



TRADE PROGRAMME INFORMATION NEEDS ASSESSMENT REPORT

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Executive Summary

This study aimed at assessing the information needs of stakeholders in all the 35 EPAs that are being targeted by TRADE Programme in 11 Districts (Mchinji, Ntchisi, Dedza, Blantyre, Kasungu, Nkata-Bay, Rumphu, Karonga, Lilongwe Rural, Thyolo and Chitipa). The assessment utilised a community level survey of 350 farmers and 35 Extension workers. The study used structured questionnaires and 35 focus group discussions to examine farmers' information needs for commodity cultivation and other general information. Furthermore, the study also involved 11 District Information Officers and 11 District Agriculture Communications Officers who were considered as key informants in the study. The individual farmers comprised of both male and female members. The assessment also involved all the TRADE Programme partners to assess how the programmes' message will flow accordingly. The study used a sample size of 407 respondents. The study employed a cross-sectional study design and used a combination of methods to collect both quantitative and qualitative data. Quantitative data were analysed by using SPSS and Excel, while qualitative data were analysed using content analysis. Both descriptive and correlation analysis were used to analyse the findings. The specific information needs behind each decision were derived and analyzed, based on factors that affect choice of channel to access information and the level of awareness of the relevance of that information. Furthermore, some information dissemination systems were studied to see what role they play or could play in the information networks of the farmers. The results of the study revealed that rural farmers have a wide variety of information needs including information on marketing, weather condition, agricultural credit/loan, new seeds, storage method, planting methods, diseases and pest control, and pesticide availability and its application. The results further revealed that 209 out of 350 (59.71%) farmers need daily information for various agriculture work. It was also found that the first preferred source of information to the farmers is personal contacts (colleague or fellow farmer) followed by Radio, Print Media and Government Extension Workers. The study findings also revealed that the barriers to accessing agricultural information in the study area are associated with lack of information services, inadequate number of extension agents, inadequate funds, lack of awareness of information sources and

information not easily accessible. It is therefore recommended that there is a need for TRADE Programme and its partners to lay more emphasis on sustainable practices on information accessibility to rural farmer.

Acronym

DAES	Department of Agriculture and Extension Services
EPA	Extension Planning Area
FBOs	Farmer Based Organisations
FGD	Focus Group Discussion
ICT	Information and Communication Technology
MoLG	Ministry of Local Government
NGO	Non Governmental Organisation
TRADE	Transforming Agriculture through Diversification and Entrepreneurship
VC	Value Chain
VDC	Village Development Committee

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CHAPTER ONE

1.0 INTRODUCTION

Government of Malawi through the Ministry of Local Government is implementing the Transforming Agriculture through Diversification and Entrepreneurship (TRADE) Programme in eleven districts (Mchinji, Ntchisi, Dedza, Blantyre, Kasungu, Nkata-Bay, Rumphi, Karonga, Lilongwe Rural, Thyolo and Chitipa) focusing on 7 commodities (groundnuts, soybean, sunflower, Irish potato, dairy, beef and honey). The programme is to contribute to improved sustainable livelihoods of rural people in Malawi through “Value Chain commercialisation and resilience of rural poor and smallholder producers”. TRADE Programme specifically seeks to:

- (i) Increase production and productivity by smallholder farmers;
- (ii) Functionally upgrade smallholder farmers and the rural poor to undertake new functions such as processing, storage, packaging to capture more value;
- (iii) Improve horizontal linkages by strengthening the capacities of cooperatives to provide market access functions to smallholder farmers; and,
- (iv) Improve vertical linkages between stakeholders at different functional levels of the commodity chain, including private sector.

TRADE Programme is targeting Smallholder Farmers with the ability to generate market surplus. For smallholder farmers to be transformed, there is a need for effective communication that can be enhanced if there is effective knowledge sharing that can trigger behavioral change. It is in line with this purpose that TRADE Programme conducted an information needs assessment that will guide the programme to reach the target stakeholders with relevant information and to develop a Knowledge management and communication strategy to outline systems, processes and responsibilities to ensure that

the project generate, capture, analyse, document, package and disseminate knowledge and lessons learnt throughout the programme as well as externally.

Information need assessments provides program designers the ability to develop interventions that target users with specific information needs. Information needs can be classified according to the agricultural value chain. Both approaches work through different phases of decision making a farmer needs to undergo during a cropping season – acquisition of inputs, production planning, cultivation, harvesting, packing and storing, transportation, and selling. In addition to production oriented information, off-farm income generation options, implications of changing policies are also important information and information on sustainable natural resource management. However, in information needs assessment a farmer may highlight an important information need based on his/her needs and interests, but unrecognized needs will not be met through this approach. Nevertheless, the value of information needs assessment, by engaging directly with users of information, should not be overlooked. A two-way process enables farmers to share lessons and best practices related to their farm enterprise, thus incorporating their knowledge base as well. Information needs assessment should act as an initial guide to developing programs, so that contextually appropriate content is generated. It is expected that the findings will help TRADE programme to ensure that all its media messages are developed, disseminated and tailored to meet the information needs of the rural smallholder farmers, TRADE Programme implementing partners and TRADE Programme Management Unit, as part of engaging and updating all the TRADE programme's stakeholders

1.1 Assessment Context and Background

In agriculture, the role of information in enhancing agricultural development cannot be over emphasized. Bachhav (2018) stated that, the use of information in agriculture sector is enhancing farming productivity in a number of ways. Providing information on weather trends, best practice in farming, timely access to market information helps farmer make correct decisions about what commodities to produce and where to sell their product and buy inputs. According to Richardson et al. (2015) the information needs of farmers change

from time to time due to changing agricultural technologies, environmental changes, agricultural policies, and the emergence of agricultural innovations. Yet, there is inadequate information for rural farmers. That is why Babu et al. (2019) had stated that a better understanding of farmers' agricultural information needs and information sources could help guide extension and other agricultural programs to better target specific groups of farmers. In case of TRADE, such an assessment would help to ensure that all TRADE Programme media messages are developed, disseminated and tailored to meet the information needs of the rural smallholder farmers. It is in view of this need that this study needed to guide TRADE Programme to develop interventions that target users with specific information needs.

1.2 Objectives of the Study

The main objective of the study was to analyse information needs of stakeholders (farmers) in all the 35 EPAs that are being targeted by TRADE Programme in 11 Districts (Mchinji, Ntchisi, Dedza, Blantyre, Kasungu, Nkata-Bay, Rumphi, Karonga, Lilongwe Rural, Thyolo and Chitipa).

The specific objectives of the study were:

- To analyze the source of information used by the rural farmers
- To ascertain determinants of information needs amongst smallholder farmers
- Analyze the stakeholders' communication practices targeting rural smallholder farmers focusing on agricultural value chain intervention.
- To examine the challenges faced by rural farmers in meeting their information needs
- To identify interventions that can improve delivery of information services to the farming communities

CHAPTER TWO

LITERATURE REVIEW

2.1 Determinants of information needs amongst smallholder farmers

Information has consistently been a significant element in the development of human society and has shaped over a long period of time the way in which we think and act (Meyer, 2016). Information is crucial for increasing agricultural production and improving marketing and distribution strategies (Oladele, 2014). Information also opens windows of giving out experiences, best practices, sources of financial aids and new markets. By the same token, information enables farmers to make informed decisions regarding production and marketing and managing their lives successfully to cope with everyday problems and to realize their opportunities (Matovelo, 2008; Idiegbeyan-ose Jerome and Theresa, 2009). As discussed by Aina et al (2012), information has a vital part to play in improving and sustaining agricultural production of any country or nation. Also, Ochieng (2010) asserts that access to information is a vital tool for empowering individuals to make informed decisions or take action for them or for community development.

Supporting the above views, Durutan (2005), had stated that agricultural producers already know that information is important and valuable and all they need is its timely accessibility in order to improve agricultural production. According to Camble (2018), and Sturges and Neill (2014), lack of adequate and relevant information has impacted negatively on any development process including agriculture. Ferris, (2017) adds that access to accurate, timely and appropriate information enables farmers to make better decisions about what to produce, when to produce and where to sell it than those who do not have such information. Similarly, Byamugisha et al., (2013) note that the possible benefits of using current agricultural information are improvement in farming techniques and knowledge of when to use manure or fertilizer, how to treat diseases and what crops to plant.

2.2 Sources of Agricultural Information for Farmers

Information source is an institution or individual that creates or brings about a message (Statrasts, 2007). The characteristics of a good information source are timelessness, accuracy, relevance, cost effectiveness, trustworthiness, usability, exhaustiveness and aggregation level (Statrasts, 2012). The selection of an information source depends on a number of factors; including level of income, farm size, age, geographical location, level of education (Riesenberg, and Gor 2010). Adhiguru et al (2010) found that small and marginal farmers accessed less information and from fewer sources than medium and large Scale farmers. Ogboma (2010), Buba (2017), Meitei and Devi (2009), and Mtega and Benard (2013), mentions some information sources used by farmers in accessing their agricultural information including; newspapers, journals, bulletins, community leaders, and famer groups. Another study by Daudu et al. (2009) reported farmers to use agricultural extensions, posters, Televisions, and Radio as their source of information.

Furthermore, a study by (FAO, 2007) revealed that fellow farmers, neighbors and farmers' cooperative society used as preference sources of information used by farmers in accessing agricultural information. Ogboma (2010) noted that the sources of information used by rural farmers were personal experience, workshops and seminars, training, friends and neighbors, Ministry of agriculture, magazines of agriculture, extension officers, local Government officers, non Government organization, libraries of agriculture and posters. The study by Daudu et al 2013 further showed that the main sources of information used by farmers in accessing agricultural information were Extension agents, Friends, Radio and Libraries. Similarly, Bozi and Ozcatalbas (2010) revealed that family members, neighbor farmer, extension services, input providers and mass media were key sources of information for rural farmers. Therefore, in view of the fact that each farmer prefers certain information sources or channels over others, it is important to do a thorough study before opting for an information source or channel to address their information needs.

2.3 Information Needs of Rural Farmers

Devadson and Lingam (2015) had stated that, information needs represent gaps in the current knowledge of the user. In day to day work; lack of self sufficiency constitutes an information need. Information needs are thus a factor that may drive rural farmers to seek information to fill the gaps in their information and knowledge. Farmers require different types of information for day to day agricultural activities. Moreover, the level of information needs may differ between people, or a group of people, depending on a range of factors, such as age, level of education, socio-economic status, range of information sources available, level of awareness, and ease of use of information (Kaniki, 2014). According to Meitei and Devi (2009), rural farmers are not getting the right information at the right time, leading to slow development of agricultural activities.

Dulle and Aina (2010) argue that in order to provide timely, appropriate and relevant information to farmers, it is necessary to classify their information needs. The study by Benard (2011), Sabo (2007), Mtega and Benard (2013), Meitei and Devi (2009), showed that the information needs for farmers differ and range from how and where to purchase agricultural equipments, information on improved seeds varieties, information on marketing, loans or credits, weather condition, irrigation, Information on soil fertility.

