



THE PMRC E-VOUCHER RESEARCH REPORT 2017/2018

PREPARED BY:

RESEARCH:

Albert Kasoma (Senior Researcher) & **Esther Nchimunya Nyemba** (Researcher), with the support of **Bernadette Deka** (Executive Director)

TECHNICAL REVIEW:

Akabondo Kabechani (Head of Research and Analysis) and **Chileshe Chaunga** (Researcher)

EDITORIAL TEAM:

Chiti Jacob Nkunde (Communication Specialist) **Layout and Design**

Melody Simukali (Head of Communications & Grants) **Editorial**

This document and trademark(s) contained herein are protected by the laws of The Republic of Zambia. This electronic representation of PMRC intellectual property is provided for non-commercial use only. Unauthorized posting of PMRC electronic documents to a non-PMRC website is prohibited. PMRC electronic documents are protected under copyright law. Permission is required from PMRC to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see PMRC Permissions .
(www.pmrczambia.com/copyright).

The PMRC is a nonprofit institution that helps improve policy and decision-making through research and analysis.
PMRC's publications do not necessarily reflect the opinions of its research clients and sponsors.

 **PMRC®** is a registered trademark.

TABLE OF CONTENT

Abbreviations & Acronyms	i
Executive Summary	1
Introduction	2
Background Information	2
Objectives of the study	3
Data and methodology	4
Literature Review	4
Overview of the e-Voucher system in Zambia	7
How does the e-Voucher system operate in Zambia?	7
Discussion of Findings	9
Experiences of the 2017/2018 e-Voucher implementation	9
Challenges	10
Opportunities	12
Conclusion	13
Lessons from others countries	13
Recommendations	16
References	17

List of figures

Figure 1: e-Voucher Implementation Model	7
Figure 2: Steps in the e-Voucher Administration System	8

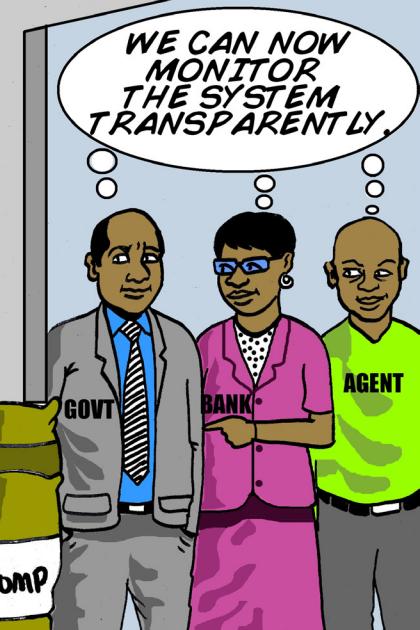
ABBREVIATIONS AND ACRONYMS

7NDP	Seventh National Development Plan
ATD	Authority to Deposit
DACO	District Agricultural Co-ordinating Officers
DC	District Commissioners
DMDO	District Marketing Development Officers
e-Voucher	Electronic Voucher
FAO	Food & Agriculture Organization
FISP	Farmer Input Support Programme
GDP	Gross Domestic Product
GESS	Growth Enhancement Support Scheme
GRZ	Government of Republic of Zambia
Ha	Hectare
ICT	Information and Communication Technology
MoA	Ministry of Agriculture
NRC	National Registration Card
PEPs	Electronic Payment System (PEPS)
PMRC	Policy Monitoring & Research Centre
SSA	Sub Saharan Africa
SZI	Smart Zambia Institute
USD	United States Dollar
ZESA	Zimbabwe Electricity Supply Authority
ZIAMIS	Zambia Intergrated Agricultural Management Information System

THE PMRC E-VOUCHER RESEARCH REPORT

2017/2018



**ZIAMIS
SYSTEM**

EXECUTIVE SUMMARY

The **Electronic Voucher Farmer Input Support Program** (e-voucher) was fully implemented during the 2017/2018 farming season. An assessment of the program during the 2017/2018 farming season did reveal some notable implementation successes such as; *reduced Government costs associated with procurement, transport and storage of inputs*. The other successes relate to increased private sector participation in input distribution especially in rural areas and an increase in beneficiary targeting.

It must be noted however, the e-Voucher also faced challenges notably; *delays in Government funding resulting in late distribution of e-cards; poor internet connectivity and poor flow of beneficiary information*. These challenges made stakeholders especially farmers and agro-dealers not to appreciate the e-Voucher program.

