Interview with Roland Abraham

Interviewed by Margaret Robertson
Minnesota Historical Society

Interviewed October 5, 1988
at Abraham’s home, St. Paul, Minnesota

MR: How did you become interested in farming?

RA: I suppose the basis for it was that I grew up on a farm in Renville County. Now you'll know why I was suggesting Renville County for inclusion in your project. After completing high school, I found that there was little money and no jobs available, so I worked at home on the farm for two years.

I had been in 4-H Club work, and the county agricultural agent out there knew my father quite well. They had worked together on some things. The agent had lost an office secretary, so he came out one Sunday afternoon—I guess I was away playing ball or something—and asked my dad whether he thought he could spare me, because the agent wanted me to be his office assistant. He promised my father that I could be home to do chores mornings and evenings and on Saturday afternoons. We worked Saturday mornings in those days. I worked in his office for two years. I had a goal of going on to college, and by the time I had worked there for two years I had enough money, I thought, to get by in college for the first year.

I came down to the University, having no intention of going into agriculture. I had an interest in high school teaching in the areas of science and music. It only took me one quarter to find out that high school science teachers were finding it hard to get jobs at that particular time, except as high school agricultural instructors. An uncle of mine had said, "Unless you're pretty good, you'll starve to death in music." Well, I wasn't that good, so I transferred to the agricultural college. I finished a bachelor's degree in animal science and agricultural education, and then went out as an agricultural agent for a period of years.

My interests broadened somewhat, and I was fortunate enough to get a fellowship at Harvard. I spent a year there getting a master's degree in public administration, and I came back to an administrative assignment in the Saint Paul office of the extension service. Three years later, I was asked if I would be interested in the assistant director's job. That's where I stayed. Then along the way, I went to the University of Wisconsin and finished a doctorate in public administration.

My parents were always active in extension work. My dad cooperated in the 1913 hog cholera control program in Renville County. Renville County was a demonstration
county. He cooperated with the extension agent who had charge of the program. For years he was secretary of the local cooperative creamery, and my mother was always active in the extension home economics programs. I remember she was in the poultry program in the early twenties; I was beginning grade school about that time. They were active all those years. I got into 4-H Club work about 1927-28.

So I was kind of brought up in extension work. My parents were always active in farm organizations, perhaps not so much in their younger years as in later life. Dad was president of the Farm Bureau in Renville County for nearly ten years, until about the time of his retirement. All of those sorts of things influenced me. I particularly enjoyed working with livestock, and that got me started in the first place. Then there was the prospect of getting a job right out of college, teaching agriculture. Well, I never did teach agriculture. I took a job as an extension agent and never got back to the classroom in that sense.

MR: What kind of farming did your parents do?

RA: General farming. It was mixed farming, livestock and grain. It was not a large farm, and it was almost imperative that I move on, because there were other members of the family who had to be supported by that small farm. In the 1930s, one didn't need a lot of encouragement to move on.

MR: What influence did the 4-H Club have on your growing up and in teaching you about agricultural techniques?

RA: Well, a fair amount, although not because of the production side of it so much. There's always been in the past--a good many years past now--quite a lot of emphasis on learning production techniques in 4-H. The techniques were important, and they still are for those whom it fits. But I enjoyed working with groups. I don't know whether I was a leader in the group at that time, but I participated fully and liked to work with groups. So that had something to do with it.

When I was working with the county agent as his office assistant, I was not really just a secretary. I didn't even know anything about typing when I started. They hadn't taught it in high school, so I had never acquired that skill. I did learn. If there were specialists who came into the county to work with the women's home economics program, the agent would often send me out to help the specialists make the set-ups and provide the transportation. On occasion, he would have me go to 4-H Club meetings in his place, because of what I had already done in 4-H Club work under his leadership.

Another experience was a demonstration program that was brought about by the 1932 program to control loose smut in barley. The only useful treatment at that time to treat the seed was to use a hot water method. This was done at a creamery where there were ample
supplies of steam to heat the water. There were several of these stations going during the same week, so the county agent would send me out to operate one of the stations while he would be somewhere else. I got into the demonstration mix, so to speak, that way. I suppose all of those things had some influence on why I went into agriculture and why I stayed in it. However, there would be some who would say that when I went into the administrative side, I really left agriculture.

MR: Is the teaching of agriculture today different from the way it was taught when you attended the University?

RA: Certainly for those of us who were in agricultural education preparation for high school teaching. We were more involved in learning the agricultural practices of the day. That may be true to some extent now, but in general the sciences may be emphasized a bit more, as well as public policy and management. I think there's more depth now. Of course, there's more knowledge. And with more knowledge, one either knows more and more about less and less, or less and less about more and more. There's more specialization in the instruction now, although the curricula are so designed as to give the student some perspective beyond a narrow track, because in the work-a-day world, one needs to know more than just one specialty.

There is more specialization, but at the same time there is probably more emphasis on policy and general economics. Depending upon the person's interest, there might also be more emphasis in the sociological aspects than was true when I was a student. At the time I was an undergraduate, rural sociology was a three-credit course and everybody opted out of it if they possibly could. I think people now see more need for some understanding of the social world. So while I'm arguing that there's more specialization, there is this overlying area of more general education at a fairly sophisticated level.

MR: In your book, you describe the evolution of the agricultural extension service. Do you want to talk a little more specifically about the state of the agricultural extension program when you joined it?

