THE NEED FOR INFORMATION TO ENHANCE AGRICULTURAL PRODUCTIVITY OF RURAL COMMUNITIES OF WESTERN PROVINCE OF ZAMBIA: CASE OF LITOYA RURAL FARMERS

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Abstract

In order to attain national development, the role played by information in the process cannot be denied. In fact, information does not diminish if shared but rather improves the state of the one who receives it. Countries that have invested in information as a tool for national development have a lot of stories to share with those that have not done so. The value of information lies in the fact that its application cuts across all sectors of development. Zambia as a nation is currently pursuing its development efforts with a view to attain the status of a middle class income country by the year 2030. However, in order to achieve this desired goal, the need for an evaluation of the role played by information provision activities in the lives of the under privileged groups in the nation is critical. This is because the under privileged groups of the Zambian society are among the intended beneficiaries of the development that the country is trying to achieve. One such under privileged group is the farming communities in the rural areas of Western Province of Zambia.

This research paper discusses the consequences of lack of agricultural information provision to the rural farmers of Litoya area in the Western Province of Zambia. With data collected through interviews and observations, the paper has highlighted and considered the role of information provision in the proper utilization of farming land, farming implements for land tillage, and the need for marketing information for the small scale farmers of Litoya area. The paper concludes by highlighting recommended channels through which information could be made available to the rural farmers of Litoya in order to enhance their agricultural viability and henceforth contribute to the national development process.

Key words: Agricultural information provision, Small scale farmers, Land conservation practices, Land tillage implements, Marketing of agricultural produce, Zambian rural communities
1.0 INTRODUCTION AND BACKGROUND

In order to attain national development, the role played by information in the process cannot be denied. In fact, information does not diminish if shared but rather improves the state of the one who needs and receives it. Countries that have invested in information as a tool for national development have a lot of stories to share with those that have not done so. The value of information lies in the fact that its application cuts across all sectors of development. One of the sectors of national development that requires effective utilization of information is the agricultural sector.

In Africa, many countries are still underdeveloped. In order to achieve development, agriculture has been one of the key sectors that has actively contributed to the development process. In fact, agriculture has arguably been regarded as “the backbone of African economies” and that “about 70% of Africans and roughly 80% of the continent’s poor live in rural areas and mainly depend on agriculture for their livelihood” (Economic Commission for Africa 2007). Further, the Economic Commission for Africa (2007) indicates that “agriculture is the main source of income for rural population in Africa”. Considering these statistics, it is indeed imperative that investments in the provision of agricultural information should be made in order to help African move out of its current state of underdevelopment.

Zambia is one of the African countries to which the above statistics apply. In fact, in its 5th national development plan the Zambian government has prioritized the introduction and enhancement of various agricultural activities as a way to eliminate poverty in the rural areas (Republic of Zambia Ministry of Finance and National Planning 2006). In order to achieve development through agriculture, the role played by information in the various activities that the government wishes to undertake cannot be ignored. For instance, people need information about the fertility of their land in order to match soil against appropriate crops. Farmers also need information about sustainable agricultural practices. Further, farmers need information about markets where they can sell their products. However, with the lack of legislation and policies on effective information management practices at national level, the extent to which agricultural information provision will be a key player in the agricultural sector activities remains debatable.
Evidently, with the above account, rural populations are among the vulnerable in our society. The rural populations require a variety of information in all their aspects of life if they are to be removed from the vicious circle of poverty. Among the information required in order to alleviate the various ills that rural populations experience is information pertaining to agriculture. It is envisaged that, if provided, such information would help the rural farmer to be more productive and be able to realize enough income that could help attain and enjoy improved life styles.

Although at national level Zambia lacks a coherent approach for addressing the various agricultural information needs of various stake holders in the agricultural sector (Simumba 2007), there are visible gaps in as far as access to agricultural information is concerned between small scale farmers who live in rural areas of Western province and the small scale farmers who live along the line of rail and near urban areas such as Lusaka and the Copperbelt. In view of the above, and considering that the majority of people in Western province live in the rural areas, with most households headed by women and with the province having the highest number of orphans (Central Statistical Office 2004), this research paper regards rural farmers as a vulnerable group in society to whom appropriate agricultural information should be provided. As such, the paper uses the case of Litoya rural farmers in Senanga district of western province of Zambia as a case study to illustrate the consequences of lack of information to aid agricultural activities. Further, the paper stresses the importance of providing information to Litoya rural farmers and proposes channels through such information could be provided.

