

DEDICATION

I sincerely dedicate this work to my sweet wife Tutu Phiri for the immeasurable support she gave in during the period of my studies. She accepted to stay alone at home looking after our two children Mwazanji John and Mercy while I was studying. For this I thank her very much!

Finally, to my father Mr. Mathias .S. Phiri and mother Mrs Mainala Phiri who have contributed so much towards my life and education.

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ABSTRACT

The Study was designed to determine the effectiveness of training and visit system of Agricultural extension.

The total population of Study composed of 18 camp extension officers, 4 block Supervisors and 8 district based Staff plus 7413 farmers. The researcher used random sampling method and picked 10 camps out of 20 camps, and the research was confined to these camps.

The researcher collected data using the questionnaire and interview techniques and analyzed it critically using tables of frequencies, and percentages.

The Study revealed that the following are some of the problems which make the T and V system less effective in Kasama west : few qualified extension officers, and among other problems stated in the Study are lack of transport for supervisory work. Also non-availability of adequate inputs such as seeds and fertilizers and inadequate credit facilities.

According to the Study the success or failure of the introduction of Training and visit system of Agriculture extension depends on the relevance of contents and degree of popular interest it generates, to any country.

The Study recommended among others the following: training of agricultural staff in advanced courses at diploma or degree level, promoting the expansion of market oriented production particularly of small scale farmers who are the majority, streamline the provision of credit resources to producers, improve their command of inputs.

These could help Government to find ways of improving the quality, relevance and efficiency of T & V system.

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## CHAPTER ONE

### 1.0 INTRODUCTION

For many years now, the Zambian government has made attempts to improve agriculture in order to be self-sufficient in both crop and animal production, as well as for export. An early approach was the support given to those farmers who were inclined to produce crops or animal produce on a relatively large scale. This answers the question why agriculture along the line of rail i.e from Livingstone to Copperbelt developed so well. This encompasses only a very small part of Zambia's farmers. The great majority of farmers who lived elsewhere struggled without the support of agricultural services to feed their families and earn some cash by the sale of agricultural produce.

The regular shortage of food led to regulations on the production of food in the tradition farming areas, away from the line of rail. Such regulations were enforced by agricultural extension staff placed at District Bomas or at agricultural camps.

When maize spread more and more rapidly and tradition food stuff (sorghum, millet, cassava) reduced in importance. Through the extension services the ideas of crop rotation and the use of manure and compost were being brought to the attention of the farmers. This was later, in the fifties and sixties, replaced by the promotion of the use of fertilizers, in combination with the use of

maize hybrids instead of open pollinated varieties of maize, and high plant population. Unfortunately, these initiatives were found acceptable mainly with only those farmers who had access to the means required to utilize the information and services available. The small, mainly traditional farmers did not have access to the information nor were they aware of services available. The majority of the farm families lived too far away in any case to be reached by the few agricultural extension workers available.

Over the past years agricultural extension was not successful in improving the flow of agricultural produce from the farming community. A major weakness was the lack of systematic contact between farm families and extension workers. The approach of extension system used was undefined in the sense that it had no name. During that time, the Department of Agriculture had few Extension workers, the ration being one (i) extension worker to eight hundred (800) farm families.

The area covered by the extension workers varied with the number of farmers ranging from 5km to 25km.

This extension system meant that if an extension worker visited one farm family a day, without been off duty, then he would only manage to visit 365 farm families in a year and 435 farm families would remain unattended to. By the time the extension worker goes back to the first farm family, they would have forgotten about the new

technique that could have been taught to them.

In 1978, an initiative was taken by the Department of Agriculture to introduce an intensive method and extension, known as the Training and visit system out extension (the T and V system). The T and V system proposes a systematic and methodical approach to establishing an intensive contact between the farm families and the extension worker, who becomes part and parcel of the farmer's life and activities. The farmer benefits by a regular contact with agricultural field worker who follows an agreed schedule of visits also allows an efficient follow up of developments in the field by an active participation from the side of the (more senior) guiding officers and by the support of officers.

Kasama district where this study took place is located in the Northern Province and was between 10°S and 11°S latitude. The longitude 31°E almost cuts the district into two(2) parts. Agriculturally, the district has been divided into two(2) i.e. Kasama east and west. This study was confined to Kasama west.

The area around Kasama west is mainly a plateau, ranging from 914 meters on the eastern side up to 1650 meters above the sea level on the western side.

The soils are predominantly ferralsol ranging from sandy loam to clay loam. Colours range from red to brown. These soils are generally leached, pH 4-6, and therefore a high range of fertilizer to sustain heavy feeders like maize. However, Kasama soils successfully sustain a wide range of food and feeder crops.

Kasama west lie in high rainfall belt of Zambia with minimum rainfall of 1100mm to 1400mm, and the annual mean rainfall increase from east to west.

The mostly temperative range is from 10<sup>o</sup>c to 35<sup>o</sup>c in winter and summer respectively. The district is relatively frost free.

Kasama west district has 7413 farmers of which 6576 are males and 837 are female farmers.

#### 1.1 Statement of the Problem

The Study was designed to investigate the effectiveness of Training and visit system of agriculture extension in Kasama West for the period between 1990 and 1994.

Since the introduction of Training and visit system of agriculture extension in Kasama West, there has been no systematic Study to evaluate its effectiveness.

The Training and visit system has had problems of inputs, learning materials and farmers had complained of not being reached by extension staff. In addition to this, the field extension staff have had problems of transport to reach farmers and also problems of subsistence allowance. Hence, there has been a question on the accuracy of the monthly reports from camps, and on the effectiveness of Training and visit system of agriculture extension in Kasama west.

This study focuses on the effectiveness of Training and visit system and fill up gaps mentioned above.

## 1.2 Purpose of the Study.

The purpose of the study was to determine the effectiveness of Training and visit system of Agriculture in Kasama West District.

## 1.3 Objectives of the Study.

The objectives of the Study were :-

- (i) to investigate the effectiveness of Training and Visit system of Extension in Kasama West District.
- (ii) to trace the flow of learning materials such as pamphlets and Handouts, from Provincial office to the District down to the camp.

- (iii) to determine the amount of time given for each village extension meeting, and the use of learning materials such as pamphlets, textbooks, radio and handouts for Extension Officer's use and availability.
- (iv) to explore the flow of input supply and marketing Situations.
- (v) to determine availability of credit to farmers, whether they be adequate and timely.
- (vi) to investigate the nature and availability of transport for Supervision on the part of camp Extension Staff, Block Extension officers and district based staff.
- (vii) to investigate the farmers implementation of messages delivered to them by camp extension workers, through adoption practices and demonstrations.

#### 1.4 The Significance of the Study.

It was felt that the results of this Study would help decision makers, educators, donors to know how effective the Training and visit system is and what kinds of problems it is facing.