INTRODUCTION

In order to harness the potential of the e-Voucher program, Government need to address all key challenges faced during the 2017/2018 farming season by ensuring early commencement of the program and provision of adequate funding. The e-Voucher also presents an opportunity for Government to improve on beneficiary targeting, improved monitoring of programmes and promotion of private sector participation. Farmers' access to agricultural inputs is a backbone for any agricultural transformative and productivity agenda. The importance of subsidy on increasing fertilizer use for boosting agriculture productivity and economic growth sets back to 1960s during **Asian Green Revolution**. The success of Green Revolution in Asia was associated with government's support on subsidies, credits and improved infrastructure and uptake of technologies through research and extension.

The Zambian Government like many other governments in the Sub-Saharan Africa (SSA) has, since 2002, implemented **Farmer Input Support Program (FISP)** as part of its agricultural transformation agenda. In order to achieve the overarching objectives of the agricultural transformative agenda, FISP program has undergone a lot of changes in form of implementation. One of the major changes has been the shift from traditional farmer inputs distribution system to the electronic voucher method through agro-dealers. This change was necessitated by the poor performance of the traditional method of input distribution despite increased funding to the program. Though being in existence for over 15 years, and continued high funding due to administrative costs (tendering process, transportation and storage), SSA countries have been experiencing low crop yields, low levels of crop diversification and low levels of reduction in rural poverty.

BACKGROUND INFORMATION

Agriculture is important to every country's economy because it provides several benefits among other things; jobs, it ensures food security and contributes to the country's Gross Domestic Product (GDP). In Zambia the agricultural sector supports the livelihood of approximately **70 percent** of the population and contributes around **10 percent** of GDP besides being the backbone of the Zambian rural economy. *Of the 4.1 percent economic growth recorded in 2017, Agriculture, Forestry and Fishing combined had the highest contribution of 1.2 percent (Central Statistics Office, 2018).* In view of the above,



Agriculture supports approximately 70% of Zambia's population

the **Seventh National Development Plan (7NDP)** and the **Economic Stabilisation and Growth Programme (ESGP)** put particular emphasis on **Agriculture** alongside **Tourism, Energy** and **Mining**, as the basis for diversification (Seventh National Development Plan, 2017). It is against this background that the Zambian Government has over the past 15 years been implementing the FISP whose aim has been premised on economic gains to small-scale farmers and to the country as a whole through increased productivity and promotion of private sector participation in input distribution. Increased agricultural productivity have been viewed as having the potential to increase agricultural contribution to GDP, increase household food security and reduced vulnerability.

Poverty continues to be the greatest challenge Zambia is facing. Unlocking the smallholder agricultural development potential is critical for poverty reduction, food security and nutrition for Zambia (*Siambe, Lichilo and Siambe, 2017*). The costs for managing the FISP have been escalating since its inception and many experts have advised that the funds could be utilized in other agricultural projects with higher impact. Under the conventional FISP, input supply faced a lot of challenges, therefore, e-Voucher system was introduced to mitigate all such challenges.

It is against this background that the Government fully implemented the e-Voucher program in 2017/2018 farming season after successfully piloting the program in selected districts in 2016/2017 farming season. The overarching objectives of the e-Voucher include:

- *Reduced public expenditure associated with delivery of inputs*
- *Promotion of private sector participation in agricultural input distribution*
- *Promotion of crop diversification through provision of freedom of input choice to farmers*
- *Improved beneficiary targeting and reduced resource leakages through duplicate farmers and unintended beneficiaries by linking farmers to their National Registration Cards (NRC).*

OBJECTIVES OF THE STUDY

This study was necessitated by the full implementation of the e-Voucher in order to provide an assessment for the successes and failures in operationalisation of the program. The following were the objectives of the study:

- i. *To assess stakeholders' experiences in the implementations of the e-voucher.*
- ii. *To identify challenges faced in the implementation of the e-voucher system.*
- iii. *To identify the opportunities to further enhance the implementation of the farmer input support program.*

- iv. To offer research-based recommendations from the lessons learnt in order to improve the implementation of the e-voucher program.

