



## **E-Voucher Performance and Recommendations for Nationwide Rollout during the 2017/18 Farming Season**

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### **Summary of Key Points**

- The traditional Farmer Input Support Programme (FISP) is beset by challenges to an extent it is failing to deliver against its main objectives of increasing productivity and poverty reduction. Despite over 15 years of implementing FISP, crop yields remain persistently low, without significant reduction in rural poverty, yet the costs of the program remain very high.
- Against this background, the Government piloted the electronic-voucher system (e-FISP) to replace the ailing traditional FISP. The pilots have had some notable successes:
  - A comparison of implementation costs between the e-voucher and conventional FISP showed that Government could save a lot of money by implementing FISP through the e-voucher, as there are no procurement, transportation, storage, and handling costs involved.
  - Participation of the private sector in input distribution to rural farmers increased by 83%, from 230 agro-dealers during 2015/16 farming season to 422 during the 2016/17 season.
  - Although farmers were still biased to redeeming fertilizer and maize seed, the system encouraged agricultural diversification. For instance, in the livestock rich areas such as Southern Province, about 10% of the households reported purchasing veterinary drugs and dip chemicals and another 5.5% redeemed their vouchers for insecticides and herbicides.
- However, the pilots also faced challenges. Delays in launching the pilot for the 2016/2017 pilot had some significant consequences. Delayed government funding resulted in e-cards to be distributed late, towards the end of December 2016. This led to farmers failing to redeem inputs ahead of the growing season.
- To harness the huge potential of the e-FISP, the Government needs to address key challenges faced during the pilot and commit early to the nationwide rollout of the program to ensure that the system is ready for the 2017/18 agricultural season.
- To support the rollout, bureaucracy and staff induced inefficiencies would be reduced by automating most of the processes, especially card activation. For instance, farm registers should be made electronic to improve transparency in the system and banks can tie card activations to farmer deposits rather than to be manually initiated.
- Most significantly, a nationwide sensitization/education program for farmers and stakeholders implementing the e-FISP needs to be part of the rollout process.
- With these measures in place, the e-voucher can be a success and deliver a more cost effective input subsidy that supports agricultural diversification and alleviates rural poverty.

**CONTEXT:** Although the FISP subsidy program has been in place since 2002, it is marred with several weaknesses. The overall objective of FISP is to increase private sector participation in the supply of agricultural inputs to small-scale farmers and contribute to increased household food security, improve agricultural productivity and income. Due to the weaknesses associated with the program, very few of these objectives have been met.

Poor implementation has resulted in the late delivery of fertilizer to farmers, a situation that compromises farmers' crop yields. When fertilizer is provided, it is not necessarily used effectively by smallholder farmers and the *one size fits all* blanket fertilizer recommendation fails to take into account spatial variability of soil fertility and climatic conditions. The net result is yields remaining stagnant, and below the 5MT/ha target set out in the Malabo declaration.

Despite FISP, rural poverty has consistently remained high, declining only marginally from 78 to 76% since FISP was introduced in 2002. Targeting has also been a problem in that a reasonable share of subsidized fertilizer has not been reaching those who can buy commercially priced fertilizers (Jayne et al. 2011; Mason, Jayne, and Mofya).

Despite these shortcomings, Government expenditure on input subsidies via FISP has remained very high due to the tendering process, transportation, and storage. Between 2009 and 2017, spending on fertilizer subsidies through the FISP was above 30% of the total budget allocation to the Ministry of Agriculture (MoA). Spending on FISP comes as an opportunity cost to other more effective broad-based social protection investments that have higher returns.

After many years of lobbying for FISP reform, the Government in 2015 started piloting the e-voucher (hereafter referred to as e-FISP), first in 13 districts during the 2015/16 agricultural season and expanded to 39 districts during the 2016/17 farming season. The e-FISP is intended to address

the issues facing the traditional FISP; especially reducing public expenditure by promoting private sector led input distribution and marketing as depicted in Table 1. In particular, the e-FISP is intended to achieve the following objectives:

- Reduce public expenditure on the delivery of inputs;
- Crowd in more private sector in agro-input distribution, thereby promoting competitiveness and transparency in the supply and distribution of inputs;
- Ensure timely delivery and access to inputs by smallholder farmers;
- Provide farmers with freedom to choose inputs of their choice thereby promoting agricultural diversification and;
- Reduce leakages and increase the number of intended beneficiaries by linking the e-cards to a particular farmer and their National Registration Card (NRC).