2.0 THE VIABILITY OF AGRICULTURAL PRODUCTIVITY FOR LITOYA AND OTHER AREAS OF WESTERN PROVINCE

Widely referred to as Barotseland, the Western province area shares borders with Central, Southern and North-Western provinces. It also shares its other borders with countries such as Namibia and Botswana to the south and Angola to the west. The province has an interesting landscape which includes the famous Barotse plains and a considerable amount of land covered by bush. In fact, the plains are in between bushes – one on the western part sharing borders with Angola and the other one on the eastern side of the province. The Zambezi river cuts across the plains.
With the above features, the province is blessed with different types of soils – sand, loam, alluvial, clay to mention but a few. Given the availability of these soils, a number of crops are cultivated. These include, among others, cereals such as maize and rice, horticultural crops such as Irish and sweet potatoes, tomatoes, cabbages among others. Further, the province also produces a lot of cassava.

Given the above, it is clear that the province has a lot of potential to produce a number of agricultural products. For instance, currently, maize production is mainly done at small scale level and virtually across the entire province. However, Shangombo district and some areas in Sesheke district have high potential to produce large amounts of maize at commercial level. Similarly, Senanga, Kalabo and Mongu districts are the areas where the barotse plains are more prominent and have great potential for production of high grade quality rice of different varieties. Further, cassava is grown on the sandy-bush-areas with great potential to produce tones of cassava meal.

Maize, rice and cassava are, but not the only agricultural products the province can produce at large scale. There are other crops such as Irish potatoes, sweet potatoes and a variety of vegetables such as rape, tomatoes and cabbages. These crops are usually grown in the extensions of the main plain area locally known in lozi as musindi and/or liko. These stretches from the main plain are actually many. There are also similar land scapes locally known as makanda. These are small plains surrounded by bush with a small lake on the middle of such a plain.

The Litoya area in Senanga district shares the above described agricultural landscape and is one of the places with great potential for production of all the crops mentioned above in large quantities. However, currently not much is being grown on large scale.

3.0 PURPOSE OF THE RESEARCH

The purpose of this research was to identify agricultural information–based challenges faced by small scale farmers of Litoya area and recommend an appropriate channel through which information could be made available to the farmers. It was envisaged that the understanding of these challenges would trigger the need to seek appropriate information-based solutions that
can be relayed to the farmers in order to improve their livelihoods through their agricultural produce.

4.0 RESEARCH OBJECTIVES

The objectives of the study were as follows:

i. To establish the levels of awareness vis-a-vis appropriate land utilization practices in the Litoya plains;
ii. To identify and establish awareness of the existence of cost effective land tillage farm implements;
iii. To establish the existence of marketing information for produced agricultural products; and
iv. To recommend an appropriate approach and channel through which information could be made available to the rural farmers of Litoya area.

5.0 SCOPE, LIMITATIONS AND EXCLUSIONS

The study presents views of development agents (head teacher of Litoya basic, community development officer and agricultural extension officer) that work in the area and some farmers who were interviewed. Due to insufficient time, the researchers were unable to solicit views of many farmers through focus group discussions in order to establish the levels of agricultural information awareness. However, it is hoped that in future, a follow-up study could be undertaken to cover this limitation.

6.0 METHODOLOGY

The methodology employed in this study was a case study using qualitative research approach. Triangulation was employed for data collection through document analysis, interviews and observations (Saunders, Lewis and Thornhill 2000:99). The data collected was qualitative. In order to appreciate the problem, the researchers visited the area and made observations as well as contact with farmers in the area. With regard to sampling procedures, five key informants were identified using purposive sampling and were interviewed. These included the headmaster
of Litoya Basic School, the Community Development Officer, the Agricultural Extension Officer and two farmers, all from Litoya area.

7.0 PRESENTATION AND DISCUSSION OF FINDINGS

Findings from the interviews with key informants, documents analysed and observations made by the researcher are presented in this section. Although western province has vast agricultural potential as observed by the researchers, there are a number of challenges that affect both would be commercial and small scale farmers. There are however, in reality, small scale farmers who have access to land that can be used to produce large quantities of agricultural products. These farmers, who are information-wise disadvantaged, face a number of challenges which include, among others, the ones discussed below:

7.1 Levels of awareness vis-a-vis appropriate land utilization practices

There are many attributes that can be deemed to represent effective land utilization practices. These include, among others, conservation farming practices like crop rotation, application of fertilizer in infertile soils, utilization of available land to its full capacity to avoid waste, using insecticide and pesticides when need arises, to mention but a few. Land must be appropriately utilized and preserved in order to get the maximum output out of it. However, in order for this to happen, farmers must be well informed for them to effectively use and participate in viable agricultural activities. Without information, farmers can hardly utilize their land effectively (Simumba 2007).