RA: At the time I joined it, we were just recovering from the Depression and drought, and looming on the horizon was a world war, or at least the threat of world war. At the time I first came in as a professional, there was a lot of concern about land use. Except for some of the drought years when things just didn't produce, through the whole period of the early twenties, there was a period of depression in agriculture. It was plagued by surpluses of various commodities, not always the same ones from year to year.

In the mid-thirties people began to be concerned about soil conservation. In Minnesota, for example, there were counties in the north where there were high rates of tax delinquency, and land reverted to county ownership. Ultimately, it was taken over by the state or traded between county and state. At any rate, it turned out that many of these
lands were not well suited to agriculture. They came into production during the halcyon years of very good prices, but when things began to turn the other way, farmers just couldn't make it on the poorer lands. There was an interest in trying to determine what lands ought to continue in agriculture and what lands ought to be preserved for less intensive use--perhaps some of it for wildlife purposes or for pasturage.

But when we got into the defense pact with the Allied countries, the emphasis was on production, and we couldn't produce enough. For the next four or five years the extension service worked on programs of education that had to do with stepping up production and getting maximum production. There was also an emphasis on consumer conservation, in the sense of developing substitutes for certain foods and of preserving foods. I went out and held canning and freezing demonstrations for homemakers along the way, and other agents did the same. It was that kind of setting.

There was still another influence. Beginning about the early thirties, the emergency federal farm programs were being instituted. Some were for feed and seed loans to farmers, or for grants for emergency seed supplies or livestock feed. Then federal farm programs came along which had to do with reducing acreage of certain crops and implementing commodity loan systems. At that time, the U.S. Department of Agriculture had no other personnel in the counties anywhere in the country. Right from the outset, the county extension agents had held joint appointments with the universities in their home states and the U.S. Department of Agriculture. The extension service was called upon to help organize these efforts, and in some instances, really did the administrative work.

As these programs came along--REA [Rural Electrification Administration], and the soil conservation and rural resettlement programs which ultimately became Farmers Home Administration--all of those things were demanding a lot of time of the extension agent. There was a great fear among the extension directors around the country that extension agents were being drawn off their initial purpose of conducting educational programs to administer programs. Admittedly, we were involved as extension agents in a lot of administration during those same years. Some agents liked it pretty well and ultimately drifted off into those kinds of pursuits. But in the early forties, most agents got out of those federal farm programs. They still were involved in the wartime activities--drives of one kind or another, and during World War II were responsible for organizing the farm labor in pools or whatever was possible, county by county.

There was the element of emergency, along with the push to get production. That's the setting that I came into. That, in a sense, was repetitive of the World War I experience. During World War I there weren't all of the emergency agricultural programs, but there was the wartime kind of emergency. There was much less machinery available by way of organized personnel to start with. It took an act of Congress to provide the emergency money to put an agricultural agent in every county in the country. In Minnesota, I think
only sixteen out of eighty-seven counties had an agricultural agent when the United States entered World War I.

Since the end of World War II, the emphasis has been on the educational side, until we hit the hard times for agriculture in the mid-eighties. Then extension agents were drawn into the mediation business. I don't know, because I haven't been that close to it, but I would have some reservations about the continued role of the agents in that area. I think there's an educational role there, but I don't really see an administrative role. Yet some of the agents were spending very nearly all their time on mediation. I believe that role has diminished by now.

MR: You mentioned that during World War II and immediately afterward, that a lot of the agricultural extension work involved administering programs.

RA: Not so much after World War II, but beginning about 1933 or '34 there were emergency seed and feed loans available. There was also a big program of cattle buying at the time, where there wasn't feed. Then the wheat, corn, and hog programs were created. When those came on, that's when the agents got into the administrative side of things. The extension service was asked to do it. This continued until about early World War II, when the production emphasis came down hard. Extension agents continued with some of the administrative work, but with different assignments, like the farm labor program, for example. It was not so much the administration of emergency programs anymore, and from then on they've been out of the administrative end of things.

MR: Is that because the programs ended or because someone else took over that administrative role?

RA: It ended because by then there was enough leadership developed in the counties. The laws governing those programs, particularly those that relate to farm commodities and acreage control, were in the hands of farmer-elected committees. They had their own administrative framework, from the USDA [United States Department of Agriculture] office right down into the counties. There were state committees, and there were county committees and so on. By then the farmers themselves were managing and directing those programs, although extension agents served in advisory roles to the local committees.

At the end of World War II, the labor situation was ameliorated, and that was phased out. The emphasis on production, of course, decreased. There weren't the incentives for doing it anymore. For a couple of years, food and feed was needed in the rehabilitation of Europe, but by 1947 that was pretty well over. And from then on, I would say, there haven't been any of those emergency programs, except during the middle eighties, when the financial crunch arose.
MR: You mentioned that except for this most recent period, the primary role of agricultural extension has been education. What kind of education are you talking about?

RA: One kind of education has been to interpret for farmers the utility of information from new research. There's also a reverse of that, the feeding back to the research side the needs that aren't being adequately addressed, or haven't been touched at all, or the things that aren't working out as expected. There needs to be a two-way flow with respect to agricultural information relating to production.

