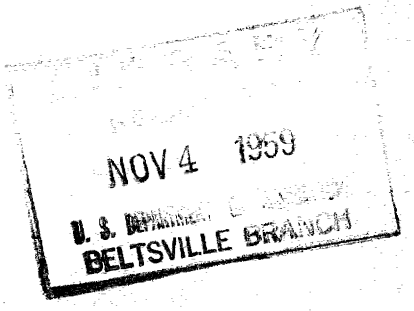
October 1959

KEEPING ABREAST OF CHANGE

IN THE RURAL COMMUNITY



UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Extension Service
Agriculture Information Bulletin No. 215

"Extension must be ever alert to adjust its programs, focus and methods to insure that its resources are used most effectively and in keeping with the ever changing problems of the people demanding services of it."—The Cooperative Extension Service Today—. . . Scope and Responsibility.

CONTENTS

ACKNOWLEDGMENTS

The material for this report was gleaned from scores of publications of the U. S. Department of Agriculture and of the State land-grant colleges.

A great contribution came from the work of persons in the Departments of Agricultural Economics and Rural Sociology at several land-grant colleges on the changing rural community. Material presented at in-service training programs for rural clergy by these institutions on socio-economic changes was especially helpful.

A special word of appreciation is due three of these individuals—to Dr. Everett M. Rogers, Rural Sociologist, Ohio State University, author of "Social Change in Rural Society"—Dr. Alvin L. Bertrand, Professor of Rural Sociology, Louisiana State University, author of "Rural Sociology—An Analysis of Contemporary Rural Life"—and Dr. Olaf F. Larson, Head, Department of Rural Sociology, Cornell University for his several writings on "Social Trends Affecting Families." This material provided excellent background and guidelines, particularly in the sections on family life and community.

Material prepared by Dr. E. J. Niederfrank, Extension Sociologist, Federal Extension Service, and other members of the Agricultural Economics Program Division, Federal Extension Service, for use in Agricultural Resource Adjustments Seminars was drawn on heavily in putting together this analysis of change.

The annual staff conference of the Federal Extension Service was devoted to change and implications for extension. This made a distinct contribution.

Finally, recognition that the first germ of the idea for this report grew out of some work with Dr. Paul A. Miller, Provost, Michigan State University and Committee Chairman, preliminary to the preparation of the study on the "Scope and Responsibility of the Cooperative Extension Service."

And to Dr. Richard O. Comfort, former Executive Director, Department of Town and Country Church, National Council of the Churches of Christ in the U. S., for his emphasis on the importance and great need for this type of resource piece by rural church leaders. Also for his continued encouragement to "get the job done."

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

KEEPING ABREAST OF CHANGE in The Rural Community

Phillip F. Aylesworth[1]

PART I THE RURAL COMMUNITY TODAY

INTRODUCTION

If one word typifies the present day rural community, that word is change. All evidence testifies to change in many sectors of life, changes that have come rapidly and recently.

The rural resident shares the farm-to-market road with the farmer's pickup or truck. Increasing numbers of farm people are getting used to the rigors of commuting to jobs in town or city. In 1958, nearly one-third of the income of the farm population came from nonfarm sources. Petroleum fuels have largely replaced oats and hay as a source of motive power. Not too many years hence sayings such as "He lacks horse sense" and "Stubborn as a mule" will need interpreting to the younger generation.

Despite the obvious changes in rural America, there is a time lag in understanding. The one-time farm boy and girl who have been in the "Big City" for a good many years retain a clear image of the rural community of three or four decades ago. Their city counterparts are apt to think of it in terms of "Currier and Ives" or they think little of what has made it possible.

The school bus symbolizes the change from the one-room school of song, story, and legend to the consolidated school. And the "Little Brown Church in the Dell" has in many rural areas become a big church in town within easy driving distance of farm and rural nonfarm families. Rural America no longer thinks of "miles to a place" but "driving time."

You'll have to go into the far by-ways of the countryside to see evidences of America's rural past. The spring house that served so long as the refrigerator of many a rural home has been displaced by the refrigerator and freezer locker. Today's farm homemaker and transplanted city homemaker in the rural community have kitchens that are the envy of some of their city cousins--who are apt to have kitchens that lack elbow room.

The massive changes in farming are more than a shift from horse, mule, and human muscle to mechanical or electric power. They are a genetic revolution as well—witness the millions of acres of hybrid corn. They are also a managerial change of the first magnitude. Today's modern commercial farm is not just a face-lifted traditional farm. The skills required to manage its complex of technical, economic, and biological factors are of a high order.

Need for Action

A period of transition is always a period of danger. Where there are great and rapid changes, it is easy to lose sight of basic values. In many instances the worst in the new situation is the easiest to acquire. If changes are not fully understood and evaluated, and if constructive leadership is not given by those individuals and institutions which influence rural life, the community of the future may not include the qualities most wanted.

Some description and measure of these changes is needed in order that people generally can better understand the situation and trends, the impact of the changes, and the implications for program efforts being carried out in the community.

These changes are bringing a sense of urgency to organizations and institutions serving the rural community. They face great opportunities as well as great responsibilities. As a consequence many organizations are taking a penetrating look at their role in the rapidly changing situation. This fact is illustrated by the approach of the Cooperative Extension Service in the study of the "Scope and Responsibility of the Extension Service." This further emphasizes the need for a background of factual information upon which to make decisions.

Organization of Report

Several publications of the U. S. Department of Agriculture contain information on various aspects of the changing rural community. Assuming that most people have neither the material nor time available, this report attempts to digest the pertinent parts from applicable publications and present a capsule of the information.

---

[1]Program Relationships, Federal Extension Service, U. S. Dept. of Agriculture.

You'll find the report organized into three expanding stages:

(1) A 3-paragraph summary of changes: in population and family life; technology of agriculture; and in community institutions and services. (See below.)

