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Report on Department of Rural Sociology Research
Project No. 29, "Barriers to Information"

Artwork by -- Ronald L. Mann
Where Knowledge Originates... 

Before new ideas and practices to improve agriculture can be used by farm operators, they must be developed and tested. Most of the new farming methods have their origin in scientific research done by land grant college experiment stations, government agencies and private industry. Research has enabled us to make farm work easier, reduce man hours spent in farming, and increase food production. The result has been better farm living and more and better food and fiber at less cost for everyone.

But the development of new farm practices is only the first step to better farming through research. Until farm people get the information and put it to use, research is of little practical value. This report is concerned with how scientific information from the College of Agriculture reaches the farmer. It is based largely on research done by the Department of Rural Sociology, University of Missouri. It is intended for community leaders and others interested in the communication of scientific farm information.

**$S$ MILLIONS FOR MISSOURIANS $S$**

Hybrid seed corn, "miracle" insecticides, high concentrate fertilizers, weed killers, and improved breeds of poultry are a few of the many contributions of scientific research to better farming. It is estimated that the use of hybrid seed corn alone is worth at least $50 million to Missouri farmers every year.

Much Scientific Farm Information Originates at Colleges of Agriculture.

At the forefront of research in agriculture are the land grant colleges of agriculture and their experiment stations, one of which is located at the University of Missouri, Columbia. Here, practices are thoroughly tried and tested under actual farm conditions before they are recommended to farmers.
How Information Reaches Farm

Study Traces Channels...

How does information on these new developments in agriculture reach farmers? What sources of information do they use most? Answers to these questions are important for community leaders and educators interested in the rapid advancement of our agricultural industry.

The Department of Rural Sociology, University of Missouri College of Agriculture, made an intensive field study in a northeast Missouri community to help obtain a clearer picture of how scientific information reaches the farmer. A total of 279 farm operators were interviewed. The following sections describe the different channels of communication available. Figures appearing in the boxes with the discussion of each type of communication show how much the northeast Missouri farmers used it.

There are many roads from college to farmer—

The channels by which information reaches farm people are something like a series of roads from the College to the farmer. There are several kinds of roads. Each has some advantages and some limitations but together they provide an effective network of communication.
Some are reached by

**Direct Roads...**

The College of Agriculture maintains some direct contacts with the individual farm operator. The farmer may come to the College for conferences, meetings, and demonstrations. He can make individual requests for information either in person or by mail. Farm bulletins and other publications are sent directly to him on request. When special problems arise, a specialist from the College may go to his farm.

Another direct contact of the College with the farm family is through county agricultural agents and home demonstration agents. These persons are members of the College of Agriculture staff and are experts in applying research information to specific farm and home situations.

More are reached by

**Indirect Roads...**

Newspapers, farm journals, radio, and television provide important channels of communication from the College to the farmer. Much of the technical farm information published by farm journals and newspapers is based on experiment station research. The College of Agriculture of the University of Missouri provides a weekly news service for all local newspapers in the state and daily special releases. Editors of the major farm journals keep in close contact with the College to obtain timely information growing out of research. (The next time you read a farm magazine notice how much information comes from the colleges of agriculture and their experiment stations.)

Information from the College of Agriculture also reaches the farmer by means of radio. Each day, 34 radio stations in Missouri are provided with tape recordings from the College and 71 are provided with daily scripts for use in broadcasting. In addition, county agents and home agents in the state participate in more than 600 educational broadcasts each month. Two farm programs are telecast by the College from KOMU-TV each week and other television stations are provided with timely educational materials.

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**The study indicates—**

- Less than 1% received information from meetings at the college.
- 23% used bulletins.
- 30% got help direct from county agents.

**The study indicates—**

- 65% obtained farm information from newspapers.
- 75% obtained farm information from magazines.
- 46% obtained farm information from radio.
Information Relay Stations...

Farm meetings, schools and industry provide relay stations along the roads of communication.

Farm organization meetings provide a place where farm information from the College may be brought together and relayed to a number of interested farm operators at one time. For such information, farm organizations depend heavily upon research done at the colleges of agriculture. Their leaders often call upon county agents and agricultural specialists to appear in person or to supply farm information for their own members to present at meetings.

Schools serve as stations where information is gathered and relayed on to the people in the communities they serve. Teachers that have been trained at colleges of agriculture teach vocational agriculture in the high schools and collect information which is passed on to students and their parents. Many farmers attend adult classes or go directly to the vocational agriculture teacher for advice. In addition, many students trained in the College of Agriculture return to their communities with knowledge of improved farming methods.

Industry also relays farm information from the College to the farmer. Industrial concerns are always looking for new and salable ideas. They have utilized and publicized much research from college experiment stations. Industry also has its own agricultural research teams, many of them trained in colleges of agriculture.

The study indicates—

- 22% obtained information at meetings arranged by the county agent.
- 19% got information directly from vocational agriculture teacher.
- 23% attended adult farm classes held at local high school.

Government agencies, such as PMA and SCS also were important sources.
The Roads Are Connected...