The Study was to help farmers who would have access to the report appreciate efforts the Department of Agriculture extension branch is making to service them and the reasons for the launching of Training and visit system.

It was to help those responsible for the Production of learning materials such as pamphlets, radio programmes and handouts for lessons become aware of the extent to which their materials are effective in extending knowledge to farmers.

#### 1.5 Assumptions of the Study

- (a) It was assumed that there was inadequate flow of learning materials from Provincial Agricultural Officer's office to the District.
- (b) It was assumed that farmers were too busy in their fields to attend village Extension Group meetings, as they were used to been visited individually by camp Extension Officers other than at a formalized place.
- (c) It was also assumed that there was inadequate and ineffective use of radios, pamphlets and handouts by farmers.
- (d) It was assumed that there was inadequate supply of inputs to nearest depots so as to enable farmers have access to them.

- (e) It was assumed that credit facilities were inadequate and not timely.
- (f) It was assumed that means of transport were readily available to extension workers.
- (g) It was also assumed that farmers response regarding their problems and pitfalls were not taken seriously by concerned parties e.g marketing institutions and the extension workers.

#### 1.6 Limitation of the Study

This Study was restricted to Training and Visit system of Agriculture in Kasama West district and was conducted in ten(10) camps out of the twenty (20) camps in the district for the following reasons:

- i) Time factor could not allow
- ii) Financial resources were not enough for the researcher to cover all village Extension Groups.
- iii) Transport was also another handicap to the researcher's mobility

#### 1.7 Definitions of the terms used

##### (a) Adoption Practice

This is a technical demonstration where the farmer carrying out the task provide inputs for the purpose of learning new methods of farming,

- (b) Block: An agricultural area consisting of at least (3) camps which is covered by field extension workers in their day to day operations.
- (c) Block Extension Officer : An agricultural worker in charge of a block.
- (d) Camp: This is an area of station covered by field extension workers in their day to day operations.
- (e) Camp Extension Officer: This is a field worker in charge of a camp. He is a person who works in close contact with the farmer.
- (f) Contact Farmer: These are farmers who assist a camp extension officer to carry out recommended techniques to his fellow farmers.
- (g) Crop forecast: A method of obtaining crop data by looking at crop situation in the fields and all factors that would affect its production in order to enable people in authority to plan a head.
- (h) Effectiveness: Producing the desired or intended results, making a Striking impression and fit for service or work.

- (i) Extension worker: These are agricultural Staff specially trained to teach farmers.
  
- (g) Field Notebook: A diary used to record three main items: basic information about the camp, the extension workers' daily activities and problems encountered in the field, and the main points discussed in the fortnight training.
  
- (k) Hybrid: The product of a cross between two genetically unlike parents
  
- (l) Subject matter Specialist: A person with a major in one or two fields of study e.g. crops or animal Science.
  
- (m) Village Extension Group: This is a group of farmers normally consists of 10 to 20 farmers who come together for the purpose of learning new techniques.

## CHAPTER 2

### LITERATURE REVIEW

The Zambian government has made many attempts to achieve development of agriculture so as to be self-sufficient in food production and in the supply of various raw materials such as oil seed, cotton and tobacco. An earliest approach employed by the ministry of Agriculture was intended to support farmers who were inclined to produce crops or animal produce, on a relatively large scale, hence, the development of agriculture along the line of rail from Livingstone to Copperbelt. This encompassed only a very small part of Zambia's farmers. Small scale farmers, who are the majority had no support of agricultural services.

Regularly occurring shortages of food led to regulations on the production of food also in the tradition farming areas, away from the line of rail such regulations were enforced by agricultural extension staff placed at district Bomas or at agricultural camps. When maize spread more and more rapidly and traditional food stuffs (Sorghum, millet, cassava) reduced in importance, soil fertility became an issue of great importance.

Through the extension services the ideas of crop rotation and the use of manure and compost were brought to the attention of the farmers. This was later, in the fifties and sixties, replaced by the promotion of the use of fertilizers, in combination with the use of maize hybrids instead of open pollinated varieties of maize,

and high plant populations. Unfortunately, these initiatives found acceptance mainly with only those farmers who had access to the means required to utilise the information and services available. The Small, mainly traditional farmers did not have access to the information nor were they aware of services available. The majority of the farm families lived too far away in any case to be reached by few agricultural extension workers available.

The kind of extension method which was practised before Training and visit system of agriculture extension came into effect in Zambia was that of individual farm visits. Extension Staff in the department of Agriculture are very few to cater for all individual farmers in the country. Hence many farmers had little contact with extension staff.

In the handbook for Agricultural field workers by the Department of Agriculture: Training and visit system of extension in Zambia (196:6) it was pointed out that:

Over the past years agricultural extension was not successful in improving the flow of agricultural produce from the farming community. A major weakness was the lack of systematic contact between farm families and extension workers.

Therefore, an initiative was taken by the Department of Agriculture to introduce an intensive method of extension known as 'The Training and visit system of extension' (The T & v system). The T & V system proposes a systematic and methodical approach to establishing an intensive contact between the farm families and the extension worker, who becomes part and parcel of farmer's life and activities.

Farm families are organised in groups of 10 to 20. The agricultural worker meets these groups twice in a month on set days so as to impart new technologies of farming and also to discuss problems encountered in the fields by the farmers. This class of people is known as the village Extension Group (V.E. G). The farmer who is a member of the V.E.G benefits by a regular contact with agricultural field worker who follows an agreed schedule of visits. This agreed schedule of visits also allows an efficient follow up of developments in the field by active participation from the (more senior) guiding officers and by the support of officers.

Instructions and orders pertaining to the administration of Training and visit system are obtained from the Provincial headquarters.

The Provincial Extension Training Officer is responsible for intensifying training of agricultural field workers in relevant techniques and recommendations through the existing Training

committee. Members of this committee include all Provincial Specialists officers and the subject matter specialists. This curriculum committee is responsible for the technical contents of various training courses to be arranged on the basis of apparent knowledge and practical skills of the agricultural field workers. The ideas for subjects to be taught partly emerge from felt needs of the farmers at camp\block level and partly as considered to be important by district or Provincial agricultural experts. Detailed Plans for the timing and location of various training courses are worked out by the Provincial extension training officer in cooperation with district level agricultural staff.