(2) Statements of the changes occurring in each of these areas and the impacts on people and institutions. (pp. 2 and 3)

(3) Supporting data measuring the extent of change. (Part II-p. 4-12)

SUMMARY OF CHANGES

There is great heterogeneity and diversity of the rural population in the present day rural community. The occupational structure is changing--increased intermingling of non-farm rural residents with farm people--greater industrialization--increased numbers of farmers working off their farms--more women employed outside the farm home--greater mobility of all people.

The technological revolution in agriculture is producing many changes in the structure of farming. There are fewer farms, but more with larger, more integrated business operations--increased capital requirements--greater dependence on services from off the farm--more specialization--increased mechanization--great increases in productivity.

Changes are also taking place in community institutions and services. There are larger and more complex institutions--greater dependence on services beyond the immediate locality--increase in number of kinds of organizations--membership in special interest groups is increasing--consolidation of schools--changes in communication and transportation--maladjustments of community services and local government.

MAJOR CHANGES AND IMPACTS

Population and Family Life

1. Total U. S. population is increasing rapidly and is expected to increase another 25% by 1975. The number of farm people is declining but the total rural population is increasing due to the increase of non-farm residents.

2. There are shifts in population distribution and composition. There is a marked scarcity of young people in their 20's and an increasing proportion of aged and pre-school and school children in rural areas.

3. The composition of the labor force is changing, including more women workers from the farm population as well as urban.

4. More farm people are becoming part-time farmers.

5. The labor supply and demand for unskilled jobs is decreasing. Jobs are more technical and specialized. Lack of information about job opportunities exists.

6. Decentralization of industry and decreasing opportunities in farming are bringing increased moving. This is causing adjustments in the social and economic structure of families and in communities.

7. The educational level is rising.

8. There is increased life expectancy--more leisure or off-the-job time. This provides opportunity for greater involvement in community work, creative expression and other spare time activities.

9. Levels of living are rising and many forces are operating to further raise the standards of living--the level of aspiration.

10. Farm people are increasing their income from off-farm sources. This affects the nature and extent of farm family interaction. The amount of time the family has to spend with one another is decreasing.

11. The family as an institution is changing resulting in fluidity or in stability in various patterns of family living. Family membership roles are changing--responsibilities once considered as separate areas of work are now shared by family member.

12. The pace and tempo of family living has increased tremendously. The diversity of family interests results in various members pursuing their individual activities. Family time together tends to be crowded aside in a seemingly relentless schedule.

13. People are turning to new outlets and new forms of recreation and social life, especially young people (away from home and local community).

14. Split loyalties are involved in the separation of home and work.

15. There is an increasing interdependence of all segments of the population--locally, nationally and worldwide--with a corresponding increase in complexity of relationships. Interest in public affairs is increasing.

16. Fewer functions are performed in the home; increasingly these are performed by agencies and organizations outside the home.

Technology of Agriculture

17. Farming is becoming a highly specialized occupation emphasizing efficiency. Farmers deal less with people and animals and more with machines. There is less a feeling of closeness to the soil and kinship with nature and more attention to scientific efficiency and business relations.

18. Never before in our history have so few farmers produced so much. In 1900 one farm worker produced food and fiber for himself and 7 others. Now one farm worker supports himself and 24 others.

19. The capital required to break into farming as an occupation is going up steadily. Farm land values and operating costs have risen sharply.

20. Labor efficiency is increasing rapidly. The number of farm workers is declining. A higher level of skill is required.

21. The number of farms is decreasing, the size increasing, and specialization in production increasing.

22. Industry is providing farmers with more services. Purchased inputs are being substituted for land and labor.

23. Total cropland acreage has changed little, but has shifted toward the more efficient areas of production. Production per acre and unit of livestock is increasing.

24. There is increased vertical integration of farming with decision-making highly centralized.

25. Increased mechanization of farms is displacing small independent farmers and farm laborers. With this change comes problems of occupational adjustment and community integration.

26. Marketing practices are changing. The food marketing bill is increasing sharply. People are relying more on purchased foods; home production is decreasing.

27. Total output-increasing technological advances are being adopted at a rate which causes total output to increase faster than demand is expanding.

28. Unfavorable disparities in cash income between farm and non-farm is occurring in some areas.

Community

29. There is increased intermingling of non-farm residents and farm people. Differences between rural and urban people are decreasing. Neighborhood and community boundaries are becoming less distinct and meaningful in rural areas. The social values of rural and urban folks are mixing and merging.

30. Mixed-income communities are replacing what were once only farming areas. There is greater industrialization and changes in occupations and income sources.

31. Greater efficiency, larger opportunities but greater risks are being substituted for the more deliberate life of the old community.

32. The technological revolution in transportation and communication has transformed our economy. New concepts of living are emerging.

33. Rural people are depending less on each other, both in family and community relationships. There are larger and more impersonal relationships in the modern community.

34. There is a greater interdependence of communities beyond the immediate locality, frequently calling for planning and action on a wider basis.

35. There is a greater disparity or range in variation in opportunity and achievement, both between communities and between individuals within the community. Some communities are declining in activity and population while others are growing rapidly. Problems are increasing in both.

36. Larger and more complex community institutions and services are evident in cooperatives, churches, schools, health facilities and the like.

37. Social and civic organizations and institutions are adapting to change slowly; the result often is inadequate programs or methods to fit changing needs and opportunities.

38. Maladjustments of community services and local government in relation to needs occur; this causes such problems as unrealistic tax structure, upset of property values, and gaps in services. Many services are performed in the old communities at an added cost, and appear in the form of over-competition and duplication.

39. With communities today more complex than they used to be, successful programs call for more correlated planning, more effective leadership and group action than in the past. There is a greater need to understand the social composition and patterns of social control and leadership of the community. The task of adult education is increased.

40. The crossroads church of past years and the rural one-room school are becoming obsolete. The role of the church has enlarged so that it not only fills spiritual needs but also is a part of community activities.

41. Increased numbers of children have created a shortage of schools. Convergence of families in some areas has created an intense problem. Other areas are left with unfilled but out-moded schools. Schools are being consolidated and services expanded.