The Government of Zambia has indicated its intentions to rollout the e-FISP countrywide starting during the 2017/18 farming season. This policy brief outlines some key areas that need to be addressed to be able to successfully implement such a rollout. We begin by drawing from lessons learnt from the pilot and then give a road map to guide the Government to move forward. More concerted efforts from both public and private sectors will be urgently required to make the rollout a success.

**DATA AND METHODS:** Since the launch of the e-FISP pilot, MoA partnered with the Indaba Agricultural Policy Research Institute (IAPRI) to monitor the program implementation in pilot districts. The objective of the exercise was to document the successes and challenges of the e-FISP implementation to inform the upscaling of the program.

The monitoring entailed visiting the pilot districts, interviewing various stakeholders including farmers, banks, agro-dealers and MoA Provincial and District Agricultural Coordinators (PACOs and DACOs) and

**Table 1. Cost Savings Comparison between Traditional FISP and e-FISP**

Activity	Traditional FISP		e-FISP
	Done by Government	Done by Government	Done by Private Sector at their own cost
Pre-planning	✓	✓	
Tendering	✓		
Procurement	✓		✓
Distributing to districts	✓		
Distributing to satellite depots	✓		
Selecting beneficiaries (meetings)	✓	✓	
Facilitating collection of moneys	✓		✓
Storage of inputs	✓		✓
Handling costs	✓		✓

Source: Adapted from Sitko et al. (2012) with authors' modifications.

Marketing and Development Officers. The last visit was done in February 2017 in 13 pilot districts.<sup>1</sup> Figure A1 in the appendix summarizes how the e-FISP pilot was being implemented in 2016/17 farming season.

**EXPERIENCES FROM THE 2016/17 E-FISP PILOT:** During the 2016/17 agricultural season about 25% of FISP was distributed through e-FISP. Findings from the monitoring exercise show that despite the implementation challenges the e-FISP system has crowded-in more private sector participation in the distribution of inputs to rural farmers in the 39 expanded pilot districts. In the 2015/16 farming season alone, more than 230 new agro-dealers came on board as a result of the e-FISP pilot and this number increased to 422 in the 2016/17 farming season. Most of these agro-dealers reported setting multiple shops in different districts. In addition, agro-dealers were able to stock more diverse inputs in their shops. Despite some notable delays in e-cards activation, most farmers reported having access to inputs of their choice on time in nearby agro-dealer shops.

During the first pilot, survey results from IAPRI/MoA e-FISP survey in 13 districts showed that in general, about 85% of the

farming households redeemed their vouchers for fertilizer and maize seed while the other 15% purchased other farm inputs. However, there was variation by province. For instance, in the livestock rich areas such as Southern Province, about 10% of the households reported purchasing veterinary drugs and dip chemicals, 2.6 and 2.9% redeemed their vouchers for insecticides and herbicides respectively (Kuteya et. al. 2016).

Based on these results, the purchase of other inputs apart from maize seed and fertilizer is likely to increase with the proposed countrywide rollout in 2017/18 farming season, unlocking the potential for agricultural diversification.

Despite these successes, the second pilot phase faced some major challenges threatening the countrywide rollout of the e-FISP. Of all these, the most significant problem can be attributed to the delayed and erratic Government funding of the program. As will become more apparent in the recommendation section, upfront funding of the e-voucher program is essential to its success (whereas under the traditional FISP suppliers can advance fertilizer and seed to Government on credit). Box 1 summarizes the challenges threatening the successful implementation of e-FISP in the 39 districts of the second pilot.

<sup>1</sup> Central (Kabwe), Muchinga (Chinsali, Isoka and Nakonde), Luapula (Mansa and Samfya), Northern Kasama and Mungui), Copperbelt (Ndola, Chingola and Mufulira) and North-Western (Solwezi and Mwinilunga) provinces.

