

## **An evaluation of the agro-dealers' role in enhancing diversification among farmers of Chibombo district of Zambia.**

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### **Abstract**

**Background:** Agriculture has a significant role in adding to financial development and guaranteeing food and nutrition security of any given nation. It is for this reason that the agricultural sector has been advocating for agricultural diversification especially among small scale farmers who are the majority in our country. To realise this, several players among them agro-dealers have a major role to play to enhance diversification for small scale famers. Therefore, this study tried to evaluate the role agro-dealers play in enhancing diversification among farmers of Chibombo district of Zambia

**Methods:** an explorative research design based on qualitative approach to data collection from 14 small scale farmers, 4 agro-dealers and district agriculture staff was used. Content and thematic analysis formed part of the analytical methods used for this study.

**Results:** The study findings reveal that agro-dealers are key players in advancing agricultural diversification among small scale farmers through increased farmers' access to both crop and livestock inputs, thereby boosting agricultural productivity. In addition, the SSFs have also benefited from ago-dealers by forming out grower schemes who are supplied then supplied with inputs in a timely manner. Further, it was also found that if agro-dealers where to be financially capacitated, they can even do better by consistently and efficiently supplying the goods and services required by the farmers.

**Conclusion:** It has been observed that agro-dealers do enhance agricultural diversification but not to their full potential. There are so many gaps that for diversification to occur there is need for intervention. Agro-dealership is a business and small-scale farmers should regard farming as a business for diversification to take place. There is need for all stakeholders to be encouraged to engage in awareness creation and capacity building of the agro-dealers to effectively equip them with skills and knowledge essential to help farmers.

**Keywords:** Small Scale Farmers, Agro-dealers, Agriculture Diversification, Zambia

## Introduction

Over the years, there has been emphasis on the significance of diversification to the agriculture sector especially in line with making the sector Zambia's main source of revenue. This may make sense due to the fact that majority of rural Zambia heavily depends on farming as a livelihood. This in turn is intended to uplift rural livelihoods whose poverty levels rose from 73.6% in 2010 to 76.7% in 2015 (World Bank, 2020). In addition, the call for diversification is meant for increased productivity in the sector. There is therefore need to measure agriculture diversity. Amongst the ways of doing this is to assess the crop and farming diversity, that is, the number of crops grown and the number of overall farming activities including livestock husbandry (Waha et al., 2018). Improving agriculture diversity does to some extent translate into an important element and also contributes to resilience and resource conservation, which was highlighted in the 7<sup>th</sup> National Development Plan (7NDP). The 7NDP provides a foundation for diversification, to ensure that vision 2030 is achieved as agriculture is the key driver. However, this requires investment into the major agents of agricultural diversification such as rural infrastructure, agricultural research and development, market information, irrigation, and lastly services like agriculture extension and credit (Ministry of National Development and Planning, 2006).

Apart from agents of diversification, it is important to look at farmer categories. There are four classifications, which are identified by; an individual farmer, initially small-scale farmers claiming 0.5-10 hectares of land; followed by emergent farmers owning 10-20 hectares; medium-scale farmers owning 20-60 hectares; and lastly large scale or also known as commercial own more than 60 hectares. In addition, Small scale farmers (SSF) in Zambia are characterized by their low

levels of crop diversification with statistics showing that 18% of SSF only cultivate one crop, 32% of them grow two crops, while 29% grow three crops (Mofya-Mukuka and Hichaambwa 2016). Aside from crops, livestock brings a lot of socio-economic benefits that are a vital source of livelihood for rural small-scale farmers. In the same vein, the livestock and fisheries sector has been identified as high potential area that can be used for agricultural diversification (Ministry of Agriculture and Corporate, 2011).

These small scale farmers tend to enhance their livelihood by raising one type of livestock, which doesn't depict the whole purpose of diversification. To magnify this, Kabaghe (2017) explain that in Zambia, livestock diversity also varies just like crop production, but overall, the livestock sector seems underdeveloped because most investments are directed to cattle production. In addition, the livestock sub-sector plays significant financial and social functions among small-scale farmers. For example, poultry farming has been expanding by 20% every year. The pig business has also experienced significant growth over the most recent years (NAP, 2004-2015). Besides, technologies such as improved crop varieties, livestock vaccines, and information as well as communication technologies are expected to ultimately enhance poverty eradication and stimulate economic growth through agricultural production.