Another study by Babu et al., (2012) found that the important information needs for rural farmers were pest and disease management, pesticide and fertilizer application, best time to plant, planting method, storage and seed treatment. Tologbonse D, et al. (2008) conducted the study of information need of rural farmer's community, the findings showed that the majority of farmers (89.9%) needed information about the crop production. A study by Lwoga (2009) established that 66.3% of the small- scale farmers interviewed needed information on controlling plant diseases and pests, 59.1% on marketing, 58.6% on credit facilitates, 54.7% on control of animal diseases and 29.3% on irrigation practices. Moreover, Ozowa (2005) argued that information needs of farmers vary, given new and complex problems farmers face every day.

2.4 The Challenges Facing Rural Farmers When accessing Agricultural Information

Several Challenges facing farmers in accessing agricultural information have been identified. For instance, Tologbonse et al. (2008) found that challenges facing farmers in accessing agricultural information were outdated information, language barrier, lack of awareness on existence of different information sources, lack of funds to acquire information and poor format of information carrier. Furthermore, the study by Daudu (2009) pointed out some of the problems encountered by farmers in accessing agricultural information. These include financial problems, inadequacy of facilities/professional, incomplete or irrelevant information. Also, Byamugisha et al. (2008), point out the challenges encountered by farmers when searching for agricultural information as lack of cooperation from fellow farmers in sharing agricultural information and language barriers.

Aina, (2009) revealed that the factors affecting the flow of agricultural information to farmers in Africa include, the limited number of radios and television sets, the low literacy level of farmers, and the inadequate number of personnel trained in agricultural information. Similarly, Babu et al. (2011) conducted a study on farmers' information needs and search behaviors. The findings from this study showed that the major constraints facing farmers in accessing information were poor availability, poor reliability, lack of awareness of information sources available among farmers and untimely provision of information. Furthermore, Mtega and Benard (2013) carried out the study on the state of rural information and communication services. The findings from the referred study showed that, poor/unreliable information infrastructure, high illiteracy levels, low income, lack of electricity and high cost of ICTs have limited the accessibility of information services in rural areas.

2.5 Factors Affecting Information Seeking

According to Zarmai, Okwu, Dawang, & Nankat (2014) some of the factors that affects farmers from accessing information are categorised as societal, institutional, physical, psychological, intellectual, individual, social and natural factors. Table below summarises some of the factors that affect information seeking among rural farmers.

Factor	Description
Societal	hamper the availability of resources necessary to satisfy needs within the social system
Institutional	the incapacity and/or unwillingness of an information provider to deliver needed information to a certain type of seeker
physical:	impose themselves when an individual is unable to make contact with the appropriate information providers due to some physical consideration
psychological	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
intellectual:	when the individual lacks necessary training and expertise to acquire information
Individual	The individual factors associate with farmers' occupations, education level, personal characteristics, personal information quality and the development of the individual information quality and intelligence
Social	Social factors include political laws, policies, social ethics and demographics
Natural	natural factors include natural resources, geography and topography

The above reviewed literature showed that even though the information needs of various categories of farmers have been studied, the information needs of rural farmers, especially being targeted by TRADE Programme, have not been adequately addressed. This is the gap that this study intends to fill.

CHAPTER THREE

STUDY DESIGN AND METHODOLOGY

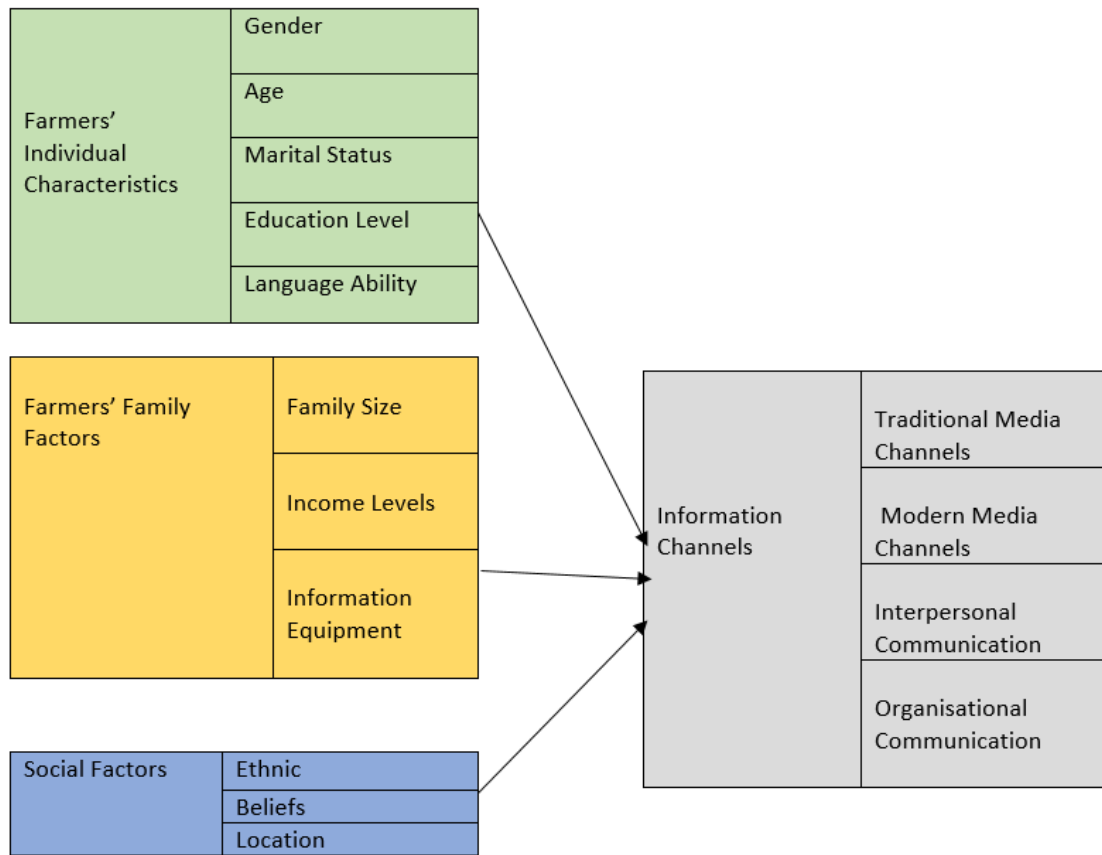
3.0 Introduction

This chapter presents the study design and methodology. The section describes the design, the location, the target population, the sample and sampling techniques, the study instruments, data collection procedures and data analysis technique.

3.1 Analytical Framework

A model was developed through discussions with Government Extension staff and Focus Group Discussions (FGD) with farmers to identify the information needs and the sources of information used among smallholder farmers in rural areas where TRADE Programme is implementing its interventions. The information needs were analyzed based on the level of perception that is influenced by individual, social and family factors as illustrated in the model below. Based on the reviewed literature, Information needs must not be assessed in the same way to all farmers. Some of the farmers are not aware of their information needs, and as a result do not seek such appropriate information and they don't know where they can get the required information. It is against this reason that a simple information model was developed to assess information needs of smallholder farmers based on various factors and perception. With the use of this model the information needs become evident and possible gaps were easily located. The model includes factors that affects smallholder farmers from accessing information using different channels and what information the farmers need to make optimal decisions. Finally, the model guided to identify information gaps and become clear on where improvements could be made in the mode of channels farmers can use to access information. The model also clarifies the scope and focus of future interventions. Figure below depicts the analytical framework of this study.

STUDY ANALYTICAL FRAMEWORK



Source: TRADE Programme-Knowledge Management and Communications

3.2 Study Design

A cross-sectional study design was adopted for this study. The design allows the researcher to collect data and use both descriptive and correlation analysis. The stratified random sampling technique was used for the spot selection of farmers. The data collected through questionnaire, observation and informal interviews was thoroughly organized and tabulated using simple statistical method, charts and percentage. The graphs were generated and described accordingly. The questionnaires were prepared in English language and administered in Chichewa and Tumbuka as respondents could easily understand the items mentioned in questionnaire. Total 407 questionnaires were administered randomly to the farmers, key informants and used to guide the focus group

discussions. The researcher collected all the questionnaires from the research assistants. This constitutes 100 % (407/407) of the total response. It is important to note that some of the respondents could neither read nor write even in Chichewa language which is chief language of the nation.



Enumerator administering a study questionnaire to a farmer in Rumphi District

3.2 Study Site

The study was conducted in 35 EPAs found in 11 districts (Mchinji, Ntchisi, Dedza, Blantyre, Kasungu, Nkata-Bay, Rumphi, Karonga, Lilongwe Rural, Thyolo and Chitipa). Further, the EPAs selected were those, where TRADE programme is implementing interventions meant to promote 7 value chains (groundnuts, soybean, sunflower, Irish potato, dairy, beef and honey). Besides the EPAs, District councils, Area Development Committees were also

involved. Furthermore, the selected EPAs are the ones that have the potential to be transformed through the 7 value chains TRADE programme is promoting in 35 EPAs.

3.3 Target Population

The target population comprised of individual households and some existing farmer groups in all the 35 EPAs. The assessment utilised a farm level survey of 350 farmers using a structured questionnaire and 35 focus group discussions to examine farmers' information needs for commodity cultivation and other general information. Furthermore, the study also involved 11 District Information Officers and 11 District Agriculture Communications Officers. The individual farmers comprised of both male and female members. The assessment also involved all the TRADE Programme partners to assess how the programmes' message will flow accordingly.

3.4 Sample and Sampling Techniques

In this study the combination of simple random sampling techniques as well as purposive sampling was used to get the sample of respondents for the study. Simple random sampling helped to select individual farmers, existing farmer groups and other programmes' partners that were involved in this study. The purposive sampling technique allowed the researcher to select the farmer groups, District Agriculture Communications Officers and District Information Officers as key informants that provided the required information in respect to the objectives of the study.

3.5 Study Instruments

Data was gathered through questionnaires and focus group interviews using well-designed formal questions. Questionnaires and interviews were preferred as tools for data collection to allow the data collectors to get the relevant data as the tools allowed the respondents to fully explain their responses within a given time. Both open ended and closed ended items were used in the interview. Questions were designed to assist the data collectors to get the relevant information needs of farmers.

3.6 Focus Group Discussion Methodology

Thirty-Five focus group discussions (FGDs) were carried out in 35 randomly selected groups in 35 EPAs, from 11 districts. Focus groups were formed based on types of commodities farmers produce and gender. In each EPA, one group of male and female farmers respectively were formed. For each of the 35 groups, fifteen farmers were randomly selected to form one group. In all EPAs but one, only one women's group could be formed. Group size varied, but generally contained between ten to fifteen farmers, depending on the situation. On average one to two FGDs were carried out in each EPA. The sessions were summarized, and analyzed for trends in the qualitative responses of respondents for their agricultural information needs, used information sources, preferred information medium, and bottlenecks to information searching.



TRADE Programme official conducting a focus group discussion in Thyolo District

3.7 Data Analysis Plan

On completion of data collection and before embarking on compiling and coding of the data, the researcher checked the data for completeness of the questionnaires. The data was arranged and grouped accordingly. The coded data was entered in the computer for analysis using SPSS and Microsoft excel. Quantitative data was arranged and analyzed by use of graphs. Qualitative data from open ended questions was analyzed using thematic content analysis and presented through narratives according to the objectives.