As earlier observed, the land that Litoya farmer’s passes can be utilized for many agricultural activities. The land can be used for the cultivation of cassava, Irish and sweet potatoes, maize, rice and vegetables. During the period November to April the land can be used for small scale maize and rice production since the land is divided in small portions for the households in the area. This is also the period when sweet potatoes are planted and produced. In the period April to December, the land can be used to plant a variety of vegetables. Interviewees were asked to state their position on whether Litoya farmers effectively utilized their land. Effective utilization of land was measured using variables such as the practice of crop rotation, complete tillage and
planting of crops on all available land to each farmer, among others. The following were some of the responses provided:

You know, this land is very fertile for various crops...in fact, these farmers here are aware of this. They usually plant maize followed by rice and there after practice a bit of gardening before another onset of the rain season begins.... The only problem is that they do not grow enough crops....and its not every one who participates in crop rotation as others tend to focus their attention to catching and selling fish especially after the floods.... more especially those who have cattle and villages in the main plain....

In as far as I am concerned, our farmers here practice less of crop rotation and mainly this can be attributed to lack of information...these people are not aware that the land they have in the plain can help them grow crops such as Impwa which they do not eat here but they can sell it and is easy to store. It is even easier here to grow winter maize here which can be sold at K1000 per cob and will help them raise enough money....

It's a natural response to survival... they have to ensure that they have something to eat through out the year.... But of course its the work of the agricultural extension officers to ensure that farmers are made aware of effective ways to utilize their land.... however, extension work is sometimes hampered by other challenges such as the lack of transport to visit the many villages we have around here...and the availability of such officers as most of them do not stay here longer enough........

The land here is not all utilized, only very small portions are cultivated and most of the farmers wait until the beginning of the rain season... most of them claim that they have small portions of land which they prefer planting maize only....

From the above responses, the respondents’ views suggest that the farmers lack information on the importance of practices such as crop rotation as well as planting of enough crops, practices which can help them generate income. For instance, the respondents reveal that impwa, a
widely eaten vegetable in urban areas and in provinces such as Southern and Central, are not among the vegetables that are currently being grown in Western province. Clearly, the above response is a positive affirmation to the fact that the small scale farmers in Litoya lack information which can help them effectively utilize their land to full capacity. As a result, the agricultural productivity of these farmers is greatly hampered and hence the low income generated from agricultural activities as noted by the Central Statistical Office (2004).

7.2 **Awareness of the existence of cost effective land tillage farm implements**

Rural farming is one of the most difficult activities that those, whose lives depend on it, face each year. The difficulty mainly is due to the fact that tilling of the land is mainly done using hands, except for a few who may have oxen and those who may have money to hire oxen for ploughing. Because of lack of tools to use in their farming, it is difficult for most rural farmers to cultivate big areas of land. As a result, their agricultural produce is limited.

However, in order to address the above concern, a number of modern equipment that can perform farming activities easier and sometimes perform multiple tasks is now available on the market. An example of such equipments is the Power tiller, an agricultural farm implement that can be used for farm activities such as watering, tilling, disking, cutting and planting. This machine is handy and currently has been distributed by Micro Bankers Trust at affordable price. The implement has actually been used by some small scale farmers along the line of rail and those who live near urban areas. In addition, the government through an initiative called the Agricultural Sector Investment Programme runs a programme called Smallholder Agricultural Mechanization Promotions (SAMeP). According to Sakala (1999) the SAMeP project:

…operates nationwide and has Field Offices in Lusaka, Southern, Central, Northwestern, Northern and Eastern Provinces of Zambia. In Western Province, SAMeP tasks are being undertaken by a partner NGO called Keepers Zambia Foundation (KZF). All the mentioned field offices including KZF are currently engaged in the wholesale tasks in the distribution of agricultural implements.