In line with this, the government has and is still trying to help farmers especially SSF in the best possible way, especially by implementing programmes such as the Farmer Input Support Programme (FISP) including other subsidies that would benefit farmers. In so doing it has also called on the private sector to join in the implementation of the government's support to the farmers to overcome food insecurity in the country by providing inputs and equipment to support SSFs address the challenges in diversifying

especially in rural areas where agriculture is the mainstay of the daily activities.

Even though the private sector through agro-dealers have been perceived as a path to improvement, some challenges have been faced by this sector among them being insufficient accountability to farmers, inadequate provision of services and limited provision of farmer's needs (Poulton, Dorward, and Kydd, 2010).

Since the agro-dealers are in close contact with the SSF, they are seen as the main people who can help overcome farmer's challenges through the provision of irrigation equipment, rearing of different domesticated animals among others.

Over the years, the main role that the private sector has played in agricultural diversification is developing technologies to raise productivity in agriculture and stimulate agricultural diversification through agro-dealership. It is for this reason that, agro-dealers assume a significant part in guaranteeing that farmers access and utilise goods and services they provide to increase their yields and improve disease and livestock management. By definition, *an agro-dealer is someone, business organisation and sometimes cooperative society that engage in the sale and purchase of agricultural input* (Adato and Meinzen-Dick, 2007). The agro inputs sold by agro-dealers fall into various types like fertilizers, pesticides, animal feed, seed, professional agricultural information and farm implements or equipment among others.

Moreover, literature has tried to suggest the concept that agro-dealers can help enhance diversification through SSF. According to Mwanamwenge and Cook (2019) in their write-up on beyond maize exploring agriculture diversification in Zambia from different perspectives, they argue that diversifying agricultural production can possibly build the accessibility, reasonableness, and availability of assorted and nutritious

food, and is one of the huge responsibilities the country can make to food security and sustenance. In addition, diversification requires making stronger networks and an all-encompassing approach including a range of partners' like agro-dealers. Nonetheless, though agro dealers are prepared to help crop broadening and livestock farming, their stock is driven by farmers' requests and information supplies. As such, since their study did not look at agro-dealers as value chain elements that can help achieve agriculture diversification among SSF (Bognaglia, 2009), this study is key to understanding the role they play.

In addition, Belt et al, (2015) in a study on making inputs accessible for smallholder farmers in Africa, where they talked of what was needed for agriculture to prosper, they did not look at the challenges the agro-dealers face and the presumption of how small-scale farmers can improve on the standard of farming and the challenges they face, which are unexpected agricultural events like market, price fluctuations, pest, disease infestations, and lastly climate change conditions. For SSF to really diversify, it is vital that farm inputs should be accessible, moderate, open, and of good quality if the farmers are to benefit through quality agricultural inputs that will improve their productivity, efficiency and revenue (Rosegrant et al., 2001; World Bank, 2007; AGRA 2013).

Further, Olomola (2014) in his IFPRI (International Food Policy Research Institute) discussion paper titled "business operations of agro-dealers and their participation in the loan market in Nigeria" argues that, this sector lacks policy attention if indeed they are to contribute to the success of the ongoing agricultural transformation. In essence this simply, means that without a clear policy direction, agro-dealers' contribution towards providing a leading role in the affairs of SSF including agricultural diversification will not be clearly stated

and they will do things as they please. Others have tried to look at determinants of agro-dealers participation in providing loans to farmers (Adesina 2009).

Generally, SSF consist of a large portion of farmers in Zambia 1.5 million, despite the fact that agro-dealers have been interacting with SSF for quite in Zambia and Chibombo district in particular which prides itself in both crop and livestock farming, no evidence has been documented on how they have enhanced the small scale farmers' agricultural diversification. Moreover, these farmers still face food insecurity particularly at household level. Hence, this study aims at assessing the role that agro-dealers play in the agricultural diversification of small-scale farmers including the challenges faced by both.

## **Methodology**

### **Research Design**

For this study, an explorative research design was used to ensure maximisation of the discovery of information to help us have a general description and understanding of the problem at hand based on the qualitative approach to data collection (Stebbins, 2001).

### **Study setting**

Chibombo is midway situated at the core of Zambia and offers limits with Lusaka on the South and Kabwe on the North. It covers an all-out surface region of 8, 342km<sup>2</sup>, and a population of 199,626 with a development pace of 2.6% (www.cen.gov.zm/exp). The District can be categorized as one of the nation's most dynamic rural areas with critical tracks of arable land for yield and domesticated animals' agribusiness. Other agro exercises incorporate poultry and domesticated animals being one of the backbones of the District exercises

### **Study population**

The population for this study included small scale farmers (14) who are in interaction with the agro-dealers, four (4) agro-dealers, District Agriculture Coordinator (DACO) and District Agriculture Marketing Officer (DMCO).