Actual training activities take place at district level and the courses are given by Provincial Specialist officers. The training sessions are chaired either by the District Agricultural Officer or the Principal of the farm institute, or by the officer in charge of the Farmers Training Centre. The participation of the district staff allows a better, more relevant and realistic follow up of activities of the agricultural field workers when they have returned to their blocks or camps. The participation in the course involves field level extension Staff from both the Agricultural camps and Blocks. The mixing of the two categories of field level extension staff is intentional in order to stress the need for jointly tackling the farmers' problems through the T and V system of extension. Only when fully aware of each others abilities and personalities can the group of extension workers effectively and

efficiently work to support the farmers' development. (Handbooks for Agricultural field workers 1982 : 10-11)

In order to promote an effective support for the agricultural field workers in the agricultural camps a specific number of such camps are assigned to a particular Block. This makes it possible for regular supervisory visits of staff from the block to guide and assist the camp level extension staff. Once the T and V system of extension was introduced the agricultural field workers at the camp had to divide this into six working areas in order to be able to plan a schedule of regular visits to groups of farm families to be convened in each of the six areas. The six groups of farming families elect their own representatives known as 'contact farmers' through whom the agricultural field worker reach the farm families concerned, without actually visiting them all. This is so, as it is not possible for an agricultural field worker to visit every one at his farm on a regular basis. Also, information travel to other families as long as the 'contact farmers' have a good standing in the community.

In spite of the introduction of the T & V system in Kasama west district, there had been some complaints and problems concerning the system.

Juill, (1988 : 12) argued, in his contribution to solving problems that:-

It is impossible to solve problems until its causes are first determined.

As per the statement above it was indeed imperative, first and foremost, to determine the causes of the problems. After determining the causes, then, it is easy to solve them. Hence, this research was conducted so as to assist determine the causes of low production in both crops and livestock and/or the effectiveness of Training and visit in Kasama west at large.

According to the National Extension Action Plan, by Extension Branch Department of Agriculture (1991 : 16). There has been a lot of problems that have been associated with the adoption of T and V especially in Provinces without Donor assistance. The following are problems which have been listed in accordance with the National Action Plan of the ministry of Agriculture.

1. The chronic lack of transport and recurrent funds necessary to implement the system and maintain the necessary sequence of contacts at all levels.
2. The isolation of narrow technical messages which are related to farm problems and the tendency for extension staff to act as messengers as opposed to advisors.

3. The relatively high cost of T and V and general lack of adequate resources to sustain the system without donor support.
4. The poor selection and failure of contact farmers to act as messengers between extension and the farming community at large.
5. The lack of media support and its integration within seasonal programmes.
6. The paucity of appropriate innovators and the tenants research - extension linkage resulting in insufficient technical messages to back up the regular cycle of training and visit throughout the year.
7. The inability of T and V in its classical form to address the needs of complex mixed crop and livestock farming Systems and diversity of agro-ecologies.
8. The lack of suitably qualified Staff at district level as subject matter Specialists to ensure adequate linkage between Provincial subject matter specialists and camp Extension Staff.
9. The lack of effective input supply and marketing institutions to support the extension efforts.

10. Low population densities and large block and camp size making the distances to be travelled in order to maintain the regular visit cycle difficult to function.
11. The lack or non-existence of feedback from field Staff regarding farmer problems resulting in extension programmes which were heavily top-down and of doubtful relevance.
12. The involvement of field Staff in activities that felt beyond the Scope of extension.

Despite these perceived deficiencies, elements of Training and visit have proved valuable. These elements are reflected in any well organised extension system and this includes:-

1. Timely planning of seasonal programmes involving all staff.
2. Regular training and Supervision of field Staff and a general increase in morale.
3. Clear division of responsibilities between Provincial, District, Block and camp officers.

'The link with the farmer depends often on the contact the agricultural field workers are capable of establishing. From the handbook for agricultural field worker. Training and visit.  
(Ministry of Agriculture 1983:8)

The day to day, extension activities are left to field extension staff, the agricultural field workers. These very often have insufficient training and experience. The agricultural field workers are made up of Agriculture Assistants and commodity Demonstrators who have to provide complete coverage of agricultural advice to the farm families.

In order to build-up the required level of knowledge and information, the agricultural field workers require frequent and intensive training in all aspects relevant to farm families in their areas. In addition, they need a strong and frequent support from specialist at district or provincial level to tackle any new problems that arise. Both conditions are not met. Little in-service training was provided in the past and this resulted in the key personnel in the Department of Agriculture remaining poorly trained. The agricultural field workers thus lose confidence and tend to avoid their farm families.

Many farmers did not receive seeds and fertilizers in so much that wards like Chumba and Musowa, farmers, have not even planted a single grain of maize. In short fertilizers Seeds were inadequate. Many farmers did not qualify to get loans. From the ministry of Agriculture Kasama West District Crop forecasting 1990/91)

If poverty and hunger has to be eliminated in Zambia, the government ought to have a more positive approach in addressing the needs and pleas of small scale farmers who are the majority producers of food crops.

"The most fundamental and in the long term most sensible measure to ensure the self-sufficiency of developing countries is obviously the implementation of local food production."

(Heribert. H. (1988 : 90)

A more systematic approach to both agricultural extension and research, input and credit disbursement and general marketing of farm produce will surely create a way for development of agriculture in Zambia to the end that the country becomes self-sufficient in food production and in the supply of various agricultural raw materials.

VanDen A.W and Hawkin in their book Agricultural Extension (1988 : 284) :

'Introduction of Training and visit system has not always been based on a sufficiently thorough analysis of the existing extension system and its difficulties or of the social-economic and cultural solution. Experts came to different countries using the same blue print each time, often based on experiences in India. There is a large supply of trained agriculturists in India, many of whom are willing to work for a low salary.

If we compare, Zambia to India, it is almost impossible to find enough qualified staff, especially subject matter specialists. Further, financing the extension service might present problems after the world Bank loan expires. Therefore, Zambia needs a more sustainable and systematic way of extension methodology.

## CHAPTER 3

### 3.0 METHODOLOGY

#### 3.1 Research Design

This Study makes use of descriptive research design in order to give an accurate account of effectiveness of Training and visit system of Agricultural extension in Kasama West District.

The researcher felt that describing events, procedures, methods, techniques, responses, local leaders and ministry officials will provide a clue in identifying the performances of Training and visit system of extension.

#### 3.2 Population

The total population living in the area of study composed of 18 camp extension offers, 4 Block extension officers, 8 district based staff plus 7413 farmers i.e 6576 male farmers and 837 female farmers. All these were included in the population of the Study. The total population was therefore 7441.

### 3.3 Sample of Population

The researcher mostly used probability sampling, which employed random sampling procedures for selecting 10 camps out of 20 camps in the district. The research concentrated on 10 camps. Twenty pieces of paper bearing the names of 20 camps were written and the District Agricultural Officer was asked to select 10 camps at random.

Within the 10 chosen camps, the Block extension officer was also asked to pick farmers whose names were in the multiple of (4) from the farm register, for instance 4, 8, 12, 16 ..... and 60 were selected.

The researcher included camp extension officers, block extension officers of the selected blocks and all district based staff were subjects of the Study. Because of their small numbers there was no need for sampling procedures.