42. Special interest groups have increased in number and kind. This brings a greater variety of people in specialized relationships, overlapping interests and often lack of communication among the groups.

43. Community services and functions are being compartmentalized; that is, a family purchases groceries in one area, and attends church and school in other areas.

44. High geographic and social mobility increases the occupational heterogeneity in many communities. Group arrangements are in process of change.

45. There is stronger demand for organized community facilities—health, recreation, safety, welfare, police and fire protection. Dependence on government agencies and services is increasing.

PART II MEASURES OF CHANGE

POPULATION AND FAMILY LIFE

Population

Probably the most significant population trends in recent history are: (1) the big boom in our total population since 1940; (2) the increasing urban sprawl and flight to suburban fringe areas; (3) the decline in the percentage of people on farms; and (4) the absolute and relative increase in non-farm population in the rural community.

World Population. During 1957 and 1958, about 90 million people were added to world numbers. That increase is comparable to the population of Japan and twice that of France. Such growth is unprecedented in human history.

The present world population is 2,500 million. If the present rate of increase continues, it will take a mere 30 years to add another 2,000 millions.

U. S. Population. We have come from 76,000,000 to approximately 175,000,000 in this country since 1900. Yet this is a small part of world population—7%. The U. S. population is growing at the rate of 1.7% per year. It is now estimated that we'll have 225 million persons by 1975 and 300 million by the year 2000.

Farm Population. Farm population has been declining for many years. In 1910, about one out of every three persons lived on a farm. The total numbers of persons on farms remained fairly constant until 1933 although the percentage of the total decreased. In 1933 there were 32.4 million people on farms or about 26% of the total U. S. population.

By 1950, the ratio had declined to one out of six, and by 1958, only one out of every eight persons was a farm resident. In 1958 there were about 20.8 million persons living on farms or only 12% of the total population. From 1950 to 1958 a net of over 7 million persons left farms. This is over 4% per year.

Geographic Distribution. There were no large changes in the distribution of farm population among the geographic regions of the country between 1950 and 1958. The South still has approximately half of the farm population, the North Central States about one-third, and the Northeast and West each have slightly less than one-tenth of the farm population.

However, the proportion in the South has been falling since 1940. In this region, farm population was 21% smaller in 1958 than in 1950 compared with a decline of 13% in the rest of the nation. The West South Central geographical area (Ark., La., Okla., Texas) showed the greatest loss—about 27%. Above-average declines also occurred in the Great Plains and Mountain States.

Mobility. The rural-farm population had a proportionately smaller number of moves than did either the rural-nonfarm population or the urban population—85.1% of the rural-farm population were non-movers compared to 77.1% and 79.3% respectively for the other groups.

Age Groups. Between 1950 and 1958 the number of farm people 18 to 55 years old decreased considerably. This group now comprises less than one-third of the farm population. The oldest (65 years or older) and the youngest groups comprise the largest proportion of the farm population. This age distribution creates a high ratio of persons of dependent ages to those of working age.

The decrease in the number of self-employed farmers came largely in the group under 45 years of age. It's harder for the older ones to get jobs off the farm.

Reasons for Decrease. Major reasons for the decrease in farm population:

(1) Less manpower needed in agriculture due to changes in farm technology; (2) Increased opportunities for non-farm employment, nearby or elsewhere; (3) Unfavorable disparities in certain regions between farm and non-farm cash incomes; (4) Other factors, such as the search by farm people for educational advantages, changes in residence for retired persons, and quest for other opportunities.

The "push" away from farms due to lack of home conveniences and other low standards of living is not such an important factor in our migration of farm people today as it used to be. Today "pull" factors like job opportunities are more important.

Farm and Non-Farm Households. In 1958 there were an estimated 5.04 million households in the United States. There was an average increase of 860,000 per year during 1950-1958. During this period rural farm households decreased over 1 million while nonfarm-rural households increased about 4 million.

Rural Non-Farm Population. Rural non-farm population increased 15% from 1940 to 1950. By that time it was considerably larger than the farm population. Between 1950 and 1958 it is estimated that the rural non-farm population increased 48%. Most of this increase occurred in the urban fringe of metropolitan cities. Much of this population is so dense that it will undoubtedly be classified as urban in the 1960 census. Increases also occurred in the rural fringe, which includes the extended, less densely populated areas around the cities, where agricultural land uses are still predominant.

Overall the number of farm people is decreasing but the total number of persons in rural areas (farm and towns under 2,500) is increasing.

Employment Pattern

Farm people are receiving a larger proportion of their income from nonfarm sources. Besides

the decline in number of farm operators the trend has been upward in the number of remaining farmers who have engaged in non-farm work. By 1958 nearly 40% of all working farm people held non-farm jobs, compared to only 14% in 1930.

The 1954 census of agriculture reported that 28.3% of all farm operators had worked off their farms for pay 100 days or more in that year. Only about 35% of the farm families depend entirely upon agriculture for income.

Nearly 3 million farm residents were working primarily at non-farm work. Of these slightly over 1 million were women. This means that 26% of the farm women worked away from home for wages. This is an increase from 17% in 1950.

The trend toward part-time farming is emphasized by the following figures: In 1929, 15% of the total number of U. S. farms were part-time. In 1939 this figure was 20%; in 1949, 31%; and in 1958 close to 40%.

Replacement Ratio

The replacement ratio 1950-60 of rural farm males, age 20-64, in the United States is 168. This means that for every 100 rural farm males who die or reach age 65 in the period 1950-60, about 168 will reach the age 20 to replace them. This makes a "surplus" of about 40%, not counting migration. Moreover, still fewer will be needed as the number of farms continue to decrease as small farms are combined with others and mechanization replaces manpower.

This situation is not entirely new in the United States. For many years approximately half of our farm boys and girls reared and educated in rural areas have moved away to spend their productive years in non-farm employment.

Industrialization

Decentralization of industry with the development of smaller units of plants and factories has led to the growth of cities and towns in rural areas. This development is providing more job opportunities and is attracting people to these centers.

