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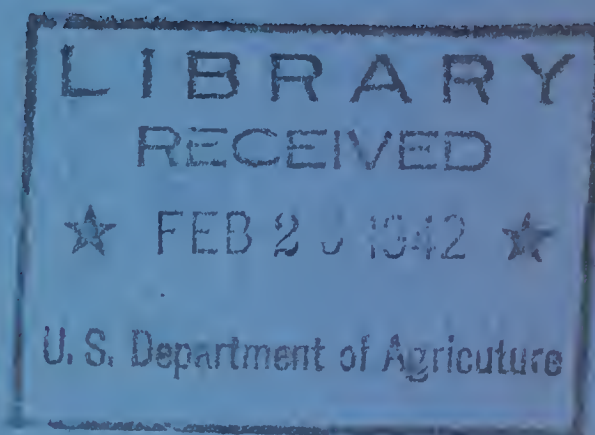
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**REPORT OF THE CHIEF**  
**OF THE**  
**BUREAU OF**  
**AGRICULTURAL ECONOMICS**  
**1941**

1940/41

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# REPORT OF THE CHIEF OF THE BUREAU OF AGRICULTURAL ECONOMICS, 1941

UNITED STATES DEPARTMENT OF AGRICULTURE,  
BUREAU OF AGRICULTURAL ECONOMICS,  
*Washington, D. C., October 15, 1941.*

HON. CLAUDE A. WICKARD,  
*Secretary of Agriculture.*

DEAR MR. SECRETARY: I present herewith the report of the Bureau of Agricultural Economics for the fiscal year ended June 30, 1941.

Sincerely yours,

HOWARD R. TOLLEY, *Chief.*

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## A DEMOCRACY USES ITS EXPERTS IN A TIME OF CRISIS

The Bureau of Agricultural Economics has mobilized for defense. Throughout the year its work has been focused on meeting defense needs quickly and effectively. Research and planning have been speeded up—their findings merged into patterns for practical action.

Checking and rechecking agriculture's experience in the first World War and the later years of depression, BAE during the year has sought first of all to fuse the data of its experts with the practical experience of the Nation's farmers, and to put this fused knowledge to work for the Nation. This merging of the experience of layman and expert—in recent years a problem of increasing importance to the success of democracy—has seemed crucial in the current emergency.

It has meant trying to achieve a practicable way of blending the conclusions of research men, administrators, and farmers into blueprints for definite action. The findings of science could thus be brought into immediate focus on the individual farm, the individual farmer in turn could key his plans and problems to the Nation's immediate or long-term needs, and the administrators of farmers' programs could shape their work to that of both the others.

Much of the following report will bear on the various ways in which this practical working relationship between expert and citizen is being brought about. For in almost every phase of the year's work—whether it was in cooperation with the Land-Grant Colleges in the development of actual grass-roots planning for agriculture, or in its cooperation with other agencies in the formulation of programs and policies in Washington, or in its progress toward a practical synthesis of fundamental research and planning—the question that has assumed immediacy has been, "How can the laymen make use of the conclusions of the expert, and the expert incorporate in his conclusions the specific problems and experience of the farmers?"

The question was pointed up, of course, by the urgent need for tackling both the problems of current production in a world at war and the problems to come when the world is once more at peace. In such a situation neither the layman's answer nor the expert's was enough; the two somehow had to be made into one. There seemed to be only one way to do this: "In what way," the Bureau asked thousands of farmer-committeemen as well as its experts, "can agriculture expand its production now and at the same time escape the need for drastic adjustments later when the emergency is over?"

Fortunately the Nation's farmers were already partly prepared for the question. The Bureau's research staff in the economics of farming had been functioning for nearly 20 years, and the Federal and State program for cooperative agricultural planning was in its third year. At the beginning of the last fiscal year, 2 years of experience in the correlation of the two activities had already been accumulated.

During those 2 years, in cooperation with the State Land-Grant Colleges and with other agencies of the Department, State, county, and community committees of farmers, administrators, and technicians had been organized in all parts of the country to point out the major agricultural problems in their areas and the Nation, and to help work out practicable ways of meeting them. Early emphasis in the counties was given to describing the existing land use areas so as to get a preliminary, broad view of the county's total land resources. From the reports and maps of this analysis the county could then be visualized in terms of its actual land assets and liabilities, whether they were stony or cut-over tracts with small, impoverished farms; tracts subject to erosion when in cultivated crops; forested or other unsettled tracts; or tracts with good farm land capable of sustaining varying degrees of intensive cultivation; or whether the county had combinations of these conditions. And the committees, as most did, could then proceed to formulate ideas for doing something about the conditions that needed improvement.

The value of these beginnings in grass-roots planning became apparent when, early this year, a swift reappraisal of the productive capacity of the Nation's farms became necessary as a result of threatening events abroad. Ready to be tapped at that moment were a vast fund of research data and the reservoir of information and experience gained in the preceding 2 years of agricultural planning.