### 3.4 Instruments

#### (i) Questionnaires:

22 Questionnaires were developed for camp extension officers, Block extension officers and District based staff.

(ii) Interviews were conducted by the researcher among the selected farmers.

### 3.5 Data Collection

Data was collected from camp extension officers, block extension officers and district based staff by using questionnaires. This was administered personally by the researcher.

Personal interviews were done with selected farmers.

The researcher also went through monthly and annual reports from the District, and Crop forecasting reports were also reviewed.

Previous documents prior to Training and visit, plus documents now used for T and V were also examined.

## CHAPTER 4

### 4.0 DATA ANALYSIS

- 4.1 This chapter presents the findings of the investigations into the effectiveness of the Training and visit system of agricultural extension in Kasama West district i.e. Kasama West, Milungu, Kasonde Cisuna, Musa, Nkolemfumu, Lukulu North Project, Mwamba, Chiombo and Ngoli.
- 4.2 The analysis started with the transcription of questionnaires and interviews.
- 4.3 Data analysis has been done by using tables of frequencies, and percentages. In some cases, tables have been combined according to categories, while in certain circumstances where respondents, differ Vehemently, separate tables have been shown. At the bottom of every table salient points have been highlighted.
- 4.4 The data has been divided into five categories (parts) i.e.  
Part 1 common questions which appeared in the questionnaires of agricultural Staff.  
Part 2 was District based Staff.  
Part 3 was for Block Extension Staff  
Part 4 was for Camp Extension Staff  
Part 5 was for Farmers.

Personal Data

Table 1.0 Distribution of Agricultural Staff (Respondents) by sex.

Sex	Frequency	Percentage
Male	17	74
Female	6	26
Total	23	100

According to the data given in table 1.0 74% of agricultural Staff were males and 26% were females.

Table 2.0 Distribution of Agricultural Staff (Respondents) by Age.

Age	Frequency	Percentage
20 - 29	6	26
30 - 39	9	39
40 - 50	3	13
Above 50	5	22
Total	23	100

According to table 2.0 39% of agricultural Staff had their age in the range 30-39, 26% had their age in the range 20-29, 22% were above 50 and 13% had their age in the range 40 - 50.

Table 3.0 Distribution of Agricultural Staff by Education.

QUALIFICATION	FREQUENCY	PERCENTAGE
Standard VI/ Cert. in Agric.	2 7	7 9
Form II/ Cert. in Agric.	5	22
Form III/ Cert. in Agric.	3	13
Form IV/ Cert. in Agric.	12	52
Form V/ Cert Diploma in Agric.	1	4
None of the Above	-	-
TOTAL	23	100

According to the data provided in table 3.0 52% agricultural Staff were form Vs with certificates in agriculture, 22% were form IIs with certificates in agriculture, 13% were form IIIs with certificates in agriculture, 9% were Standard VI with certificate in agriculture and 4% were form Vs with Diplomas in Agriculture.

Table 4.0 Form of Transport used to do work.

TRANSPORT	FREQUENCY	PERCENTAGE
Bicycle	8	44
Motorcycle	7	30
Vehicle	2	9
Foot	4	17
Total	23	100

According to table 4.0 on the means of transport used by agriculture staff, 44% use bicycle 30% use motorcycles, 17% walk and 9% use a vehicle.

Table 5.0 How is Training and visit system compared to the old method of extension?

	FREQUENCY	PERCENTAGE
Good	22	96
Poor	1	4
TOTAL	23	100

96% of the respondents said Training and visit was good while 4% said it was poor.

Table 6.0 Are inputs available to farmers?

	FREQUENCY	PERCENTAGE
Yes	12	52
No	11	45
Total	23	100

52% of respondents said inputs were available to farmers while 48% said they were not available.

Table 7.0 Are inputs, seeds, fertilizers adequate?

	FREQUENCY	PERCENTAGE
Yes	7	38
No	16	70
TOTAL	23	100

70% of the respondents said inputs (seeds, fertilizers) were not adequate while 30% said it was adequate.

Table 8.0 Are inputs (seeds, fertilizers) timely?

	FREQUENCY	PERCENTAGE
Yes	4	17
No	19	83
Total	23	100

83% of the respondents said inputs (seeds, fertilizers) were not timely and 17% said it was timely.

PART 2. DISTRICT BASED STAFF

QUESTIONNAIRE DATA ANALYSIS

Table 1.0 Do you normally have transport whenever you want to do your work.

	FREQUENCY	PERCENTAGE
Yes	2	22
No	7	78
Total	9	100

78% normally had no transport whenever they needed it, while 22% had transport.

Table 2. Do you use teaching aids when instructing camp and Block extension offers?

	FREQUENCY	PERCENTAGE
Yes	7	78
No	2	22
Total	9	100

78% used teaching aids when instructing camp and Block extension officers and 22% did not.

Table 3 If the answer is Yes, to question 3, are those teaching aids given to Block and camp extension officers?

	FREQUENCY	PERCENTAGE
Yes	3	33
No	4	45
Left questionnaire blank	2	22
Total	9	100

45% do not give teaching aids to Block and camp extension Staff, 33% give teaching aids to Block and camp extension staff while 22% of the respondents left the answer blank.

Table 4. What problem do you experience when instructing Block and camp extension officers?

PROBLEM	FREQUENCY	PERCENTAGE
Block and camp officers find it hard to comprehend the Lecturers	7	78
Low attendance of Block and camp Extension officers	2	22
Total	9	100

78% said block and camp officers find it hard to comprehend Lectures and 22% said there was low attendance of block and camp extension officers.

Table 5 Does Training and visit system cover all farmers in the District?

	FREQUENCY	PERCENTAGE
Yes	1	11
No	8	89
Total	9	100

80% said it did not cover all farmers in the district while 11% said it covered all farmers in the district.

Table 6. If the answer to question 7 is, 'No' why?

	FREQUENCY	PERCENTAGE
Because of few extension staff and farmers are distant apart	5	56
Transport is a major problem	3	33
Farmers are not willing to join village extension Groups	1	11
Just any other problems	0	0
Total	9	100

56% said there were few extension staff and farmers are distant apart, 33% said it was because of Transport which was a major problem and 11% said farmers are not willing to join village extension groups.

Table 6. If the answer to question 7 is, 'No' why?

	FREQUENCY	PERCENTAGE
Because of few extension staff and farmers are distant apart	5	56
Transport is a major problem	3	33
Farmers are not willing to join village extension Groups	1	11
Just any other problems	0	0
Total	9	100

56% said there were few extension staff and farmers are distant apart, 33% said it was because of Transport which was a major problem and 11% said farmers are not willing to join village extension groups.

Table 7 How is the flow of instructional materials from the Provincial Agricultural officer to the District?

