters and Agro dealers. The discontinuation of the E-Voucher has negatively affected private sector participation in that the Agro-dealers are no longer supplying farming inputs to the farmers as the Government has taken up the role of procuring and supplying farming inputs direct to the farmers under the DIS modality, a move which has threatened private sector participation, contrary to the FISP objective to increase private sector involvement in the distribution of agricultural inputs.

The risk sharing mechanism is a good initiative by the MoA to help farmers recover from crop loss. However, its effective implementation is faced with challenges such as low pay out amounts and low numbers of farmers benefitting from pay outs. This has resulted in farmers

redeeming gum boots, sprayers and machetes, items not commensurate to the loss suffered, due to the low value of pay outs. In some cases, some farmers are compensated while other farmers are not, despite suffering similar losses and farming within the same area. This poses a risk that the objective of the MoA to help small scale farmers recover their investment losses resulting from weather related events will not be attained.

CHAPTER EIGHT: RECOMMENDATIONS

This chapter presents the audit recommendations based on the findings of the audit. The recommendations, if implemented, may result in positive impacts with regard to the implementation of the Farmer Input Support Programme.

The Government through MoA should ensure that:

- i. A policy to wean off farmers from the programme is introduced to enable other small holder farmers benefit from the programme. At the same time, MoA should discourage the sharing of farmer packs to ensure that beneficiary farmers maximise the inputs before being weaned off.
- ii. The E – Voucher is reintroduced as a means of implementing FISP to give farmers the freedom to choose their inputs and promote diversification. Further, the MoA should also harmonise the value of inputs for all FISP beneficiaries to ensure that they are all accorded the same benefits.
- iii. The Agro ecological features of the different regions in the country should inform the distribution of farmer packs so as to ensure that appropriate seeds are distributed in the appropriate regions.
- iv. A Monitoring and Evaluation framework is put in place to enable assessments on the implementation of FISP to be conducted to enable timely decision making. The Monitoring and Evaluation framework will enable continuous reviews of the programme for the purposes of addressing implementation challenges that maybe identified to improve the programme and as a way of assessing the impact of the programme on its beneficiaries.
- v. Investments in warehousing infrastructure are made across the country to avoid incurring warehousing costs. Where this is not possible, the Ministry through the DACOs should physically inspect the rented warehouses and Agro shops to ensure that they have sufficient storage capacity, proper security and good maintenance prior to the distribution of inputs by suppliers.
- vi. Agricultural inputs distributed to farmers should meet MoA technical specifications and quality standards by issuing certificates to the Agro dealers to ensure that good quality fertilisers and seeds are distributed to the farmers. Through ZARI, stringent measures are put in place to implement quality control for both seed and fertiliser before distribution to

beneficiary farmers. Quality control should be evidenced by the issuance of certificates to Agro dealers distributing these inputs.

- vii. Sensitisation on insurance cover and packages offered, and crop diversification to FISP beneficiaries and CEOs is conducted.
- viii. Mechanisms are put in place to monitor the use of inputs by the beneficiaries to avoid abuse of agricultural inputs.
- ix. Computed pay-out amounts are made directly to affected farmers by insurance providers to enable the farmers redeem pay outs on their own.
- x. Clear guidelines on the frequency of CAC meetings are set and adhered to, to deliberate on FISP implementation which will ensure that CACs monitor the implementation of FISP and provide feedback during CAC meetings.
- xi. ATCs are issued and acquitted by individual farmers in order to ensure that the rightful beneficiaries collect farmer inputs.
- xii. The farmer targeting process is made more stringent to ensure the intended beneficiaries are on the programme. Names of beneficiaries under the programme should be printed and displayed in public places prior to the distribution of inputs to enable farmers to identify any irregularities. In addition, the FISP farmer register on ZIAMIS is linked to the National Registration Office to validate the beneficiary list.
- xiii. Investments are enhanced in national weather services, infrastructure such as satellite and capacity building of staff so as to increase accuracy in the way that the satellites capture data on the weather index and enable staff to interpret and verify information from insurance companies on triggers.
- xiv. In conjunction with the Meteorological Department, research is done on how best the Weather Index can detect the weather affected areas at both germination and area yield stages.
- xv. A review of insurance policy on FISP is undertaken to ensure that the insurance provides cover for both pre and post-harvests, floods and army worm attacks and also that pay-out amounts to farmers are realistic and able to empower farmers during their loss.