There has also been a lot of effort on helping people to understand the place of agriculture in the world economy, as well as the U.S. economy. I suppose it's still going on. We had quite an intensive program on farm policy education in which we endeavored to attract community leadership and farm organization leadership to participate—not from the prospect of fostering a particular point of view, but helping them understand the various forces that operate in agricultural trade or in policy and the consequences of various courses of action. So that when they speak to their legislators, or when they vote, or when they participate in their cooperatives, or whatever they do where policy considerations are important, they will be better informed to make intelligent and wise decisions. In addition—although this hasn't been done much in recent years because the cooperatives themselves have done a pretty good job of marketing education—there was a period in which the extension service played a very, very significant role in helping farmers to see the advantages of working together. Farmers needed an understanding of what was involved in moving their products through the market at hopefully more profitable levels than they would be able to achieve otherwise.

So I'd say it's been fairly broad education. Beginning in about 1955, there have been programs helping people to look at their own community areas—where they fit into the scheme of things, whether their community can thrive or whether they are destined to dwindle a little bit with the increased size of farms. The whole business of a macro look at the world scene was another area.

The extension service, as you well know, has had programs for homemakers from its earliest days. These have changed drastically. At one time, one could say that women were focused on "stitchin' and stewin'," as one person always refers to it. But they came to be greatly concerned about child and family development and family relationships. In more recent years, they were concerned about the use or abuse of drugs. Women also became interested in participating in a better understanding of wills, estate planning, and the whole concept of farm and home management—how the family establishes its goals. As these goals change from time to time, they need to know how they can address their own circumstances and how to make the choices and go on from there. They also needed to know how to deal with stress.
These were family considerations, and more and more rural women became active in the decisions of managing the farm enterprise. Also, many aspects of the programs for women were available to women in the smaller towns and in the cities, to some degree. I'd like to come back to that particular point a little later. The home economics program was largely focused, at one time, on the techniques of performing certain things in the home. From there it broadened into the whole family consideration, the whole business enterprise of the family, and into community considerations. Women became interested in knowing more about libraries and community health, public health, and mental health.

If we take a look at the youth program, the 4-H program has moved from essentially the same early focus--gardening or raising pigs or baking bread--to a much broader concept of developing the whole person, particularly in giving them the opportunities that they may not have been able to get through the more formal elementary and secondary school programs. At first, 4-H largely came about because there was a feeling that rural youngsters were at a disadvantage in the whole socialization process as contrasted to the more urban youngsters. Of course, with the advent of all the communication media that we now have, the automobile, and the elaboration of the school curricula, that really is no longer an issue. But the programs have been adjusted to be useful to youngsters most anywhere they live.

This notion of providing programs to people in the large communities is a really tough issue. To provide the interaction between an extension agent-guided program and the numbers of people who reside in a suburban or urban area is quite different from the more one-to-one element in the less heavily settled areas. How to manage that has been a problem that I doubt has been solved yet. It wasn't solved when I left. We were working on it, doing the best we could. We were relying more on mass media kinds of things, which are not as effective in doing an educational job. You can get awareness, you can alert attention, but in really doing an educational job, it takes something more than just what goes by on the tube or what goes by from the radio or what is seen in the newspapers.

MR: You seem to be saying that the agricultural extension program is reflecting the greater complexity of rural life.

RA: Very much so. Very much so. I think what you've just said has been occurring all along. The extension service has endeavored to be in tune with the needs of the people. In the early years, people needed to be able to produce enough to have a higher level of living. As things moved on, that became less and less of a problem, except for some aberrations now and then--national emergencies, war, the Depression. But I think you're absolutely right. The extension service has endeavored to keep in tune with those changes and adapt its programs accordingly.
Sometimes we were a little bit behind the people. There were other times, maybe, when we were a little bit ahead. How successful we were in the first place in catching up depended on the state of knowledge available to do anything about a certain problem. On the other hand, if we were a little too far ahead, it might be that we were looked upon as being a little bit foggy-thinking: "That's way out. That's fine for a book farmer, but for me?" But I think, in general, there has been this rather central core of moving with the needs of the people.

I've often referred to extension as being a people-centered organization. If it doesn't meet the needs of people, it isn't going to be there very long, nor does it need to be, nor should it be. So it's incumbent upon extension agents and the leadership to constantly be in touch with local people and leadership. I think that's been one of the strengths.

Another aspect of it is that one or two agents in a county couldn't possibly get to all the people individually. They've been very effective in helping identify leaders in a community who can help do this job. I would say it's not been quite as effective in some aspects of agriculture. In the marketing, yes, and in the policy discussions, certainly. But in the education that has to do with specific farm practices, that doesn't work quite so well. It works pretty well in the women's programs. Women seem to be quite willing to listen to other women in a public setting. Men? They're a little more--I don't know whether it's a "macho" instinct or what it is, but it's a little different. However, I think that's changing.

MR: How has the perception and image of the extension service changed? Do people see agricultural extension as something that's useful and applicable to their lives?

RA: It certainly has if you look over a long enough span of time. Even as late as the time when I first came into extension, there was skepticism on the part of farmers as to whether we really knew what we were talking about or whether what we had to say was practical. About the time that I came in, hybrid corn was being introduced. As extension agents and some farm leaders who could see a little bit beyond the section lines began to use and demonstrate hybrid corn, the results were so dramatic between hybrid corn, on the one hand, and the old open-pollinated varieties on the other, that it didn't take farmers very long to say, "Well, I guess there's something to this research going on down there at Saint Paul after all." I think that was quite dramatic.