By drawing upon these sources, the Department in September 1941 was ready to announce the 1942 national production goals, adapted to new defense requirements, and in turn, to convert, through its defense machinery in the field and in Washington, these goals to State and county levels on the basis of the production warranted both by the land and the potential markets.

This fusion during the year of BAE's research and planning activities into working plans for effective action is significant. To some degree it may be said to mark the coming of age of the reorganized Bureau. Not only has the Bureau been able to make significant contributions in working with the Secretary's Office and the administrative agencies in the development of specific plans for action, but in cooperation with other agencies in the Department it has been able to work effectively with the farmers in the field, in analyzing and appraising the activities of the Department.



An outstanding and a difficult part of the work during the year was the effort to summarize the work and thinking of all the State and county agricultural planning committees into a single report on agricultural policy in relation to the defense situation. The analyses and recommendations of the State agricultural planning committees as to the current situation and measures needed to meet the impact of the war and the probable shocks of the following peace have already had a direct effect upon the several programs of the Department. Some of the measures suggested have already been put into effect, others are incorporated in the suggested national production goals for 1942, and others, it is hoped, will be made a part of the Department's program to meet the shocks of the post-defense period. Only a brief summary of these recommendations can be given here, but they are important as an indication of the scope and spirit of current farm thinking:

(1) Agricultural and defense planning must be closely interwoven. Farmers stand ready to contribute whatever they can to the defense of democracy, but the unplanned expansion of production which characterized efforts to meet the needs of World War I should not be repeated. With possible shortages of supplies and labor ahead, farmers think that the needed increases in production should be obtained as efficiently as possible and that unwarranted uses of supplies and energy should be curtailed.

(2) The farmer committeemen clearly indicate that we should begin now to plan for the post-defense period. They believe that full employment should be maintained then and that steps should be taken now to see that we are ready to take up the slack if and when our defense program is ended or the effort lessened.

### I. BLENDING RESEARCH AND PLANNING INTO PROGRAMS FOR ACTION

An important objective in the synthesis of planning and research during the year has been the determination of the types of adjustment needed in the various farming areas. In this work the Bureau has been helped immeasurably by the Agricultural Experiment Stations and the Land-Grant Colleges. At the close of the year preliminary reports for each of the seven BAE regions had been prepared, and revised regional reports and a national summary were scheduled for completion by early fall.

The plans developed have been focused on two goals: (1) the production of sufficient farm products to meet all needs of the defense emergency, and (2) the utilization of rising consumption and prices during the emergency to effect some of the adjustments warranted by national health and conservation needs of the future.

Preliminary findings indicate that the adjustments to be made by farmers to meet the changed production outlook in the years immediately ahead are bound to be widespread. All commodities will be affected to some extent. The plans being developed, however, will have two great virtues in their favor: (1) The pattern of changes indicated as necessary will benefit the Nation as a whole as well as the Nation's farmers because the shifts will be in the direction of a better national diet for all; and (2) the adjustments that must be made as a whole, fit in readily with the long-time objectives of the farm programs now in operation.

At the close of the year estimates were being made of the entire potential productive capacity of the farms in the Nation. This work was being undertaken by regions and by types and sizes of farms. The ultimate question for which an answer was being sought was: "Disregarding ordinary measures of price or cost, how much *can* our farms produce without doing irreparable injury to the farm plant?" This inventory of the potential productive capacity of the Nation's farm land in an emergency should be of value not only as a guide in the present defense program but also as a basis for more permanent adjustments in the changed world that is bound to follow the advent of peace.

A dim preview of agriculture's role in that changed world has already been given in the broad recommendations of the State agricultural planning committees. Even before the national defense program got under way a growing market for many food products was beginning to take up the slack in the so-called surplus production, and new marketing emphases based upon people's needs in food rather than upon their ability to buy it were gaining broad public favor. There is little doubt that these new emphases on better national—and perhaps international—health and nutrition will be carried through the defense program into the years beyond.

This has certain definite implications for agriculture's post-defense economy. The United States may never see a return of the former large export markets for such products as wheat and cotton but it will see a growing insistence on an adequate diet for all of its people. This necessarily means a much more liberal distribution of the "protective" foods—dairy and poultry products, vegetables, meats, and fruits. Consequently, a much larger and more stabilized domestic market for these products than we have formerly been able to make available to the American producer seems to be in prospect.

Fortunately, these post-defense probabilities dovetail readily into present production needs. On the basis of lend-lease requirements, the cotton, wheat, and tobacco areas might well use the present situation to effect a partial shift to more profitable alternatives. In fact, a partial shift now, from these commodities to those for which the present demand is great, would tend to simplify both present and future adjustment problems.