	FREQUENCY	PERCENTAGE
Inadequate	6	67
Adequate	3	33
Not just there	0	0
Total	9	100

67% said it was inadequate and 33% it was adequate and none said it wasn't there.

Table 8 Do you get any leaflets for distribution to block and camp extension officers?

	FREQUENCY	PERCENTAGE
Yes	5	56
No	4	44
Total	9	100

56% said they got leaflets which were distributed to block and camp officers and 44% did not.

PART 3. BLOCK EXTENSION OFFICER'S QUESTIONNAIRE DATA ANALYSIS

Table 1. How many camps do you have in your Block?

	FREQUENCY	PERCENTAGE
1 - 2	0	0
2 - 3	0	0
3 - 4	1	25
5 - 6	3	75
Total	4	100

75% had 5 - 6 camps in the block and 25% had 3 - 4 camps in the block.

Table 2 How often do you attend fortnight meetings?

	FREQUENCY	PERCENTAGE
a) Periodically	4	100
b) Whenever there is something of importance	0	0
Total	4	100

100% attended fortnight meetings periodically.

Table 3 Has the concept of Training and visit system fully been explained to you?

	FREQUENCY	PERCENTAGE
Yes	4	100
No	0	0
Total	4	100

100% said the concept of Training and visit has been fully been explained.

#### PART 4. CAMP EXTENSION OFFICERS

##### FOCUSED SEPARATE SPECIFIC QUESTIONS

Table 1. How many village extension groups do you have in your camp?

	FREQUENCY	PERCENTAGE
1 to 6	1	10
6 to 8	7	70
more than 8	2	20
Total	10	100

70% had 6 to 8 village extension groups 20% had more than 8 while 10% had 1 to 6.

Table 2. What is the average number of farmers in each village extension group?

	FREQUENCY	PERCENTAGE
Less than 5	1	10
5 to 10	1	10
10 to 20	6	60
more than 20	2	20
Total	10	100

60% had farmers in the range 10 to 20% had more than 20 farmers, 10% had farmers in the range 5 to 10 while the other 10% had less than 5 farmers.

Table 3. Are farmers adequately covered during village extension Group meetings?

	FREQUENCY	PERCENTAGE
Yes	7	70
No	3	30
Total	10	100

70% said farmers were adequately covered during village extension group meetings while 30% said no.

Table 4. Has the concept of Training and visit system Fully been explained to you?

	FREQUENCY	PERCENTAGE
Yes	10	100
No	0	0
Total	10	100

100% said the concept of Training and visit system had been fully explained to them and none said no.

Table 5. Does the Block extension visit you regularly?

	FREQUENCY	PERCENTAGE
(a) Yes	8	80
(b) No	2	20
Total	10	100

visited by Block extension regularly while 20% were not.

Table 6. Are you visited by the district based staff?

	FREQUENCY	PERCENTAGE
(a) Yes	10	100
(b) No	0	0
Total	10	100

100% were visited by the district based staff.

Table 7. What problems do you face when instructing farmers?

	FREQUENCY	PERCENTAGE
a) Apathy of farmers towards village extension meeting	1	10
b) Farmers find it hard to comprehend the lessons	1	10
c) Low attendance of farmers	7	70
d) No problem	1	10
Total	10	100

70% said low attendance from farmers, 10% said apathy of farmers towards village extension meetings, 10% said farmers find it hard to comprehend lessons and the other 10% had no problems.

Table 8. How many village extension group meetings are held each month?

	FREQUENCY	PERCENTAGE
(a) Once	0	0
(b) Twice	8	80
(c) More than two	2	20
Total	10	20

80% said village extension group meetings were held twice, 20% said more than two and none said once.

Table 9 How often do you attend fortnight meeting?

	FREQUENCY	PERCENTAGE
(a) Periodically	9	90
(b) Whenever there is something of importance or urgent	1	10
Total	10	100

90% said they attended fortnight meetings periodically, 10% whenever there was something of importance or urgent.

Table 10. Do messages or lessons learned during fortnight meetings meet the needs of your farmers?

	FREQUENCY	PERCENTAGE
(a) Yes	0	100
(b) No	0	0
Total	0	100

100% agreed that messages or lessons learned during fortnight meetings met the needs of their farmers, and none said no.

Table 11. Do you use teaching materials during you sessions?

	FREQUENCY	PERCENTAGE
(a) Yes	4	40
(b) No	6	60
Total	10	100

60% said don't use teaching materials during their sessions while 40% said Yes.

Table 12. If the answer is No, to 11 why not?

	FREQUENCY	PERCENTAGE
(a) Not available	10	100
(b) Poorly designed	0	0
Total	10	100

100% did not use teaching materials during their sessions because the materials were not available, and none said they were poorly designed.

Table 13.. Do you distribute leaflets during village extension group to farmers?

	FREQUENCY	PERCENTAGE
(a) Yes	1	10
(b) No	9	90
Total	10	100

90% said no while 10% said they distribute leaflets during extension group meetings to farmers.

Table 4. How long have you been farming?

	FREQUENCY	PERCENTAGE
0 - 9 years	8	13
10 - 19 years	32	53
20 - 39 years	16	27
40 - 49 years	4	7
above 50 years	-	-
Total	60	100

53% said they have been farming for the period in the range 10 - 19 years, 27% said in the range 20 - 39 years, 13% said 0 - 9 years, 7% said in the range 40 - 49 years and non had been farming for over 50 years.

Table 5. How has been the rainfall pattern this season?

	FREQUENCY	PERCENTAGE
Below normal	44	73
Normal	12	20
Above normal	4	7
Total	60	100

73% said the rain was below normal, 20% said rain was normal and 7% said the rain was above normal.

Table 6. When do you plant your crops?

	FREQUENCY	PERCENTAGE
Early	16	27
Normally	20	33
Late	24	40
Total	60	100

40% of farmers said they plant late, 33% said they plant normally and 27% said they plant early.

#### PART 5 INTERVIEWS FOR FARMERS

##### 1 PERSONAL DATA

Table 1 Distribution of farmers by sex

SEX	FREQUENCY	PERCENTAGE
Male	44	73
Female	16	27
Total	60	100

73% of farmers were males. 27% were females

Table 2 Distribution of farmers by Age

AGE	FREQUENCY	PERCENTAGE
20 - 29	4	7
30 - 39	20	33
40 - 50	32	53
Above 50	4	7
Total	60	100

52% of farmers were in the range of 40 - 50 years, 33% in the range of 30 - 39, 7% in the range of 20 - 29 and 7% above 50 years.

Table 3. Marital Status

MARRIED	FREQUENCY	PERCENTAGE
Yes	44	73
No	16	27
Total	60	100

73% of farmers interviewed were married and 27% were not married.

Table 7. How was the credit disbursement?

	FREQUENCY	PERCENTAGE
Timely	0	0
Late	60	100
Total	60	100

100% of farmers said the credit disbursement came late.