### **Sampling Design and Sampling Procedure**

The study employed a purposive e sampling method with the desire to obtain information on small scale farmers who have benefited from the agro-dealers (agents/actual agro-dealers) and help provide the benefits and challenges faced as they try to diversify their agricultural production.

### **Data Collection**

Data were collected in February and March 2021. Interview guides were utilized to investigate insights with regards to how agro-dealers enhance agricultural diversification for small-scale farmers in Chibombo. Interviews were directed in the dialects of Nyanja and English held in perceptibly, private areas and all study participants were encouraged to straightforwardly talk about their opinions.

For purposes of this study, data collection was done by using both primary and secondary methods of data collection, which included:

1. Primary data collection through:
  - a. In-depth Interviews with: (i) small scale farmers to help gather practices, experiences and perceptions of the role played by agro-dealers in enhancing their diversification, and (ii) the agro dealers perspectives on what they are doing to enhance SSF to diversify
  - b. Key informant interviews with DMCO and DACO. These

interviews helped to identify the policy and programmatic areas being undertaken by government in ensuring the private sector (agro-dealers) are a key component of agricultural diversification among small scale farmers

2. Secondary data through document review of government policy and other external documents related to the subject matter.

### **Data Management and Analysis**

All the data collected from the IDIs and KIIs were transcribed and were necessary translated into English and was thereafter checked for precision. Utilizing thematic and content analyses, the records were audited a few times and a bunch of codes were created to portray gatherings of words, or classes, with comparative implications. The gathered classes were refined and used to create themes arising from the data. Direct quotations from small-scale farmers, agro-dealers and agricultural district officers' key informants are presented in italics to feature key discoveries.

### **Ethical Considerations**

The researchers strived to uphold all ethical research principles in conducting this research by ensuring informed consent before participating in the study, anonymity and confidentiality with the data provided and discontinuity towards participation.

### **Covid-19 Prevention Measures**

The following measures, among others, were undertaken by the researchers to reduce the risk of contraction and spread of the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the virus responsible for COVID-19 by: Maintaining social distancing and COVID-19 prevention measures with interviewees as recommended by WHO and Ministry of

Health Zambia; and avoiding handshakes with interviewees.

## **Results**

### **Benefits derived from agro-dealers by farmers: Demand Perspective**

#### *Proximity to the sources of inputs*

Proximity, as well as time spent to access agro-inputs, were highlighted by small scale farmers as some of the benefits of dealing with agro-dealers in Chibombo district. Four respondents attested to the fact that having agro-dealers closer to them saved on time and transport expenses that would have been incurred while seeking assistance. In instances where farmers experienced challenges regarding animal rearing, agro-dealers came in handy by providing technical advice on how best to handle such problems. As a result, this did not only save time but money as well, allowing them to focus more on other pressing needs. Furthermore, agro-dealers stock a variety of agro-inputs and these inputs are usually of good quality which includes: improved seed, fertilizer, pesticides, insecticides, livestock vaccines, and technical advice. Such agricultural inputs are considered important particularly to small-scale farmers. This is supported by what one of the respondent opined that:

*“Sometimes we do not have enough transport money to follow the experts for guidance. But since Agro dealers are present within the community, we easily access help from them. It reduces the cost of doing business”.*

#### *Accessing goods on credit*

Findings also show that Agro-dealers provide inputs to small scale farmers on credit. This is a plus for small-scale

farmers, especially in instances where they can't afford to pay upfront. This also improves the relationship that exists between agro-dealers and farmers. One of the respondents explained:

*“The benefit of having agro dealers is that, when you don't have enough money, they are able to give you on credit. They understand when you explain to them and they get to know you. They tell you when to pay them, but they will give you what you want at that time”.*

#### *Out grower scheme opportunities*

Another benefit of having agro dealers is that, it presents an opportunity for both small scale farmers and agro dealers/agro food companies to develop out grower schemes. Out grower schemes create a relationship between farmers and agro-dealers which in turn benefited both. However, one of the respondents indicated that farmers tended to benefit more because they received agriculture inputs from agro-dealer but the maize harvested also belonged to them. The respondent went on to say that the agro-dealer's main objective was to advertise their products and in so doing the farmer benefitted. One of the female beneficiaries explained:

*“Last year when one of the agro dealers planted maize on our land which is along the road, just because they wanted to advertise their maize variety. They planted their maize and applied their fertilizer. We did not give them any money but they still gave us all the maize that was harvested”.*

This may mean that the agro dealer used their piece of land as a demo-plot for their maize variety, also as a way of advertising to road users.