DATA AND METHODOLOGY

The study employed the use of in-depth interviews conducted with various stakeholders in the agriculture sector who included **Farmers, District Agricultural Co-ordinating Officers (DACOs), District Marketing Development Officers (DMDOs), Banks, Agro-dealers and District Commissioners (DCs)**. The study was conducted in three purposively sampled provinces; Lusaka, Central and Southern Provinces. **The following districts were covered: Chibombo, Chongwe, Chisamba, Kabwe, Kapiri Mposhi, Kafue, Monze and Mazabuka.**

Some of the information obtained during the study included: performance of the financial institutions, farmers and Agro-dealers perception of the e-voucher system, performance of the Zambia Intergrated Agricultural Management Information System (ZIAMIS) system and generally the overall performance of the e-voucher system when compared to the traditional method of input distribution.

LITERATURE REVIEW

Mason et al, (2013) in a study aimed at reviewing Zambia's agricultural input subsidy indicates that subsidies for fertilizer and seed were the cornerstone of many SSA governments' agricultural development and poverty reduction strategies. The Government of Zambia has devoted a considerable share of its agricultural budget to input subsidies which has been as high as **30 percent** of total agricultural sector spending, and **4 percent** of the agricultural sector poverty reduction programme spending. Through Farmer Input Support Programme (FISP), Government provided beneficiary farmers with subsidized fertilizer and hybrid maize seed. However, the impacts of the FISP program exhibited a significant degree of crowding out of commercial purchases of hybrid maize seed and fertilizer (*Mason et al, 2013*). This is mainly because subsidized inputs are generally targeted to relatively better off households who could afford the inputs at commercial prices. For smallholder crop production an increase in the quantity of subsidized fertilizer acquired by a smallholder household raises its maize area planted, yields, and output.

Musika (2018) notes that apart from improving beneficiary targeting and promoting timely access to inputs by increasing private sector participation, the 'e-Voucher' programme has the potential to accelerate diversification of the smallholder sector by allowing farmers to purchase a wide range of recommended inputs such as veterinary drugs, agricultural equipment, livestock, poultry and fingerlings. Before rolling out the e-Voucher system, the Government piloted the system in 13 districts. In this process, the Government identified 20,000 ghost farmers and subsequently removed them from the list of eligible farmers (*Moono, 2017*).

Siame et al., (2017) in a study that focussed on assessing the performance of e-Voucher observes that the administration of the FISP manual system has had challenges resulting in high operational cost and/or decimal impact on smallholder performance and graduation. In order to mitigate the FISP challenges, the FISP Electronic Voucher System was introduced in 2015/2016 farming season. The research concluded that it was difficult to state whether the e-Voucher system had helped in crowding-in private agro-dealers when there was a committee that approved the Agro-dealers to be incorporated in the system. The research further recommended for a better and sustainable exit strategy for farmers who would graduate from receiving inputs. This shall lead to the formation of value adding enterprise along the agricultural value chains by those exiting the e-Voucher system and consequently make it possible for the smallholders to participate in agricultural industrialization.

Chikobola and Tembo, (2016) noted that the objective of the Government of the Republic of Zambia (GRZ) on FISP reforms from conventional FISP to e-Voucher was to increase competitiveness in the agricultural sector among all key players (*input suppliers, agro-dealers, banks, etc.*), while improving farmers' welfare. The policy reforms were intended to ensure that FISP is more efficient, cost-effective and effective in supporting diversification and accelerating agriculture development (*Ministry of Agriculture [MoA], 2016*). Government's role is to oversee and monitor, while the private sector are to manage key FISP processes. Direct distribution of inputs by Government involved a lengthy and bureaucratic tendering process that was very time-consuming, and often the inputs reached the beneficiaries late (*Mangisoni et al. 2007*).

Using e-Voucher as a method of input distribution has also been introduced in other African countries. In Nigerian it is called the **Growth Enhancement Support Scheme (GESSION)**. GESSION is the subsidized fertilizer delivery mechanism using e-Voucher which is directly sent to beneficiaries' mobile phone as text messages so as to decrease the leakages to non-genuine farmers (*Obayelu, 2016*). It started in 2012 and targeted 5 million farmers registered every year. The programme aimed to distribute a voucher of 100 kilograms of fertilizer directly and electronically to those registered farmers for 4 years (*Obayelu, 2016*). The purpose of GESSION was to increase agricultural productivity by enhancing input use (from 13 kg to 50 kg per Ha) and to activate private sector fertilizer and seed industry by moving away from the public procurement and distribution of agricultural inputs.

