



# **Agricultural Information Sources for Farmers in Lesotho, Southern Africa**

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## **Introduction**

### *Background of the Study*

The baseline survey of the Lesotho Farming Systems Research (FSR) prototype areas was a collaborative effort of the Lesotho Ministry of Agriculture (MOA) Research Division and Washington State University's Farming Systems Research Project. The project's thrust was adaptive on-the-farm demonstrations to stimulate farmers' interest and adoption.

### *Prototype Areas*

The Government of Lesotho designated three FSR prototype areas. These areas represented the three ecological areas of Lesotho in which applied farming systems research was taking place. The areas were:

1. The Mountain Area—Molumong. An area of 18,000 acres with a total of 26 villages and 655 households;
2. The Foothill Area—Nyakosoba. An area of 14,800 acres with 41 villages and 1,044 households;
3. The Lowland Area—Siloe. An area of 23,500 acres with 40 villages and 1,231 households.

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### *Purpose*

The purpose of the baseline study was to identify better methods of providing technical agriculture information to farmers. The survey was to determine: 1) what communications channels and sources of agricultural information farmers used in three prototype areas; and 2) what channels or sources of agricultural information farmers preferred.

### **Methodology**

The FSR baseline survey was conducted using personal interviews with a structured Lesotho language questionnaire. Interviews were conducted with a 14 to 18 percent sample of household heads in each prototype area. Data were collected by establishing a "trainer team" which in turn trained a team of village interviewers in each of the three prototype areas. Members of the trainer team also were responsible for interviewer training, questionnaire development, data collection, and preparation for analysis. The questionnaire was pretested in each of the three prototype areas with 66 people, none of whom participated in the research sample.

### *Training of Trainers*

A 7-day orientation course on how to implement the survey and to train village interviewers was organized so that the trainers could experience the concepts to be taught in the field. Part of the sample was drawn during the course in order that trainers would better understand sample selection.

### *The Sample*

The three prototype areas were visited and every village, chief, and household were listed. With a total of 2,900 households in the three areas, a decision was made to have a final sample of no less than 15 percent of this total.

### *Interviewer Recruitment and Training*

The help of local leaders and MOA extension staff was solicited for interviewer recruitment. Candidates lived in or near prototype area villages and had at least a Junior Certificate level education or equivalent. Selected participants were paid a training allowance during the 10-day course

and 25 interviewers were selected at the end. During the same period, meetings were held with local leaders in each area to legitimize the survey.

### *Analysis of Data*

Because of the observed differences in farming practices and styles of living among these prototype areas, the data analysis is broken down by prototype area for the majority of observations.

## **Results**

### *Sources Used*

Respondents were asked to indicate whether they or anyone in their household had heard any useful agricultural information from any source during the past year. Those who answered "yes" were then asked to indicate the source of this information. Overall, 57 percent of the sample households had heard useful agricultural information. This ranged from a high of 69 percent in Siloe to approximately 50 percent each in the Nyakosoba and Molumong areas.

Radio was ranked first by those who heard information, followed by village meetings, extension agents, other individuals, and clinics (see Table 1).

Table 1. Source of Useful Agricultural Information Reported by Percentage of Household Heads in the Three Prototype Areas

Source	Prototype Area (N=249)		
	Siloe %	Nyakosoba %	Molumong %
1. Clinic	15	17	7
2. Extension Workers	19	3	35
3. Other Individuals	12	28	3
4. Radio	40	70	47
5. Pamphlet	3	10	3
6. Farm Training Center Course	4	6	0
7. Village Meetings	51	38	47
8. Demonstration	1	3	3
9. School	0	4	3

Household heads in Siloe mentioned the village meeting as the most frequent source. Respondents in Nyakosoba indicated that the major source for useful agricultural information was radio. In the Molumong area the village meeting was tied with radio as the most frequently used source.

### *Examination of Selected Sources*

The question, "If you need agricultural information, for example about a new variety or how to treat a crop disease, what people do you get it from?" was asked to determine what specific individual a respondent might use as a source of agricultural information. Approximately half of the sample could identify a specific individual. Responses were classified as either extension agent, blood relative, friend or neighbor, prominent citizen/chief, or other. In Siloe, respondents reported blood relatives (38 percent) and extension agents (35 percent) as the most frequently consulted persons. The most frequently mentioned source in Nyakosoba was blood relatives (34 percent). The person most often named in Molumong was the extension agent (68 percent). Overall for the three areas, extension agents were the most frequently mentioned, followed by blood relatives, then friends or neighbors.