#### *Other technical advice to farmers*

It also emerged that, agro dealers offer technical advice to small-scale farmers on agricultural issues. This does not only help the beneficiaries enhance their

productivity but also enables them become more resilient to ..... for instance, one of the respondents explained that that when pests infested his field, he was able to seek guidance from the agro-dealer in his area. He confidently indicated that if faced with a challenge, he could still approach them for technical advice not only on maize but also vegetables including tomatoes.

#### **How Agro Dealers Help Small Scale Farmers Diversify: Views from Agro Dealers**

##### *Providing guidance*

As agricultural diversification becomes a prominent topic, the use of improved livestock chemicals, improved seed varieties, etc is inevitable among small-scale farmers. Agro-dealers in Chibombo have attested to the fact that they usually provide guidance to small-scale farmers, ranging from seed varieties to the proper use of livestock chemicals, which may to some extent, encourage the farmers to diversify. One of the agro dealers explained that they provided advice and short lectures on some topics depending on what small scale farmers wanted to venture into. The advice provided ranged from crop production to livestock management. Stocking products in smaller packages

As it has been established, small-scale farmers struggle with having access to certain inputs because of high prices. Most inputs such as fertilizer are too expensive for small scale farmers. It emerged that, in order to enable farmers' have access to affordable inputs, Agro-dealers in Chibombo district offer smaller packages of cheaper seed varieties, livestock chemicals and fertilizer. This, it was assumed, would give farmers an opportunity to diversify. Agro-dealers affirmed that they stock small quantities of seed varieties and other products to give chance to more small-scale farmers to purchase and hence diversify their

produce. One of the agro dealers explained:

*“we stock both small quantities and big packaging. When we go to order inputs, we know that only a few can afford to buy big packaging. So, what we do is we order small quantities so that anyone can afford”.*

### **How Do Agro-Dealers Enhance Diversification? Ministry of Agriculture Perspective**

#### *Stocking variety of products*

Agricultural diversification involves a lot of aspects, among them is stocking a variety of products that may give an opportunity to farmers to diversify. The DACO explained that, agro-dealers stock a variety of products, allowing small-scale farmers close by to access them, and hence diversify. The DACO accentuated that agro-dealers enhance diversification because of what they stock and most of their products are certified such as seed which is a plus for the farmers. He also indicated that agro dealers stock animal feed to encourage those wishing to start keeping livestock to do so. He put it this way:

*“In a way agro dealers do help agricultural diversification because of what they stock. They stock quite a range of products which farmers may be looking for, starting from fish farming. Those involved in fish farming they’ll find maybe feed for fish being stocked. Feed for livestock being stocked, medicines of which are chemicals that are used in controlling diseases. Then livestock will be stocked and then they’ll also find seed of various crops being stocked and fertilizer also. So, from that point of view, let’s say a farmer wants to diversity, he has been maybe growing a crop like maize in and out so then he wants to diversity, he’ll go to the agro-dealer and ask for some other crops let’s say Soya beans or groundnuts, they’ll find these crops there and other certified seed crops. So, from*

*that point of view, I can say yes they do encourage diversification in the district”.*

#### *Bring inputs closer to farmers*

The other way Agro-dealers enhance diversification among small scale farmers is by bringing inputs closer to the farmers.

In order to increase productivity, farmers require agri-inputs and this has led to most agro-dealers taking up the agro-dealing business. This is an advantage for the farmer because they are able to purchase products without having the need to travel to urban areas which may be far away. Bringing inputs closer to them does not only help them diversify but also cut on unnecessary costs.