Table 8. How was said distribution?

	FREQUENCY	PERCENTAGE
Timely	16	27
Late	44	73
Total	60	100

73% of farmers said it was late and 27% said it was timely.

Table 9. Was said adequate?

	FREQUENCY	PERCENTAGE
Yes	56	93
No	4	7
Total	60	100

93% of the farmers said seed was adequate and 7% disagreed.

Table 10. How was basal dressing fertilizer distribution?

	FREQUENCY	PERCENTAGE
Timely	8	13
Late	52	87
Total	60	100

87% farmer said it was late and 13% said it was timely

Table 11. Was basal dressing adequate?

	FREQUENCY	PERCENTAGE
Yes	52	87
No	8	13
Total	60	100

87% of farmers said it was adequate and 13% said it was not adequate.

Table 12. How was top dressing fertilizer distribution?

	FREQUENCY	PERCENTAGE
Timely	36	60
Late	24	40
Total	60	100

60% of the farmers said it was timely and 40% said it was late.

Table 13. Was Top Dressing fertilizer adequate?

	FREQUENCY	PERCENTAGE
Yes	16	27
No	44	73
Total	60	100

73% of farmers said it was not adequate and 27% said it was adequate.

Table 14. Are you a member of a village extension group?

	FREQUENCY	PERCENTAGE
Yes	52	87
No	8	13
Total	60	100

87% of farmers said were members and 13% said were not members.

Table 15. How many times a month do you meet?

	FREQUENCY	PERCENTAGE
Periodically	52	87
Whenever there is something important or urgent	8	13
Total	60	100

87% of the farmers met periodically while 13% met whenever there was something of importance.

Table 16. Does the camp extension officer follow a fixed schedule?

	FREQUENCY	PERCENTAGE
Yes	48	80
No	12	20
Total	60	100

80% of the farmers said camp extension officers follow a fixed schedule while 20% said no.

Table 17. Does the camp officer force you to adopt the teachings?

	FREQUENCY	PERCENTAGE
Yes	4	7
No	56	93
Total	60	100

93% of farmers said they are not forced to adopt the teachings and 7% said they are forced.

Table 18. Are messages related to your problems?

	FREQUENCY	PERCENTAGE
Yes	52	87
No	8	13
Total	60	100

87% of farmers said messages were related to their problems and 13% said they were not.

Table 19. Are your problems adequately answer during your village extension group?

	FREQUENCY	PERCENTAGE
Yes	52	87
No	8	13
Total	60	100

87% of farmers said their problems were adequately answered during their village extension group meetings and 13% disagreed.

Table 20. Do you have any demonstrations or adoption plots at your farm?

	FREQUENCY	PERCENTAGE
Yes	28	53
No	32	47
Total	60	100

53% of farmers did not have demonstrations or adoption plots at their farms while 47 had.

Table 21. Does the camp extension officer give you leaflets or other printed materials during your meetings?

	FREQUENCY	PERCENTAGE
Sometimes	0	0
Always	0	0
Never	60	100
Total	60	100

100% of the farmers interviewed said they never received any leaflets or other printed materials.

Table 22. How many hours does the camp extension officer spend with you during your meeting?

	FREQUENCY	PERCENTAGE
a) $\frac{1}{2}$ hour to 1 hour	8	13
b) 1 hour to 2 hour	8	13
c) more than 2 hours	3	5
d) As need arises	41	69
Total	60	100

69% of farmers said as need arises, 13% said between  $\frac{1}{2}$  hour, 13% said 1 hour to 2 hours and 5% said more than 2 hours.

Table 23. Do you participate in field days?

	FREQUENCY	PERCENTAGE
Yes	52	87
No	8	13
Total	60	100

87% of farmer said they participate in field days and 13% said they do not.

Table 24. Do you participate in Agricultural shows?

	FREQUENCY	PERCENTAGE
Yes	16	27
No	44	73
Total	60	100

73% of farmers did not participate in Agricultural shows and only 27% participate.

Table 25. Does the contact farmer visit you?

	FREQUENCY	PERCENTAGE
Yes	28	47
No	32	53
Total	60	100

53% of the farmers are visited by contact farmers are 47% are not.

Table 26. Do you have problem in comprehending messages?

	FREQUENCY	PERCENTAGE
Yes	12	20
No	48	80
Total	60	100

80% of farmers did not have problems in comprehending messages while 20% had problems.

Table 27. If the answer to question 26 is Yes what made of teaching would you want them to use to you?

	FREQUENCY	PERCENTAGE
Demonstration/Adoption plots	20	33
More simple language	13	22
none of the above	27	45
Total	60	100

45% of the farmers said none of the above 33% said Demonstrations/Adoption plots and 22% said more simpler language.

Table 28. Do you have problems acquiring?

	FREQUENCY	PERCENTAGE
Yes	44	73
No	16	27
Total	60	100

73% of farmers had no problems, while 27% of farmers had problems.

Table 29. Are they Available?

	FREQUENCY	PERCENTAGE
Yes	56	93
No	4	7
Total	60	100

93% of farmers said inputs were available and 7% said they were not available.

Table 30. How do you find Training and visit system of Agriculture compared to the old system.

	FREQUENCY	PERCENTAGE
Good	60	100
Poor	0	0
Total	60	100

100% of farmers interviewed said Training and visit system was good and none said it was poor.

## CHAPTER 5

### 5.1 DISCUSSION OF THE FINDINGS

The main objective of the Study was to investigate the effectiveness of Training and visit in Kasama West. The findings in the results show that this objective has not been fully realised. Kasama West district still lacks suitably qualified Staff as subject matter specialists, who would ensure adequate linkage between Provincial subject matter Specialists and field workers. 96% of agricultural Staff in the district are certificate holders from Zambia college of agriculture. These are the same people who are used as subject matter specialists, hence, the same calibre with field extension officers. Therefore, it was not surprising to find that the rate of comprehending agricultural technical messages by field extension officers from the district was quite low. 78% of block and camp officers find it hard to comprehend the Lectures. When field extension staff receive distorted information, then it is unlikely that they could sufficiently pass over the information to farmers, thus, defeating the purpose of training and visit system sometimes field extension officers were not sure of themselves. That was why some of them tried to avoid farm families, where problem would have been tackled.

The T and V system was faced with another serious problem. That was the lack of transport for supervisory Staff. 78% of district

was the lack of transport for supervisory Staff. 78% of district based staff normally had no transport, whenever they needed it. This is further qualified by the fact that there are few extension workers to reach the farmers who are distantly apart.

The flow of instructional materials from the Provincial Agricultural Officers' office is also inadequate, 67% of the district based staff said it was inadequate, and since the qualification of the district based staff is low, this puts the field extension officers at awkward position in the sense that they wouldn't be fully catered for in terms of instruction materials.