In Malawi, a combination of direct input distribution and vouchers known as the **flexi-vouchers** has been used (*Obayelu, 2016*) In 2005/2006 the country introduced the Farm Input Subsidy Program (FISP) that used paper coupons (*vouchers*) as a means of input redemption. But this paper-based voucher system faced myriad of challenges among which were: *influx of counterfeit coupons leading to the introduction of the e-Voucher system in 2013/2014* (*Obayelu, 2016*). The fully scaled up e-Voucher in all the districts enabled, beneficiaries to redeem both seed and fertilizer. Farmers were expected to pay a cash price when redeeming the coupon. This price was equivalent to about one-third of

the retail price of fertilizer. Because of the large scale of the program, its budgetary costs have been difficult to control, and displacement of smallholder commercial fertilizer sales had been high.

The e-Voucher as the mode of input delivery in Zimbabwe was introduced in 2011/2012 farming season through FAO (*Obayelu, 2016*). The objective of the programme was to provide e-Voucher beneficiaries with agricultural inputs of their choice, to get more agro-dealers and suppliers on board and re-establish more business relationships while at the same time help to re-vitalise the supplier-wholesaler-retailer chain in rural areas. E-voucher dubbed *Electronic Payment System (PEPS)* were targeted at districts where there was mobile network coverage, Zimbabwe Electricity Supply Authority (ZESA) coverage, and an Agro-dealer/ Electronic Payment System (PEPS) retailer network at ward level. PEPS ensured immediate cash payment of commission to retailers and real time electronic transmission of payment to the relevant wholesalers/suppliers. Swipe cards were loaded with e-vouchers to the value of USD 160 and distributed to selected vulnerable beneficiaries.

In Tanzania, the Government has been subsidizing the fertilizer and other agricultural inputs through the **National Agricultural Input Voucher system (NAIVS)**. Poor smallholder farmers who were the beneficiaries of NAIVS were expected to increase crop productivity per unit area and hence reduce extensive farming/shifting cultivation. The study by Hepelwa et al.,(2013) used the panel data analysis technique to analyse agricultural data collected in year 2007(before NAIVS) and 2012 (during NAIVS). The study found a statistically significant difference between crop harvest by households with and without access to NAIVS. The average crop yield (production per area) was relatively higher in 2012 than the yield in 2007. On average the area cultivated by the households increased more than double in 2012. Majority poor smallholder farmers did not access the NAIVS due to high market price of inputs not well compensated by the static low value of NAIVS. Also, the study found that the effect of NAIVS was significantly high to the well-off households. The implication from this finding is that the NAIVS was not achieving the intended objective of increasing crop productivity by the poor smallholders.

Generally, it can be concluded that e-Voucher systems in agriculture has replaced the conventional FISP that worked using paper vouchers. E-voucher administration strengthens the distribution chains by stimulating competition in the market. It also speeds up payments to agro-dealers and helps them build better links with the wholesaler suppliers. E-vouchers are more secure and allow instantaneous payment to the agro-dealer. The e-Voucher will help avoid monopoly by any single agro-distributor, and bring services closer to farmer.

OVERVIEW OF THE E-VOUCHER SYSTEM IN ZAMBIA

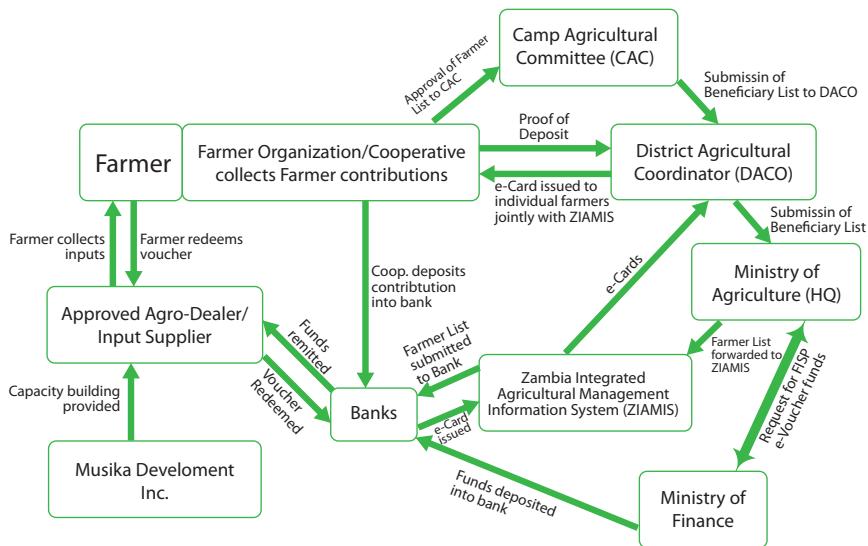
After successfully piloting the e-Voucher system in the 2015/2016 and 2016/2017 farming season, Government in the 2017/2018 farming season announced 100 percent implementation to all the beneficiaries countrywide. In order to understand the experiences of the implementation of the e-Voucher for the 2017/2018 season, it is important to understand how the system works and how different it is from the conventional FISP.