About that same time when the need for production was great, farmers began to be quite willing to accept new practices, to try anything to get more production. I think that resulted in quite a change in the credibility of the extension service, as well as of the experiment stations and of the agricultural colleges. There were other illustrations of this. An area that has come under a fair amount of controversy is the use of herbicides and insecticides. There was a time when certain species of plants were regarded as weeds which were virtually impossible to eliminate from the farmer's field, and they brought
down his yield. Well, improved herbicides came along. There were some that could be
used earlier but they were terribly expensive, and some sterilized the soil for too long a
period. These new herbicides cleaned up the weed problems more economically and
effectively.

I'm sure that in the fruit growing areas, were it not for the use of the insecticides, we
would either have little wholesome fruits or they would be terribly expensive, or both.
Now when you buy apples and don't even think of buying a wormy apple. Similarly,
fungicides can reduce crop loss from plant disease and more nearly assure wholesome
fruits and vegetables.

Today there are other sources of information. But where does the information come from
in the first place? If it's new information, much of it comes from the colleges of
agriculture or the USDA research efforts. And it's initially disseminated largely through
the extension services. Sure, the magazines, newspapers, and the commercial institutions
of one kind and another get this information and disseminate it. But I think farmers and
others, to the extent they're looking for research-generated information, like to have what
they perceive to be an objective presentation of a particular piece of information. I'm not
saying that the press or agricultural businesses don't present it properly, but farmers like
to have the viewpoint of someone who isn't selling anything. So I think there is this aspect
of credibility.

The extension agent is out there working with people, let's say, in Meeker County. He's
out there today, he's out there tomorrow, he's out there two months from now, and he's
out there two years from now. There's that contact point of continuity. People get to know
the individual so they get some perception of the credibility and integrity of that
individual. They assume that they are credible, because for the most part, extension
agents are. I know we've had a few inadequate agents on occasion, but generally, they
don't stay in extension unless they're really interested in people. From that point of view,
they do the best they can in being honest with people and in providing solid information
so that people regard them as being objective. I think that's an important characteristic
which is still needed.

MR: You have spoken about the importance of agricultural extension as a conduit in
getting information from the universities and agricultural colleges to the farmer. But
when did the realization come that that conduit had to work the other way, that the results
that farmers were coming up with were important to the university programs?

RA: I think early on there was some realization of this, maybe not so much by the farmers
as by the agents themselves, observing what was working and what wasn't working. But it
didn't take long for the farmers themselves to speak to those kinds of issues. I suppose it
developed somewhat more as the general level of education of farmers rose.
Here's a point that I should have made earlier, that I suppose changed the view of farmers generally to someone trained in the college, for example. The immigrant farmers who brought with them the methods that they knew or learned in other countries were pretty well out of the picture of managing or running and operating farms by around 1930. By then, the first generation also was beginning to pass out of farming. So what we were beginning to see at that time were second generation people who had been educated in American schools, who grew up observing different practices. That was when people began to give credibility to the information from research stations in their own minds, in the minds of the average farmer. "This is the way my dad did it; we used to do it this way," began to be heard less and less, because those people weren't effective in the management of their farms as new needs and technology arose. In fact, the agent whom I worked under made that point when I was writing this book. He said, "I think that changes in farm operators had as much to do with acceptance of new practices as the fact that there were a few things that demonstrated what the real values were."

**MR:** What about the agricultural extension's ability to change? You mentioned the importance of pesticides and insecticides in growing crops in Minnesota. Now there is a greater concern about agricultural runoff in the eighties. Has there been a way that this information has come down more quickly to farmers?

**RA:** I think that the extension service can move rapidly enough if the information is available. One of the problems is that some of these questions are not readily answerable. Even if the information was available as to what the real problem is, there isn't an immediate substitute for current practices, or the circumstances regarding Joe Blow over here and Joe Zilch over there, which are different in each instance. That was particularly true, I think, in this debt management situation.

Here was a farmer in his middle years, who, perhaps, had enough land to operate and he could handle it himself. Maybe he had a son or a son-in-law working with him, and they had a big enough operation so they could handle it. They didn't really need to get out and get more land to get a good viable operation. So they didn't have to invest in a lot of heavy machinery or buy more land at high prices. More recently, the farmer who was starting out, in order to get a larger operation, oftentimes found that he had to invest in land and machinery at a high price. And there were those farmers who wanted more. To do more, it took larger and larger investments which they really couldn't handle.

When farmers would ask questions about how they could produce more, the extension service would respond, "Yes, this is how you could do it. You make the decision of whether you're going to do it or not." But I don't think they were at the point where they'd say, "Well, you go out and buy some more land," or, "Go do this or do that." I think that the debt-incurring circumstances came about through the feeling on the part of some of the farmers that they had to expand more in order to make it work. And maybe the
financial counselors that they worked with were as much interested in getting a loan made so they'd get some interest on money as they were in, "Is this guy in a place to handle it?"

Unfortunately, trying to acquire larger amounts of land to work had a serious effect on the prices. It pushed them up. Land is not really worth any more than the value of what it can produce. Land got up to $2,000 or $3,000 an acre, and interest rates were in excess of fourteen and fifteen percent. The interest rates were even higher on the machinery that farmers would have to acquire in order to operate more land. So it was a no-win situation.

