The W. K. Kellogg Foundation, since its inception in 1930, has assisted programs in health, education, and agriculture. The programs in agriculture are usually concerned with rural society and the quality of rural life rather than technical agriculture. The agricultural programs are international and range from domestication of the musk ox to rural leadership training to technical assistance in agriculture and home management to food science and technology programs to extension education, resource development, community services, and an agribusiness educational program. Observations on rural development include the following: (1) it has been suggested that the most economically rewarding kind of education for developing countries is for rural females; since they are responsible for the younger generation, they can most quickly and constructively change attitudes and norms; (2) rural development is often equated with agricultural development when the non-agricultural rural population is a large problem; (3) land-grant universities in the U.S. have been slow to change their orientations from agricultural technology and business back to their original focus on the problems of people in rural areas; and (4) governmental commitment is necessary for rural development efforts to be effective, a commitment lacking in the U.S. (KM)
The general topic of this workshop, "Educational Policy and Rural Development," is sufficiently broad to cover practically any topic one could care to address. This, of course, has been one of the vexing problems with the term "rural development"—it can be stretched so far that the handle to the solutions are extremely difficult to identify, let alone grasp. Therefore, I have chosen to address a relatively limited sub-topic—the role and orientation of the W. K. Kellogg Foundation to rural development generally and to education for development specifically.

The W. K. Kellogg Foundation was established in 1930 by Mr. Kellogg, who had amassed a considerable fortune in the cereal business. This business was located in Battle Creek, Michigan, because of a number of historical circumstances. Battle Creek was the national headquarters of the Seventh Day Adventist Church in the late 1800s. Among other things, Seventh Day Adventists are vegetarians and are quite concerned about health practices generally. A combination hospital and health spa was established in Battle Creek and run by Dr. John Harvey Kellogg, a noted physician of his day. It became a fashionable place to come and receive the various kinds of treatment offered at what became known as the Battle Creek Sanitarium. One of the means of treatment was through a controlled diet which, of course, contained a number of meat substitute foods. Among these were various kinds of porridges, specially baked breads, and grain-based cereals.
W. K. Kellogg was the business manager of the Sanitarium and became enthusiastic about the possibility of selling the cereal products developed at the Sanitarium to the general public. Often, as patients were discharged and resumed their ordinary pursuits, they sent back to the Sanitarium for the foods that they associated with their successful treatment. The Sanitarium usually complied with the request and this became a substantial side venture. Dr. Kellogg was busy running the Sanitarium and was not enthusiastic about going into the cereal business on a full-time basis.

One of the patients at the Sanitarium in 1895 was a former hardware dealer named C. W. Post. Mr. Post also saw possibilities in the ready-made cereal business and when he was discharged from the Sanitarium, he set up a factory in Battle Creek whose first product was Postum, a coffee substitute. He was quite successful at this venture and later broadened his array of products to include Grape Nuts and Grape Nuts Flakes, and eventually a large line of cereal products. The Post Company still manufactures cereal today in Battle Creek.

Perhaps boldened by this example, Mr. Kellogg quit his job as business manager of the Sanitarium and set up his own cereal business in 1906. He was 46 years old at the time. His first product was Corn Flakes, the formula for which he had discovered by accident through experimentation one night at the Sanitarium. After one year of operation, his factory burned down.

Undaunted, Mr. Kellogg sought additional funding and built a new and enlarged plant in 1907. The rest, as they say, is business and merchandizing history; his cereal products sold at a rate far beyond his fondest expectations. He was amazed when he was told that he had become a millionaire. I suspect very few of us in this room have had that kind of pleasant surprise.
Mr. Kellogg was a business and advertising genius. He soon became immensely wealthy. He was convinced that he would not do his children and heirs a favor by leaving them his millions; he provided trust funds for the education of his descendants but decided, because of a very positive orientation toward his fellow man, to put his money to work in solving human problems. He engaged in an unorganized program of philanthropy for many years before establishing the W. K. Kellogg Foundation in 1930. Mr. Kellogg was 70 years old at the time.