DMDO added that farmers are however, at liberty to either request for inputs from Lusaka or the agro-dealer based on their preferences, would stock the inputs. He explained that to some extent it saves the farmer time and transport costs. The DMDO put it this way:

*“Agro-dealers help farmers in a very big way because they actually bring inputs closer to their door step at times, they may go to an agro-dealer, and they’ll ask “do you have this input, can order for me”? Which as individuals they cannot go and maybe that input can only be found in Lusaka, it will be expensive for a single farmer to go get that. But the agro-dealers, based on the preferences of the farmers, they get those inputs stock them and sell them to the farmers”.*

### **Type of Agro-Dealers Found in Chibombo**

According to DACO & DMDO, the prominent type of agro-dealers operating in Chibombo district are private operating business entities. These may be wholesalers or retailers. They buy directly from the manufacturer or sometimes an importer. These agro dealers try to provide

a service to the farmers across Chibombo district, by selling commodities of agricultural nature. By so doing, they derive a profit;

Both the DACO and DMDO stated that the types of inputs provided by these agro-dealers range from crop to livestock inputs. It emerged that the agro dealers also stocked equipment for land preparation and irrigation like watering cans. The key informants also revealed that there were few agro-dealers who even stocked inputs like legume-related crops such as soya beans, beans and cowpeas just to encourage crop-livestock integration which is currently promoted by the Ministry of Fisheries and Livestock and Ministry of Agriculture. Findings also indicated that several agro-dealers in Chibombo were involved in aggregation, which means coming together to encourage the growing of soya beans and value addition. To that effect, the DMDO indicated that the aggregation project which was run by Amack in Kembe area had seen many farmers benefitting from it. They benefitted in the sense that they could procure certified seed from agro-dealers through the project.

*“Agro-dealing is a business by people who are selling commodities of agricultural nature to the farmers and they derive a profit from that.*

*So those are the type of agro-dealers we have who have stationed here and have shops where they stock these commodities that these farmers need. So, you’ll find they have commodities like seeds, a variety of seeds, legumes, vegetable seeds, and cereal crop seeds like maize, Sorghum, so they’ll stock such type of and they sell to the farmers. Apart from that, they’ll also stock other commodities like medicine for livestock and or in the rearing of livestock.*

*They also stock equipment for land preparation like ploughs as well as irrigation such as watering cans and other tools. So, they’ll stock quite a range of*

*commodities used in agriculture, yeah!”*  
DACO

### **Measures to Improve Productivity of Small-Scale Farmers in Chibombo District**

According to the small-scale farmers Agro-dealers need to hold seminars for farmers. This is because, farming practices have remained the same for a long time and the issue of diversification still remains a myth. This has led to call for strategies that are needed to spur the use of improved technologies such as fertilizer, improved livestock chemicals, the improved seed variety, and pesticides.

Findings from the small-scale farmers indicate that agro dealers need to hold seminars or training targeting farmers as a way of sharing agricultural knowledge, technologies and other valuable information. This may go a long way in linking the farmer to promoting household food security and poverty reduction. Thus, Agro-dealers have a huge role in agricultural diversification in that they need to conduct some kind of workshop to educate small-scale farmers on the fundamentals of agricultural diversification. Some respondents highlighted that agro-dealers need to hold seminars which will equip the farmer with the necessary information needed to diversify. One of the respondents opined:

*“Agro dealers need to hold seminars so that farmers can also learn, that’s the main thing they can do. Because when farmers are trained, they can use that knowledge to benefit themselves agriculturally”.*

Respondents also indicated that agro-dealers need to take the necessary measures to ensure that they have everything farmers need even as they wish to diversify. This would be an advantage for the farmers in that the all products and services are available at all times. The products and services should be available



and accessible to all small-scale farmers. One of the respondents said:

*“Agro dealers should reduce the prices of commodities, and should also stock everything that’s needed. You’ll find that the only have a few stuffs, sometimes you’ll be forced to go to town”. Female respondent, 15 miles Chibombo.*

Furthermore, one of the respondents indicated that Agro-dealer should ensure that their shops are well managed and their representatives understand the products they are dealing in. A number of respondents highlighted that most of the agro-dealer sales representatives lack the necessary information regarding the products and services they are offering. It is important to ensure that the representatives are knowledgeable to enable them provide quality services to small-scale farmers. One of the respondents lamented:

*“These same people when you go to buy from their shops, they can’t even explain properly in terms of how certain products are supposed to be used. Even if you go to an agro-dealer they can’t explain properly and most of the farmers can’t read on their own”.*

In the same vain, one of the respondents from agro-dealers proposed having mini-workshops for agro dealers as one of the strategies that can help improve productivity among small scale farmers. This may equip agro dealers with knowledge that they can impact to farmers, resulting into improved agricultural techniques and hence productivity. Agro-dealers of agricultural inputs may be an important vehicle through which to address some of the barriers and promote adequate use of inputs and promote capacity building among small-scale farmers. Strengthening their networks may generate a more efficient supply of inputs, where quality inputs are available for farmers all the time not only during planting season.