I think that perhaps the extension service may not have been able to do the job that was needed by way of management education to help farmers see what they were getting into. We had some management projects going. There was the Southwest Farm Management Association, the Southeast Farm Management Association, and the Waseca County Farm Management Association. There was also one up in the Red River Valley. The participants in those associations didn't get into trouble, because the extension people working with them were able to take them through the decision-making process and sharpen their pencils on these things. But managing one's farm enterprise is a very personal kind of thing, and people didn't flock to participate in those associations. It's a little like raising kids; you think you're your own expert.

There were a lot of factors impinging on this, and it could be that the extension service just was not able to devise a system or a method to make management education as attractive as it should have. It's an intensive kind of education, because it cannot be done by mass media, nor by a few general meetings. It takes a lot of a one-to-one kind of thing, and that's expensive. I don't think extension ever will have personnel to do all that is needed. Some of the high school agricultural instructors have been involved in adult education programs focusing on management, and I think they've done a good job with those who participated. But they, too, were limited in how many people they could work with.

MR: What about the theory that the farm crisis was brought on by bad managers, who would have been casualties of the rural crisis no matter what.

RA: I suppose there's some of that, but I think it would be inaccurate and unfair to a lot of individuals to say, "They were just poor managers." A lot of the signs indicated that what they did was the way to do it. The size of a farm operation that would support a family appeared to have to increase in order to provide the level of living that those families wanted. Those who came into the picture in the early years of their careers as farmers had far less resources. They had nothing built up on which to go, and to get in at the levels they needed to, it took more money. So they had larger and larger loans. Farm machinery was expensive, and if they got more land, they couldn't go out and hire another man. Hired help was not available. So it had to be capital intensive, which meant larger machinery.
I grew up during the Depression era, and I know that did something to my way of thinking. I tend to be more conservative, and I think a lot of people of my age who grew up in that era are conservative. I don't think many of them were getting into trouble, because they just didn't move quite so fast, so they weren't out on the edge when things went sour. A lot of those people maybe bought some more land, but they didn't have to go out and buy 200 or 400 acres. Maybe they bought an eighty or a quarter section, and they averaged out the cost of that over the land that they already had under pretty good debt control. By not buying so much, they didn't have to expand into large machinery. They may have bought some, but not a great deal. And there were some who just made do with the machinery that somebody else passed off that really wasn't worn out, and they took secondhand machinery. So there were management things that some individuals were able to do, maybe because of their mindset or because they said, "I think I can do it this way and not proceed quite so fast."

Sure, there were some people who I think were plungers, but there have always been some who are plungers. I know of people who plunged in the early years. I had an uncle who made it and went broke several times in North Dakota. He never could do things halfway; it was either whole hog or none, you know. So there was some of that, but I wouldn't say that these people were destined to be failures. Many of them actually did work at carrying out their farm operations in a very efficient and respectable manner. It's just that the debt load got too big.

**MR:** Did the farm crisis run its natural course, or did the things that the legislators and farm groups do help bring it to an end more quickly?

**RA:** I suppose all of the above. For one thing there was some improvement in farm prices. Not a lot, but some. There was a dropping off of the prices of farm land. I don't think machinery prices changed much, but farm land went down. A case in point—my brother was to receive the farm from my mother when she passed away. My father bought it in 1934 for thirty-four dollars an acre. The probate appraisal panel appraised the farm at $2,995 per acre. He'd improved it in the meantime, of course, but this doesn't make sense. My brother is township assessor. I said, "How much do you think that land, your farm, is overvalued?" "Oh," he said, "at least $1,000." And he was even a bit generous at that, because farms that were being sold in that community didn't bring in anywhere near that money. Averages were down around $1,000 an acre or less. So it's an illustration that the land can only carry so much debt.

Lenders, I think, began to realize, "Okay, we cannot lend money under these conditions." The pressure for buying land dropped off, so the price of the land dropped off. Then the interest rates began to come down, and that was a national phenomenon in the economy which always has a bearing on farms. Then there were opportunities for some coming together of give-and-take in the mediation program. I'm sure that that had some bearing.
It's obviously different from state to state, because not every extension service operated the same way, and some of them didn't do anything like that at all. I'm sure mediation helped some of the farmers. I think there were a lot of factors that went into this.

Even the drought of this current year will probably enhance the prices of farm commodities, so that those farmers who got half a crop or better will probably be better off than if everybody had had a full crop. That's just one of the vicissitudes of farming.

**MR:** Was this most recent farm crisis part of the boom-and-bust cycle of agriculture, or was it an anomaly in that it was so desperate a crisis?

**RA:** If one looks back, there's been sort of a cyclical situation. I don't think it had to be as bad as it was. I would not want to venture a very intensive discourse on that subject, because I don't think I'm really on very solid ground one way or another. But I just don't think it had to be. That's my personal opinion. If things go up too far, sure, they're going to come down. But it's not like the hog production cycle that was often up and down, up and down, where you always figured that there were peaks and valleys. The swings in agriculture seem to be marked by events outside of agriculture, as much as within it.