3.8 Scope & Limitation

The scope of the present study was limited to the farmers from 35 EPAs found in 11 Districts TRADE Programme is targeting and whose main occupation is agricultural. The study involved male, female and even youth farmer's community and therefore it was a projection of the entire population of the 11 districts. Further the information collected was based on a significant number (n=350) of farmers. Hence the result reflects the entire population of the 35 EPAs, since 10 individual farmers were involved and one focus group discussion was conducted in every EPAs TRADE Programme is targeting.



A mixed farmer group in Ntonda EPA responding to some questions during the study

CHAPTER FOUR

DATA PRESENTATION OF FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the findings of the study. The data presented here, is in form of responses raised from the interviews conducted during the study. The study focused on the information needs of TRADE programmes' stakeholders in all the 35 EPAs where TRADE Programme is being implemented. The assessment focused on the areas that farmers needs information, Preferred channels of communication, when these farmers needs information and challenges farmers met when accessing information. The analysis has been done using both descriptive and correlation Analysis.

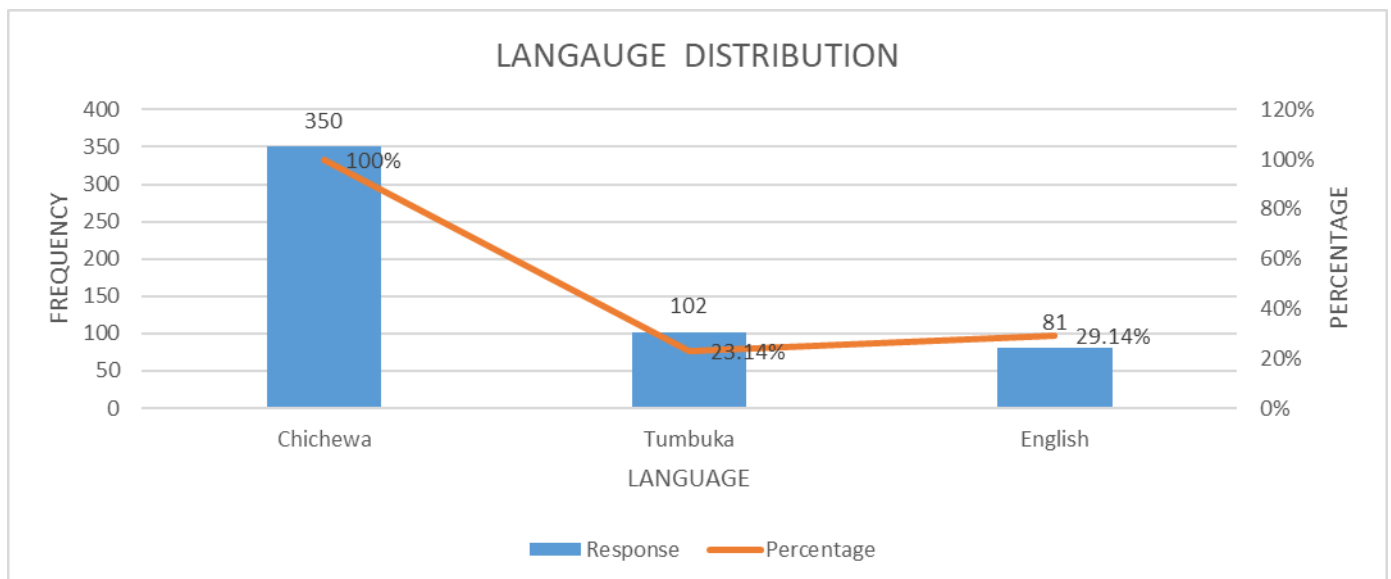
4.1 Descriptive Analysis

4.1.1 Demographic Information

TRADE Programme is implementing its interventions in 35 EPAs found in 11 target districts. Below are some of the demographic aspects of the population that was involved during the information needs assessment.

4.1.2 Language of the Respondents

Chart below shows that all respondents were able to understand Chichewa language because it is a native language while 23.14% were able to understand Tumbuka Language and 29.14% respondents were able to understand English Language. Figure 1: Chart showing distribution of Language

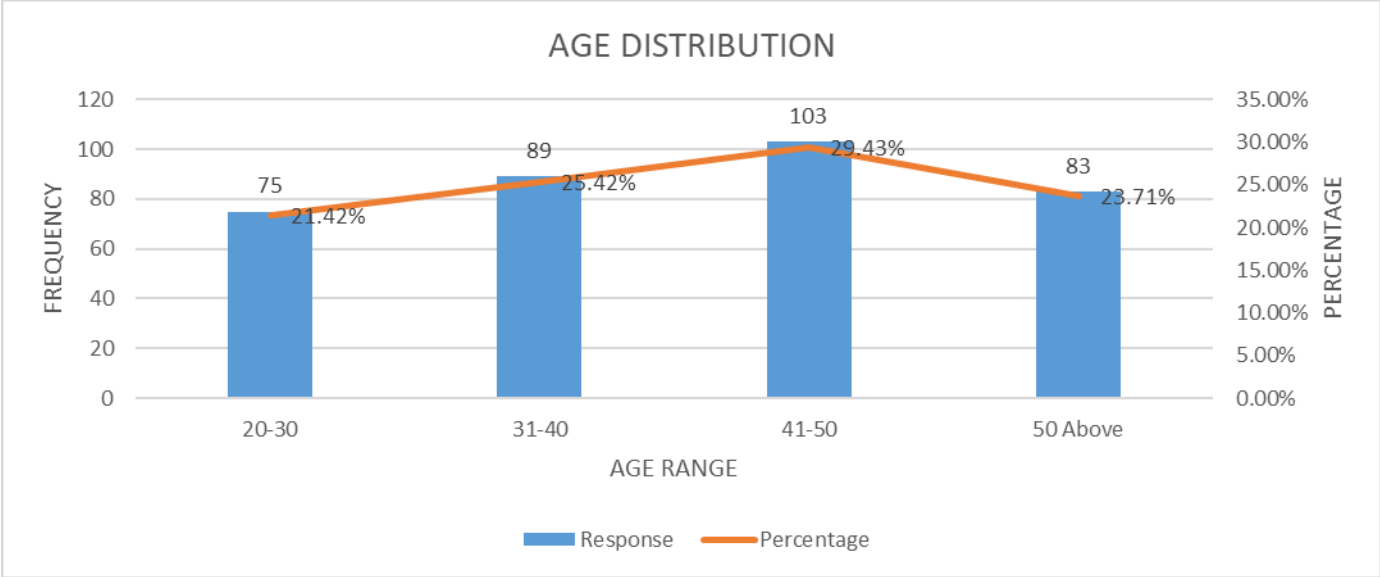


Source: TRADE Programme Knowledge Management and Communications

4.1.3 Age of Respondents

The highest percentage (29.43%) of the respondents that were involved during the study were from the age group 41-50 years followed by the age groups of 31-40 (25.42%). Youth were fully involved as shown by the graph below.

Figure 2: Chart showing Age Distribution

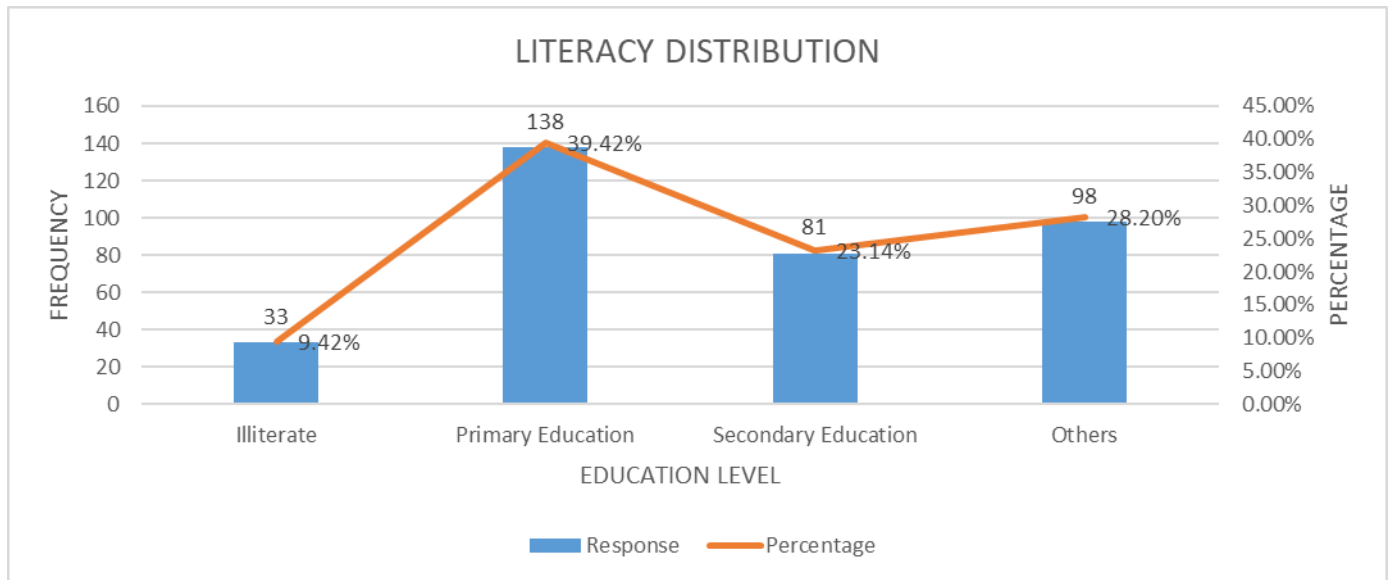


Source: TRADE Programme Knowledge Management and Communications

4.1.4 Education Status of the Respondents

Under educational status, maximum numbers of respondents (39.42%) were those who attained the primary school education, 23.14% attained secondary education, while 28.20 % attained other formal education and only 9.42% respondent were found illiterate in the study. The description shows that the majority of rural farmers are at least literate since a good number of respondents attained primary and secondary education. Chart below illustrates the literacy distribution of the respondents that were involved in the information needs assessment.