### *Extension Agent*

Respondents were asked if they could name their Ministry of Agriculture extension agent. If they could not name him or her they were asked to indicate if they knew the person even if not by name. Only 24 percent of all household heads could identify the local agent by name. There were sharp contrasts between the prototype areas. A total of 56 percent in the Molumong area identified the agent by name as contrasted with only 3 percent of those interviewed in the Nyakosoba area.

### *Radio*

A total of 43 percent of the household heads interviewed reported having a radio in their home. This ranged from 53 percent in Siloe to 30 percent in Molumong. Ninety percent of the respondents in each area reported their radios in working order. Reception quality of Radio Lesotho—the principal government radio station located in the capital of Maseru—was reported by respondents as 24 percent clear

and 73 percent variable in Siloe; 51 percent clear and 47 percent variable in Nyakosoba; and 48 percent clear and 51 percent variable in Molumong.

In general, news and music type programs were the most popular in all three prototype areas, followed by agricultural news programs (see Table 2).

Table 2. Types of Radio Programs Listened to as Reported by Percentages of Household Heads

Type of Program	Prototype Area Listeners (N=207)			All Project Respondents (N=(441))
	Siloe %	Nyakosoba %	Molumong %	%
1. News	35	79	60	30
2. Music	38	72	55	29
3. Stories/Plays	13	37	32	14
4. Agriculture	25	34	53	21
5. Nutrition	11	41	35	14
6. Other				
Domestic	12	38	32	13
7. Other	12	62	8	14

#### *Preferred Sources of Information*

Respondents were asked to answer the following question, "If you had one choice of how to receive agricultural information, what source would you choose?" In answer to this question, respondents overwhelmingly indicated the extension agent as their most preferred source (see Table 3).

Table 3. Sources of Agricultural Information by Percentage and Rank for Those Used and Preferred by Respondents

Source of Agricultural Information	Used (N=249)		Preferred (N=445)	
	%	Rank	%	Rank
1. Radio	28.3	1	8.8	3
2. Village Meeting	26.1	2	10.7	2
3. Extension	10.2	3	64.2	1
4. Other Individuals	8.2	4	.9	7
5. Clinic	7.7	5	.9	7
6. Pamphlets	2.7	6	6.8	4
7. FTC Course	2.0	7	4.3	5
8. Demonstration	1.1	8	2.5	6
9. School	1.1	8	.5	9

There was a significant difference between the source used by respondents and the source preferred for receiving agricultural information. Respondents preferred the extension worker by 70 percent in Siloe, 64 percent in Nyakosoba, and 59 percent in Molumong. The response was of special interest in Nyakosoba since only 3 percent of the respondents had reported knowing the extension worker.

## **Summary and Implications**

Although response rates varied between the three areas, radio, village meetings, and extension agents were the most frequently mentioned sources of information. The implications are that continuing educational efforts with radio and village meetings should be utilized and improved. These sources may be the most effective in the awareness and interest stage of the adoption of FSR technologies and practices. These should be reinforced by individual and group contacts with an extension worker.

Only 51 percent of the total sample could identify a specific person as a source of agricultural information. The extension agent was the most frequently mentioned source in Molumong while blood relatives were the highest ranked source in Nyakosoba and Siloe. This suggests that improving the flow of agricultural information via blood relatives may be helpful.

Approximately 70 percent of the respondents in the sample could not identify their extension agent, with significant contrast between respondents of the three areas.

Radio listeners preferred to listen to news, music, agriculture news, and nutritional news programs. Focusing the message in a more personable and meaningful manner may attract more listeners. Adapting stories, songs, and plays to agricultural information is a means to convey information in an interesting way to farmers. Possibilities exist for using Radio Lesotho, which is generally well received in all three areas.

Regular agricultural news is broadcast in Lesotho to farmers in the prototype areas but only 43 percent of household heads interviewed reported having radios. The Government of Lesotho might consider increasing the

number of radios in the prototype areas. There is also literacy education via radio taking place over Radio Lesotho in cooperation with the Lesotho Distant Teaching Center. Agricultural news programs might be utilized as a means of teaching basic education students. It has been found that those in literacy programs must have access to the use and application of practical materials to maintain their literacy skills.

Extension workers were by far the most preferred source of receiving agricultural information. This was even true in the Nyakosoba area where only 3 percent of the respondents knew their local agent by name. (This may indicate that further research should be carried out to find out why their preferred choice is an extension worker and to verify they have not just given an answer that they thought was "correct.")

Lionberger and Gwin (1982), referring to the use of radio in developing countries, note that behavioral change attributable to mass media alone is said to be around 10 to 15 percent, but when combined with extension workers in the field, it goes above 50 percent. This implies that recruitment, training, placement, and support of extension agents in the prototype areas, coupled with more effective use of radio, village meetings, demonstrations, and clinics could enhance the diffusion of FSR technology and recommendations.

## Bibliography

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