This trend is increasing the occupational heterogeneity in many communities and narrowing the differences between rural and urban families.

Levels of Living

Farm families have made great gains in levels of living in the past 25 years. Electricity, running water, and the automobile have brought many changes to life on the farm. More and more families are taking advantage of these conveniences.

Level-of-living indexes are based on four items which best indicate how well American farmers are living. These are the possession of electrical service, telephones, and automobiles, and the average value of products sold and traded. In 1956 for the country as a whole, the index level of farm families was 145 (1945 equals 100).

Medical care made the most gain and in this category farm families approached the closest to city levels of spending. One reason for the gain is the widespread growth of medical prepayment plans and health insurance.

Greater availability of electric power and equipment was one of the most important factors in improved levels of living. In 1940 only 33% of farm households had electricity, 18% had piped running water, and 15% a mechanical refrigerator. By 1956, 94% of farm homes had electricity, 64% piped running water, and 90% a mechanical refrigerator.

The Family

Family Roles. The roles and statuses of family members are changing. The chief trend seems to be for women to shed their traditional roles in favor of outside work, professional careers and other "emancipated" roles. There is less division of labor between male and female tasks in the home, a decline of economic dependency of woman on the man, and increased sharing of authority.

The patriarchal type of family is decreasing. More and more family groups are characterized by patterns of equality among family members.

Use of Time. The average work week for the gainfully employed has been cut shorter decade by decade. The 40-hour week is now the usual pattern. Farm operators also are working shorter hours. A recent nationwide survey shows that the average workday of farm operators in the United States is about 10 hours in the winter time and 12 hours in the summer time. These are shorter than the 16-to-18-hour days that farmers put in a generation ago.

There is a counter force to increased leisure by those individuals attempting to do two jobs—on-the-farm and off-farm. The U. S. Bureau of Census reported that about one out of every 20 employed persons had an additional job in 1957.

Despite the growth of recreation in rural areas, both in attitude and actual activity, the opportunities and facilities for recreation available to rural people are still far behind those available to urban people—libraries, playground, swimming pools, parks and gymnasiums.

The work rhythm has also changed as the type and location of work have changed. Instead of a 5 or 6 day week, with Sundays off, we see many families where individual members work on different shifts and have different free days during the week. This adds to the difficulty of maintaining family unity and group decisions and increases the complexity of planning by institutions working in the rural community.

Age Relationships. Both men and women are marrying younger and the gap between husband and

wife ages is narrowing. The woman has her last child at a younger age. This gives her more free years to work outside the home. Increased life expectancy, along with earlier marriage, means the husband and wife spend more of their life span together.

Employment Outside the Home. There is a great upsurge of women, especially married women over 35, who hold a job outside the home. Thus they depend more on a great variety of services to help them better fulfill their roles in the home. This includes child study groups, family life education, foods and nutrition, management of family resources and other phases of home management.

TECHNOLOGY OF AGRICULTURE

The Agricultural Industry

The agricultural industry represents an important factor in the nation's economy. The term agribusiness has been coined to express the combination of all production work on the farm, the manufacture and distribution of farm supplies, and the processing and distribution of farm commodities and items made from them. Agribusiness employs around 40% of all the people that work in the United States and supplies the commodities which account for about 40% of total consumer expenditures. Agricultural production supplies over 60% of the value of raw materials consumed by the United States economy.

Of the 65 million people employed in the United States, about 25 million work somewhere in the agricultural industry—7 million work on farms, 7 million produce for and service farmers, and 11 million process and distribute farm products. In addition, a half million scientists and technicians directly or indirectly serve agriculture.

Vertical Integration. This refers to unit control (one man or one board) over all phases of production, processing and distribution. Under this definition, farmer-businessman arrangements may cover a wide range from only slightly closer than an open-market relationship to the complete ownership and operation of the farm by business.

Contract farming is an instrument which may be employed in vertical integration. Only one crop or kind of livestock may be involved, or it may cover the entire output of the farm.

Groups of Farms. Two major groups of farms have emerged. They are distinctly different, and their problems are different.

1. Commercial farms are 2.1 million in number. These farms produce about 91% of all farm products marketed.

2. Small-scale, part-time and residential units, according to the last census, number some 2.6 million "farms." They produce only 9% of farm products marketed.

Farm Technology

Today's agricultural scene is characterized by increased commercialization, high cash operating costs, high investment, and rapidly increasing production efficiency. This is true on both a per farm worker and a per farm basis.

Since 1940 total farm output has increased 40% while crop acreage has declined 2% and man-hours has declined 48%. The productivity of farm workers doubled during the period 1940-55. Non-farm labor and manufacturing productivity, on the other hand, increased slightly less than 50% during this period.

Production of individual crops and livestock products fluctuates considerably but total output of American agriculture changes very little. The stability of total farm output from year to year indicates that farmers seldom leave an important part of their production plant idle. If they reduce output of one product, they usually use the resources released to produce something else.

Agriculture is continuing to feed and clothe more and more people per farm worker and per acre because machines, agricultural chemicals, and other purchased items have been substituted for farm labor, workstock, and land in production. The increase in efficiency has been great. Today's average farmer produces as much in one hour as he did in two hours in 1940. The developments in agriculture as the result of new science and technology have been greater during the last 25 years than during the previous 120 years. One farm worker today produces enough food and fiber for himself and about 24 others. In 1940 this figure was 10.6; in 1900 it was 6.9 and a century ago 3.

As for our farm production potential, an estimate shows that if all farmers applied present technical knowledge as fully as farmers in economic classes I, II, and III (the top 25% of all farmers), then one farm worker could supply food and fiber for himself and 45 others. This is almost double the present figure of 24.

Many factors have contributed to the rapid increase in output of agriculture in recent years. The adoption of technological advance in recent years has been speeded by the relatively favorable farm prices, the healthy financial position of most of agriculture, the higher level of education, and the backlog of new technology. Increased technical know-how, getting crops planted and harvested at the right time because of better power and machinery, improved seed varieties, insecticides, agricultural chemicals, changing practices in many phases of land crop management, irrigation and the like have sharply increased yields per acre.