I remember there was an economist who had quite a following with a contention that there's a one-to-seven relationship between the income in agriculture and the income of the rest of the economy. Well, I don't know whether there is or not. There has been a relationship at times, but not always. To be sure, agriculture prospers if there's a strength in the economy. There's some lag in the economy, but generally, when the agricultural economy doesn't prosper, the rural economy doesn't either. For example, the small town businesses are certainly hurting around the state as a result of the drought and as a result of these earlier difficulties of the middle and early eighties.

Small towns in rural communities are declining. One of our extension sociologists predicted that twenty-five years ago and got kicked around a little bit for it in meetings around the state. How far they'll decline in size, I don't know, but a lot of them are not going to grow much, because so many were established seven to ten miles apart. That was about the distance that a farmer could drive in one day with a team of horses and deliver whatever it was he was going to sell or buy. That's not true anymore. If they're looking for machinery repairs, it may be that there's only one dealer of the two or three main brands in a county. So they go fifty miles for parts if they need to. It's a little more expensive, but maybe that dealer can stock a broader range of parts. I think there are some of those kinds of changes taking place.

One only needs to look at the school census to realize what's happening in rural areas. Towns that have had a full-blown elementary and secondary education program for years are planning to team up with a neighboring community. They're not consolidating yet, but that will come in some way. If the state Department of Education places additional
requirements on high schools for language education, mathematics, and so on, the individual small town school isn't going to be able to provide that. The only way they can do it is if they can draw more schools together. Then they will get more of a school population, with a bigger base on which to get funding.

Some towns aren't going to like this, because the schools may well have been their biggest business enterprise. The local school is a rallying point for most communities. In some communities, it might be the church. In Stearns County, it could be. But for most towns, it's the school, because sectarian influences are not a factor. And the towns resist losing the school or having it diminished.

MR: Much of the talk during the farm crisis was about the family farm and whether it can survive. How would you define a family farm today, and is it something that's viable in the future?

RA: This has been a burning question for many people for, I suppose, fifty years or more. A family farm, to me, is predicated, first of all, on the kind of enterprise that it is, whether it's grain farming or livestock farming or strawberry production or whatever. Some are more labor intensive than others. So a family farm, it seems to me, is the size of operation—not necessarily the number of acres—but the size of operation that an individual family can manage and operate. I don't know of any way one can look at a particular farm and say, "This is a family-size farm. It is 240 acres." It depends on what the family wants to do with it, what their personal resources are. I don't mean money only; I mean their own physical and management skills. Not everyone is going to turn out to be a top or really successful manager. Many can do better than they have, and that's what education is all predicated on—that people can be helped to do better than they would have done without that kind of assistance. So whether farms that families can manage will survive, I suspect, will depend and differ somewhat on the nature of the farming enterprise.

There was a great worry here a few years ago that dairying was no longer going to be a family operation; it would be kind of an industrial operation. Well, they tried that in Iowa. It's a bit crude to refer to it, but they forgot about the biology of the cow. The manure from a collection of cows accumulated so fast and to such a degree, they had trouble disposing of it. It wasn't worth enough to haul it any great distance from a central location.

Admittedly, the size of dairy farm operations today is larger. Today one man can take care of a herd of fifty or sixty cows, where he wasn't able to do it with even two people some years ago. There are some large dairy combines around—some in California, which is a little different. I think climate makes a difference, and the fact that a lot of feed is imported from other states. Perhaps population concentrations are a factor also.
Cattle feeding, however, is a little different. That seems to lend itself more to large operations. There was quite a lot of concern that hog production was going to go the same route, to large scale operations. It hasn't for much the same reason that there are some farmers who will produce many hogs in a given year because they can manage a number of farrowings a year. But there is a point where there's so much labor involved that you can't do it all by automated machines.

Crops are also a little bit different. The potential there for large industrial type operations is a little greater, but not with livestock, on the average. Probably a major exception to that is poultry production. I don't know how many farms in Minnesota still have a flock of chickens, but I would bet that the number is down to very few. Turkey production is approximating that. I suppose if you knew the names of all of the growers, two hands might well account for ninety percent of the turkey growers in the state.

The land is going to be farmed by someone. It's not like an industrial operation where you can confine the operations that need to be performed in a given line of manufacture on a ten-acre or ten ten-acre slots around the country. To do this with farm land becomes so expansive and pervasive in terms of geography, that single management really can't deal with it. I hope I'm right, because the alternative would be a much higher percentage of our income being expended for food. Now only fourteen percent of our income for food is what we're accustomed to in this country.

**MR:** Do you see a growing rate of corporate farming in Minnesota? I know that there's a state law that prevents quite a bit of that.

**RA:** I think that one has to distinguish between corporate farming in which there is a corporation that's removed from the individual land and operated by a hired manager, and the individual farmer who, for various legal or tax considerations, incorporates his operation. I don't know whether the latter is growing or not. I don't think the first kind of corporate farming is growing, and I really don't think it will. As you say, there's a law in Minnesota that is intended to preclude it.

There was a little spate of that at one time when some foreign money was coming into the state. Presumably more money would come in now. It might. The insurance companies at one time owned a lot of land, and those were some of the most poorly managed farms that you could lay your eyes on, simply because there was no way they could control the day-to-day things that had to be done.

**MR:** To turn back to the agricultural extension program, when you look back at your years as director, what are some of the programs of which you are especially proud?