The district also has a problem of inadequate inputs which are delivered late to farmers. 70% of agricultural Staff said inputs (seeds, fertilizers were inadequate) and <sup>some</sup> 30% of agricultural Staff said the delivery of inputs were ~~not~~<sup>ade</sup>quate. The success of any agricultural activity in the world depends on agricultural inputs. If there are no inputs, the agriculture extension becomes void of its purpose.

## 5.2 CONCLUSION/SUMMARY

The success or failure of the Introduction of Training and visit system of agriculture extension depends on the relevance of its contents and the degree of popular interest it generates. It is essential for the introduction of Training and visit system to be proceeded by a field survey in which the needs of farmers and their problems are identified and acceptable solutions designed. This could be carried out by a team of Specialists preferably from the district headquarters assisted by local extension staff in the field.

There is need to improve the contents of Training and visit system of extension, especially in connection with food crops and animal production. This could be done in liaison with Misamfu Regional research station, and the grassroots level which are farmers themselves.

Although, Training and visit system provides an intensive contact between farm families and extension workers, a lot of problems lay a head of it. This is so because the money which is <sup>usually</sup> ~~used~~ is a loan from world bank. The whole system might present a lot of problems when the world bank loan expires. The general maintenance of motorcycles, vehicles, bicycles and indeed, the payment of <sup>t. b. s.</sup> subsistence allowance to extension which seems a motivating factor

at the moment will be a very big burden to a developing nation like Zambia. Besides, Zambia has very few agriculturists. This makes it quite ineffective, compared to places where it was first introduced e.g India. In India, there are many qualified agriculturists who are even willing to work for low Salaries; which is not the case in Zambia. These Indian agriculturist, have a better coverage of their farmers, as opposed to their counterparts in Zambia.

Finally, I would say that, since Training and visit system of agriculture is quite new to Zambia and that this study looked at it in a renewal setting. I would recommend that other researchers do Similar studies in urban and peri-urban settings in order to find out whether there would be similar or different results.

### 5.3 RECOMMENDATIONS

From the findings of this study it is possible to make the following recommendations.

- a) The department of agriculture needs to train its staff in advanced courses at diploma and degree level. This will help staff to broaden their minds and understand new technologies of farming without difficult.
- b) The department of agriculture needs to provide more instructional materials to the field Staff. This will assist extension staff to keep a breast with new techniques of farming.
- c) The department of agriculture should promote the expansion of market oriented production particulary of small scale farmers who are the majority.
- d) The government needs to Streamline the provision of credit resources to producers, improve their command of inputs.
- e) The government needs to effect periodic upward adjustment of floor producer prices based on the cost of production. Other farmers might get discouraged to grow crops like maize which is below the grow margin.

- f) Increase the effectiveness and efficiency of governmental marketing services, especially through Liberalization.
- g) The Zambian government needs to provide a more sustainable and systematic way of extension methodology than the current Training and visit system which is dependant on world bank loan.
- h) There is need to revise the current Training and visit system which is dependant on the world bank loan so as to present a more sustainable and methodical system because should the world bank loan expire this will certainly present problems in the ministry of agriculture.

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APPENDIX A

QUESTIONNAIRE FOR DISTRICT BASED STAFF

Dear Respondent,

You are asked to freely and honestly answer all questions. The findings are hoped to be of benefit to agricultural extension.

The information will be treated very confidentially.

INSTRUCTIONS

Tick in the box corresponding to the letter of the answer of your choice.

Example

The Provincial headquarters of Northern Province is:

- (a) Kasama
- (b) Mongu

---

1. What is your sex?

- (a) Male
- (b) Female

2. What is your age?

- (a) 20 - 29
- (b) 30 - 39
- (c) 40 - 50
- (d) above 50

3. What is your education standard?

- (a) Standard six/certificate in Agriculture
- (b) Form II/certificate in Agriculture
- (c) Form III/certificate in Agriculture
- (d) Form V/certificate in Agriculture
- (e) Form V/Diploma in Agriculture
- (f) None of the above

4. Do you normally have transport whenever you want to do your work?

- (a) Yes
- (b) No

5. What form of transport do you have?

- (a) Bicycle
- (b) Motorcycle
- (c) Vehicle
- (d) None of the above

6. Do you use teaching aids when instructing camp and Block extension officers?

- (a) Yes
- (b) No

7. If the answer is Yes, to question 3, are those teaching aids also given to Block and Camp extension officers?

- (a) Yes
- (b) No

8. What problems do you experience when instructing Block and Camp extension officers?
- (a) Block and Camp extension officers find it hard to comprehend the lectures
  - (b) Low attendance of Block and Camp extension officers
9. How is Training and Visit System compared with the old method of extension?
- (a) Good
  - (b) Poor
10. Does Training and Visit System cover all farmers in the District?
- (a) Yes
  - (b) No
11. If the answer to question 7 is, 'No', why?
- (a) Because of few extension staff and farmers are distant apart
  - (b) Transport is a major problem
  - (c) Farmers are not willing to join village extension Groups
  - (d) Just any other problems

12. How is the flow of instructional materials from the Provincial Agricultural Officer's office to the District?

- (a) Inadequate
- (b) Adequate
- (c) Not just there

13. Do you get any leaflets to be distributed to Block Extension Officers and Camp Officers?

- (a) Yes
- (b) No

14. Are inputs available to farmers?

- (a) Yes
- (b) No

15. Are inputs, i.e. seeds, fertilizers adequate?

- (a) Yes
- (b) No

16. Are inputs (seeds, fertilizers) timely?

- (a) Yes
- (b) No

Thank you very much.

Please return the questionnaire to:

JOHN PHIRI,  
UNZA.,

APPENDIX B

QUESTIONNAIRE FOR BLOCK EXTENSION OFFICERS

Dear Respondent,

You are asked to freely and honestly answer all questions. The findings are hoped to be of benefit to agricultural extension.

The information will be treated very confidentially.

INSTRUCTIONS

Tick in the box corresponding to the letter of the answer of your choice.

Example

The Provincial headquarters of Northern Province is:

(a) Kasama

(b) Mongu

---

1. What is your sex?

(a) Male

(b) Female

2. What is your age?

(a) 20 - 29

(b) 30 - 39

(c) 40 - 50

(d) above 50

3. What is your education standard?

- (a) Standard six/Certificate in Agriculture
- (b) Form II/Certificate in Agriculture
- (c) Form III/Certificate in Agriculture
- (d) Form V/Certificate in Agriculture
- (e) Form V/Diploma in Agriculture

4. What means of transport do you use to cover your Block?

- (a) Bicycle
- (b) Motorcycle
- (c) On foot

5. How many camps do you have in the Block?

- (a) 1 - 2
- (b) 2 - 3
- (c) 3 - 4
- (d) 5 - 6

6. How often do you attend fortnight Training meeting?

- (a) Periodically
- (b) Whenever there is something of importance or urgent

7. Has the concept of Training and Visit System fully be explained to you?

- (a) Yes
- (b) No

8. How is this method of extension compared to the previous one?

(a) Good

(b) Poor

9. Are inputs available to farmers?

(a) Yes

(b) No

10. Are inputs, seeds, fertilizers adequate?

(a) Yes

(b) No

11. Are inputs (seeds, fertilizers) timely?

(a) Yes

(b) No

Thank you very much.