HOW DOES THE E-VOUCHER SYSTEM OPERATE IN ZAMBIA

According to Kutuya et al., (2016), an *e-Voucher* is an electronic system that uses a mobile delivery and tracking system to distribute subsidized products through private-sector suppliers to targeted farmers. In the case of Zambia, the e-Voucher program is being carried through a web-based platform called the **Zambia Integrated Agricultural Management Information System (ZIAMIS)**. The ZIAMIS was designed as a web based, real time registration and electronic payment system with associated applications to co-ordinate and operationalise the key processes of the electronic voucher system.

The following are the processes involved in the e-Voucher administration systems.

Figure 1: e-Voucher Implementation Model



Source: Adapted by PMRC

Figure 2: Steps in the e-Voucher Administration System



Source: Adapted by PMRC

Through ZIAMIS, Ministry of Agriculture (MOA) and all stakeholders in the implementation of the e-Voucher were able to conduct the following:

1. Establishment of a consolidated and harmonised farmer register attached to farmer details and National Registration Cards.
2. Registration of input suppliers including their products and recommended prices.
3. Registration of Agro dealers and their location to ensure accessibility of inputs by farmers.
4. Inclusion of an input catalogue for all recommended inputs with their prices and packaging.
5. Tracking of farmer contributions made through financial service providers before authorization of Government contribution (subsidy).
6. FISP subsidy authorization management of Government contributions to farmers.
7. Input redeeming management through tracking of inputs redeemed by farmers at

respective Agro-dealers and monitoring of Agro -dealers performance.

8. Monitoring and providing an oversight of progress and activities of all stakeholders involved in the program.

DISCUSSION OF FINDINGS

Experiences of the 2017/2018 e-Voucher implementation

Despite having a number of implementation challenges, the e-Voucher system scored a number of successful stories towards its objectives. Firstly, the implementation attracted the participation of more private players in the input supply programme than never before. Such players included Agro-dealers, financial institutions and insurance providers. There were approximately over **5,000** Agro-Dealers country wide in the period under review compared to about **1,000** Agro-Dealers during the 2 years piloting period. These Agro-Dealers set up shops everywhere and were able to stock diverse inputs and chemicals. Secondly, most farmers interviewed attested to the fact that through the e-Voucher, they were able to access a diverse of agricultural inputs than before.

Interactions with **District Agriculture Coordinating Officers (DACOs)**, **District Commissioners (DCs)** and **DMDOs** reviewed that the ZIAMIS platform was an enabler of good data management and information sharing tool. At the time of the study most of the District Agricultural offices (DACOs) were almost done with their implementation reports. The efficiency design of the ZIAMIS was appreciated by most DACOs as it made their work easier than the use of conventional methods of distributing inputs that required the use of paper at every stage.

The findings of the study revealed that farmers had mixed feeling towards the e-Voucher. Some farmers praised the system as being convenient because they are able to get inputs of choice at their own time and within their own localities. On the other hand, some other farmers, especially those whose cards were not activated on time, felt that the system was a threat to their food security and livelihood. They suggested early commencement of the program as a solution to solving all the problems faced.

CHALLENGES

The study also identified a number of hiccups associated with the implementation of the 2017/2018 e-Voucher system. It was realised that some of the challenges faced in the 2017/2018 season are similar to the ones faced during the piloting of the e-Voucher as discussed below.



Lack of Internet Connectivity

The 2017/2018 e-Voucher implementation faced the challenge of connectivity which was a similar problem faced in the piloting of the program. Interactions with selected agro-dealers reviewed that internet connectivity was an extra cost and hindered the effective operations of the ZIAMIS system. More specifically lack of internet connectivity posed a challenge as regards farmer registration and access to farmer activation codes especially in rural areas leading to delayed sharing of information among stakeholders.



Lack of branches for accredited banks in some districts

Some Banks engaged by Government to implement e-Voucher did not have presence in some districts. The absence of bank coupled with the use of proxy banks was a challenge in the period under consideration leading to failure by some farmers in the affected districts to make their mandatory beneficiary deposits.