The SAMeP project also deals in many various agricultural implements including the SAMeP adjustable cultivator, an implement used to break up the soil. These equipments can be used to
cultivate large areas of land with less effort and can enable small scale farmers produce and sale a lot of crops on a large scale. The respondents were asked to indicate the tools farmers use for tilling the land in Litoya area and if they were aware of modern equipment that can ease tilling activities. The following were some of the responses provided:

Yes, mainly our farmers here use their hands to till the land, but those who have cattle use their oxen to plough, except there are few with such privileges … as a result even hiring becomes expensive and sometimes those that hire have their land tilled late…

None of our farmers around here uses such kind of equipment for tilling of land… I guess it could be due to the lack of information about the existence of such farming equipments… if informed I am sure some of our farmers could strive to obtain them…

They use hoes and only a few have ploughs. This discourages them from tilling big areas if informed I am sure they can even work in groups and buy such equipments. The farmers here need better implements otherwise the area has potential for growing a lot of crops at large scale…

From the above presented responses, it is evident that though other small scale farmers especially those in the line of rail and those who live in areas near urban areas are aware and use various equipments for tilling their land, Litoya rural farmers are not aware of the existence of such equipments. Lack of such important information is indeed, a big disadvantage to the farmers, who, despite having fertile soils are unable to utilize it fully.

7.3 Existence of marketing information for produced agricultural products

Despite Litoya farmers being small scale and peasantry in nature, the amount of effort that they exert towards the cultivation of crops is quite amazing. For instance, a single farmer is able to produce more than one hundred (100) 50 kilograms (Kgs) bags of rice. These farmers also produce an imaginable amount of sweet potatoes. They also cultivate cassava that has been
even presented at district agricultural and commercial shows. The farmers also produce vegetables in their gardens, though mainly for consumption only! Respondents had the following to say about the availability of marketing information for their various farm produce:

_Our farmers in this area are not aware of the fact that they can actually contact shops like Shoprite to supply their products… if such information was provided, I am certain that a number of them would even increase their farming activities in order to have access to cash_

_Selling the commodities such as sweet potatoes along the main road is difficult as most villagers have the stuff…_

_They are not very much aware that they can actually supply to shops like Shoprite, I am sure they would be providing a lot of tomatoes... these people lack information otherwise they have resources for business but can’t utilize their resources effectively…._

Indeed, the above responses affirm the fact that the rural farmers of Litoya area are not well informed on where they can market their produce. Although the farmers go out of their way to ensure food sustenance for their families and also raise monies for activities such as paying school fees for their children, it is sad, based on the above responses, to note that they do not sell their produce at times due to lack of readily available markets. In situations where agricultural produce is sold, most often the prices for such commodities are not competitive. For instance, a 50 kg bag of rice can be sold at K60, 000. Farm produce such as sweet potatoes are usually exchanged for fish. Still, if efforts to exchange the sweet potatoes with fish fail, the stock that is not consumed is usually cut into small pieces and dried up for family consumption later in the year or in the early months of a new year when the province is usually hit by hunger. Just like in the other two cases above, the vegetables produced are usually not sold.

Although it has been generally accepted that “there is a serious lack of sufficient and timely market information on the prices of agricultural products (particularly maize and other foods stuffs) and on the supply and demand thereof” (Republic of Zambia Ministry of Agriculture and Cooperatives 2004), this situation prevalent in Litoya is just in the opposite of what happens with
small scale farmers in urban areas and the line of rail. The farmers along the line of rail usually sell their sweet potatoes either along the main road networks or indeed transporting it to Lusaka from, sometimes far places like Serenje. This also applies to vegetables such as tomatoes which are usually transported from places like Mkushi to either Kasumbalesa or indeed Lusaka. With regard to farm produce like cabbages, farmers usually supply such stuff to either big supermarket such as Shoprite, Melisa and Spar or indeed sold at the open market (Hichaambwa, Haantuba and Nawiko 2007). Rural farmers along the line of rail and in areas surrounding urban areas are aware of the existence of markets for their produce in form of supermarkets, open markets and other smaller shops (Ibid). This comparison indeed highlights the urgent need for information provision to the underprivileged farmers of Litoya. What is even amazing is the fact that sometimes Shoprite Mongu branch runs out of vegetables such as cabbages and tomatoes yet such farm produce could be lying idle in places less than 70 kilometers away from Mongu!

In rural areas near urban areas where small scale farmers have access to market information, their monthly mean income is much higher than that for their counterparts in the rural areas of western province (Central Statistical Office 2004). Considering this fact, Hichaambwa, Haantuba and Nawiko (2007) note that “horticulture production and marketing has great potential in increasing rural as well as peri-urban, and to a certain extent urban wealth creation”. There is therefore need to ensure that rural farmers of Litoya area are accorded an opportunity to access information market and sell their products.