In only about 15 years—since the early 1940s—the combined per-acre yield of 18 leading field crops has increased about 40%. Production per breeding unit of livestock rose by more than one-fifth. Breed improvement, better combinations of

balanced supplements, disease control, modern equipment, etc., have all contributed.

Research and Education. The dramatic advances in agricultural technology did not come about automatically. Much of the credit for improved technology goes to the land-grant colleges and the USDA. The production research of these institutions made many of the improvements possible. Moreover, the Federal-State cooperative extension service has made a big contribution in disseminating new production information to producers. This has helped minimize the gap between the best known technology and the technology actually used by farmers.

Farm Price Supports. Other governmental aids, including conservation assistance, credit, disease, insect and weed control, marketing information and services, and price stabilization have all contributed to improved technology, greater efficiency and increased output.

One of the important factors accounting for accelerated technological progress has been the increased stability and higher level of income resulting from farm price support programs in the past 25 years.

Mechanization. The increase in mechanization has brought about: (1) A rise in operating costs making farmers strive for high output per man, per machine, per farm; (2) larger farms; (3) more intensive production on existing acreages; and (4) less labor used in similar farming processes.

Results of Technology

It is estimated that between 1910 and 1950, the resources saved in American agriculture as a result of improved technology amounted to about $16.2 billion when valued at 1946-48 prices. The savings in resources in 1950 alone was much larger than all the expenditures of the Federal and State governments on agricultural research and extension work since 1910.

Agricultural technology has advanced even faster since 1950. If the agricultural output achieved in 1957—the latest year for which complete figures are available—had been produced by the methods available to farmers in 1939, it would have cost the Nation about $7-1/2 billion more in land, labor, capital, and other resources than the actual cost in 1957.

The Farm Problem

The crux of the farm problem as it has emerged in recent years is two-fold:

(1) Producers of abundance—Output-increasing technological advances are being adopted at a rate which causes total farm output to increase faster than the demand for food and fiber is expanding. Despite both a smaller crop acreage and a shrinking labor supply, farm output increased 23% between 1950 and 1958, while population increased only 15%. Efficiency as measured by output per worker increased 26% but returns to producers were below 1950.

(2) Inadequate units—Those least able to compete—to apply technological improvements—are being by-passed in this march of technology. As a result many farmers suffer from underemployment of human resources in many agricultural areas. More than a million farm families concentrated largely in the South, have too few farm resources to provide full-time employment to permit a satisfactory level of living. This adds to the complexity of the agricultural situation.

The Structure of Farming

Agriculture appears to be in the middle of revolutionary changes in size and capital structure.

Size of Farms. The total acreage of land used for growing crops and for pasturing livestock has changed very little. However, the last two decades have seen an unprecedented increase in average size of farms. Many farms have become steadily larger in acreage, increasing from an average of 138 acres in 1910 to 174 acres in 1940, and 242 acres in 1954. Currently the average size is around 270 acres.

The volume of sales per commercial farm has more than doubled since 1940. Using 1954 prices, the average volume of farm products sold has increased from $4,000 in 1940 to more than $9,000 in 1958.

Specialization in Agriculture. Even more important than increase in size has been the growing specialization in certain phases of farm production. The size of enterprises on farms also is changing rapidly. The number of farms selling dairy products declined one million from 1940 to 1954 as total production increased. Farms reporting chickens and broilers declined one-third in the five years 1949-54 while sales almost doubled.

Number of Farms

The number of farms in the United States reached a peak around 1920, and has been declining since then. From 1940 to 1954 the number of farms declined more than 1,300,000. Since 1954 there has been a further decline of nearly 500,000.

The number of U. S. farms in operation in 1958 is estimated at 4-3/4 million—2% less than in 1957 and 18% below the number 10 years ago.

The number of farms containing 1,000 or more acres increased 30% while the total number of farms was declining 20%. The average size of these farms rose from 3,662 acres in 1940 to 4,073 acres in 1954. This trend toward fewer and larger farms has continued since 1954 and will likely do so in the future.

Investment. The amount of production capital per farm almost doubled between 1950 and 1958--from $17,000 to $33,500. The investment per farm worker reached a record high of $20,700 in 1958--a 115% increase from $9,600 in 1950.

Farm land values have gone up 63% since 1950 and are at a record high of $125 billion or $108 per acre. The 1954-57 period was characterized by continued rising land values without a comparable increase in farm income. This situation was unprecedented in the previous 40 years of record. The most important factors accounting for continued high land values appear to be the attitudes of people toward farmland as an investment, and the demand from farm operators for additional land to utilize mechanization and new technology more fully. About two-fifths of all land transferred is bought by established farmers to increase the size of their business.

The investment in farm machinery and motor vehicles has shown the largest percentage gains--six times what it was in 1940.

In the 1954 Census farm operators and their families reported that they spent about $8.1 billion for the purchase, operation, and maintenance of motor vehicles and farm machinery that year. This amounts to an average of $1,700 per farm and over $2,100 per commercial farm. The total was one-fifth of reported farmers expenditures for all production and family living expenses.

Non-Farm Inputs. There has been a dramatic growth of large-scale industries to produce inputs for farmers or furnish marketing and processing services formerly carried out on the farm. These nonfarm inputs include machinery, fertilizer, pesticides, gasoline, feed additives, and other services now produced in the nonfarm sector. They have substantially replaced or offset farmland and farm labor in the production process. More than half the inputs used in agriculture now come from nonfarm sources and the percentage is increasing sharply. The proportion of nonfarm inputs has increased from about one-third in 1940 to more than half in 1958.

Economic Classification of Farms

According to the 1954 census, Classes I, II, and III (farms with value of market sales of $5,000 or more) made up 27% of the total farms. These groups produced 79% of market sales. Class IV farms with sales of $2,500 to $5,000 made up 17% of the number of farms and produced 12% of market sales. Thus 2,102,000 farms, or 44% of the total number, produced 91% of total market sales.