Delayed turnaround time for queries

Centralized e-Voucher services by banks led to delayed turnaround time for farmer queries and prompt rectification of problems. A 'system set-up' where only bank headquarters had the authority to carry all e-Voucher related services with branches only attending to receipt of farmer deposits posed a challenge regarding handling of farmer queries.



Delayed activation of farmer cards

The study revealed that delayed activation of farmer cards led to delayed access of inputs by farmers and this had a negative bearing on agricultural productivity. Most farmers had made their mandatory deposits but did not have their e-Voucher cards activated. Sometimes farmers received activation codes from Smart Zambia institute (Szi) (which signalled authorization to upload funds on the e-Cards by Government to the banks) but some banks took long to effect the activation. This negatively impacted on farmers' confidence in the system.



Lack of e-Readiness for the implementation

This study also revealed the lack of e-Readiness in the overall implementation of the e-Voucher; There was insufficient ICT equipment and inadequate training of agro-dealers.

The ZIAMIS system was only meant to accommodate a given number of farmers at the pilot stage. The 100 percent rollout of the programme presented a number of problems such as system crashes and slowed down processing time since minimal efforts were made to upgrade the system.

Training which was given to agro-dealers and other stakeholders on how to use the ZIAMIS platform was not adequate. Training was given to one member from each participating Agro-Dealer business. In most instances the owners of the businesses went for training and later trained their workers. A close scrutiny of this training mode however, showed that business owners did not adequately train their workers.

The study also revealed that the farmer registration faced challenges of lack of suitable and reliable equipment especially in remote rural. For example, Personal Digital Assistants (PDAs) given to camp extension officers in rural areas (some of which did not have power sources) for purposes of farmer detail registration often needed battery recharging. This led to delays in farmer registration especially for camp officers who were operating in remote rural areas.



Fragmented and incomplete farmer information

The administration of 2017/2018 e-Voucher was characterized by mismatch and sometimes incomplete farmer details on the ZIAMIS platform and bank details. The fragmentation of farmer information led to delayed access of **Authority to Deposit (ADTs)** by farmers and eventually failure to deposit at all.



Delayed disbursement of Government contribution

The disbursement of Government contribution was done in phases which resulted in delayed loading of farmer cards by banks. To make matters worse the loading of cards was not done on first come, first serve basis but, rather, was done randomly. This was an outcry that made most farmers fail to appreciate the e-Voucher programme.



Failure by banks to fully integrate into the ZIAMIS system

Due to the rules and regulations that banks operate under, most of them did not fully integrate with the Zambia Intergrated Agricultural Management Information System (ZIAMIS) system with their bank systems. This development came with its own challenges in the implementation of the e-Voucher.

OPPORTUNITIES

The study identified some opportunities in the e-Voucher implementation. The following are some of the opportunities that were identified in the overall administration of the e-Voucher that can help in achieving agricultural development in the country.

Improved beneficiary targeting

The establishment of a consolidated and harmonized national database of beneficiaries on the ZIAMIS system can help strengthen beneficiary targeting by Government for other programmes besides FISP. Through the registration process the system was rid of ineligible beneficiaries such as households on Government payroll which is consistent with FISP policy objectives. The system went further to verify and track non-existing and duplicate farmers.

Promotion of private sector participation

The successful implementation of the e-Voucher system offers an opportunity for increased private sector investment into Government programs thus reducing Government expenditure and service delivery. The e-Voucher has a multiplier effect on job creation; as more private investors participates in the e-Voucher implementation, more jobs are created in the transportation, storage and selling of inputs in Agro-dealer outlets.

Improved monitoring of the program

The Zambia Intergrated Agricultural Management Information System (ZIAMIS) platform is an important tool for monitoring the FISP program as it provides a consolidated system where all implementing stakeholders carry out their business on a single platform with real time processing. The platform offers an opportunity for the Ministry of Agriculture (MoA) to monitor progress towards agricultural diversification as the redeeming of inputs give some indications on crop diversification activities that farmers are engaged in.

CONCLUSION

Notwithstanding the challenges that the e-Voucher has faced in its first year of full implementation, the program had a good success rate. The program recorded a success rate of **80%** of beneficiaries (*Presidential Speech, National Assembly, 2018*). The ZIAMIS system has demonstrated to be a valuable platform that Government should endeavor to use for quick service delivery. Of the 804,260 targeted delivery, 716,161 managed to access Government support (*Presidential Speech, National Assembly, 2018*). The system has also proven to be a cost-effective mechanism for input delivery with reduced Government direct involvement in procurement and transportation. If well implemented, the e-Voucher has the potential to make FISP smart in that it simultaneously serves as a mechanism to target intended beneficiaries and enhance demand in private sector markets.