Please return the Questionnaire to:

JOHN PHIRI,  
UNZA.,  
PR 2 - 30,  
P.O. BOX 32379,  
LUSAKA.

APPENDIX C

QUESTIONNAIRE FOR CAMP EXTENSION OFFICERS

Dear Respondent,

You are asked to freely and honestly answer all questions. The findings are hoped to be of benefit to agricultural extension.

The information will be treated very confidentially.

INSTRUCTIONS

Tick in the box corresponding to the letter of the answer of your choice.

Example

The Provincial headquarters of Northern Province is:

(a) Kasama

(b) Mongu

---

1. What is your sex?

(a) Male

(b) Female

2. What is your age?

(a) 20 - 29

(b) 30 - 39

(c) 40 - 50

(d) above 50

3. What is your education standard?
- (a) Standard six/Certificate in Agriculture
  - (b) Form II/Certificate in Agriculture
  - (c) Form III/Certificate in Agriculture
  - (d) Form V/Certificate in Agriculture
  - (e) Form V/Diploma in Agriculture
4. What means of transport do you use to cover your camp?
- (a) Bicycle
  - (b) Motorcycle
  - (c) On foot
6. How many village extension groups do you have in your camp?
- (a) 1 to 6
  - (b) 6 to 8
  - (c) More than 8
7. What is the average number of farms in each village extension group?
- (a) Less than 5
  - (b) 5 to 10
  - (c) 10 to 20
  - (d) More than 20
8. How many village extension group meetings are held each month?
- (a) Once
  - (b) Twice
  - (c) More than two

8. How often do you attend fortnight Training meeting?
- (a) Periodically
  - (b) Whenever there is something of importance or urgent
9. Do messages or lessons learned during fortnight meetings meet the needs of your farmers?
- (a) Yes
  - (b) No
10. Are farmers problems adequately covered during village extension Group meetings?
- (a) Yes
  - (b) No
11. Has the concept of Training and visit system fully been explained to you?
- (a) Yes
  - (b) No
12. How is this method of extension compared to the previous one?
- (a) Good
  - (b) Poor
13. Do you use teaching materials during your sessions?
- (a) Yes
  - (b) No

14. Does the camp extension officer following a fixed schedule?

(a) Yes

(b) No

15. Do the camp extension officer force you to adopt the teachings?

(a) Yes

(b) No

16. Are messages related to your problems?

(a) Yes

(b) No

17. Are your problems adequately answered during your village extension group? *Meeting*

(a) Yes

(b) No

18. Do you have any demonstrations or Adoption Plots at your farm?

(a) Yes

(b) No

19. Does the camp extension officer give you leaflets or other printed materials during your meeting?

(a) Sometimes

(b) Always

(c) Never

22. How many hours does the camp extension officer spend with you during your meeting?
- (a)  $\frac{1}{2}$  hour to 1 hour
  - (b) 1 hours to 2 hours
  - (c) More than 2 hours
  - (d) As need arises
23. Do you participate in field days?
- (a) Yes
  - (b) No
24. Do you participate in Agricultural Shows?
- (a) Yes
  - (b) No
25. Does the contact farmers visit you?
- (a) Yes
  - (b) No
26. Do you have problems in comprehending messages?
- (a) Yes
  - (b) No
27. If the answer to question 28, is Yes what mode of teaching would you want them use to you?
- (a) Demonstration/Adoption Plots
  - (b) More simpler language
  - (c) None of the above

28. Do you have problems acquiring your inputs?

(a) Yes

(b) No

29. Are they available?

(a) Yes

(b) No

30. How do you find Training and Visit System of agriculture compared to the old system?

(a) Good

(b) Poor

Thank you very much.

APPENDIX D

INTERVIEW FOR FARMERS

Dear Respondent,

You are asked to freely and honestly answer all questions. The findings are hoped to be of benefit to agricultural extension.

The information will be treated very confidentially.

INSTRUCTIONS

Tick in the box corresponding to the letter of the answer of your choice.

Example

The Provincial headquarters of Northern Province is:

(a) Kasama

(b) Mongu

---

1. What is your sex?

(a) Male

(b) Female

2. What is your age?

(a) 20 - 29

(b) 30 - 39

(c) 40 - 50

(d) above 50

3. Are you married?

(a) Yes

(b) No

4. How long have you been farming?

(a) 0 - 9 years

(b) 10 - 19 years

(c) 20 - 39 years

(d) 40 - 49 years

(e) above 50 years

5. How was the rainfall pattern this season?

(a) Below normal

(b) Normal

(c) Above normal

6. When did you plant your crops?

(a) Early

(b) Normally

(c) Late

7. How was the credit disbursement?

(a) Timely

(b) Late

8. How was seed distribution?

(a) Timely

(b) Late

9. Was seed adequate?

(a) Yes

(b) No

10. How was basal dressing fertilizer distribution?

(a) Timely

(b) Late

11. Was basal dressing fertilizer adequate?

(a) Yes

(b) No

12. How was Top dressing fertilizer distribution?

(a) Timely

(b) Late

13. Was Top dressing fertilizer adequate?

(a) Yes

(b) No

14. Are you a member of a village extension group?

(a) Yes

(b) No

15. How many times a month do you meet?

(a) Periodically?

(b) Whenever there is something of importance or urgent

15. If the answer is No, to 11 why not?
- (a) Not available
  - (b) Poorly designed
16. Do you distribute leaflets during village extension Group, to farmers?
- (a) Yes
  - (b) No
17. Does the Block extension visit your regularly?
- (a) Yes
  - (b) No
18. Are you visited by the District based staff?
- (a) Yes
  - (b) No
19. What problems do you experience when instructing farmers?
- (a) Apathy of farmers towards village extension meeting
  - (b) Farmers find it hard to comprehend the lessons
  - (c) Low attendance of farmers
  - (d) No problem
20. Are inputs available to farmers?
- (a) Yes
  - (b) No

21. Are inputs (seeds, fertilizers) adequate?

(a) Yes

(b) No

22. Are inputs (seeds, fertilizers) timely?

(a) Yes

(b) No

Thank you very much.

Please return the Questionnaire to:

JOHN PHIRI,  
UNZA.,  
PR 2 - 30  
P.O. BOX 32379,  
LUSAKA.