Approximately 1.2 million small commercial farms--26% of the total--produced only 7% of total market sales. In addition there were nearly 1.5 million part-time and residential farms. These produced 2% of total market sales.

The following table gives the details:

Number and Percentage of Farms and Proportion of Market Sales by Economic Class, United States, 1954

Economic Class	Value of Sales	Number of Farms	Percentage of all Farms	Percentage Market Sales
Commercial Farms:	Dollars	Thousands	Percent	Percent
Class I	25,000 & over	134	2.8	31.3
Class II	10,000-24,999	449	9.4	26.9
Class III	5,000-9,999	707	14.8	20.5
Class IV	2,500-4,999	812	17.0	12.1
Class V	1,200-2,499	763	16.0	5.7
Class VI	250-1,199[1]	462	9.7	1.4
Other Farms:				
Part-time	250-1,199[1]	575	12.0	1.5
Residental	Under 250	878	18.3	.3
Abnormal[2]	-------	3	.1	.3
All Census farms	-------	4,782	100.0	100.0

[1] Farms with sales of $250 to $1,199 were classified as part-time if the operator worked off the farm as much as 100 days, or if other income of the operator family exceeded farm sales.
[2] Public and private institutional farms, experiment stations, and so on.

Marketing

Changing distribution patterns are greatly affecting farmers. The need to base production on what can be profitably sold to the consuming public is taking on increasing significance. The problem of the farmer retaining a fair share of the dollar consumers spend for food is increasing.

Supplies and Prices. Record harvests of 1958 brought a record volume of food products into the marketing system. The physical volume of farm marketings ran 2% above the previous record of 1956 and 7% above 1957. The volume of farm marketings, based on conditions as of July 1, is likely to reach a new high in 1959. Cash receipts from farm marketings in the first half of 1959 were slightly below those for the same period in 1958. The volume of marketings was up nearly 3% but prices received by farmers averaged 3% lower.

The excess productive capacity at present is estimated at 6 to 10%.

Marketing Charges. Expenditures for marketing food went up from $10 billion in 1941 to $22.8 billion in 1948 and $35.6 billion in 1957.

In 1957, American consumers, with 13% higher per capita incomes than in 1951, bought 11% more food from farmers, including more higher-cost animal products. Yet farmers received $700 million less for the larger volume of production in 1957 than the more limited volume in 1951. (In 1951, farmers received $20.2 billion for processed food that cost consumers $43.0 billion. In 1957, farmers received $19.5 billion for producing about 11% more food that cost consumers $50.4 billion.)

In contrast, consumers paid food processors and marketing middlemen $7.4 billion more in 1957 than in 1951 for hauling, processing, and handling the food between the farm gate and the retail counter. (Labor costs $3.6 billion; transportation costs $1 billion; other business expense $2.8 billion.) Corporate profits in the food industry increased $0.7 billion.

Comparing 1957 with 1947 the total marketing costs increased 74% while the value at the farm increased 4%. The retail cost increased over $14 billion during this period while the farmers share was declining from 51% to 40%, a 16-year low. During most of these years farmers prices declined while marketing costs continued upward.

Advancing retail prices accounted for somewhat more than half of the increase in food expenditures. Another 15 to 20% resulted from a rise in consumption and a substitution of more expensive for less expensive foods (meat, milk, eggs, fruit and vegetables for grains and potatoes). Substitution of convenience foods for foods requiring less processing or other marketing services apparently accounted for only a minor part of the rise in per capita food expenditures.

In earlier years marketing margins declined when the value at the farm fell. But in recent years marketing margins have risen even when the farm value fell. In 1950, the farm food market basket retailed at $920; in 1958 at $1,065—an increase of $145. The farm value dropped $5 during the period to $427. The marketing margin was $638.

An increase in marketing margins has this important effect: it tends to reduce the effect of higher consumer incomes on demand at the farm. During such a period, demand at the farm becomes more inelastic, more "sticky" than formerly. The farmer receives a smaller proportion of the increased expenditure for the food products.

Food Cost in Relation to Income. Despite the large increase in the marketing bill, the overall farm food expenditures did not keep pace with rising incomes. While per capita disposable incomes rose 38% between 1948 and 1957, expenditures for all food on a dollars-per-person basis went up 18%.

The purchasing power of an hour of factory labor has increased with reference to most food products since 1939. In that year the income from an average hour of factory labor would purchase 8 loaves of bread; in 1957 it would purchase 11 loaves.

Between February 1950 and February 1958 retail beef prices increased 5.7% while weekly earnings of factory workers increased 35%. The amount of working time to buy a pound of beef dropped from 30 to 19 minutes.

Home Food Production. Families in the U. S. are not producing as large a share of their food now as they did even a few years ago. Farmers' sales of food commodities in 1955 were about one-tenth higher than they would have been if families had produced the same proportion of their food as in 1942. It is estimated that 17% of all food consumed by civilians in this country that year was produced at home. In 1955 the figure was only 9%.

The factors responsible are: (1) decrease in farm population, (2) easier to buy food due to good roads and more accessible markets, (3) increase in off-farm employment, and (4) changes in ways of living and eating.

The pattern of food spending has changed. Farm families eat out more, and like city families, they buy more of the convenient processed or semi-processed foods.

The Balance Sheet of Agriculture

Farm assets rose to a new record value of $203 billion on Jan. 1, 1959. The increase of $14 billion in the equities of owners of farm properties over the previous year was due to increases of nearly $9 billion in farm real estate values, about $4 billion in the value of livestock on farms as the result of higher prices, and $3 billion in other assets.

Farm debts rose again in 1958 as they have each year since 1945, reaching a total of $23.3 billion. However, the increase was not disproportionate in terms of increases in the value of real estate and other equities.

Farm mortgage (real estate) debt rose for the 13th consecutive year in 1958 to an estimated total of $11.3 billion on January 1, 1959. Farm mortgage debt continues to increase 6 to 7% per year. Non-real estate debt rose about 12% in 1958. A continued rise in 1959 is anticipated. From 1950 through 1958, total debt has increased 87%.