LESSONS FROM OTHER COUNTRIES



Zimbabwe

E-Voucher system has been a very useful tool to Zimbabwe given the challenges that the banking sector was facing in terms of cash stock outs and inflation (*FinMark Trust Report, 2016*). An emerging trend has been the use of e-Vouchers as an agricultural and credit facilitation tool. The e-Voucher scheme is run by the Government of Zimbabwe, through the Ministry of Agriculture, Mechanization and Irrigation Development (MoAMID) in partnership with the FAO, USAID and EU (*FAO, 2012*). While the e-Voucher scheme is still a pilot programme, reviews indicate that for farmers, e-Vouchers reduced incidences of corruption, while for retailers, there are significant improvements in linking retailers and farmers.

However, there are challenges such as lack of collateral security among agro-dealers to help them access credit for bulky input purchases. There is also a tendency of price hikes for agricultural inputs and tools (*IRIN, 2012*). A related issue is the general need for wholesaler insurance to ensure wholesalers are assured of compensation in the event that agro-inputs are not purchased.



Malawi

Malawi has had a Farm Input Subsidy Programme (FISP) with an innovative ICT component that issues e-Vouchers to smallholder farmers to improve farm input efficiency and distributive effectiveness. The e-Voucher was introduced via the local mobile money provider, known as Zonna, to curb corruption in the FISP (*Kilic, Whitney and Winters, 2015*).

E-voucher implementation was affected by the **lack of network coverage in most rural areas**. Government had however, planned to introduce the use of bio-metric registration system probably by end of 2018.

The distribution of seed-packs through the e-Voucher had substantially increased output. The programme, however, has been criticized because the architecture for marketing is absent, and transaction costs are high. As a result, informal markets are the instruments of trade, with little or no recording of data.



Tanzania

Tanzania uses the community-based targeting. This targeting method has been used repeatedly across Sub-Saharan Africa, but has been shown to be quite ineffective due to political favouritism or misunderstanding by community leaders of the criteria through which they identify beneficiaries to receive the subsidized inputs (*FinMark Trust, 2016*).

Experts had tipped the Government that the e-Voucher was going to fail as long as measures were not put in place to prevent failure. Businesses which profited from the conventional input delivery mode are much more likely to fight and oppose the e-Voucher system. The main assumption of the e-Voucher model is that efficient input delivery will translate into better utilization which might not be the case ('*Electronic Smart Subsidies in Agriculture (ESSA)*', 2010). Therefore, e-Voucher can only be successive if there is extensive awareness and training of all stakeholders on the administration and operationalization. There is also need to empower agro-dealers so that they can easily access credit from commercial banks to stock adequate fertilizer and other inputs at their redemption centres.



Mozambique

Prior to the launch of the e-Voucher scheme, the paper-voucher had been active in Mozambique since 2013, and was gradually replaced by the e-Voucher after the successful outcome of the pilot phase. The e-Voucher project remained under implementation at least until the end of 2017/2018 agriculture season.

In Mozambique the voucher system caters for 50 percent subsidy whilst farmers are also supposed to pay the remaining 50 percent (Nagasawa, 2017). Thus, this program lacks inclusiveness necessary to reach the intended beneficiaries. The greater the participation in the program, the greater the socio-economic impacts will be. Program evaluations that have been conducted so far show that one of the primary reasons many farmers did not use the vouchers was lack of money to make the necessary co-payment to purchase the seed-fertilizer package. This finding suggests that a more generous initial subsidy could be

smarter, bringing in more people and spurring greater learning across a broader range of less well-off farmers, including women.

We conclude that the subsidy programs do work for poverty reduction if targeted to vulnerable and potentially viable farmers and maintained for 3-5 years. Subsidies also improve food security but at a huge cost. They lead to leakages and crowding out of private sectors. They are effective if they are mainly crop-specific and are not sustainable; and may work as a short-term fix for price spikes because they distort markets.