Figure 3: Chart showing Literacy Distribution



Source: TRADE Programme Knowledge Management and Communications

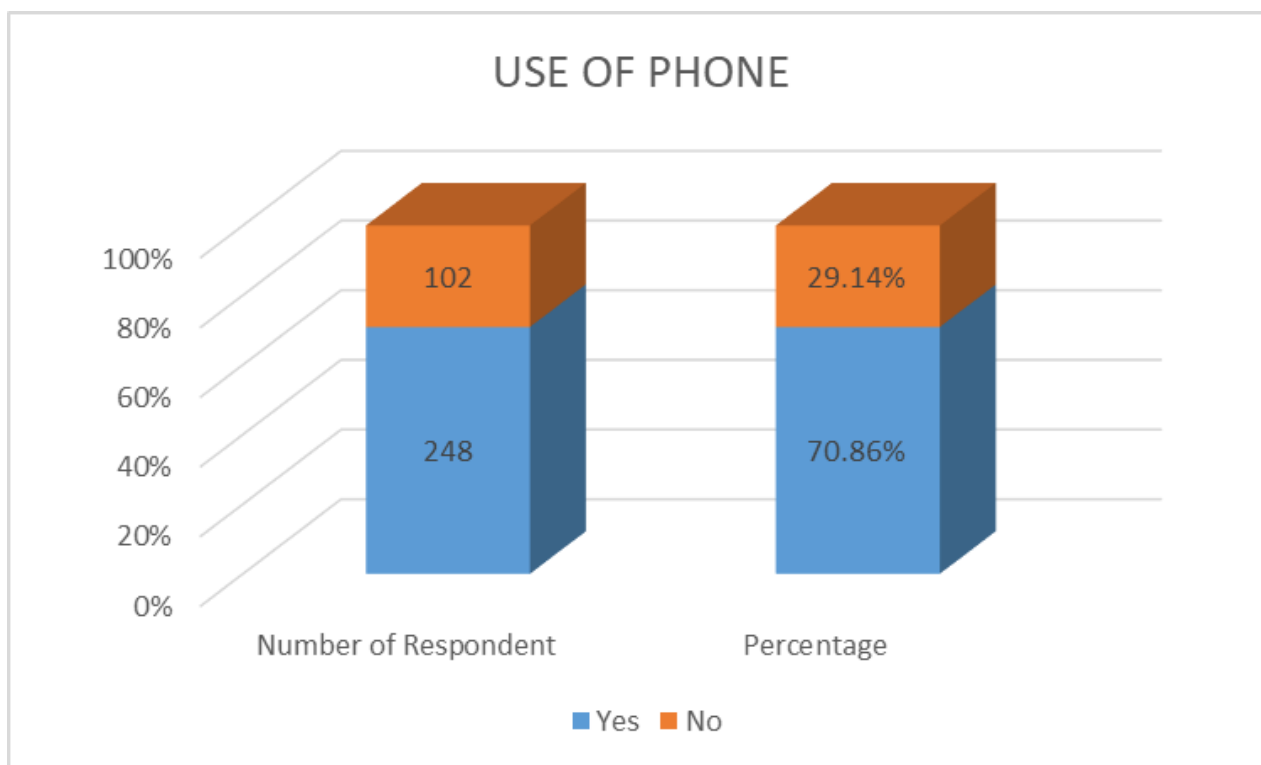
4.1.5 Use of mobile phones by farmers



TRADE Programme officer interacting with a farmer in Chitipa attesting his ability of using a phone

The result showed that the majority of the farmers (70.86%) are using mobile phones for communication and other purpose. It is a good sign that most of the farmers from rural areas are now using or familiar with the mobile device. The phones are helping these farmers to access some agricultural information on prices of commodities and other general information. 70.86% of respondents were in agreement that they can also be able to access other agricultural messages through the phones.

Figure 4: Chart Showing the Use of Phone among smallholder farmers



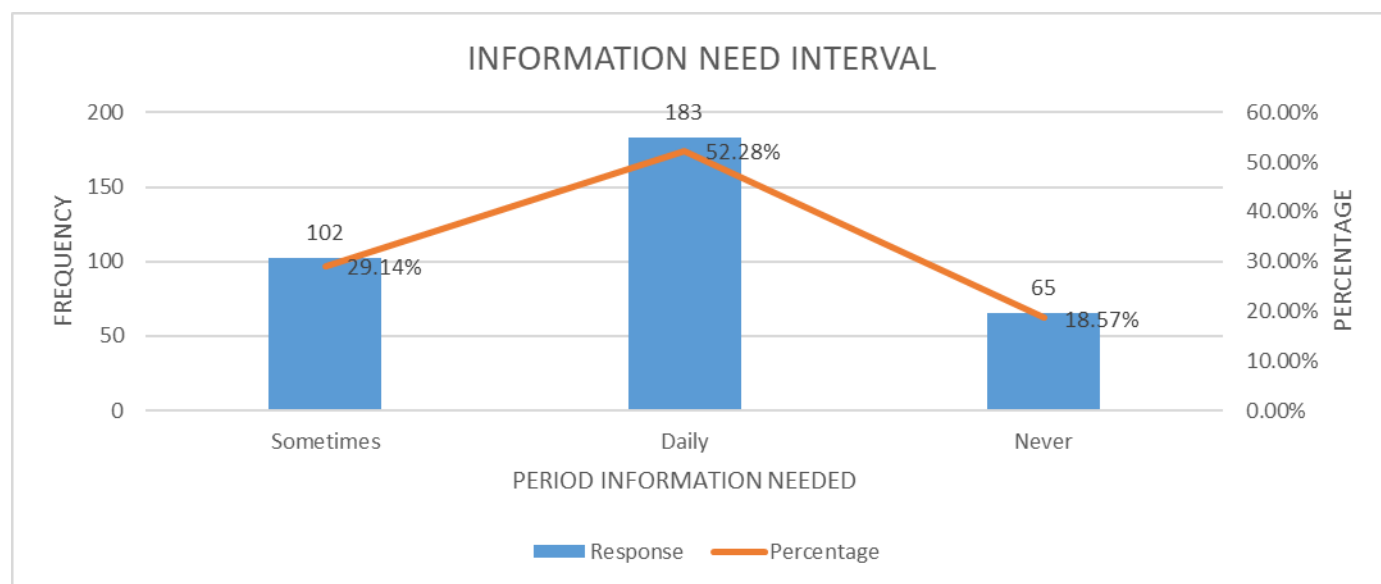
Source: TRADE Programme Knowledge Management and Communications

4.1.6 Information Needs by Farmer

As for the distribution of respondents with respect to information need, majority (52.28%) of the farmers need daily information, while (29.14%) farmers need information sometimes. Only (18.57%) farmers stated that they do not need information for agriculture activities. Significant differences emerge between importance given to certain information by the four clusters of information search behaviors. For low searchers more importance is given to pesticide application information, which is given lower importance for high, medium and

semi-medium searchers. This is also similar for water management, planting method, market and commodity, weeding and harvesting information. Low searchers have smaller land area, lower income, and access less information sources. They give more importance to commodity cultivation information than the other search groups, probably because they are currently not able to easily access the information or do not know which sources are available to access the information. Again a similar pattern emerged for seed varieties information, crop insurance, best agricultural practices, agricultural machinery and best time to plant information, except that semi-medium searchers gave greater importance than the low searchers. Seed treatment has high importance for high searchers compared with other groups.

Figure 5: Chart Showing the interval the information is needed



Source: TRADE Programme Knowledge Management and Communications

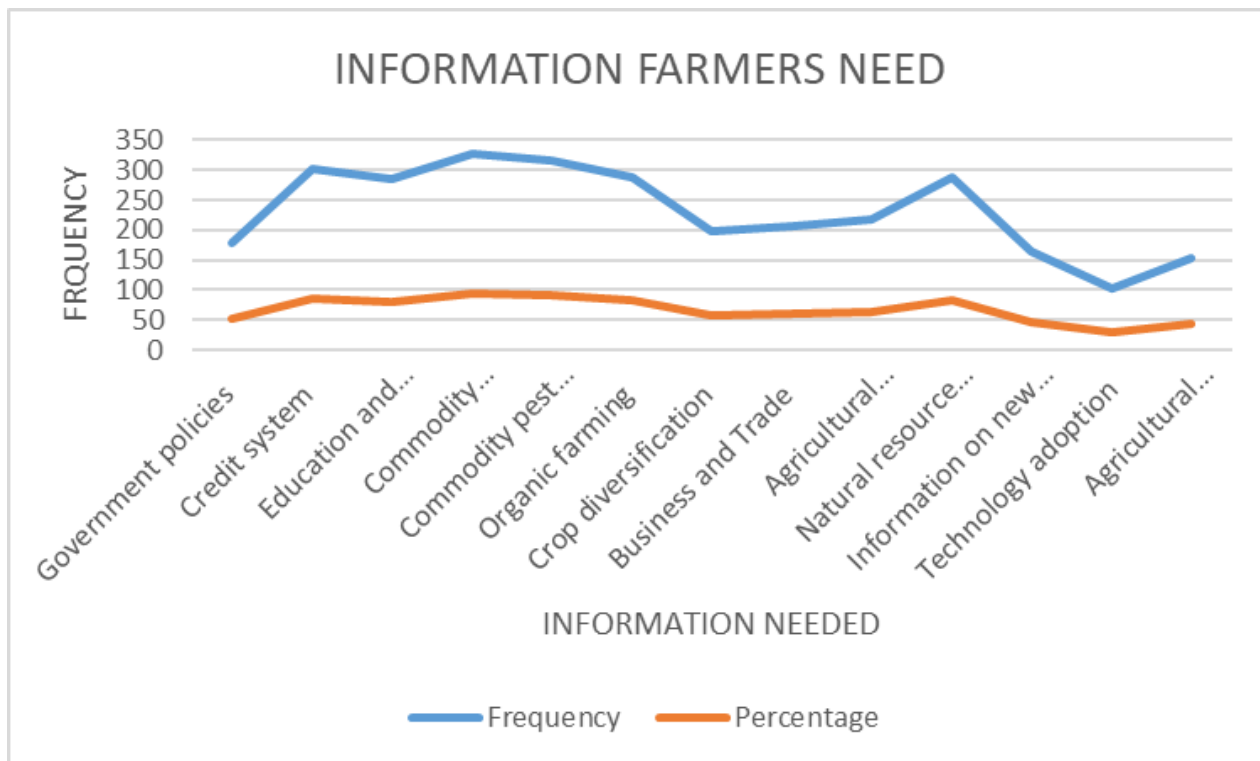
4.1.7 Information needs related to Commodity cultivation

Farmers’ importance of information needs related to commodity was gauged using a checklist. The most important information needs for commodity are: disease and pest management followed by pesticide and fertilizer application. Seed varieties and inputs were also considered important, but were not accessed as much considering the importance given to this need. The information given the lowest importance was related

to post-harvest aspects, grading, storage, consumer behavior, transport and distribution. Similar pattern of importance of information needs for commodity also emerged from the qualitative analysis of the farmers group discussions. The four most important information needs (disease and pest management, pesticide and fertilizer application) are accessed mainly from input dealers, while seed variety information is obtained primarily from the Government extension staff. Best practices information is obtained primarily from public extension staff as well.