APPENDICES

Appendix 1: List of Districts on E-Voucher

| Province | District |
|----------|---|
| Lusaka | 1. Luangwa 2. Chongwe 3. Chirundu 4. Rufunsa |
| Eastern | 5. Katete 6. Nyimba 7. Petauke |
| Southern | 8. Livingstone 9. Kazungula 10. Kalomo 11. Choma 12. Monze 13. Mazabuka 14. Chikankata 15. Gwembe 16. Siavonga 17. Sinazongwe 18. Pemba 19. Namwala 20. Zimba |

| Province | District |
|----------|---|
| Western | 21. Nkeyema 22. Kaoma 23. Luampa 24. Lukulu 25. Mitete 26. Limulunga 27. Mongu 28. Kalabo 29. Sikongo 30. Nalolo 31. Senanga 32. Sioma 33. Shangombo 34. Sesheke 35. Mwandi 36. Mulobezi |
| Central | 37. Chisamba 38. Mumbwa 39. Chibombo 40. KapiriMposhi 41. Ithezhi-tezhi 42. Shibuyunji |

Appendix 2: List of Documents Reviewed and Purpose of Review

| Document | Purpose |
|--|---|
| Sustainable Development Goals - Agenda 2030 | To understand the global goals relating to poverty reduction, food security, nutrition and sustainable agriculture. The SDGs will also be used to identify assessment criteria for the audit. |
| Seventh National Development Plan – 2017-2021 | To understand the interventions being implemented by government to enhance food security at household and national level through the agriculture sector. |
| The National Agricultural Policy 2012 – 2013. | To gain an understanding of the policies that the Ministry of Agriculture has put in place in striving towards the success of FISP. To establish possible assessment criteria |
| Ministry of Agriculture- Second National Agricultural Policy 2016. | To appreciate its contents, in particular, on matters related to FISP. To establish possible assessment criteria. |
| Ministry of Agriculture Strategic Plan (2018-2021) /Business Plans for the same period. | To understand the targets and objectives of the Ministry of Agriculture through the implementation of the FISP |
| FISP 2017/2020 to 2020/2021 agriculture seasons - Direct Input Supply Implementation and E-Voucher manuals | To gain an understanding of how the Direct Input Supply and E-Voucher were each intended to work in the implementation of the FISP. |
| FISP Monitoring and Evaluation Reports for the 2017/2020 to 2020/2021 Agricultural Seasons. | To establish the impact of FISP on crop production. |
| Ministry of Agriculture - FISP Info-graphics. | To gain an understanding of the stages of the FISP programme in order to identify areas of high risk in the implementation process. |
| Ministry of Agriculture - Annual Plans and Annual Reports 2017/2020 to 2020/2021 Agricultural Seasons. | To gain an understanding of the annual plans for the MoA and to establish the extent to which planned activities were carried out. |
| Africa Portal Round-Up Newsletter - Impact of the Farmer Input Support Policy on Agricultural Production Diversity and Dietary Diversity in Zambia 2021. | To establish whether the FISP has contributed to agricultural production diversity |

| Document | Purpose |
|--|---|
| IAPRI - Implementation of a sustainable inclusive- and effective E-voucher Farmer Input Support Programme (FISP) in 2019 and beyond. | To understand the benefits/advantages of the E Voucher Farmer Input Support Programme over the conventional Direct Input Support programme |
| FISP Wrap up Reports (2017-2021) | To obtain information on when the beneficiaries received inputs in comparison to when they should have received inputs. |
| Goods Received Notes and the Acquittal Sheets signed by the farmers | To establish that farmers had collected the required inputs from the warehouse. |
| Quality and Technical Standards Certificates | To verify whether the quality of agricultural inputs meets MoA technical specifications and quality standards. |
| Monthly and Quarterly Monitoring Reports (2017-2021) | To ascertain the level of monitoring carried out by the Camp Extension Officers and how often farmers on FISP were monitored. |
| Evaluation Reports prepared by the MoA and other subject matter experts such as IAPRI (2017-2021) | To assess whether FISP had had an impact on the livelihoods of farmers since inception. |
| Minutes of Camp Meetings (2017-2021) | To determine the levels of participation by the cooperatives and beneficiary farmers and whether the Camp Agriculture Committees (CAC) were active and meeting regularly. |
| Registration Certificates 2017-2021 | To ascertain whether the farmer organisations were registered by the Registrar of Co-operative Societies or Registrar of Societies. |
| Acquittal sheets for the redeemed insurance payouts 2017-2021 | To assess the nature of the items redeemed and associated value so as to establish whether they were directly related to the loss incurred. |