Mr. Kellogg had a number of deeply held philosophical orientations which have guided the operation of the Foundation ever since its inception. For example, he felt that education was the best way to improve one generation over the previous one. He also felt that there was more knowledge available than was being put to use in human affairs, so he stipulated that he wanted his funds to be used in programs of application rather than research. He also was very positively oriented toward problems of children and their welfare. For many years the Foundation owned and operated a number of children's camps near Battle Creek, Michigan.

The first significant project of the Foundation, in the early '30s, was the Michigan Community Health Program. Health care in rural areas at that time, as is also true today, was very inadequate. The Foundation employed a number of physicians, dentists, public health practitioners, nurses, and educational specialists to improve the quality of health care in southwest rural Michigan. To this end, it provided funds for the construction of county health clinics and other health-oriented facilities, and later branched out to build a number of rural school buildings. So one could say, with some justification, that the W. K. Kellogg Foundation has been engaged in the business of rural development since its very inception.
This initial venture of the Foundation set the pattern for the Foundation's area of focus. We now assist programs in the general area of health (medicine, public health, nursing, dentistry, hospital administration), education (broadly defined and generally oriented toward programs in higher education), and agriculture. Programs in agriculture, as will be seen, are ordinarily concerned with rural society and the quality of rural life rather than technical agriculture.

As I briefly enumerate programs classified under the category of agriculture, it will be readily apparent that they could as well have been classified in the educational category but since most of them deal with people in rural areas, they fall under my purview within the Foundation.

1. Domestication of the musk ox at the University of Alaska.
2. Centers of Agricultural Adjustment at Iowa State University, North Carolina State University, the University of Newcastle-Upon-Tyne in England, and the Swedish Agricultural College in Uppsala.
3. Technical assistance to Indians in agriculture and home management at Brigham Young University.
4. Programs in Rural Leadership Training at Michigan State University, Pennsylvania State University, California, and Montana State University.
5. Assistance to the establishment of Food Science and Technology programs at the University of Helsinki, the Agricultural College of Norway, and University College, Cork in Ireland.
6. 4-H Leader Training in Norway, Ireland, the United States, and several countries in Latin America.
7. Center for Rural Manpower and Public Affairs at Michigan State University.
8. The Human Resources Development Center at Tuskegee Institute in Alabama.
9. Specialized Farms Demonstration project in Jutland, Denmark.

10. Education for the Development of Tropical Agriculture at the Institute for Tropical Agriculture in Colombia and the Institute of Colombian Agriculture in the same country.

11. Programs in Extension Education and Resource Development at the University of Reading in England, University College, Dublin, in Ireland, the Agricultural College of Norway, the Royal Agricultural College of Sweden, the Tune Landboskole in Denmark, and the University of Helsinki in Finland.

12. A program of community service and rural development in isolated "hollows" in eastern Kentucky conducted through the employment of indigenous student volunteers at Alice Lloyd Junior College in Pippa Passes, Kentucky.

13. Development of an educational program in agribusiness for undergraduates at School of the Ozarks in Point Lookout, Missouri.

On the basis of experiences gained through knowledge of these programs and through conversations with colleagues, let me make a few observations on rural development and, incidentally, education for rural development. Some of these observations will probably not surprise you. (Any opinions expressed here are not necessarily those of the W. K. Kellogg Foundation, its employees, or grantees.)

1. The definitive description for rural development education has not yet been articulated. Indeed, there may not be one, given the variety of meanings attached to the term "rural development."

2. In many countries, the public school system is oriented to concerns other than rural development. They tend to emphasize education for the professions and the civil service, creating urban aspirations and rural discontent. In this connection, Professor Theodore Schultz of
the University of Chicago has advanced the thesis that the most economically rewarding kind of education that can be emphasized in developing countries is for rural females. Traditionally, female education has not been considered important since males tend to be the bread-winners, movers, and shakers. But Professor Schultz argues in a rather convincing way that one can change attitudes and norms most quickly and constructively by educating females to be responsible and participating members of the society; who is in a better position to imbue the younger generation with progressive attitudes and norms of behavior?