**RA:** I think that even though there wasn't enough of it, the farm and home development program was one of the better ones, because we were dealing with individual family
needs and problems in terms of their own goal setting. To some degree, those who participated were able to manage their business operations a little more successfully.

The farm policy education program we had was quite good. The people who were in charge—the specialists who were conducting those programs—were able to bring in knowledgeable people in the area of agricultural public policy. A good many of our rural leaders were able to get an understanding of what is involved, that agriculture is one piece of a world economy, and what one could expect from certain policy changes. So people could make up their minds better in that regard.

Another, in the area of family living, was the expanded nutrition education project. It was built on the earlier experience of training local women to present educational information to their neighbors. This was a national program for people who were disadvantaged by way of income—maybe by way of education, but certainly by circumstance—to identify several others in that community who were in similar circumstances. These people were trained in nutrition, and they could work with people like themselves who were not in the habit of doing a lot of reading or going to educational meetings. For many of these people, probably all their energy would permit them to do was to just keep going the way they were. But we were able to help a lot of people in that regard with the nutrition program.

I think that our soils and agronomy programs generally were very useful to people. They were able to choose their crop production systems and the kinds of inputs that had to go with it, in terms of fertility, fertilization, tillage practices, and pesticide or herbicide aids if they were needed—but not above the levels that were really needed. They were able to hold down the amount of those inputs. Obviously there were people who always felt, "Well, if some is good, more is better." They were going to go out and overdo it. I don't believe that is done as much anymore, because it's costly, and generally farmers aren't going to spend a lot more for that than is needed. So the educational programs we had in that whole area of crop production and soil management have been very useful. I know we had top-notch people in that area. I wouldn't give an inch to any other state for the people whom we had working in that area, and our agents generally were well trained. We had a lot of educational programs going in those areas.

Livestock management programs were important, particularly the dairy herd improvement programs. When I started as an agricultural agent in the late 1930s, it was a very efficient and good herd that would produce 10,000 pounds of milk a year on the average—in fact, it was less than that, probably 8,000 pounds. Now if the herd average is not near 20,000 pounds, the dairy farmer isn't in it. That says something. Okay, maybe we've produced too much milk. On the other hand, the price of milk has remained affordable because we're producing large quantities of it. The emphasis isn't on butterfat, but that comes with the territory. The percentage can be reduced somewhat, but ultimately you have to do something else with the butterfat. I think that the dairy and the herd management
programs were very successful. Without it, the dairy farmers would not have survived in the business.

We had some programs in animal health education, conducted largely with the cooperation of the practicing veterinarians. There was a similar program on family legal affairs, which I think was quite useful. We organized practicing attorneys who were selected by their peers to do the educational job in specific communities. We had no people in that area, but there were lawyers available who were licensed to practice law in those communities. So we tried to utilize them, and they did quite a good job. The lawyers simply did not have the wherewithal to organize the program, and we did.

Of course, I can't tie this up without saying that I think the youth program has been fantastic. My children have been in Boy Scouts and in Girl Scouts, and they are good programs, but I don't think there's another program that can hold a candle to the 4-H program for its development of individuals. I don't know many 4-H Club members who have gotten into trouble. They generally develop different kinds of values and senses of responsibility for other things, as well as to themselves. I think that has to be one of the good programs, and I believe it will continue to be. It's changing as the needs of young people change and interests change.

MR: It seems that a subtext of what you're saying is that in the extension program, not only is education important, but the organizational skills that the service brings are also important.

RA: Right. I've said many times that I suppose I could name on two hands the people who have been employed in extension who couldn't do the job because they didn't know their subject matter. Those who didn't really fit in and do a good job were those who did not know how to work with people—which involves organization, motivation, and respect. You have to seek people's views and involve them in establishing what the program should focus on.

Yes, I think organization is important. It's an important aspect of education. You can't say, "I'm going to go out and teach." There has to be the right kind of setting developed in which education can take place. That kind of framework is one that is not peculiar to extension education. Adult education is what we might be talking about. It is also very true in the more formal education of the classroom, or public school or private school or college. The teaching setting has to be organized, and the manner in which things are done has to be organized. Not every extension agent has those skills. So some may require more assistance than others from someone whose specialty is organization and helping other people develop those skills.

There isn't an extension agent who can know all that needs to be known in dealing with 1,600 farm families in a county. It's just not possible. With the immense quantity of
knowledge that's available these days and more coming all the time, there isn't one individual who can do it alone. That is why in the extension framework we employ specialists in specific subject matters. We try to help them see that one of their roles is to help provide a suggested organizational framework in which their specialty of educational work can be done. These specialists then work with the extension agents and do some of the direct teaching right in the field. This is one facet of extension which is very important and which makes it worthwhile. There is ready access to what's coming off the research bench, because these specialists are housed in the collegiate departments. They're the ones who really bring back the things that need to be looked at and say, "Hey, Joe, we've got to give a little more attention to this matter of foliage nutrients."

MR: As you review your career as director, were there some aspects of the agricultural extension service that were disappointments to you? Programs that were less successful?

RA: I think we made progress in that which we were able to do. Its limitation was that it just takes more personnel to do everything. So one has to try to match up what seem to be the most insistent things that people are looking for and what can be supported in terms of personnel. The biggest part of the extension budgets was always personnel--I suppose eighty-five percent of it. It may be a higher percentage now, I don't know.