The rate of return on farm capital has been sharply reduced in recent years due to continued increases in the market value of production assets in agriculture, particularly real estate, without corresponding increases in farm income. However, in 1958 the returns were up sharply from the 2.5% in 1956 and 1957 and near the long time average of 4%.

Returns to Farm People

Farm Income. Gross farm income at $38.3 billion and production expense at $25.2 billion were both at a record high in 1958. Thus, farm operators received $13.1 billion realized net income from farming. This was the highest of the past 5 years, but 11% below both the previous 5-year and 10-year periods.

Realized net income was 34.3% of gross farm income in 1958--the same as the average of the past 5 years. This compares with an average of 47.4% for the previous 5 years and 50.7% for the 5 years preceding that.

This emphasizes the great increase in cost of production items in recent years. A much larger income is now needed to maintain the same level of realized net income.

In 1958 net income of the farm population from farm sources was $16.0 billion; from non-farm sources, $6.2 billion. The total cash income per person on farms from farming alone, $768; from all sources $1,066.

Cost-price Squeeze. During April 1959 the index of Prices Received by Farmers was 244% of its 1910-14 average. This compared with the record high of 313 in February 1951.

The index of Prices Paid by Farmers Including Interest, Taxes, and Farm Wage Rates also increased to a new record high of 299 in 1959. Prices paid for non-farm goods and services used in farm production have been rising faster than prices for farm produced items; non-farm production items have reached new peaks each year since 1955.

Production expenses continued their upward trend in the first 6 months of 1959, reaching a new high rate of $25.8 billion. Contributing to this increase were higher wage rates, property taxes, and interest charges plus higher prices paid for feeder livestock, feed, farm machinery, and motor vehicles. Seed and fertilizer were the only important cost items for which average prices declined.

COMMUNITY

Special Interest Groups

Organized special interest groups are clearly growing in numbers and specialization. Every rural community has dozens of them—churches, youth groups, parent-teachers associations, commercial and civic clubs, and various others. Many families belong to several local organizations. Duplication of leadership and of programs or services among these various local organizations is common. In some communities, the large number of special interest groups makes it hard to find adequate meeting times and places.

One outgrowth of special interest groups is the growing dependence on professional, paid leadership. The family has lost or is losing many of its traditional functions. There is a trend away from the self-sufficient family that provided itself with most of its basic necessities, and in addition cared for its old and ailing members. Many educational, religious, recreational, and protective functions are being transferred to specialized systems as the school and government.

Another phase of the growth of special interest groups is the increase in local units being linked with others through an organization at county, State and national levels. Coupled with this trend is the tendency toward centralization of control and decision making.

With the high degree of specialization, problems of community-wide concern, beyond the program or ability of particular organizations to handle alone, largely go unsolved.

Consolidation. One of the significant trends in social services is toward bigger and bigger units of operation and administration. This is true with education, health, religion, business services, and with local government. The pressures are toward units considered big enough to provide enough volume of business to permit a desired quality and type of service or to operate more effectively and economically. Local units surrender to larger units. In general services become more removed—in miles—from the rural population.

Education

Several types of changes have been made in an attempt to streamline rural education. The most common plan has been the consolidation of a number of districts into one large unit so that the number of pupils served and the tax base are comparable to those of the urban centers.

Consolidation proceeded rapidly from 1947 to 1957; the number of school districts dropped from 104,074 to 50,403. One-room, one-teacher schools in rural areas showed a marked decline.

Rural communities face similar problems in providing education as in providing health, religion, and culture. In essence citizens seek a social

organization which will make services accessible (1) in line with the standards of more densely populated areas, and (2) at a cost within the limits of their resources. (For further discussion of this point see "Local Government.")

Health

Many persons believe that rural people are healthier than urban people because of the advantages of outdoor work, fresh air, and uncrowded conditions. On the other hand, medical and hospital facilities in many rural areas are inadequate, and unsanitary conditions sometimes exist.

Years ago, rural and urban health conditions compared favorably. Now, though, urban health conditions tend to outrank rural. The change may be due to the advent of scientific control of epidemics, growth of preventive medicine, scientific treatment of diseases and sicknesses, and the development of modern hospital and medical facilities. Rural health conditions have greatly improved during the last generation, but not as fast as urban; thus, there is still a disparity between them.

One reason for the rural gains is the widespread growth of medical prepayment plans and health insurance. These enable families to get and pay for medical treatment when needed. Voluntary health insurance covers a growing number of people (almost 70% in 1956) and pays an increasingly large part of the average insured person's bill for hospital, surgical and other personal health services. Also new hospitals built under the rural community health assistance program make medical care more readily available to rural families.

Welfare

Traditionally, local people have been responsible for furnishing public services in the field of human welfare. As these needs have increased, local and State governments have been hard pressed to meet their responsibilities. The Social Security Act of 1935 embodied the first permanent organization of a welfare system in this country, with the Federal government helping pay the bill. More and more older family members are now cared for by the government through Social Security programs and not by their families.

Church

In general, more rural people are affiliated with churches, either as members or active constituents, than belong to any other single organization. Recent studies in several States have shown that the church is the central factor in the social organization of the community and provides one of the most important forms of participation of the rural population. These are indeed important factors. A survey in North Carolina indicated that 78% of social participation of a sample of rural people was through their churches, whereas only 22% was through all other community agencies combined.

The rural church faces two situations. One is the problem of "overchurching" in areas of declining population. Farm-to-urban migration and improved transportation has tended to make obsolete the crossroads church of past years. A Purdue University study of 4,529 rural churches in Indiana disclosed that 53% had fewer than 100 members, 23% had less than 50, and 62% had a part-time minister.

The other problem is that of adjusting facilities and programs to meet the needs of rapidly expanding communities. The problem is complicated by the diversity of cultural and racial backgrounds of the families involved.