3. Too often, rural development is equated with agricultural development when in many countries, the non-agricultural rural population is large, growing, and adding to urban problems.

4. In the United States, land-grant universities have been very slow to adjust their orientations from agricultural technology and business back to their original focus on the problems of people in rural areas (a somewhat strident statement of this thesis is contained in the recent publication, Hard Tomatoes, Hard Times, which has generated a good deal of discussion among land-grant college presidents and agricultural administrators.) Some of the Kellogg Foundation program efforts have been oriented toward a reallocation of existing resources in land-grant colleges which is a terribly painful process undertaken only very reluctantly.

5. Central governmental commitment to rural development is required in order for these efforts to be effective. An example of this is again the United States in which a great deal of lip service has been paid to the need for and concept of redevelopment of rural areas, redistribution of population, and improvement of the quality of life.
generally, without a great deal of action to back up the rhetoric. Political realities seem to dictate higher priorities for federal programs.

6. One of the major concerns of the W. K. Kellogg Foundation in the last 25 years has been in continuing education. We have participated in the construction and operation of 10 residential centers for continuing education in the United States and in England. We continue to be convinced that programs for lifelong learning are necessary and beneficial both to individuals and to societies. I highly recommend to you a booklet by Herbert E. Striner entitled, Continuing Education as a National Capital Investment, published by the W. E. Upjohn Institute for Employment Research, headquartered in Kalamazoo, Michigan. Dean Striner reviews nationally supported programs in continuing education in Denmark, France, and West Germany, and shows how such a system could be constructed in the United States and in other countries.

7. In programs that we assist, education for resource development tends to be in the social sciences, communication, journalism, and human development. The rationale for this emphasis is that many field practitioners are firmly grounded in some discipline of technical agriculture. In most cases their preparation in the human relations field have been meager indeed. But the job of being a catalyst for human action in resource development is a challenging assignment. I quote from T. R. Batten's book entitled, Training for Community Development: A Critical Study of Method, published by the Oxford University Press of London in 1962.
"However, much more is required than enthusiasm, good intentions, and liking and respect for people. The worker also needs a wide range of knowledge and skills. He has to be able to stimulate, educate, inform and convince people who may initially be apathetic or skeptical. He has to be able to win the confidence of local leaders, heal their rivalries, and get them to work together for the common good. He has to be skilled in working with groups and with whole communities. And to succeed in all of this, he needs to know a great deal about each community in which he works—customs and beliefs, attitudes and relationships, local needs and local material resources. He must also have some working knowledge in several technical fields and be able to make use of this knowledge in helping people to understand and solve their problems. Although he cannot be a technician or a specialist in all of the problem areas represented in his villages (sic) i.e. he is not an agricultural specialist, a health or rural industry specialist; he must have useful know-how and skills in all of the important problem areas occurring in his villages. He must know and understand the facts which have to be taught to his villagers so that they will recognize and be able to solve their major problems.

"Even if he has all these attitudes, skills, knowledge, understanding, he is seldom a free agent. Above him there is a hierarchy of administrative and supervising officers who may or may not be entirely sympathetic with him and his problem and they in turn are responsible to the national policy-making body who are often more responsive to political pressures than to the exigencies of rural development in villages."
My final observation is that it appears that in order to be a successful rural development practitioner, one must be a combination of Jesus Christ, Albert Einstein, and Mahatma Gandhi, with a dash of Prince Machiavelli thrown in. One wonders what kind of an educational regime would produce the thousands of these individuals that are needed throughout the world. I am sure our chairman knows since he has many years of experience in working in an organization training such persons.

Rural development, however defined, is very much a problem of the orderly, efficient, and satisfying development of human resources. The W. K. Kellogg Foundation will continue to explore and be receptive to innovative efforts to prepare people who are oriented to improving, or a variety of fronts, the quality of life in rural areas.