The researcher asked the respondent some areas of information which requires day to day activity. As evident from above chart (Figure 5), majority of the farmers need information on agricultural commercialisation (43.71%) crop production (93.34%) and insecticide availability (90.18%) followed by crop diversification (56%). Other areas that were mentioned by farmers include Natural resources management (82.14%), Business and Trade (59.14%) and agricultural equipment (62.17%)

Figure 6: Chart Showing agricultural categories farmers need information

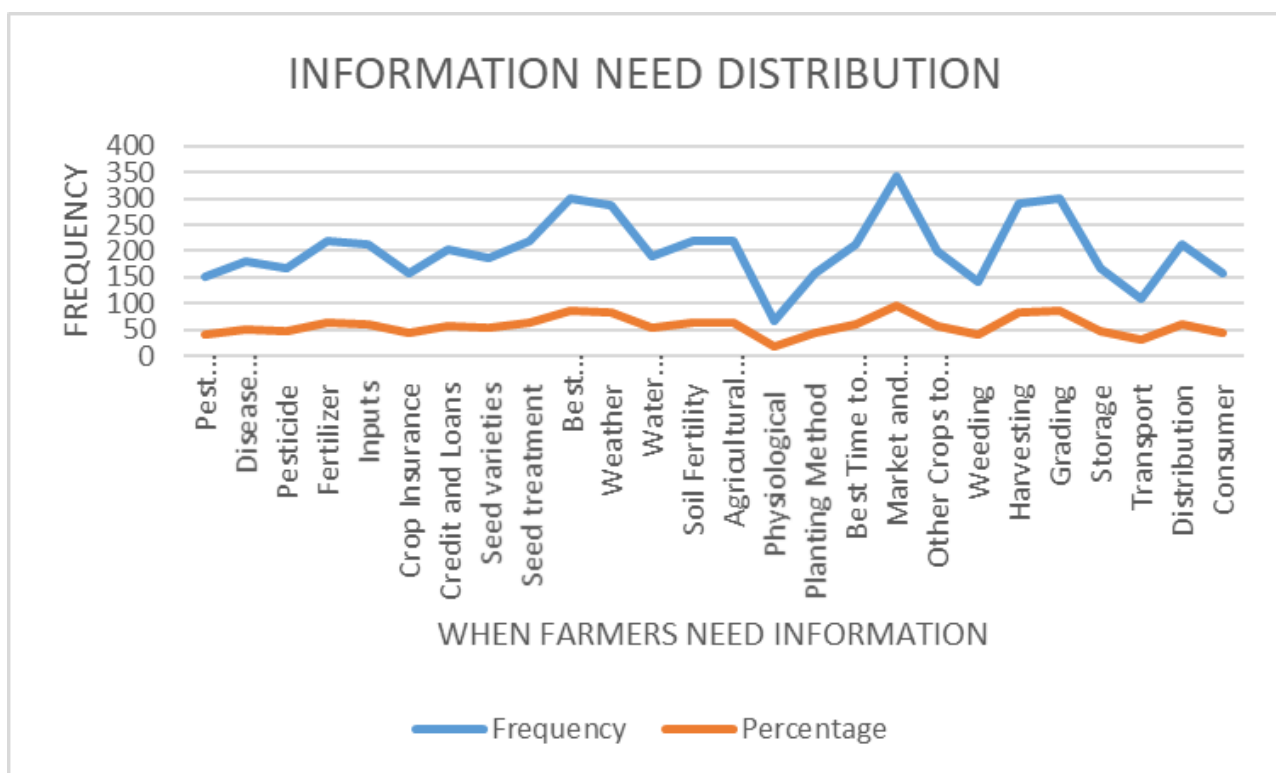


Source: TRADE Programme Knowledge Management and Communications

4.1.8 Information Needs of the Farmers Regarding the Farming Activities

The Chart below reveals that (97%) of farmers require market information of agriculture production and (83 %) of farmers need information about harvesting. (62%) of farmers require information on input distribution such as subsidies and where they can actually access different inputs like fertiliser. Further, 61 % of farmers need information about best time to plant. Other areas that were mentioned by farmers include soil fertility (62%), agricultural machinery (62.28%) and Seed treatment (23.43%).

Figure 7: Chart Showing Information Need Distribution



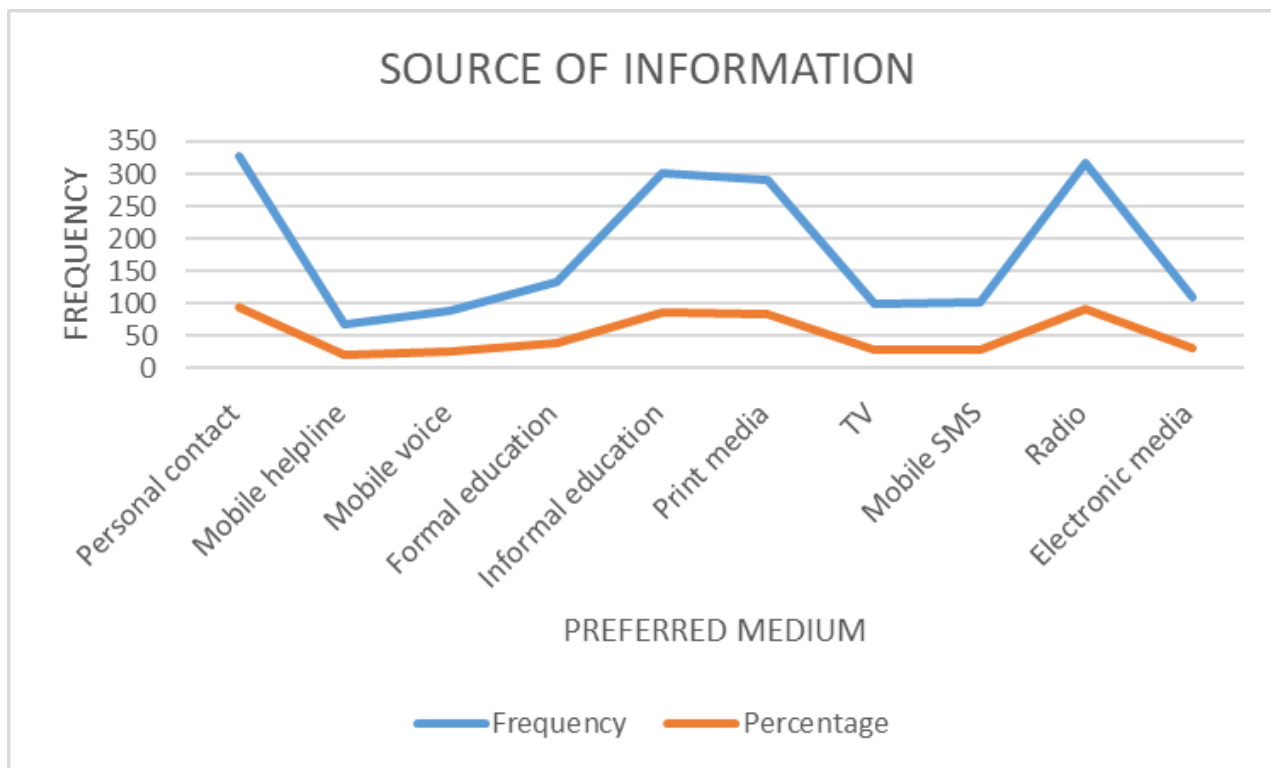
Source: TRADE Programme Knowledge Management and Communications

4.1.9 Sources of Information used by Farmers



Farmers attesting that they can be using phones to access agricultural information

Much as farmers are using phones, chart below shows that majority of the farmers (93.42%) rely on their colleague for obtaining the information while second important channel of information is the Radio (90.57%) followed by print media (83.15%) for accessing the information to the daily farming activity. Figure 8: Chart Showing Sources of Information



Source: TRADE Programme Knowledge Management and Communications

The sources of information illustrated in the chart above reveals how best TRADE programme can plan to effectively engage and update its stakeholders. Knowledge management and communications office must maintain the preferred media and introduce some relevant channels that can support knowledge sharing and engagement to all the stakeholders.

4.2 Correlation Data analysis

The Pearson Chi-square statistics test was used to compare relationships for categorical variables. Crude and Adjusted odd ratios were used to ascertain strength of association between categorical variables and factors predicting the different influencing factors that have different correlation degrees with farmers' information needs and information access channel preferences. Based on a review of the literature, the study used a model that have independent variable, which included some of the individual factors associated with gender, age, marital status, education level, and language proficiency. The model also contains dependent variables that comprised of mode of communication used by farmers

based on the individual factors listed above. The mode of communication that have been included in the model were grouped as follows:

Traditional media channels	<ul style="list-style-type: none"> Community broadcast Television Book Newspaper Magazine/Newsletters Radio Leaflet/brochure
Modern media channels	<ul style="list-style-type: none"> Short message service Mobile calls Mobile networks Computer network
Interpersonal channels	<ul style="list-style-type: none"> Relative Colleagues/Fellow farmers Fellow-villagers (including neighbours)
Organisational channels	<ul style="list-style-type: none"> Government agencies (including village committees and Agriculture offices) Farmers' cooperative organisation Association Enterprise/Agro dealers Scientific research institution Educational institution Specialised information services

The model also accommodated dependent variable that depicted the attitude of respondent when searching for the information. Differences or association between variables were considered statistically significant if the p-value was ≤ 0.05 .

The statistical model and the variables that was used is presented below.

The binary logistic regression model was specified as follows:

$$\text{Logit}(\pi) = \log(\pi/1-\pi) = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_kx_k$$

Logit (π) = in odds (event) that is natural log of the odds of an event (information needs) occurring

π = Prob. (event), that is the probability that the event will occur

$1-\pi$ = Prob. (no-event), that is the probability that the event will not occur

b_0 = Constant of the equation

b_1 - b_k = Coefficient of the independent (response)

variables k = Number of independent variable

x_1 to x_k = Independent variables entered in the model

x_1 = size of respondents (total number of people involved)

x_2 = Sex of respondents (Male 1, 0 female)

x_3 = Age of respondents in years

x_4 = Marital status of respondent (married 1, 0 otherwise)

x_5 = Education level of respondent (Primary and above 1, 0 otherwise)

x_6 = Location of respondent

x_7 = Language of respondent (1 Yes, 0 No)

x_8 = Attitude of a respondent when searching for the information

x9 = Channel of communication used (1 Yes, 0 No)

x10 = Type of information needed (info needed 1, 0 otherwise) (1 Yes, 0 No)

x11 = Income level (1 Yes, 0 No)

x12= Information Equipment (1 Yes, 0 No)

Table Two: Correlation matrix of information needs and influencing factors

Preferred Medium	Preferred Rate	Based on Gender	Based on Age	Based on Education level	Based on Marital status	Based on Language ability	Based on income level	Chi square	P-value
Personal contact	132(33)	59(44)	42(25)	31(31.6)	52(41)	39(25)	32(31.6)	12.319	0.002
Mobile helpline	108(27)	36(26.9)	40(23.8)	32(32.7)	32(26.9)	38(23.8)	30(32.7)	2.458	0.293
Mobile voice	170(42.5)	52(38.8)	70(41.7)	48(49)	42(38.8)	62(41.7)	42(49)	2.480	0.289
Formal education(Govt Extension Workers)	52(13)	23(17.2)	10(6)	19(36.5)	21(17.2)	09(6)	15(36.5)	12.968	0.002
Informal education(lead farmer approach)	154(38.50)	49(36.6)	61(36.3)	44(44.9)	38(26.6)	51(27.3)	34(24.9)	2.246	0.325
Print media	44(11)	18(13.4)	9(5.4)	19(17.3)	28(13.4)	9(5.4)	17(17.3)	10.307	0.006
Radio /Television	270(67.5)	93(69.4)	108(64.3)	69(70.4)	93(69.4)	108(64.3)	69(70.4)	1.390	0.499

Source: TRADE Programme Knowledge Management and Communications

4.2.1 Discussion of the findings of the Study

Information needs of respondents

Information on inputs, good agricultural practices, marketing, agricultural credits/loan and new seeds varieties were the major information needs for rural farmers in the study area. This implies that farmers lack access to market and input information for their

commodities. This is consonance with Shepherd, (2000), who pointed out that information on, quantities traded, market prices and other marketing-related matters rarely reaches farmers in developing countries. Also, most of rural farmers complained about lack of currently, and timely information on weather condition, this is probable because of climate change which had resulted on unpredictable rains and variability hence farmers fail to plan the right time to plant their crops. This is supported by Stigter, (2002) who pointed out that, access to relevant weather forecast information and its communication can greatly reduce the risk and uncertainty in rain fed agriculture. Similarly, the study revealed that most farmers did not know where to get credit, purchase agricultural inputs, which could be used to improve their agricultural productivity. Munyambonera *et al.*, (2012) adds that availability and access to adequate, timely and information on low cost credit from different institutional sources is of great importance especially to small and marginal farmers. The findings further revealed that, farmers need information on availability of new seeds varieties.