### Box 1. 2016/17 E-Voucher Pilot Implementation Challenges

- ✚ Generally, the program started late as provinces started receiving electronic cards around 25th December, 2016. This was largely due to non-availability of funds as the country was just coming out of the 2016 general elections and referendum, so funds were not there to activate e-cards on time. Similar to the first pilot, the implementation of the program in the 39 districts also experienced serious delays in e-cards activation.
- ✚ According to MoA field staff and farmers, the e-cards activation was very slow, in some instances taking more than three weeks after farmers had deposited the 19% contribution (K400 per farmer). In addition, a number of incidences of card activation failures were reported, but DACOs were not provided with farmer details to enable them take some quick corrective action.
- ✚ In Northern, Muchinga, Luapula, North Western, and Copperbelt Provinces, there was a shortage of fertilizer from agro dealers mainly because national input suppliers such as the Nitrogen Chemicals of Zambia (NCZ) failed to meet the national demand for D-compound. Due to fertilizer supply shortage, prices went up from K224 to between K300 and K370 per 50kg bag between December 2016 and February 2017.
- ✚ Some farmers complained that Agro-dealers swiped their cards when they had no inputs in stock. This meant agro dealers used farmers' money as capital without their knowledge.
- ✚ There is clear evidence that farmers often did not properly understand the voucher system. For instance, there were reports that farmers who swiped their cards in advance were disadvantaged because they did not benefit from lower input prices prevailing at the time when the inputs were delivered as they had to agree on a price at the time of swiping. There were also reported incidences of farmers surrendering their non-activated cards to agro-dealers to access inputs in advance. This could have led to some farmers being disadvantaged as some agro-dealers might have redeemed the cards in the absence of the farmers;
- ✚ As in the first pilot, the e-voucher redemption system still did not have the capability to identify the type of inputs redeemed by farmers, limiting the usefulness of data captured. The inability to identify the inputs redeemed makes it impossible to map the demand for various inputs, information that will be useful for input suppliers and monitoring the extent to which the program is helping unlock agriculture diversification.

Source: MoA/IAPRI's e-FISP implementation monitoring visits.

**ACTIONS NEEDED FOR SUCCESSFUL NATIONWIDE ROLLOUT OF E-FISP:** In order to successfully rollout the e-FISP program nationally, there is need to first address the challenges highlighted in Box 1 above. In addition, there are a number of requirements for such a rollout to work. The following are suggested options for a smooth and successful e-FISP implementation:

**Timely Funding of the Program:** For the e-FISP to function smoothly, funds must be made available to agro-dealers as soon as a farmer redeems inputs. Therefore, in line with the Ministry of Finance commitments

in the 2017 budget to reduce arrears and improve budgeting, funding for the e-FISP must be made available on time to ensure timely activation of e-cards to enable farmers to redeem agro inputs early. For the program to run smoothly, operational funds at district level should be released on time.

**Sensitization of Stakeholders:** To ensure all stakeholders understand the program objectives clearly, there is need to conduct a national sensitization program that can be done through community radios, televisions, print media, etc. Among the players that need to be targeted in the national awareness and sensitization of the program include

farmers, agro dealers, national input suppliers, political leaders, and district commissioners. The sensitization program among other things should encourage clearly spelt out the Dos and Don'ts for farmers, cooperatives, agro-dealers, banks and MoA staff to help facilitate the smooth operations of the program. In addition, farmers should be reminded about the objectives of the subsidy and the requirements for participation especially the down payment before Government tops up the balance.

**Role of Banks Need to Be Enhanced:** To avoid delayed e-card activations, banks could tie activations to farmer contribution deposits such that once a farmer deposits their 19% contribution the system automatically activates the farmer's e-card. Such an electronic system if possible would eliminate delays caused by a laborious system where lists are managed manually. The trigger for e-card activation should be the deposit. Otherwise, if this is not possible for the coming season, at a minimum cards should be activated within one (1) week of a deposit being made, without the need for a subsequent visit to a bank or local center.

Farmers need not wait weeks to have their e-card PIN code problem resolved; instead, there should be a system that allows local banks to handle issues of lost PIN codes including activations.

Given the volume of issues that may arise during the farming season, it is recommended that banks set-up dedicated desks to handle e-FISP farmer deposits and issues. Also, there should be a mechanism that allows farmers to use any bank that is in their locality.