Local Government

The increasing demands for services—schools, health, library, etc.,—has brought a heavy burden on local governments. The result—increasing demands for additional Federal aid.

The solution is closely related to the tax structure. During the past quarter century, the combined Federal, State and local taxes increased from about 11% of the national income to over 27%. The Federal tax increased from 4% of the national income in 1929 to almost 21% in 1953, whereas State and local taxes remained around 7%. Federal taxes now take about three-fourths of all government revenue.

Property taxes yield over 70% of the total general revenue of local governments. Because local units rely so heavily upon property taxes for their locally collected revenue, they are placed at a decided disadvantage, fiscally, compared to the Federal and State governments. Property is a relatively diminishing proportion of the total national wealth. The system also results in many inequities due to lack of uniform patterns in appraisal and assessment.

The solution apparently lies in three courses of action: (1) broadening the tax base to include other than property revenue; (2) greater reliance on State and Federal sources as the collection and distribution agency or, (3) the Federal government relinquish some of its tax sources to State and local units so they can more adequately provide needed services.

Business Services

There is a trend toward bigness and tie-ins with corporations in the agricultural segment of our economy as in other areas. Problems of small business in towns are increasing.

To illustrate this, look what is happening to cooperatives. Many local cooperatives are too small to gain the advantages of large scale economies. They do not have the volume to make them efficient, economic units. To protect themselves,

they're combining into larger and more complex units. With this integration into regional structures the average member has less understanding of their operation.

Midland Cooperatives, Inc., is an example of this growth. This co-op gained 30% in member association and in patrons between 1949 and 1957, and even more in smaller non-member associations and patrons. In 1949 Midland served 594 member associations with 240,000 patrons and 86 nonmember associations with 10,000 patrons. In 1957, the number of member associations was 775 with 310,000 patrons and the non-member associations 153 with 16,000 patrons. They distributed supplies at wholesale valued at over $43 million.

Government Agencies

The growing dependence of people upon government services has become increasingly important. This includes the responsibility for many kinds of services which benefit family members as well as programs affecting the economic well being of the various groups residing in rural communities.

Transportation

The tremendous expansion in highway systems and the automobile has greatly speeded up the fringe growth around urban centers. Part-time farming has been made possible by improved transportation. Other changes include the breakdown of the rural neighborhood as the center of rural life and larger groupings for all kinds of social services and activities. Wider friendship and recreational patterns are developing.

Neighborhood and community boundaries are losing their meaning. The city limit sign which appears at the edge of urban centers has a different meaning today. It is now just a tax boundary. It is no longer a cultural boundary, a recreational, educational, or economic boundary. Today the same kind of people live on one side of the city limit sign as on the other. The social values of rural and urban folks are mixing and merging.

Buying and marketing patterns are changing. The neighborhood grocery store is moving into the suburban shopping area or disappearing. The services are becoming compartmentalized. Many smaller communities are "dying" due to outmigration and loss of community services.

Communication

The development in communications such as telephones, radio, television and other mass media has had especially great social consequences. Facilities for receiving mass communications have become widespread. There has also been some centralization. It is reported that 217 daily newspapers disappeared in this country in the past 10 years and that "chain" operations now publish about 500 dailies.

Clothing styles of urban and farm folks reflect the improved communications as knowledge of styles increases.

Energy

Changes in source and use of energy underlie much of our great industrial development, shifts in manpower out of agriculture, and home conveniences.

Electric power production in the United States in 1957 was 16 times as great as in 1920. About 96% of our farms are electrified. In 1958 the average consumption of electricity of farms served by Rural Electrification Administration borrowers was 3,816 kilowatt hours per farm. In the farm home the use of electricity has done more to change the pattern of living than almost any other one factor. Development of industry in rural areas has been dependent to a great extent on adequate sources of power or energy.

Tractors and motor vehicles have become so numerous that horses or mules are no longer an important source of power on the farm. In 1910, the first year in which tractors were counted, there were only 1,000 tractors in the U. S. By 1955 there were nearly 5 million farm tractors. The decrease in work stock has paralleled the increase in the number of tractors.

"Too many institutions and organizations are facing to the certainties of an agrarian past while confronted with the uncertainties of an industrial future. Leaders are not leaders for long if they fail to sense the reality of the situation, nor is the organization any longer useful when its aims fail to express the real needs of the community."—Dr. Paul A. Miller, Provost, Michigan State University.

FUTURE TRENDS AND OUTLOOK

Population and Family Life

Total U. S. population will continue to increase. The urban fringe and rural fringe will increase proportionately more than the average.

The shift out of farming will continue with the most rapid growth in the professional and technical occupations, requiring a rising level of skills. Between now and 1965, half of the 10 million workers expected to be added to the labor force are likely to be women to reach a total of one-third of the labor force.

Technology of Agriculture

The "revolutionary" technological advances in agriculture will continue. Specialization in farming, mechanization, capital requirements, and shifts in land use will continue at a rapid rate. A higher level of skill will be needed. Factors beyond the control of the farmer will increase in importance. There will tend to be increased integration between agriculture and nonfarm business. The drive for efficiency will continue. Farming will become more competitive.

There is a backlog of output-increasing, cost-reducing technology available. Fully important, most of the resources now committed to agriculture—tractors, improvements in land, harvesting machinery, and much of the labor—cannot shift to other employment. Once the capital investment is made in new technologies, the new production methods are irreversible—are necessarily continued even though prices fall. Under these conditions, new technology will continue to expand production faster than markets expand. Cost of production is not reduced as fast as falling prices. This competition arises from new technologies and is fueled by efforts to survive under falling prices and rising costs. Thus, intense competition may well continue for some time.

Marketing will become more important. Upgrading in the diet will likely continue. A better balance between production and use will eventually occur.

Community

Much of rural America will become "mixed income" communities.

The school and education will assume an increasingly important role. Adult education will increase.

The role of institutions serving the rural community will change but not decrease in importance.

Cooperative Extension Work: United States Department of Agriculture and State Land-Grant Colleges and Universities Cooperating.