Ensuring agro-dealers provide accurate information to farmers and having mini-workshops will benefit not only agro-dealers but farmers as well. The agro-dealer stated that organizations and maybe seed companies should come on board to facilitate workshops that will enable them to be equipped with skills as well as knowledge. One of the agro-dealers opined:

*“I think as we know that knowledge is very important, so it’s very important for us even agro-dealers to be equipped with knowledge, though some of the knowledge can be acquired as we interact with our farmers because some have a greater knowledge than us. It’s very to find organizations that can be helping us with maybe mini-workshops, just to help us know more on some of the products that we need to stock. So, if we are not educated it’s a challenge not only to us but also to the farmers, for us we also have to stock things that we know”.*

This point was also echoed by one of the key informants, the DMDO who emphasized on the strengthening of the relationship between farmers and agro-dealers. He also reiterated the importance of building the capacity of agro dealers to enhance their effectiveness in helping the small-scale farmers.

Capacity building is fundamentally about improving effectiveness, furthering the agro-dealers' ability to do new things and improve what they are currently doing. It typically involves training, mentoring, and supporting agro-dealers from external sources. Enhancing the capacity of agro-dealers will result in the adoption of new skills and knowledge to sustain as well as expand these improvements over time. Gradually, the small-scale farmers would benefit greatly from the improvements that agro-dealers would have made. Agro-dealer capacity building and training enables agro-dealers to better estimate demand, track sales, and manage debt. He put it this way:

*“I think the first thing we’re doing is, we have other partners who coming on board to build capacity for agro-dealers on how they are supposed to conduct their business”. DMDO*

### **The Role of the Ministry**

Furthermore, the key informant explained that building financial capacity that would enable the agro-dealers to independently manage their financial affairs is one of the key things that the district agricultural office is trying to achieve. Financial capacity in the sense of linking agro-dealers to programs that would boost their resources. The DMDO highlighted that as a Ministry they’re trying to link agro-dealers to government programs like FISP and other donor-funded programs that may enable them to supply and then get their money at a profit, which can be seen as a plus for agro-dealers.

#### *Agricultural community fare*

The other role that the ministry plays is to organize and host agriculture community fares. In most cases, agro-dealers in Chibombo are situated along the great north road and many small-scale farmers live in areas far from the roadside. This agricultural community fare is an opportunity for agro-dealers to take their business closer to farmers. The DACO affirmed that his office conducts agricultural community fares which benefits both farmers and agro-dealers in that, different companies are invited. There are days that seed companies request to have these fares, the agricultural products they usually had were seed, fertilizers, seed booster among others. This gives a chance for farmers to know good seed varieties and encourage those that wish to diversify in agriculture. He further explained that the Ministry encourages more agro-dealers to operate mobile so that many farmers can benefit. As such, during rainy season most agro-dealers take their commodities to

particular areas just to display and sell them to farmers, bringing inputs closer to them. The key informant explained:

*“We have been trying to encourage more agro-dealers to take their business closer to the farmers with the road network which the government is opening up in the district. Some of them operate like mobile shops. Agro-dealer shops especially when farming season start, move their commodities to particular areas where they go to showcase them during a mini, agricultural commodity fare. So, our office conducts such together with our field workers. We normally invite the other companies, seed companies, and agro-dealers to also showcase and even sell their commodities like good varieties of seed, fertilizer, boosters to the farmers’.*

### **Challenges Faced by Farmers when Dealing with Agro-Dealers**

#### *Time dedicated to attend to farmers*

In order for diversification in agriculture to take place, there is need for farmers and agro-dealers to have a great relationship. The fact that there is an interaction between agro-dealers and farmers is a plus to improve farmers’ diversification. Nonetheless, despite the relationship that exists between the farmers and agro dealers, study findings revealed that agro dealers did not dedicate much time to explain or provide solutions to farmers’ demands. Some respondents stated that agro-dealers did not give them enough attention needed to explain or provide answers to the farmers’ concerns. One of the respondents lamented:

*“Agro dealers are always busy with business. They are busy trying to make money and don’t pay much attention to us. They don’t give time to listen to what you have to say. They have no time to explain they would rather tell you in bits as such you find that you’re given medicine coming home only to discover that the medicine*

*isn't the right one or it's expired because they always want money”.*

#### *Price variations which would promote exploitation*

The other challenge that farmers face when dealing with Agro dealers is that, agro dealers tend to manipulate the prices of their commodities. Agro dealers agree to peg their commodities at very high price since their shops are close-by. Like any other company with market power, Agro-dealers just have the ability to manipulate the market price and thereby control its profit margin. As established, these agro-dealers are located along the great north road. In certain instances, they may be stationed just next to each other, which gives them the ability to manipulate the price for products and services. Price variations happen when the same product is being sold at different prices by agro-dealers within the same proximity. Though sometimes this depends on their suppliers, more often than not extreme high price variations lead to the exploitation of farmers. A respondent highlighted that price variations of the same product is a major challenge for them because certain prices are extremely unreasonable.