**Continuous Monitoring:** It is of great importance to have an effective monitoring system throughout the life of the program to enhance trouble shooting. Another important aspect is that of having bar codes for all the agro products covered under the e-FISP for

proper monitoring and evaluation of the program on diversification. This information can further be used for targeting as well as cluster marketing (for agro-dealers) in subsequent farming seasons.

**PROPOSED ROAD MAP FOR ROLLING OUT e-FISP:** At the FISP Indaba on 10-11 March 2017, IAPRI set out a roadmap for the Government to successfully implement the e-FISP nationally. Table 2 summarizes what action is needed, and when, from Government and other participants to make e-FISP a success. This is extracted from a more detailed road map that IAPRI, MoA, and others are continuing to develop.

**CONCLUSION AND RECOMMENDATIONS:** The e-FISP pilots demonstrate that e-FISP can be a success opening the way to reducing the cost of providing input subsidies and diversifying the agriculture sector. The pilots also show that when the modalities are in place the e-FISP system works, and is understood by farmers; however, getting these modalities into place is a significant challenge.

Given this evidence, IAPRI calls on the Government to commit to the full rollout the e-voucher for the 2017-18 season and by doing so commit to:

- making funds available on time to enable the activation of cards, holding banks to account to deliver e-cards on time and urgently educating farmers to enable them to benefit in full from the e-FISP;
- creating an independent delivery taskforce to implement the road map set out in this brief to ensure the processes, actors and resources are in place to make sure it is success; and
- an ongoing evaluation of the program, including checks to test readiness for rollout ahead of the 2017-18 season.

**Table 2. Proposed Road Map for Rolling out e-FISP**

Timing	Action required	Lead actors	Expected Outputs	Notes
April	Granting of Authority by Cabinet and clear commitment to roll out e-FISP	Government (The Executive, Ministry of Finance (MoF), Ministry of Agriculture (MoA), Ministry of Fisheries and Livestock (MFL))	Authority granted and public statement issued	Clear message from the Executive and Ministries responsible for implementation that there is no turning back and that resources will be sought to fund e-FISP
April	Set up public-private task force to oversee implementation and tackle arising challenges	MoA/MFL/MoF	Task force formed	There are a number of stakeholders who can commit their time and funds to help Government oversee the successful implementation. This should include institutions who have been supporting farmers through electronic vouchers, e.g., FAO, ZNFU.
April - May	Review beneficiaries and compile list of 2017 beneficiaries and make it electronic	MoA/MFL	Updated list of beneficiaries	FAO through its country representative offered at the FISP Indaba <sup>2</sup> to help Government to register farmers and sensitization
April - May	Procurement of cards for all verified beneficiaries	MoA/MFL/MoF/Banks	Cards printed and collected from banks	Meetings with all selected/participating banks, funds made available for e-cards printing and collection of cards from banks
April - May	Set up of an Integrated Information Technology working group	MoA/MFL	Integrated Information Technology working group formed	The task force should include the Banks, representatives from phone companies and technology companies
April - May	Publicize the range of agro inputs that are covered under the e-FISP system	MoA/MFL/Stakeholders	e-FISP inputs publicized	Set list of inputs that e-FISP will be extended to so that agro-dealers/input suppliers know the full opportunity and can plan stocks ahead of the agro-dealers selection process
May - June	Agro-dealer selection, registration and training.	MoA/MFL/Stakeholders	Agro-dealers selected	Train agro-dealers and advise them on stocking a wide range of products to promote agricultural diversification. This could be done with the assistance of Institutions such as Musika who have experience with training agro-dealers

<sup>2</sup> Indaba – literally means dialogue.