I would have liked to have seen us do more in the management field, but, as I said earlier, that is so personnel intensive that we just weren't able to do it. I wish we could have done more in that area. I guess even with the success we have been having with the dairy herd improvement program, we still didn't have the majority of farmers participating in it. This isn't to say that other farmers weren't doing what they saw the successful farmers doing; I think they were, many of them. But there were more who could have been helped in their operations, I think, if we'd been able to draw them into the existing program. This is true in some other programs.

The one element of the 4-H Club program--I don't think we were a failure in it, but there was much more we could have done--was in the health area, in helping young people to better understand the whole question of chemical abuse. However, I don't know of circumstances where the youngsters who have participated in 4-H have had drug problems. I know there was quite an interest at one time in the potential of working with the older 4-H Club members. These would be people who were fourteen to seventeen years old. We got pretty close to the whole business of family planning, and we got called off that in a hurry. I guess I wasn't really anxious for us to get into it, because I knew that we had enough to do otherwise, and it wasn't the most insistent thing at the time. But we probably could have made a contribution to some things like that, but it would have been controversial. There was some literature prepared which got out without as much editing as perhaps it should have had, and some people objected to it vigorously. We reviewed it, and we realized that it was maybe a step too far. By redoing it and putting it in a little
different perspective, we improved it, and it was well accepted. But I always felt that in that area there should have been some way that we could have done a little bit more.

MR: How would you evaluate the levels of understanding and financial support that the agricultural extension service has received over the years?

RA: I think it's been good. Sure, there were times when we could have used more funds. One has to recognize that whether it's county government, state government, or the federal government, there is only so much money that's available and only so many resources. There is a whole set of wants that people would like to satisfy, but available resources are always limited in some way. You have to take some priorities and do what you can.

So we would go to the legislature. I went to the legislature, I suppose every year. Not that we had problems necessarily, but to explain to them: "This is what we would do with this much money if you granted it to us. We recognize that while we think this is very important, we know that there are other demands, and it's your business to make the allocations." And that's the way we would deal with them, and we always came out reasonably well. No, I felt that our relations with the legislature were good.

We had pretty good relations with the congressional delegation. There, of course, were other delegations around the country that entered into the picture—although while I was director, we really didn't have severe money problems. We kept moving along. I always felt that there was going to be a time, however, when that wasn't going to be possible and that there would have to be some kind of contraction. I didn't know when, and some people have told me, "You left at the right time." I was not clairvoyant; I had no idea that things were going to tighten up to the extent that they did. I think that we've been well treated over the years in terms of the assignment that we've been given and the resources to do the job.

MR: One final question. If you were to choose a particular strength of the agricultural extension program in Minnesota, is there something that comes to mind? You've written such an extensive history of the program.

RA: It's a little hard to separate out one strength. But I would say that the extension service has a continuity of relationships with people in a community and the University. There is a continuity of working with those people, of having them get to know not just the agents, but others who are in the system who have access to information that may be useful to them. There are other kinds of organizations that don't have that, and I think they have to make their success through some other kind of efforts. If that were taken away from the extension service, I think it would be less effective.
I can go into other aspects. In other countries, I've seen where the system isn't as effective simply because they don't have that continuity and that relationship, which by and large is free of political changes. I don't recall any instance when political pressure was brought to bear for us to do thus and so. Our work was based on what was relevant, on the information as we knew it. We would not do some things today that we did thirty or forty years ago because we know better, but at that time it was the state of the art. That's not in response to your question, but I think that fits in with that relationship and the continuity of being there.

Another strength is that the agents are people-centered. If they were not people-centered, it could be very, very sterile. The postal system is always criticized; it is the whipping boy of people who say, "Well, they're just bureaucrats." Well, some of them are and some of them aren't. I think a lot of them are just as interested in people as the extension service is. That criticism hasn't been leveled against us because we chose people pretty well. By whatever criteria, we were able to identify personnel as having an interest in people and some skill in working with people. That has to be pretty high on their list of wanting to do things.

This is an aside, but as I have worked in other countries, it has occurred to me that there are four characteristics of our country which has enabled extension to do the kind of job that it has. One is that we have a literate population. Second is that we have a system of communication. The telephone was developing at the time that extension began in the field. Then came radio and television. Third is that we have an adequate system of transportation, so that people in remote areas could get to that extension agent who was out there. It's that continuity business. This isn't always true in other countries. You take out one of those characteristics, and the probability of success is diminished greatly. A fourth one which I think is often overlooked is a simultaneous growth of an agricultural infrastructure that helps market farmers' products and that helps provide inputs, whether it's credit or machinery, or other needs. That is not always available in other countries.

You can put all the money you want in the extension service, but you've got to have those four elements to really be effective. For the extension service in this country, while the idea evolved and continued to change over time, I think its success was enhanced largely by these other things that were growing apace.

I did some work in Chile, and transportation is one of their biggest problems. The extension agents didn't have vehicles; the roads weren't that good; and some of the peasants out in the country couldn't go anywhere, maybe just to a little community right nearby. Literacy was improving, but it also left something to be desired.

There's another organizational aspect that I think has impeded growth in some places, and that is where the extension function has been part of the political system. In those instances, the extension service has been responsible to the Minister of Agriculture, and it
has no direct connection with the educational or research institutions. That factor, in those instances, may be more important than those four others I have named.

MR: Thank you, Mr. Abraham.