Some of the more important roads by which information reaches farm people have been listed. They do not form separate and unrelated channels of communication. Rather, the roads complement each other. For example, a man may hear about a farm practice over the radio, discuss it with friends and neighbors, who in turn have heard about the practice from other sources, and then seek more information from the county agent. Or the man may listen more closely to a topic discussed over the radio if he has already talked about it at a farm meeting or at some other gathering.

Most of these avenues of communication lead to every community in the State. At the community level, research information is talked over, modified to fit the local situation and finally put into practice or rejected by the farm operators.

The community itself is an important factor in the exchange of farm information. It provides many opportunities for social contacts through an inter-related system of activities. It serves as a focus for organizations and agencies and it is actually composed of a well established and effective communications system. While many contacts are made outside of the community, most information-seeking contacts are made with people in the community.

The study indicates—

90% of contacts with other farmers for information were made in home community.

Even among those living on the outer boundary, 76% sought their advice within the community.
Channels of Communication Within the Rural Community

Informal communication channels are dependent upon word of mouth exchange among friends, neighbors, and relatives. Conversations take place as people meet in the homes of friends and neighbors, along roads and fences, in town or at the neighborhood centers, and wherever farm people get together. In these conversations new methods of farming which individual farmers have heard about by way of study indicates—

Membership in informal groups facilitated the transfer of farm information but sometimes stood in the way of exchange of information between groups.

one of the communication lines from College to the community are discussed, evaluated, and passed on to those who may not know about them. When new ideas are tried by farmers in the community, others observe and decide whether or not they wish to try these practices themselves.

Information passes more freely among those already in groups. Lines of communication are thickest and the flow of ideas greatest within neighborhoods and within friendship, kinship, and work groups.

Village and neighborhood centers provide important meeting places where people talk about farming problems. Most of the formal meetings of organizations take place at village and neighborhood centers. These centers also provide important places for informal contacts and the exchange of information.

Study indicates—

90% of the farmers got farm information from friends, neighbors, and relatives—more than from any other source.

48% named the village or neighborhood center as the place where they most frequently discussed farming with other farmers.
Many communication lines lead to prominent farmers. It is said that the world will beat a path to the door of a man who can build a better mousetrap. This is true to some extent of the man who demonstrates better methods of farming. Most rural communities have a few outstanding farmers whose advice is regularly sought by others.

These outstanding farmers serve as relay points between the College and other farmers. They obtain new ideas from the College and from other direct sources and pass them on to others. Being among the first to adopt new practices, they actually serve as demonstrators, giving others an opportunity to evaluate the usefulness and practicability of new practices at first hand.

The study indicates—

One-third of the 279 farmers regularly sought information from 22 prominent members of this group.

The influential farmers have higher incomes, larger farms, and enjoy higher prestige in the community. They are more broadly oriented socially and more active in formal groups. They seem more uniformly receptive to new ideas and use the county agent as a source of information more than others.

A few farmers report that their own experience is the most important source of information. This is difficult to interpret. To be sure, farmers must adapt ideas and practices to their own particular situation. But learning through trial and error is a long and slow process. Possibly these men are not aware that most of their ideas come to them originally through the channels described in this bulletin.

Study indicates—

Only 4% credit their own experience as their most important source of information on improved farming methods.
Barriers to Change...

There are many blocks in the roads to better farming. The flow of information may be halted or retarded at any point along any road. It may be stopped by such diverse circumstances as a “blown out” radio tube or a poor personal relationship with the county agent. But even though communica-

### Reasons given for not adopting new practices—

- **A number of farmers said they would soon be too old to farm and saw no need for changing operations now.**
- **Lack of money was the most frequent reason given.**
- **Several operators expressed the opinion that the practices were not practical for the “common farmer.”**

...tion may be perfect and information reaches the farmer through the channels mentioned, he may fail for some reason to accept or utilize the practice. Unless the practice is put into use, the research effort and the effort to reach the farmer with the results of research have been made in vain. What are some of the blocks at this point?

1. The farmer himself may feel no need for change. He has always done things in a certain way and has “got along all right.” So, he reasons: “Why change?” This is more likely to be true with older farmers than with younger ones.

2. The farmer may have had an unfortunate experience in trying out a new practice. This may have resulted from poor planning, from using a plan not suited to the particular situation, or as a result of uncontrollable factors such as the weather.

3. The farmer may feel that it is financially impossible to put recommended practices into operation. Although many of the improved practices do not cost substantially more than less satisfactory methods, there is a basis for this reasoning, especially among farmers who work on a very narrow margin of profit. A farmer may be very realistic when he will not gamble much for fear of losing all. To counter with the statement that his income will be greater in the long run may not meet the problem as the farmer sees it and must deal with it.

4. Lack of vitality due to poor health or poor nutrition may be a contributing factor.

5. The ideas may not be geared to the thinking and experience of the people. It is true that the language of science is not yet the language of action in agriculture. This is one of the reasons why contempt has sometimes been expressed for the “book farmer.” Scientific findings must be interpreted into practical, workable plans if they are to be effective.

6. The recommended practice may actually be too big for the small farmer or he may think it is. In either case, he is likely to see little reason for giving it serious thought.
Roads to better farming through research and education lead to...

better farm living for the farmer

and to

greater abundance of food and fiber for everyone.