8.0 THE WAY FORWARD: THE ROLE OF TELECENTRES IN THE PROVISION OF AGRICULTURAL INFORMATION TO RURAL COMMUNITIES

As presented in the findings above, and considering the findings by Simumba (2007) on agricultural information needs of agricultural stakeholders in Zambia, there is no doubt that rural farmers in Zambia in general and in Litoya in particular yearn for agricultural information. However, accessing desired agricultural information is a challenge despite the availability of many channels through which agricultural information can be provided to rural communities of western province and Litoya area in particular.
Among the channels that easily come to one’s mind is the use of Agricultural Extension Officers, Teachers (especially those who teach agricultural science), community development officers as well as a number of Non-Governmental Organisations (NGOs) such as Women for Change, Keepers Zambia and Micro Bankers Trust who have programmes in rural areas of Zambia. Although such individuals and institutions could be used to supply agricultural-based information to farmers, a number of challenges make them fail to perform this function effectively. For instance, most of the above mentioned channels usually have their own mandates, which, in most cases, exclude the collection and dissemination of integrated agricultural information. In addition, Ellen (2003) notes that information seeking is usually hampered by a number of factors including those presented in table 1 below:

**Table 1: Factors affecting information seeking**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Societal</td>
<td>impede the availability of resources necessary to satisfy needs within the social system</td>
</tr>
<tr>
<td>Institutional</td>
<td>the incapacity and/or unwillingness of an information provider to deliver needed information to a certain type of seeker</td>
</tr>
<tr>
<td>physical</td>
<td>impose themselves when an individual is unable to make contact with the appropriate information providers due to some physical consideration</td>
</tr>
<tr>
<td>psychological</td>
<td>when the individual is unable to perceive their needs as informational in nature, obtain needed information from appropriate providers or accept the possibility that the information problems can be solved for psychological reasons</td>
</tr>
<tr>
<td>intellectual</td>
<td>when the individual lacks necessary training and expertise to acquire information</td>
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Indeed, a number of the factors presented above can be said to affect farmers of Litoya area. For instance, Litoya farmers are not trained in information acquisition skills! Considering this fact, this paper recommends that a telecentre be established in Litoya to serve as a channel through which agricultural information can be made available to its rural farmers.

According to Ellen (1998) “Telecentres are a means for providing community access to electronic information by utilizing information and communication technologies (ICT)”. Indeed,
for a long period of time now, telecentres have been employed as a means for disseminating information to disadvantaged people in society. This practice however is still not fully exploited in Zambia (Southern Africa Telecenter Network 2009). Among the information that can be provided through telecentres include information pertaining to effective utilization of land, farm implements and the availability of markets for farm produce.

The growing advocacy for the use of telecentres in provision of information has been mainly due to their versatility in the way information can be provided to intended clients (Southern Africa Telecenter Network 2009). Such versatility includes among others, the ability to provide access to timely and updated information (e.g. online information). Telecentres have also the ability to repackage information in various formats such as soft and hard copies. Further, it is also possible to provide information in local languages since local residents can also be employed in such establishments.

Although telecentres should indeed be seen as the way forward in supporting the provision of agricultural information to the rural people, it also has its own challenges. Citing Qvortrup (1994), Ellen (2003) indicates that among the challenges that hamper operations of a telecentre include:

Table 2: Barriers to access and use of telecentres

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Qualification</th>
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<tbody>
<tr>
<td>Network barrier</td>
<td>a lack of access to telecommunication networks</td>
</tr>
<tr>
<td>Service barrier</td>
<td>where access to telecommunication networks exists, but where only limited services are available, which may not be appropriate to a community’s needs</td>
</tr>
<tr>
<td>Cost barrier</td>
<td>the cost of purchasing equipment (and ongoing costs) is prohibitive</td>
</tr>
<tr>
<td>Qualification barrier</td>
<td>skills to use computers are high, and may not always be present. Additionally, some may be skeptical about IT</td>
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Barriers to the effective use of telecentres are not only limited to the above. However, considering the above presented barriers, one can argue that certainly solutions to such barriers are within reach. For instance, telecommunications networks for internet service provision in
Zambia are no longer a big issue. There are a number of telecentres being established country wide and it is certain that if efforts are made, the people of Western province and indeed those in Litoya area can have such facilities (Southern Africa Telecenter Network 2009). Virtually, almost all provincial headquarters have internet services. This fact in itself is a fact that even places like Litoya can have internet services. With regard to barriers relating to costs, multimedia equipments that can be stocked in a telecentre are not very expensive. In fact, equipments such as computers can be obtained through donations. The cost for internet connectivity is also steadily reducing. Further, exposure and training can be a solution to barriers related to the usage of equipment such as computers.