*“The other thing is the issue of prices, each one of agro-dealers by the roadside puts their own prices. You can go to a shop and find maybe a bottle of pesticides at k35, in another you find it at k30, k40 different prices probably depending on where they get their products from, which is a major challenge”. Male respondent, Katuba.*

On the other hand, agro dealers also faced some challenges in meeting the demands of the farmers. The challenges that agro dealers face in the recent passed included shortage of stock mainly due to the Corona virus pandemic. Thus, the covid-19 pandemic has affected a lot of sectors including the agricultural sector itself. The study findings revealed that

most inputs being sold by agro-dealers are not locally made, as such, it has been a challenge for them to stock in bulk. Due to the pandemic, all borders were closed and imports were not coming in. Some suppliers in the country hiked their prices because of the same reason, it also disadvantaged agro-dealers. The agro-dealer affirmed that due to the shortage, they were unable to provide the adequate services to the small-scale farmers. Agro-dealers also added that the hiked prices of products by their suppliers attributed to them increasing the prices of commodities which was seen to affect small-scale farmers more.

*“Challenges that we are facing right now, starting late last year is that because of the pandemic we had, most chemicals were not coming in the country. So, we usually have a shortage and farmers really suffer because if they know a product and really trust so much and then the time that they need it most it's not provided by us agro-dealers, it becomes a challenge to both us and them”.*

#### **Discussion**

Agricultural diversification is said to be the backbone of any country looking to growing a strong economy and farmers, especially small-scale farmers are being encouraged to take up the diversification aspect strongly. Agro-dealers are one of the major key players in agricultural diversification, particularly in Chibombo district. Their main objective is to increase farmers' access to agricultural inputs in their vicinity. This study found that most agro-dealers in Chibombo district are just individuals trying to take advantage of a business opportunity. They're simply providing a service to farmers in the district and at the same time earning a living. Our findings are consistent with a similar research study that the overall vision of small-scale, entrepreneurial agro-dealers is to transform the currently fragmented input distribution system into an efficient, commercially viable input

infrastructure which would in turn enable farmers to have greater access to productivity enhancing inputs and technologies (Adesina 2009).

Secondly, the study found out that most small-scale farmers in the area can access agro-input services and spend less time and inherently reduce cost. Having agro-dealers in their vicinity subsequently brings agro-input services to their doorstep which, however, has been identified as an advantage by small-scale farmers. This is because agro-dealers assume a vital role in ensuring that small-scale farmers have access to some of the essential agricultural inputs that contribute to boosting agricultural productivity. Research in other settings has suggested as well that agro-input dealers play a significant role in bringing the inputs close to the small-scale farmers (Chianu, 2008).

Thirdly, the study also discovered that seed companies through the help of agro-dealers have been able to assist small-scale farmers through programs such as out grower schemes. The schemes are agreements between farmers and buyers that bring mutual gains for both. Some small-scale farmers in Chibombo have highlighted how these schemes are at their advantage, in most cases, they struggle to purchase input such as fertilizer but with this type of agreement, small-scale farmers are supplied with all the inputs needed. This positive effect out-grower schemes have had on small-scale farmers may be attributed to the fact that those who participated had more access to inputs, received inputs timely, and as well used inputs more efficiently. In contrast, although this study has identified how these schemes are beneficial to small-scale farmers, a previous published research suggested that out-grower schemes often exclude the poorest farmers, and the landless, marginal, and subsistence farmers and women. The poor are excluded because smallholder participants in out-grower

schemes are from the wealthiest strata of rural communities, whilst out grower farming seeks to enable farmers to access value chains (Seville, Buxton and Vorley, 2011).

One key finding to some extent, seemed like a controversial topic among small-scale farmers in the area. In the sense that certain farmers commended agro-dealers for always having a variety of agricultural inputs ranging from livestock chemicals, animal feed, land preparation equipment, etc. While other small-scale farmers felt that agro-dealers don't stock a wide variety of products, they usually have to travel to nearby towns to access certain products. This could be attributed to the lack of financial capacity which could lead to the inconsistent supply of agricultural inputs by the agro-dealers.