| | |
|---|--|
| Comparison of summary reports of insurance pay outs obtained from the MoA and insurance companies 2017-2021 | To establish whether there is accurate capturing of data relating to insurance pay outs by the MoA and insurance companies. |
| Data from the ZIAMIS 2017-2021 | To obtain information on the number of Agro dealers distributed across the country and the documents uploaded in the system. |
| Sensitisation plans and reports 2017-2021 | To ascertain extent to which the MoA had achieved its planned activities relating to sensitisation of farmers and the number of beneficiaries reached against the intended beneficiaries. The reports provided information on the nature of sensitisation. |

Appendix 3 (i): Institutions Visited and Interviewees

| No. | Ministry of Agriculture - Officers Interviewed |
|----------------------------|--|
| HEADQUARTERS | |
| 1 | Chief Agricultural Economist |
| 2 | Senior Agricultural Economist |
| LUSAKA PROVINCE | |
| 3 | Acting Provincial Agricultural Coordinator (PACO) |
| 4 | Provincial Agribusiness Development Officer |
| 5 | Provincial Agriculture Coordinator Officer (PACO) |
| LUSAKA DISTRICT | |
| 6 | District Agriculture Coordinator Officer (DACO) |
| 7 | Senior Agricultural Officer (SAO) |
| 8 | District Marketing Development Officer (DMDO) |
| 9 | Assistant District Marketing Development Officer (ADMDO) |
| 10 | Block Extension Officers (BEO) |
| 11 | Camp Extension Officers (CAC) |
| CHIBOMBO DISTRICT | |
| 12 | District Marketing Development Officer (DMDO) |
| 13 | Block Extension Officers (BEO) |
| 14 | Camp Extension Officers (CAC) |
| RUFUNSA DISTRICT | |
| 15 | District Marketing Development Officer (DMDO) |
| MONZE DISTRICT | |
| 16 | Acting District Marketing Development Officer (DMDO) |
| MAZABUKA DISTRICT | |
| 17 | District Agriculture Coordinator Officer (DACO) |
| CHIKANKATA DISTRICT | |
| 18 | District Agriculture Coordinator Officer (DACO) |
| 19 | District Marketing Development Officer (DMDO) |
| 20 | Assistant District Marketing Development Officer (ADMDO) |
| KATETE DISTRICT | |
| 21 | District Agriculture Coordinator Officer (DACO) |
| CHIPATA DISTRICT | |
| 22 | District Marketing Development Officer (DMDO) |
| KAOMA DISTRICT | |
| 23 | Acting District Agriculture Coordinator Officer (DACO) |
| CHONGWE DISTRICT | |
| 24 | District Agriculture Coordinator Officer (DACO) |
| 25 | District Marketing Development Officer (DMDO) |
| 26 | Assistant District marketing Development Officer (ADMDO) |
| | |

| No. Ministry of Agriculture - Officers Interviewed | |
|---|---|
| NKEYEMA DISTRICT | |
| 27 | District Agriculture Coordinator Officer (DACO) |
| SINDA DISTRICT | |
| 28 | District Marketing Development Officer (DMDO) |
| KABWE DISTRICT | |
| 29 | District Marketing Development Officer (DMDO) |
| LUANGWA DISTRICT | |
| 30 | District Agriculture Coordinator Officer (DACO) |
| MUMBWA DISTRICT | |
| 31 | District Agriculture Coordinator Officer (DACO) |
| 32 | District Marketing Development Officer (DMDO) |
| SHIBUYUNJI DISTRICT | |
| 33 | District Agriculture Coordinator Officer (DACO) |
| CHISAMBA DISTRICT | |
| 34 | District Agriculture Coordinator Officer (DACO) |
| 35 | District Marketing Development Officer (DMDO) |
| LUAMPA DISTRICT | |
| 36 | District Marketing Development Officer (DMDO) |