Information sources

Family/parents, personal experience, neighbors or friends, radio and agricultural extension officers were the major sources of information used by rural farmers in accessing agricultural information. The implication here is that most of the respondents relied on interpersonal sources in accessing agricultural information, probably because of their regularly availability and accessibility. Lwoga *et al.* (2011) for instance stressed that interpersonal sources such as friends, family members and neighbours are all the time become the main providers of the agriculture information due to their credibility, reliability and most of all, they are trusted by the rural community. However, none of the respondents reported to use neither internet nor library and information centres in accessing agricultural information. This is probably because of low level of education, lack of electricity, lack of libraries or information centres in the rural areas, lack of awareness of the role of internet in provision of agricultural information to farmers and lack of ICTs infrastructure in rural areas. Finding of this study are not surprising as they are in line

with what have been reported previously by Benard (2011), Mtega and Benard (2013); Shaffril *et al.* (2010) and Samah *et al.* (2011). For instance, have established a few reasons why farmers are reluctant to use advance technology in accessing agricultural information such as internet, and among the reasons are do not know the benefits of the advance technology; do not have skills or expertise in using the advance technology; lack of time spent on ICT and difficulties in using ICT. This therefore, call for TRADE programme to create enabling environment for the farmers to use this modern technology so as they can access timely and current agricultural information.

Preference sources of information

The results show that personal experience, family/parents and neighbors or friend were the most preferred sources of information, while internet, library and information centers and newspapers were not preferred sources of information. These findings imply that the respondents prefer interpersonal methods in receiving agricultural information, because with interpersonal method, farmers can easily share their experiences with each other, hence improving their production. These findings are supported by Nmtambo, (2007) who reports that farmer- to- farmer contacts enable farmers to exchange news and adopt new technology, especially from experienced fellow farmers.

Challenges faced by respondents in accessing agricultural information

The majority of the respondents cited lack of information services in the study area was one of the challenges facing farmers in accessing information. Through the focus group discussion with the key informants and personal observation via the researcher it was noted that there were no information services available in the area of the study such as village/ward libraries and information centres. This is a common problem in most rural farmers in Malawi. Therefore, TRADE Programme should regard it as a challenge and provide farmers with access to current and relevant agricultural information. The findings further revealed the inadequate numbers of extension officers is also a major challenge constraining farmers from accessing information. For instance, in the one of the study

areas surveyed, there were only two extension officers. In view of this, it is not easy for them to face all the villages and reach out to all the rural farmers. This is also in line with what have been found by Aina's (2006) findings, which revealed that the ratio of agricultural extension workers to the population in rural areas is low.

Similarly, inadequate funds were another challenge hindering farmers from accessing agricultural information as it was pointed by majority of the respondents. Due to financial problems, some of the farmers cannot afford to buy information sources or attend important agricultural workshops/seminars or agricultural shows. Agricultural extension officers and village leaders' views concurred that there was lack of adequate funding to meet the transport cost for visiting farmers, in order to conduct demonstrations and workshops to sensitize the farmers. Also, the study revealed that majority of respondents were not aware on existence of information sources. For instance, one respondent from Chitipa reported that she does not know where to get help apart from friends, family members and from the personal experience. Therefore, agricultural information sources and services where they exist should be widely published and promoted, not only to create awareness but also to promote and encourage usage of the information by farmers.

4.2.2 Relationships built on factors affecting information needs and mode of accessing Information

Factors affecting farmers' information needs among others include individual factors, social factors and natural factors. The individual factors associate with farmers' occupations, education level, personal characteristics, personal information quality and the development of the individual information quality and intelligence. Social factors include political laws, policies, social ethics and demographics; natural factors include natural resources, geography and topography.

Some scholars propose that the influence factors of farmers' information needs can be divided into objective and subjective factors. Subjective factors refer to farmers' individual characteristics, education level and their traditional concepts. Objective factors include the

rural infrastructure conditions, the level of regional economic development and income level. In this study, the influencing factors can be summarised as follows.

Gender-The gender significantly influences farmers' need for agricultural information. Men's needs for agricultural information are much higher than those of women. Male and female differ in the needs of agricultural information and on the information channels, women are more difficult to be reached with agricultural information than men. Women are stronger than men in the consumer information needs, but the gender differences in administrative information are not obvious. In the choice of channels that can be used to access information, men prefer print media such as newspapers and magazines. Compared with men, women pay more attention to survival needs. Gender, therefore, has certain influence on the information needs and channels.

Age-The older farmers have a preference on government extension officers to provide agricultural information, while the younger farmers prefer the agricultural extension workers to provide sound information service system. Farmers in different ages have certain differences on information needs. Older farmers pay more attention to agricultural market information, governance information, search a lot for information, compare information from different sources, select sources which are important, need assistance from intermediary ,don't know information needed , have little access to information ,difficult to find right information ,takes time to search information ,hard to decide where to look and hard to decide which information to trust and look for information about people's livelihood. Younger farmers are more concerned about labour information and see to it as more beneficial to search for information, more self-confident than others, and like to be considered leaders in farming. On the preference of information needs, youth farmers prefer access to information via the Internet under the age of 30, while farmers over the age of 30 tend to obtain information through communication with friends and relatives. Thus, age may have certain influence on the information needs and channels.

Education level -Farmers are a large group, and the difference of education level may affect farmers' information choices. This study found that farmers' education levels are

highly correlated with the use of new technologies and altitude they have when searching for information. On the information access channels, rural residents with higher education level are more likely to value the government information department and Internet, and there were no significant differences in the choice of other channels.

Marital status -For married farmers, the burden of family and children often makes them pay more attention to the problems of daily life and their children's education, which weakens the extension information needs. Based on this study, married farmers have more needs for agriculture skills training information services than unmarried farmers. What is more, married respondents are more likely to need survival information, while unmarried farmers are more concerned about safety and demonstrative information.

Language ability- Community radio is the most popular medium for farmers. community radios that broadcast agricultural information is closely related to the farmers' activities, and the radio uses the local language of farmers, so that farmers can effectively utilise the agricultural information transmitted by the radio. In this study, farmers involved mainly has three kinds of vernacular language: Chichewa, Tumbuka and Lomwe. The communication of information is mainly in the form of vernacular language.

Income level -Farmers' economic condition determines their ability of transforming latent information needs to real demand. This study found that economic ability or income level is an influential factor in the farmers' information needs. The income level determines information needs preference and information access channels. Farmers with a good income level tend to use newspapers, magazines and the Internet as the main information channels.

Information equipment -The well-equipped farmers with a good income status have more channels to obtain information. They are more often in contact with the outside world and are more active in obtaining information.

Generally, the current mode of accessing information can be divided into three categories, including interpersonal communication, organisational communication and mass

communication. Mass communication can be further divided into the traditional media channels and modern media channels. Specific segments of various channels are shown in

4.2.3 Discussion of the factors affecting the mode of accessing information

Gender has certain influence on information access channels. Men often obtain information through radio, extension workers and farmer based organisations. Gender has no significant influence on the modern media channels. In terms of interpersonal communication channels, women are more likely to get information from relatives, fellow-villagers or neighbours than men.

The influence of age on farmers' information access channels is obvious, and different types of information access channels are different due to different age. In the traditional channels, older farmers tend to use radio to access information, while the younger farmers tend to use books, newspapers, magazines and flyers. In organisational channels, older farmers are more inclined to obtain information from extension officers and farmers based organisations, while younger farmers prefer the associations, enterprises, education institutions and specialised information service agencies. Besides, younger farmers are more likely to obtain information from the modern media channels. In interpersonal channels, older farmers tend to access information through relatives and fellow-villagers.

The education level has a significant influence on farmers' information access channels. Farmers with higher education level are more likely to use modern media channels and organise communication channels to obtain information. Farmers with lower education level are more likely to receive information via radio. In the interpersonal channels, farmers with higher education level are more likely to get information through their friends. Compared with other channels, those with lower education level are more likely to get the information they need from their fellow-villagers or neighbours.

Marital status influences farmers' information access channels. Widowed or divorced farmers are more likely to use radio and fellow-villagers to get information than those married or unmarried farmers; married or unmarried farmers get information through books, newspapers, magazines and leaflets.

Language ability has a significant impact on different kinds of information access channels. In the traditional media channels, farmers with better language ability tend to obtain information through books, newspapers, and magazines, while farmers with poor language ability get information by listening to the local broadcast and radio. Besides, farmers with better ability tend to use modern media channels to get information, including mobile phone. In terms of interpersonal channels, farmers with poor language ability have more access to information through relatives, relatives or neighbours; in terms of organisational channels, farmers with better language ability tend to choose their enterprises and specialised information service agencies to get information.

Vernacular status has a significant influence on the traditional media channels and interpersonal channels. Farmers who speak Chichewa, Tumbuka and Lomwe have a stronger preference on local broadcast and relatives. The farmers who speak English have the strongest will to use leaflets, followed by farmers who speak Tumbuka, and finally those who speak Chichewa.

The influence of region on farmers' information access channels is mainly reflected in traditional media channels and organisational communication channels. For radio, books, newspapers, magazines and leaflets, farmers in the northern region have the strongest intention.

Farmers with higher income level tend to get information through modern media channels and enterprises, while the farmers with lower income level are more inclined to use the radio, farmers' cooperative organisations, labour unions and associations to get information.

The situation of family information equipment mainly affects the traditional media channels and modern media channels. The better-equipped farmers tend to obtain information through traditional media channels such as TV, radio, and modern media channels such as mobile phones.

CHAPTER FIVE

RECOMMENDATION AND CONCLUSION

5.0 Introduction

This chapter provides the recommendation and conclusion based on the information need assessment conducted in all the 35 EPAs TRADE programme is targeting in the 11 Districts

5.1 Conclusion

The primary objective of this study was to identify the information needs of smallholder farmers in the working areas of TRADE Programme. This was done for the program as a whole, and also for other partners who will be under TRADE programme. Some conclusions have been drawn based on the findings of the study.

Information needs by smallholder farmers

In this study the need of agricultural information varies from community to community in the study area. marketing information was identified as critical in farm level decisions in all the villages. In particular, Information on inputs, seed varieties, good agricultural practices, daily weather forecast and seasonal climate forecast was noted to be highly needed by farmers. Other information including disease and pest managements alerts was also identified as important agricultural information for their crop and livestock planning. Other information needs by smallholder farmers includes nutrition and economic empowerment information. The respondents also indicated that, they do not plan for market instead they seek market after harvest and when there is a need for selling crops.

Sources of Information

When assessing the effectiveness of channel and sources used by farmers to communicate agricultural information, it was noted that interpersonal contacts and radio were effective channels for getting agricultural information. In addition, farmers use extension workers and fellow farmers in getting agricultural information. Other sources such as agricultural inputs suppliers, NGOs, district and village leaders was less effectiveness. When assessing

preferences of sources and channels farmers preferred fellow farmers, radio, mobile phones and extension officers.