Some other key findings emerged from the study such as shortage of stock due to the pandemic and several agro-dealers identified this as an obstacle to proper service delivery. During the time of the Covid-19 stock was not coming in the country or regardless of whether it was, most suppliers' hiked prices of specific items to make the most of the chance. This was attributed to the additional health restrictions on the movement of people and goods worldwide. A similar study suggested that the production of pesticides declined sharply and only resumed gradually after production plants were shut down following the outbreak. Low availability or high prices of inputs such as pesticides could weigh on yields and crop production in 2020 and 2021, particularly in developing countries. Closing borders or slowing down the transboundary movement of seeds could potentially hamper seed supply chains and on-time delivery of seed with negative impacts on agriculture, feed and food production over the next season and further into the future (Schmidhuber, Pound and Qiao, 2020).

This study found that there are incentives that have been put in place to strengthen the already existing relationship between small-scale farmers and agro-dealers. The agricultural district office hosts agricultural fairs and they also try to link agro-dealers to government projects like Farmer Input Support Program (FISP). Agricultural community fair is an opportunity for agro-dealers to operate mobile by going to the farmers who reside far from the roadside. This could be attributed to efforts put in place by the Ministry to strengthen the relationship between agro-dealers and small-scale farmers. This however, has encouraged agribusiness companies to come on board and showcase their products as well as engage with small-scale farmers. The findings are consistent with a research done by Gates, which states that agricultural fairs supply information and examples illustrating new agricultural practices while they present an arena for social gatherings and interaction (Gates, 1984). Lastly, the study contributes to the growing discourse on the need to promote agricultural diversification among small-scale farmers through agro-dealership. Our findings showed that a relationship does exist between agro-dealers and small-scale farmers but there is need for stakeholder participation and a lot of government intervention.

### **Conclusion and Policy Implications**

Expanding agricultural diversification is crucial for improving food security, nourishment and diets and furthermore has significant financial and environment flexibility benefits. The key players for diversification are agro-dealers especially regarding small-scale farmers. Therefore, this study examined the obstacles keeping down the different actors in the food framework from driving diversification. The investigation showed that smallholder farmers accept that diversification can build income and resilience and backing healthy diets, however the truths are that helpless admittance to knowledge for both

agro-dealers and farmers, a diverse scope of agrarian inputs and finance. Based on the findings of the study, the researchers concluded that agro-dealers do enhance agricultural diversification but not to their full potential. There are so many gaps that for diversification to occur there is need for intervention. Agro-dealership is a business and small-scale farmers should regard farming as a business for diversification to take place.

The findings of this study suggest the need to provide extension services to agro-dealers to enable them effectively serve small-scale farmers. There is need for all stakeholders to be encouraged to engage in awareness creation and capacity building of the agro-dealers to effectively equip them with skills and knowledge essential to help farmers. There is also need for the agricultural fairs to be hosted in all parts of Chibombo for a lot of farmers to benefit. Agro-dealers should come up with means of conducting seminars to promote capacity building of the small-scale farmers. Lastly, agro-dealers should from time to time operate mobile to ensure that they reach farmers who reside further from the roadside.

### **Availability of data and materials**

All the data used for writing this research article can be obtained from the corresponding author on reasonable request.

### **Abbreviations**

7NDP: 7th National Development Plan

DACO: District Agriculture Coordinator Office.

DMDO: District Marketing Development Officer.

FISP: Farmer Input Support Programme.

IDIs: In-depth interviews

IFPRI: International Food Policy Research Institute

KIIs: Key informant interviews

NAP: National Agriculture Policy

SSF: Small Scale Farmers

UNICEF: United Nations Children's Fund

## Appendices

None

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SN conceptualised the study, managed data collection and performed the analysis. BBB performed data analysis and contributed in the drafting of the manuscript. OBO contributed to the drafting of the introduction and drafting of the manuscript and SK contributed to drafting of the Manuscript. All authors revised and approved the final draft.

### **Ethical declarations**

Although this data included human beings, permission was granted from the community leaders and that no potentially identifying information is part of this dataset

### **Consent for publications**

No images, individual details or videos for clients' data are part of this paper.

### **Competing Interests**

The authors declare that they have no competing interests.

### **Declaration of interests**

The authors have no competing interest to declare

### **Submission declaration and verification**

We declare that this paper has not been submitted to any journal besides this one

### **Use of inclusive language**

Not applicable