Source: Performance Audit Field Visits 2022

Appendix 3 (ii): List of Stakeholders Interviewed

| No. | INSTITUTION | POSITION OF INTERVIEWEE |
|-----|---|---|
| 1. | Smart Zambia Institute (SZI) | Assistant Director - ICT |
| | | Director - Systems Development and Support |
| 2. | Conservation Farming Unit (CFU) | Chief Executive Officer |
| 3. | Zambia Cooperative Federation (ZCF) | Executive Director |
| | | Cooperative Development Manager |
| | | Finance Manager |
| 4. | Agriculture Consultative Forum | Executive Director |
| | | Policy Technical Advisor |
| 5. | Zambia National Farmers Union | Executive Director |
| | | Deputy Head Membership and Members Services |
| 6. | MUSIKA | Manager Agriculture Diversification |
| | | Value Addition Advisor |
| 7. | Indaba Agricultural Policy Research Reserve Institute (IAPRI) | Executive Director |
| | | Research Associate |
| 8. | Mayfair Insurance | Manager – Agriculture Specialties |
| | | Manager – Business Development |
| | | Index Insurance Analyst |
| 9. | Zambia State Insurance Cooperation (ZSIC) | Director Technical Operations |
| | | Underwriter |
| 10. | Food Reserve Agencies (FRA) | Food Reserve and Marketing Manager |
| | | Marketing Information Coordinator |
| 11. | Food Agriculture Organisation (FAO) | FAO Technical Advisor |
| 12. | Pension Insurance Authority (PIA) | Manager – Market Development |
| 13. | Alpha Commodities | Operations Manager |
| | | Finance Director |

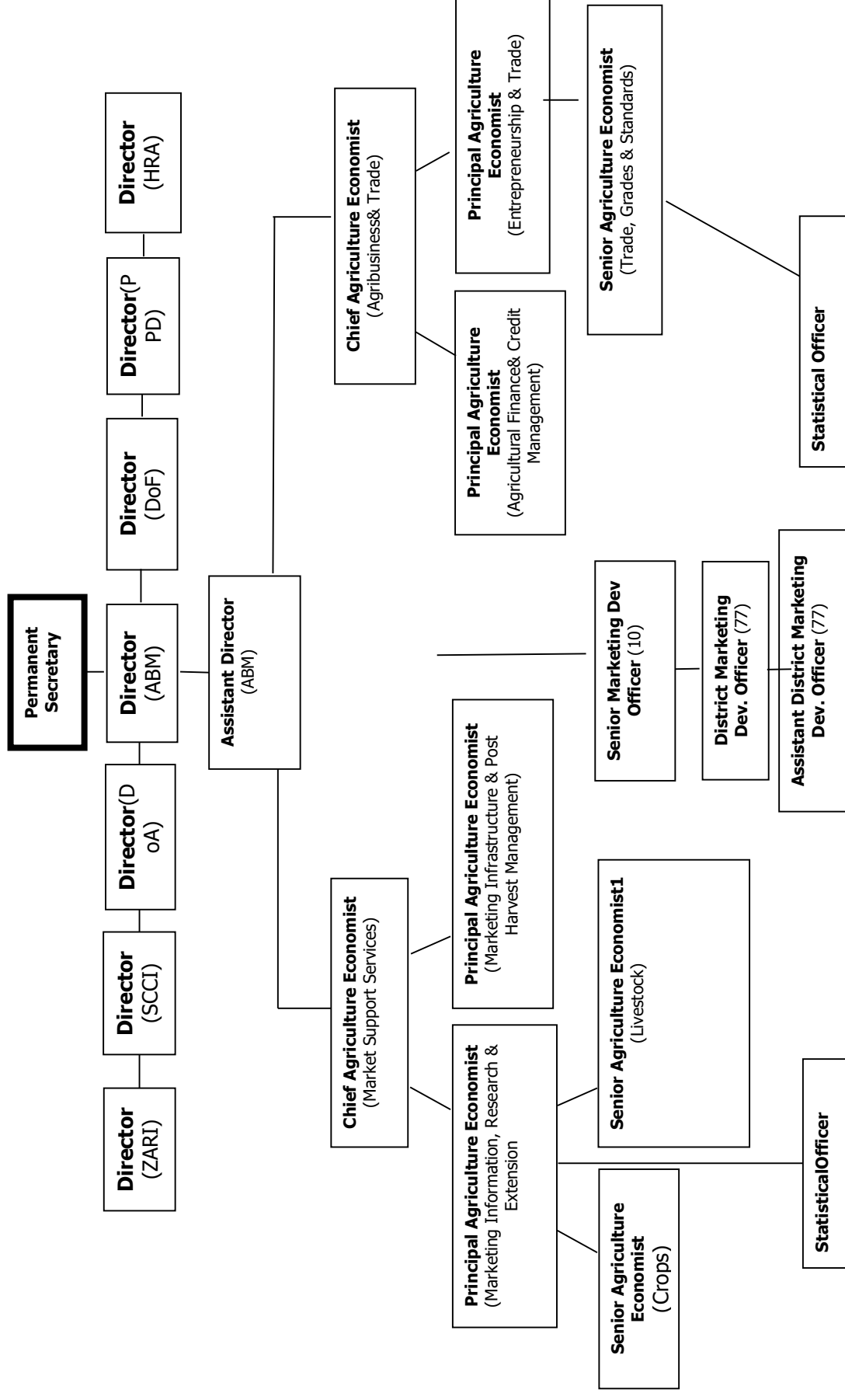
Source: Performance Audit Field Visits 2022