RECOMMENDATIONS

1. PMRC urges Government to continuously monitor the entire e-Voucher implementation system to ensure that the programme is cost effective to administer, promote crop diversification, improve timeliness in inputs distribution, improve the quality of inputs, build private sector capacity in inputs marketing and distribution. In addition, provide means to easily introduce farm risk mitigation measures and ultimately improve household and national food security as well as farm incomes for small-holder farmers.
2. PMRC urges the Government to ensure that all financial institutions fully integrate with the Zambia Intergrated Agricultural Management Information System (ZIAMIS) platform to ensure data harmonization.
3. PMRC urges Government to set aside adequate funds for programme sensitization, training of stakeholders and monitoring of the implementation process. Some farmers for example exhibited limited knowledge on the current developments with regards to the overall e-Voucher program and weather insurance.
4. In order to improve service delivery, PMRC continues to urge Government to decentralize selected functions of the Ministry of Agriculture (MoA) in the implementation of the e-Voucher such as selection of Agro-dealers.
5. PMRC urges Government to ensure timely disbursement of funds for program implementation.
6. PMRC urges early commencement of the program in order to have enough time to work on challenges that arise during implementation. Beneficiaries should be allowed to make their contribution before the onset of the farming season.
7. PMRC implores Government to monitor banks to ensure that they promptly upload e-cards as soon as Government gives authorization. One of the several problems faced in the last farming season, was that banks were not uploading money as soon as Government released funds. Consequently, farmers received inputs late and this contributed to poor crop yields.
8. PMRC encourages Government to ensure that all participating financial institutions decentralize e-Voucher related services so as to improve problem solving and response time. Generally, there was delayed response to programme queries by participating financial institutions in the last farming season because of centralization.

REFERENCES

- Chikobola, M. M. and Tembo, G. (2016) ‘Gaps in the implementation of the e-voucher system in Zambia: Implications for strategies to make the model efficient and effective’, African Journal of Agricultural and Resource Economics, 13(2), pp. 193–197.
- ‘Electronic Smart Subsidies in Agriculture (ESSA)’ (2010). Morogoro: Sokoine University of Agriculture. Available at: <http://www.tropentag.de/2015/abstracts/posters/55.pdf>.
- FinMark Trust (2016) Agriculture Subsidies in SADC Countries: Current Status and Impact.
- Hepelwa, A. S., Selejio, O. and Mduma, J. K. (2013) ‘The Voucher System and the Agricultural Production in Tanzania: Is the model adopted effective? Evidence from the Panel Data analysis’, Environment for Development, (August), p. 24.
- Kilic, T., Whitney, E. and Winters, P. (2015) ‘Decentralised beneficiary targeting in large-scale development programmes: Insights from the Malawi farm input subsidy programme’, Journal of African Economies, 24(1), pp. 26–56. doi: 10.1093/jae/eju021.
- Kuteya, A. N. et al. (2016) ‘Lessons Learnt from the Implementation of the E-voucher Pilot’. Lusaka.
- Lungu, Edgar. “Presidential Speech for the official opening of the Third Session of the Twelfth National Assembly, 2018.” National Assembly, Government of the Republic of Zambia, 14 Sept. 2018.
- Mason, N. M., Jayne, T. . S. and Mofya-Mukuka, R. (2013) A Review of Zambia’s Agricultural Input Subsidy Programs: Targeting , Impacts , and the Way Forward. 77. Lusaka.
- Moono, H. (2017) Exorcising Government Inefficiency Through E-systems, International Growth Centre (IGC), Zambia. Available at: <https://www.theigc.org/blog/exorcising-government-inefficiency-through-e-systems/> (Accessed: 27 August 2018).
- Musika (2018) ‘FISP Electronic Voucher Programme to Promote Diversification’. Lusaka, pp. 0–15.
- Nagasawa, T. (2017) The effect of Farmers Field School on inputs investment through electronic voucher (e-Voucher) scheme . A case study in 4 provinces of Central Mozambique. Wageningen University.
- Obayelu, A. E. (2016) ‘Cross-country comparison of voucher-based input schemes in sub-sahara Africa agricultural transformation: Lessons learned and policy implications’, Agriculturae Conspectus Scientificus, 81(4), pp. 251–267.

Siame, M., Lichilo, I. and Siame, N. (2017) 'An Assessment of FISP e-voucher Performance', International Journal of Innovative Research & Development, 6(7), pp. 188–212.



Unlocking Zambia's Potential

Correspondence on this Briefing Document can be sent to:
info@pmrczambia.net

Policy Monitoring and Research Centre (PMRC)
Plot No. 36c Sable Road, Kabulonga, Lusaka, Zambia
Private Bag KL 11
Tel: +260 211 269 717 | +260 979 015 660

www.pmrczambia.com