Stakeholders' communication practices targeting rural smallholder farmers

The study found that communities lack actors that can take on the role of information facilitation with respect to the information needs. Extension workers are failing to stimulate and catalyze the critical awareness that can make farmers have positive attitude towards seeking information. There is lack of Effective partnerships among stakeholders that reach farmers with various interventions. NGOs that are implementing various projects in the communities are failing to include aspect of networks and networking in their activities and agriculture components. These NGOs and Extension workers are failing to define various roles of sources in such networks and how it can benefit the farmers in the long run. Extension workers must Keep in mind that farmers will only collect information and apply it in their decisions if the marginal gains are higher than the costs of utilization.

Information dissemination systems

The study found that some information dissemination systems showed promising opportunities while others were currently less useful for the smallholder farmers. Both the traditional and organisation mode of communication showed a lot of gaps like lack of consistency when it comes to information sharing among smallholder farmers that provide much interesting opportunities for TRADE Programme to intervene. Furthermore, information dissemination systems that are being practised by extension officers and other projects are those that can not be sustained once those projects phase out. TRADE programme have the potential to include several information actors from both public and private sector, to contribute to the sustainable exit strategy of TRADE programme.

5.2 Recommendation

The results of this study were, to many, not surprising or considerably new. However, there was a need for a clear and bundled overview of information needs. In this section some recommendations for TRADE programme have been shared. The importance of a sound

understanding of the information needs of the targeted population in a development program like TRADE is very significant. Objectively, these needs stand at the basis of all activities and interventions created by such similar projects implementing interventions at community level. At the end of the day, the target population, farmers in this case, need to benefit from the activities to which they are subjected. The results of this study could help TRADE programme to tune their objectives towards information needs of the farmers. Furthermore, it could help specify the targeted activities to satisfy the specific information needs, expressed by the farmers. Regarding information needs TRADE Programme could assist the farmer, using the results of this study, in the following ways:

Provide the relevant information to farmers

This holds for the obvious and requested information needs expressed by farmers. TRADE Programme should have deliberate approaches to disseminate information on production, marketing, storage and processing. In contrast, this is also applicable to the information which farmers have not yet established a need. In most cases, this is because they do not see the relevance of this information.

Assess factors that influence accessibility of Information towards Farmers

With respect to the information needs narrated in this report, it is recommended to take the classification of factors that influence farmers to choose channels to access information into account. Concentrating on the needs within these classifications separately, when assisting the farmers, could lead to a more efficient fulfilment, which would be beneficial for both the farmers and TRADE Programme. In case farmers are satisfying the information needs with the correct and optimal information, it is important to confirm farmers' thought and eliminate possible doubt. This could help in the horizontal learning line of thought by increasing the set of information and its certainty. This certainty can be shared with others if the farmers are more comfortable and confident about the information they are using, assuming horizontal learning is applied.

Guide the farmers in the right direction as to where they can obtain the optimal information.

A general observation was made regarding the information seeking behaviour of the examined farmers. Through the analysis of the utilized sources it became clear that the majority of the information obtained from sources, other than their own experience, was provided to them by other fellow farmers. However, proper awareness was limited, the participants did not show much initiative in their seeking behaviour for new information. This is probably related to the fact that they do not know which source could help them with those needs. TRADE Programme could take on the role of broker to connect both provider and recipient and generate the initial exposure. This way both the need can be fulfilled and the behaviour to actively seek information will be rewarded.

TRADE Programme's role

TRADE Programme should play a pro active role as a catalyst of this critical awareness. Optimally, farmers should consider their information needs, relevant sources, the corresponding costs and the value of the information. Through this argued assessment they should identify the relevant information, necessary for their decisions (Kadlec, 1985; US North Central Regional Research in Farm Information Systems, 1994). They should understand why they make the decisions they make, the reason behind the fulfilment of information needs and the usefulness of sources. If this awareness is created and an attitude towards information seeking is enhanced, it could increase the level of independence among farmers. This can be done through the sessions conducted by the field staff or through larger organized training sessions with outside parties both public and private. The only way farmers will change their culturally determined habituated decision making process and information need fulfilment, is if they understand the importance of knowing why they do things the way they do. TRADE programme should stimulate the farmers in creating this awareness using its human capital (field staff which are recognized and respected) and networks with the public and private sector. Additionally, TRADE programme can build on the existing trust which is expressed towards the information offered by government extension officers. The problem with the publicly provided extension services is that they lack the means to be evenly and extensively available to all farmers. On the other hand, the private sector deals with

opposite strengths and weaknesses. They lack the trust of the target group but have the capacity to reach them. TRADE Programme could combine these traits in their training and demonstration programs. Furthermore, it could include both parties as some of the information dissemination systems. For example, in the Department of Agriculture Extension and Services (DAES), the private sector could provide information and assist in the dissemination materials while the face of the centres remains the trusted public sector operators. Such a public private partnership could also be beneficial in the TRADE Programme communication plan. TRADE Programme should capitalize both strengths and make them complements in the network of the farmers.

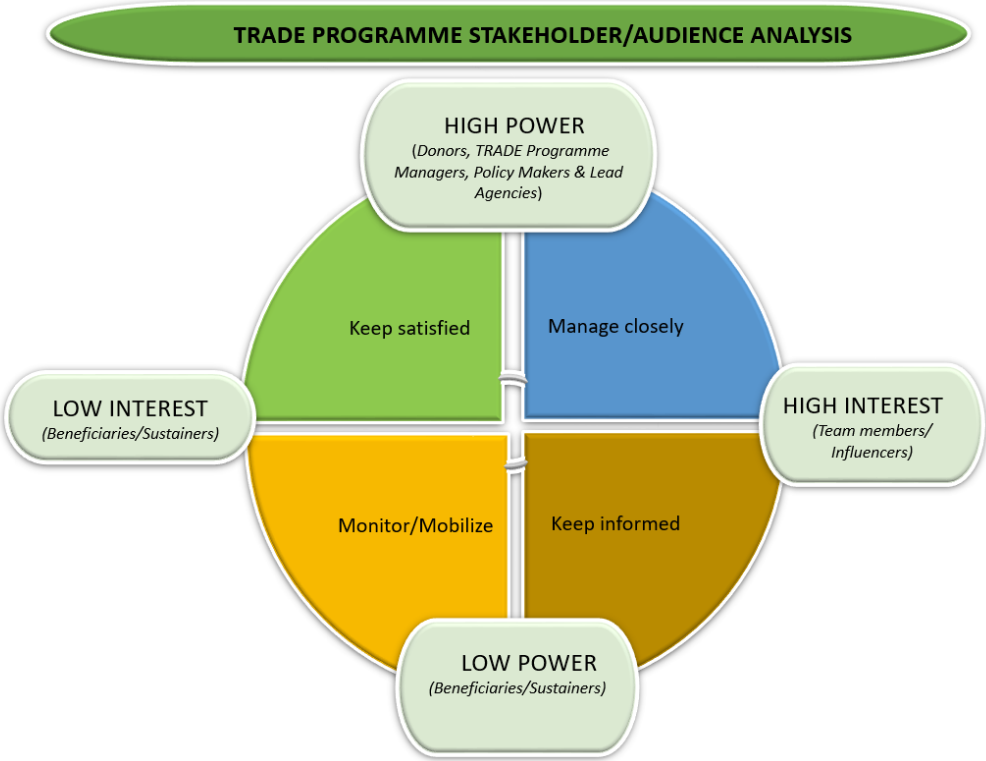
Interventions that can improve delivery of information services to the farming communities

To eventually reach a sustainable level of continued information flows to and from the farmers it is essential to enhance the appropriate linkages and the network. Seen as TRADE Programme initially works from a bottom up perspective, it is recommended to (besides playing the role of information provider) include the importance of networks in their program. More concretely, develop an additional program to stimulate this awareness of networks and networking, and show farmers the benefits of utilizing such a network. Make it clear to the farmers that TRADE Programme will eventually leave and so will the direct provision of information from TRADE Programme to the farmers. However, that does not mean the information needs simultaneously end as well. As mentioned in the introduction, the networks can carry the sustainability of the work done by TRADE Programme. Many of the information dissemination done by TRADE programme is in collaboration with the public and private sector or can be substituted by them. There is willingness to increase the role of other information providers, as it would be in favour of all parties. For example, the demonstrations on farm level. The most effective way of transferring technical information and increasing the adaptation rate is to literally show the farmers the methods and techniques through demonstrations (i.e. give them proof of success and increase their perceptions of the marginal gains). The private sector is willing to assist in these activities

in collaboration with the DAES. The network of a farmer is currently very faint, mainly because of the use of own experience and the negative attitude towards searching information when needed. TRADE Programme should take an active role in enhancing these networks, while facilitating educational and awareness training for the farmers about these networks. From the experiences with the FGDs in the field, it is recommended to include participatory visual methods (e.g. diagramming or drawing networks) when defining the current networks in terms of the farmers' perception. Similarly, TRADE Programme could then find weak spots in the networks and focus on those. Finally, the Lead Farmer could play a distinct role in the network of the individual farmer and should be defined. Many agricultural or market related information needs are similar if not identical for most farmers. In every FBO an individual has the role of lead farmer of a producer group. These individual farmers are highly relied upon and trusted by the surrounding farmers which make them good access points for new information. Assuming some of the information needs are similar, it could be more efficient to make the Lead farmer a central player in obtaining that information and spreading it with his/her fellow farmers. Thus making the networks of lead farmer's key actors in the networks of individual farmers. In this case the networks of the individual farmers do not have to be very extensive and complicated. Furthermore, it would be more efficient for TRADE programme to enhance and set up a few networks with lead farmers, through which they reach a far larger group, than to focus on every individual network.

5.3 TRADE Programme Information Dissemination Systems

Each of the individuals or groups that have been identified will need something different. Each has a different level of interest in TRADE programme. Each has a different type of power over the outcomes of the programme. As a result, TRADE programme will not be able to manage each stakeholder in the same way. The assessment recommended that the knowledge management and communication should engage the identified stakeholders/audiences depending on the categories described in the diagram below:



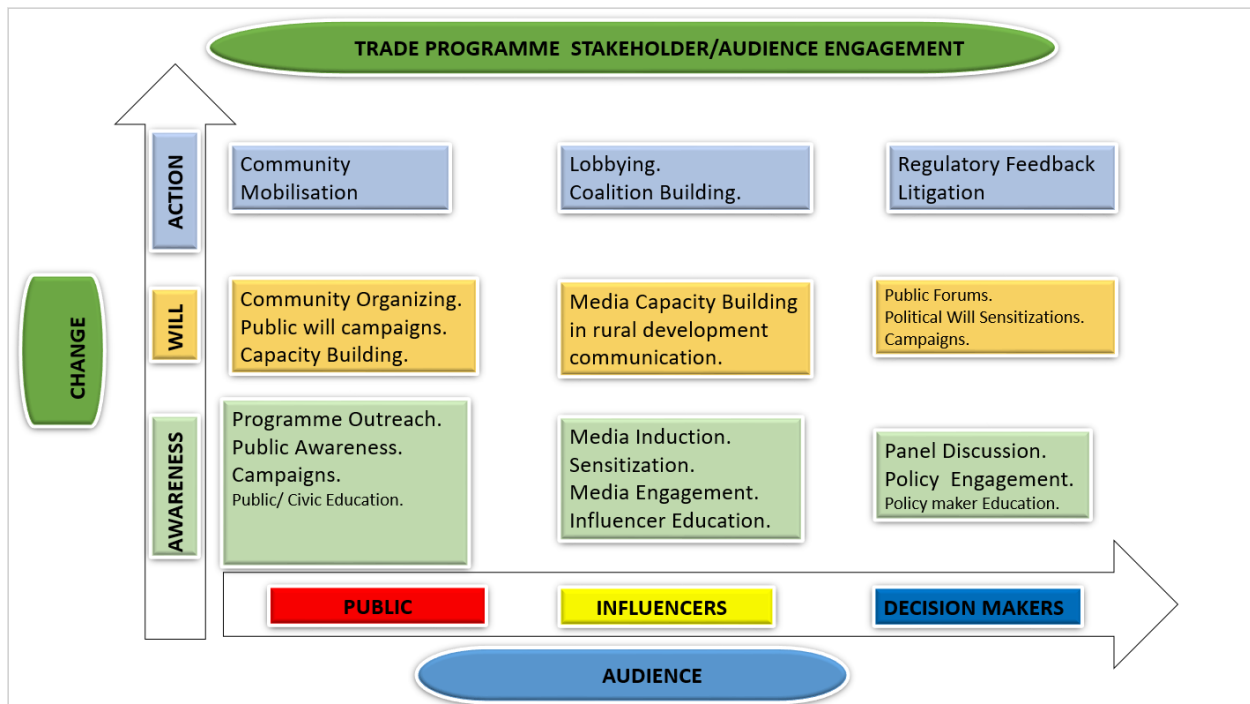
Source: TRADE Programme Knowledge Management and Communications

The figure above illustrates that TRADE programme must accommodate four categories of audience in its Knowledge Management and Communications strategy. A certain group of stakeholders (Donor community, TRADE Programme Management, Policy Makers and Lead agency-MoLG) must be considered as those who have high power in TRADE programme and needs to be managed closely with updates and proper engagement. Another group to be managed closely must be those stakeholders who have high interest (PMU and influencers-media community). Those with high interest together with those who have low power (Beneficiaries and sustainers) must keep informed at all time. The

group of stakeholders with low power and those with low interest must be mobilised and monitored now and again. Those with low interest and those with high power must be kept satisfied at all the time. It is against this background that Knowledge management and Communications for TRADE programme will adopt an approach that has been illustrated in the figure attached in the section below.

Proposed Trade Programme Stakeholder/Audience Engagement Approach

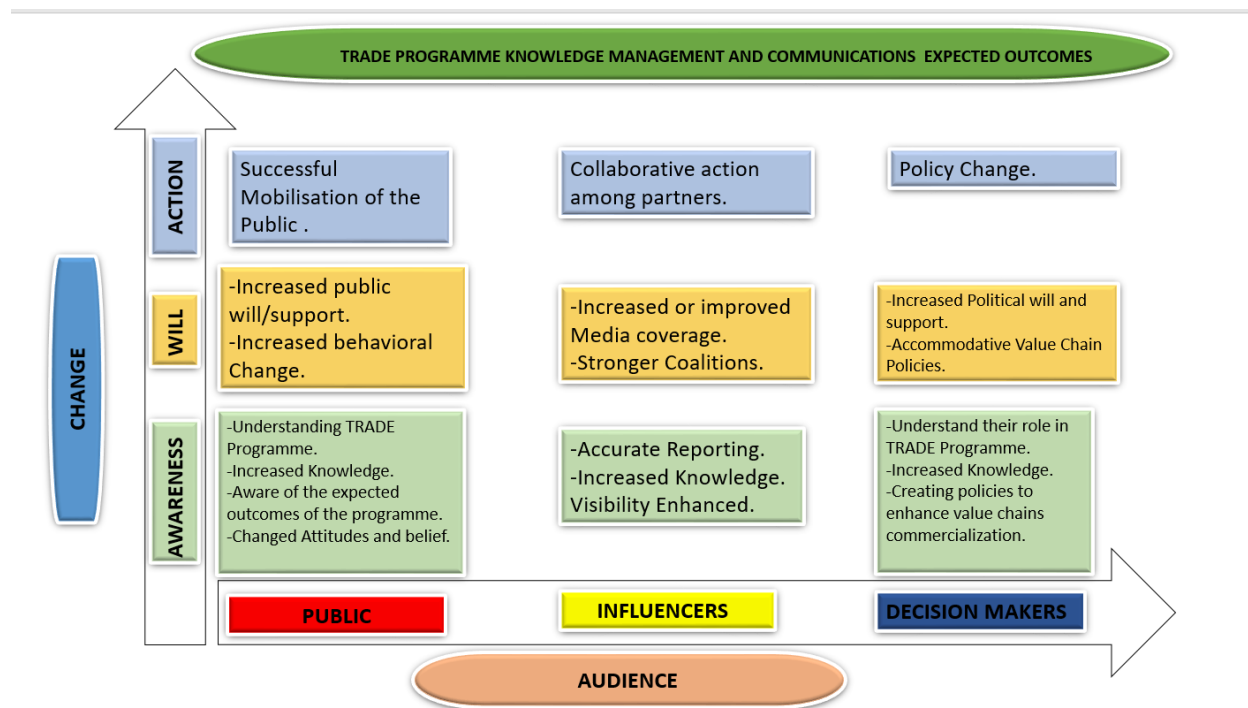
The nature of the programme needs a knowledge management and communication strategy that can enhance behavioral change. Based on the information needs assessment findings, it was recommended that TRADE programme must adopt a communication/advocacy strategy that will target three categories of audience namely: The Public, Influencer and Decision makers to let them be aware about TRADE programme and its designed interventions and then develop a will of taking part in all the interventions being implemented and start taking action in what ever TRADE programme will be doing.



Source: TRADE Programme Knowledge Management and Communications

Expected Outcomes

Once the Knowledge Management and Communication/Advocacy approach has been adopted, stakeholders will effectively be updated and engaged to the extent that the following outcomes will be achieved:



Source: TRADE Programme Knowledge Management and Communications

TRADE Programme through the Knowledge Management and Communication Office will develop a strategy based on the findings and the recommendations that have been presented in this report.

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Annexure 1: Farmers Questionnaire

INFORMATION NEEDS ASSESSMENT

Questionnaire: Farmers

Enumerator.....	Date...../...../.....
Start Time.....:.... Finish Time.....:.....	Supervisor.....

1. Farmer Profile

Name of Respondent.....	Sex.....	
Age.....	Marital status.....	
Village.....	TA.....	District.....
EPA.....	Section.....	

2. Farmers' Production

How many crops are you growing?

How many types livestock are you keeping?

Was any information given on the production of the commodities mentioned above?

How was the information given?

1=leaflets

2=training

3=text/WhatsApp

4=in person

5=other, specify

How would you rate the quality of the information given?

1=poor

2=fair

3=good

4=excellent

Did access to information encourage you to invest in your own production??

1=yes

2=no

How has the number of livestock you are rearing changed since you started accessing information?

1=increased

2=decreased

3=no change

How has the number of crops grown changed since you starting accessing information?

1=increased

2=decreased

3=no change

3. Access to information related to extension services

From whom or which organization do you primarily obtain information on extension services? *Fill in the table below:*

CODES:

Source of information: 1=Other Farmers 2= Family and friends 3= Radio/TV 4= Farmer organization/cooperative 5= Other non-farmer associations 6= Market place posters/posted bulletin 7= Agricultural traders 8=SMS messages 9=Internet 10=Newspaper 11. Extension officer 99=Other (Specify).....

How you use information: How do you use this price and market information? 1= Affect purchasing decisions 2=Affect sales decisions, 3= Affect stocking decisions 4=Affect contracting decisions 5=Affect investment decisions 99= Other (specify)

Type of Information	Do you receive 1=Yes 0=No	Source of information	How does this information affect decisions?
Pest Management			
Disease Management			
Pesticide			
Fertilizer			
Inputs			
Crop Insurance			
Credit and Loans			
Seed varieties			
Seed treatment			

Best Agricultural Practices			
Weather			
Water Management			
Soil Fertility			
Agricultural Machinery			
Physiological			
Planting Method			
Best Time to Plant			
Market and Commodity Prices			
Other Crops to Plant			
Weeding			
Harvesting			
Grading			
Storage			
Transport			
Distribution			
Consumer			

4. Farmers' attitude towards searching for information

<i>Attitude towards information</i>	<i>1=Yes 0=No</i>	
search a lot for information		

compare information from different sources		
selecting source is important		
need assistance from intermediary		
don't know information needed		
little access to information		
difficult to find right information		
takes lot effort to search information		
hard to decide where to look		
hard to decide which information to trust		
feel confused by information available		
Spend more time searching		
not lucky finding useful information		
feel takes time to search for information		
much to lose when using wrong information		
beneficial to search for information		
more self-confident than others		
like to be considered a leader in farming		
helpful to friends who have difficulty finding the right information		
quite knowledgeable about farming		
pays to select the best source		
high standards for information used		
get as much information as possible before making decision		
unbiased information important		
use many information sources		
pressure to find information need quickly		
use same source as in past		

economic consequence of poor choice concern in seeking information		
rely on traditional knowledge		
rely on own experience		
rely on information sourced		

THANK YOU FOR YOUR TIME

Annexure 2: Key informants Checklist
CHECKLIST FOR KEY INFORMANTS

Enumerator..... Date...../...../.....

Supervisor.....

1. Interviewee data

Name of Respondent.....	Designation.....
Organisation/Office.....	Contacts.....
Phone.....	Email.....
Working base (District).....	

2. Type of Information Rural People always look for

Type of information	Yes/No	If Yes, How?
Government policies		
Credit system		
Education and training		
Commodity production		
Commodity pest and disease		
Organic farming		
Crop diversification		
Business and Trade		

Agricultural machinery		
Natural resource management		
Information on new commodities		
Technology adoption		
Agricultural Commercialisation		

3. Level of how each medium is accessed by rural people

How each medium is accessed	Highly Accessed	Accessed at a very low level
Broadcast medium		
Interpersonal medium		
Print media medium		
Electronic medium		

Thank you for your time!!!

Annexure 3: Focus Group Discussions

CHECKLIST FOR FOCUS GROUP DISCUSSIONS

Group Composition

1. Number of participants in FGD _____
2. Composition of members in FGD (gender) _____

Section A: Group Information

3. What is the name of your club/association/cooperative? _____
4. When was your group formed?

5. How many members are in your group?

6. What is the purpose of the grouping?

Section B: Access to Information and Extension services

7. What is the main source of agronomic and market information in this area?

8. Have any members of this group attended any training on commodity production and marketing?

9. Who provided trainings in the past season?

10. What type of trainings have you received in any commodity so far?

Section C: Preferences for information mediums (1=not preferred, 2=neutral, 3=preferred)

Preferred medium	Preferred Rate
Personal contact	
Mobile helpline	
Mobile voice	
Formal education	
Informal education	
Print media	
TV	
Mobile SMS	
Radio	
Electronic media	

Section D: Which Categories need more information search

Farming Category	Highly Searched	Searched at Low Level
Pre-Farm activities		
Agricultural Production		
Post-harvest		

Storage of Commodities		
Agricultural Marketing issues		
Value Addition		
Access to inputs		
Access to financial Services		
Access to Climate Smart Agriculture		
Access to Good Agricultural Practices		

Thank you for your time!!!