Timing	Action required	Lead actors	Expected Outputs	Notes
June – July	Train district staff and other stakeholders involved in the e-FISP implementation	MoA/MFL	Provincial and District Coordinators (PACOs & DACOs), Provincial Marketing Officers, District Marketing Development Officers, Extension officers trained	MoA to make available the e-FISP implementation manuals and other e-FISP awareness materials
June – July	Publicize the range of agro inputs that are covered under the e-FISP system and train farmers on e-card operations	MoA/MFL	e-FISP inputs publicized. awareness programs - e-FISP awareness materials printed and distributed	Having defined the inputs and selected agro-dealers. This is the time to educate farmers in how the cards work, as well as what they can purchase. This will need to be done as part of DACOs' role in each district, as well as with central information programs
Aug – Oct	e-FISP roll out	MoA/MFL	Farmers' deposits and e-card activations/input redeeming	With all modalities in place (finances, farmers identified and selected agro-dealers trained and notified of demand expectations), cards can be distributed to target beneficiaries
April - Dec	e-FISP monitoring	MoA/MFL/IAPRI	Monitoring and Evaluation	Other interested stakeholders can join to help with funding the monitoring exercise. Monitor program throughout the course of the roll-out to ensure corrective measures are taken as soon as they happen.

Source: IAPRI/MoA/Stakeholders' suggested roadmap on rolling-out e-FISP nationally.

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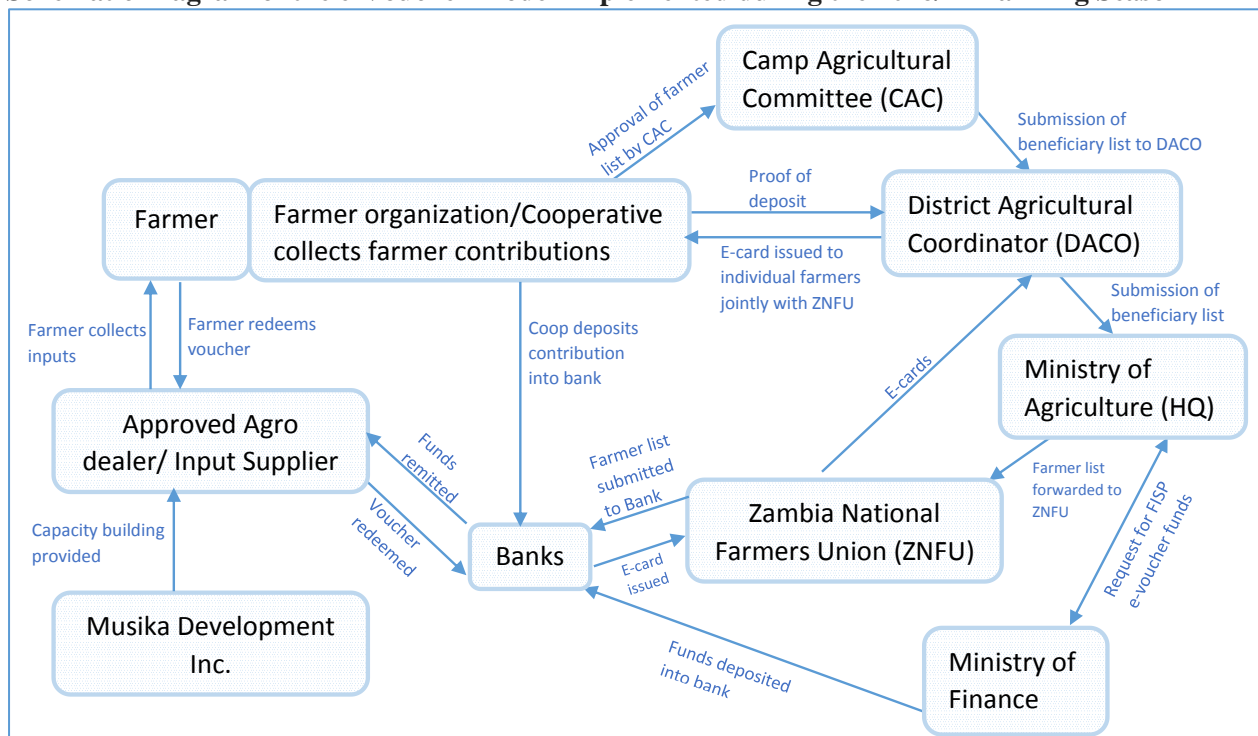
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## Appendix A1.

### Schematic Diagram of the e-Voucher Model Implemented during the 2016/17 Farming Season



Source: Adapted from the 2016/2017 e-voucher implementation manual with author's modification.