As presented above, this paper highly advocates for the establishment of a telecenter in Litoya to facilitate information provision to its disadvantaged farmers.

9.0 CONCLUSION AND RECOMMENDATIONS

This paper has established and validated the fact that Litoya rural farmers lack information on effective utilization of land, existence of cost effective land tillage farm implements and market information for farm produce. This devoid is in contrast to what exist among the small scale farmers on the line of rail and those who live near urban areas.

Clearly, as the country strives to achieve a middle class country status by the year 2030, the value of information in enhancing the agricultural productivity of disadvantaged groups such as the rural poor cannot be over-emphasized. Within rural communities of Zambia, there are evidently gaps that exist in as far as exposures to information that can improve the lives of those in the rural areas are concerned. According to the Central Statistical Office (2004) rankings, Luapula and Western province have the highest number of people employed in the informal sector with least mean monthly incomes per household. However, unlike in Luapula which is also rated to have the highest number of people involved in agricultural production, most people in Western province are not active in agricultural production. In fact, it is further reported that the highest incidence poverty is in Western province. Using these facts, it could be deduced that the province might be the least developed in Zambia. With this record, one wonders how, an area with such potential for agricultural development can remain poor. However, a close look at various situations including the lack of information with regard to how agriculture can improve
the small scale farmers of Litoya area in Western province justifies the Central Statistical Office’s ratings.

This paper has indeed revealed the magnitude of consequences of lack of information to the disadvantaged groups in society. By showing how, for instance, agricultural produce can go to waste without supplying them to readily available markets, is an example of how critical information provision can be to disadvantaged groups in society.

In order to address the consequences discussed in this paper, the need for telecenters in western province in general and Litoya in particular is recommended. With such avenues in place, the lives of Litoya’s information starved small scale farmers could be improved. For instance, if a telecentre is put in place, the farmers would be able to find information on not only how to sustain their soil fertility but also produce enough farm products that could be sold competitively. Availability of a telecentre would also help coordinate and house information on various currently uncoordinated developmental programmes carried out by various organizations in the area such as the Community Development Office and the workers and the office Agricultural Extension Officer. The telecentre can be used to generate, source and disseminate relevant information to the small scale farmers. Such information would information on different farming practices and the kind of crops that could be grown in the different seasons. Information about the availability of markets for agricultural products can also be provided. Once this is done, the value of information provision in the lives of small scale farmers of Litoya area in Senanga district would indeed be realized.

Realizing the significance of information provision to rural farmers in Zambia in general, and to Litoya farmers in particular, a number of recommendations are proposed. At a general level, the following recommendations are made:

i) There is need to introduce courses in rural information provision at certificate, diploma and degree level that highlight the need for telecentres in rural areas. Such courses could be offered to students pursuing courses such as education, social work, development studies and agriculture in various learning institutions in Zambia. The rational behind this recommendation is based on the fact that, in Zambia, these
categories of professionals constitute the majority of trained personnel who work in rural areas fostering different dimensions of national development.

ii) There is also need to impart entrepreneurship skills through training to students who pursue information science courses. Such training would encourage information professionals to be entrepreneurs and therefore be able to cease opportunity in the unexploited potential in establishing telecentres in rural areas. As a matter of fact, there are a number of organizations that offer funding for projects aimed at information provision to rural communities.

iii) The Government of Zambia should recruit information specialists to serve the needs of farmers in as far as agricultural information is concerned. The government has started this practice in the Ministry of Health where a number of trained information specialists have been recruited as Health Information Specialists.

With reference to Litoya farmers, the following recommendations are made:

i) There is urgent need to come up with a project to establish a Telecentre in Litoya.

ii) There is need to come up with a project to train development agents who work in Litoya so as to equip them with various information literacy skills such as internet information retrieval, gathering, storage and dissemination of information.

iii) The government should recruit and place an information specialist to serve the agricultural information needs of rural farmers of Litoya.

iv) Last but not the least, awareness or indeed advocacy campaigns can be conducted among Litoya rural farmers to sensitize them on the availability of tillage tools, markets for produce and any other related agricultural lacking information.

It is hoped that if such steps are taken, the livelihoods of Litoya rural citizens will be greatly improved through information enhanced agricultural productivity. Once this is achieved, it will be indeed a big step towards the government’s ambition to turn Zambia into a middle income country by the 2030.
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