Appendix 4: List of Camps Visited and Farmers Interviewed

| No. | District | No. of Camp | Camp Name | Less than 3 years | Between 4 - 6 years | Between 7 -10 years | over 10 years | Total |
|-----|------------|-------------|----------------|-------------------|---------------------|---------------------|---------------|-------|
| 1 | Lusaka | 1 | Lusaka Central | 27 | 2 | 0 | 0 | 29 |
| | | 2 | Kanyama | 14 | 4 | 1 | 2 | 21 |
| | | 3 | Mahopo | 6 | 4 | 1 | 3 | 14 |
| | | 4 | Chainda | 9 | 14 | 6 | 7 | 36 |
| | | 5 | Barlastone | 3 | 25 | 11 | 2 | 41 |
| 2 | Rufunsa | 6 | Mwachilele | 5 | 12 | 9 | 3 | 29 |
| | | 7 | Nyangwena | 0 | 5 | 1 | 0 | 6 |
| 3 | Mazabuka | 8 | Namaila | 4 | 24 | 3 | 2 | 33 |
| | | 9 | Siamandengwe | 2 | 6 | 7 | 6 | 21 |
| | | 10 | Mabanze | 6 | 11 | 7 | 8 | 32 |
| 4 | Monze | 11 | Chisowa | 1 | 24 | 4 | 0 | 29 |
| | | 12 | Mahuma | 1 | 2 | 1 | 0 | 4 |
| | | 13 | Nameebo | 10 | 10 | 2 | 5 | 27 |
| 5 | Chibombo | 14 | Shimukuni | 8 | 5 | 7 | 5 | 25 |
| | | 15 | Chikumbi | 10 | 11 | 3 | 5 | 29 |
| | | 16 | Kalolo | 3 | 3 | 3 | 2 | 11 |
| 6 | Luangwa | 17 | Luangwa | 22 | 0 | 0 | 0 | 22 |
| | | 18 | Lumya B | 5 | 0 | 0 | 0 | 5 |
| | | 19 | Chitope | 15 | 1 | 1 | 0 | 17 |
| 7 | Kabwe | 20 | Kalwelwe | 9 | 18 | 8 | 14 | 49 |
| | | 21 | Mpima | 8 | 15 | 12 | 6 | 41 |
| | | 22 | Natuseko | 8 | 5 | 2 | 4 | 19 |
| 8 | Chongwe | 23 | Kanakantampa | 7 | 13 | 13 | 6 | 39 |
| | | 24 | Palabana | 3 | 8 | 3 | 1 | 15 |
| | | 25 | Njolwe | 3 | 8 | 3 | 1 | 15 |
| 9 | Shibuyunji | 26 | Shibuyunji | 4 | 8 | 12 | 2 | 26 |
| | | 27 | Kapyanga | 3 | 13 | 6 | 1 | 23 |
| 10 | Mumbwa | 28 | Shimbizhi | 0 | 8 | 7 | 3 | 18 |
| | | 29 | Mulendema | 7 | 6 | 2 | 10 | 25 |
| 11 | Chisamba | 30 | Chipembi | 11 | 3 | 0 | 1 | 15 |
| | | 31 | Chisamba | 25 | 10 | 3 | 1 | 39 |
| | | 32 | Nansenga | 4 | 5 | 3 | 5 | 17 |

| No. | District | No. of Camp | Camp Name | Less than 3 years | Between 4 - 6 years | Between 7 -10 years | over 10 years | Total |
|-------|------------|-------------|-----------------|-------------------|---------------------|---------------------|---------------|-------|
| 12 | Chikakanta | 33 | Nameembo | 5 | 7 | 3 | 6 | 21 |
| | | 34 | Namalundu | 7 | 3 | 5 | 2 | 17 |
| 13 | Chipata | 35 | Feni | 6 | 13 | 7 | 6 | 32 |
| | | 36 | Katopola | 14 | 14 | 13 | 1 | 42 |
| | | 37 | Mangwero | 10 | 6 | 1 | 1 | 18 |
| 14 | Katete | 38 | Mwanamphangwe | 6 | 5 | 7 | 0 | 18 |
| | | 39 | Chilingondi | 5 | 9 | 7 | 6 | 27 |
| | | 40 | Mphangwe | 5 | 9 | 5 | 1 | 20 |
| 15 | Sinda | 41 | Munyamandzi | 0 | 8 | 7 | 3 | 18 |
| | | 42 | Chindeza | 8 | 24 | 3 | 2 | 37 |
| | | 43 | Chafula | 10 | 7 | 7 | 11 | 35 |
| 16 | Kaoma | 44 | Naliele | 3 | 7 | 6 | 6 | 22 |
| | | 45 | Chilombo | 6 | 9 | 6 | 5 | 26 |
| | | 46 | Mulamatila | 2 | 6 | 1 | 1 | 10 |
| 17 | Nkeyema | 47 | Kalale/Nakuyuwa | 3 | 9 | 2 | 3 | 17 |
| | | 48 | Namukuye | 1 | 5 | 1 | 0 | 7 |
| 18 | Luampa | 49 | Mbayuto | 2 | 8 | 0 | 0 | 10 |
| | | 50 | Luampa | 8 | 15 | 3 | 3 | 29 |
| | | 51 | Mwanawasa | 3 | 4 | 2 | 1 | 10 |
| Total | | | | 347 | 451 | 227 | 163 | 1188 |

Appendix 5: Organisation Structure



Appendix 6: Allocation and Delivery of Inputs by Selected Suppliers

| Name of Supplier | D Compound | | | Urea | | | Balance - Allocated less Delivered (MT) | | |
|------------------------------|-------------------|-------------------|--------------|-------------------|-------------------|--------------|---|-----------------|------------------|
| | Allocation | Delivered | Delivered % | Allocation | Delivered | %Delivered | D Compound | Urea | Total |
| Nerias Investments Limited | 75,382.80 | 64,618.35 | 85.72 | 66,644.65 | 57,988.95 | 87.01 | 10,764.45 | 8,655.70 | 19,420.15 |
| Nyimba Investments Limited | 79,176.05 | 79,176.75 | 100.00 | 23,952.90 | 23,952.90 | 100.00 | (0.70) | - | (0.70) |
| Zambian Fertilizers | 18,606.35 | 18,595.35 | 99.94 | 37,279.80 | 37,304.05 | 100.07 | 11.00 | (24.25) | (13.25) |
| Rockliffe Trading | 2,776.30 | 2,776.30 | 100.00 | 12,748.70 | 2,748.70 | 100.00 | - | - | - |
| Nitrogen Chemicals of Zambia | 15,770.20 | 15,770.20 | 100.00 | 7,286.80 | 7,286.80 | 100.00 | - | - | - |
| Alpha Commodities | 23,067.80 | 23,067.80 | 100.00 | 23,960.50 | 23,960.50 | 100.00 | - | - | - |
| Totals | 214,779.50 | 204,004.75 | 94.98 | 171,873.35 | 163,241.90 | 94.98 | 10,774.75 | 8,655.70 | 19,430.45 |

Source: Ministry of Agriculture FISP Performance Report 2021/2022 Farming Season