In the Corn Belt and the Dairy Belt the problem is less simple but equally clear. These regions are already producing large quantities of the products now in demand and will have to produce even larger quantities for the duration of the emergency. What of the years beyond? The answer to that question is partially given in the preview of post-war diet emphases already mentioned. The rest of the answer lies in the effectiveness of the programs now being carried forward by the Bureau and cooperating agencies to bring about a practical fusion of the individual farmer's own experience, gained from a knowledge of his own land and his local markets, with the more general experience of technicians and administrators who are trying to view the problem in terms of the region or the Nation as a whole. If that fusion is effective, no region, no State, no community, is going to overshoot its markets very far,—and its markets, in any case, will be larger, more stable, and more soundly based on the actual needs of the people they are intended to serve.

## DEFENSE PRODUCTION—GOALS FOR 1942

It is becoming increasingly apparent that the production of food is secondary only to the production of actual defense materials in the present situation. The need for maintaining and improving the nutrition of our own population whose work load is steadily increasing because of the defense program, the development of the lend-lease program to supply England with food, and the increasing realization that food may well be one of the most influential factors in writing the peace following the end of the war—all these indicate the necessity of maintaining and increasing food production if the defense program is really to be successful.

As a result, the Department has undertaken a specific program for increasing the production of food and feedstuffs in line with defense needs for 1942. In the development of this program the Bureau was asked to undertake the specific task, in cooperation with all the other agencies of the Department, of developing a series of recommended goals for agriculture for 1942. All of the Bureau's research, all the relevant material developed through the cooperative agricultural planning work, and all of the relevant research and administrative experience and judgment of the other agencies of the Department were brought to bear on this problem. The result was a set of definite national goals which indicated the desired supplies and utilization of each commodity for 1942, together with the acreage of crops and the number of animals that would be necessary if this goal were to be achieved.

After having been reviewed by the responsible officials of the Department, these goals were officially adopted and are now being used as the basis of the Department's production program for 1942. Should these goals be attained, agricultural production will be even higher in 1942 than the record production that is now being realized for 1941. Altogether, it is expected that farm production in 1942 will be about 115 percent of the 1924-29 level as compared with 105 percent in 1936-40, even though the production of such basic crops as cotton and wheat is rather severely curtailed. As a result, the increases in food production will be much greater than the increases in total agricultural production.

If this production is reached it will be possible to maintain and, in some cases, increase the average per capita consumption of foodstuffs and other agricultural products by the American population, and to supply enough agricultural products for export or lend-lease shipment to feed at least 10 to 12 million people, and to maintain reserves of feedstuffs and other products adequate to allow further increases in foreign trade or to give protection against drought. American farmers are already increasing the production of foodstuffs needed for domestic consumption, but further increases are desired, or are in prospect for 1942, for milk, pork and lard, eggs and chickens, soybeans for beans, and peanuts for oil. It is expected that the production of flaxseed and dry beans will continue at the current high level, and that further increases will be obtained in lamb and mutton, rice, vegetables, and potatoes; also, the current situation is such that there apparently will be no effective limitation on domestic cane and beet acreages in 1942.

With respect to beef cattle, the problem is one of marketing rather than production—that is, beef cattle numbers on January 1, 1942, will be at or close to an all-time high, and it is desirable to increase marketings in 1942, so more meat will be available and so numbers will not be further increased on January 1, 1943.

Acreage and production of feed-grain and hay should be adequate to support the desired or expected livestock production, and to give, in addition, sufficient carry-overs to provide protection against drought. In case of a very severe drought, apparently enough surplus wheat will be available to allow considerable quantities to be fed.

In the case of cotton, wheat, and tobacco, the acreage goals suggested for 1942 are all somewhat lower than, or only equal to, the acreage being harvested in 1941. This, of course, results from the fact that these are the chief export crops and that adequate reserve stocks have already been accumulated. In the case of cotton, wheat, and tobacco, the acreage goals for 1942 must necessarily agree with the provisions of the Agricultural Adjustment Act of 1938.

As the number of bearing fruit trees cannot be materially increased in 1942 over the current level, the goals should be to prevent waste and obtain the best utilization as between the several uses—canned, dried, and fresh. To a considerable extent, this is also true with respect to vegetables, for the production of certain classes of vegetables or production in certain areas is often greater than the quantity that actually moves to market.

Altogether, the goals established for 1942, or the materials on which they are based, represent one of the most comprehensive surveys of American agriculture ever undertaken by the Department. They provide for significant increases in food production and are one of the bases of a program in which thousands of farmers and all the agencies of the Department are cooperating to a common end. It is possible that many difficulties lie ahead, particularly in regard to shortages of supplies and an increasingly tight labor situation, but if the American farmers can reach, or in the case of some commodities can exceed, the goals set for 1942, American agriculture will have made its full contribution to our defense effort.

#### CROP INSURANCE FOR COTTON AND OTHER COMMODITIES

Since developing the original crop insurance program, the Bureau's activities in agricultural insurance have included current analysis of the existing wheat crop-insurance program and the development of actuarial data for the application of insurance to other crops.

Preparation of a preliminary county rate-structure for cotton crop insurance was completed during the year. This is in line with the amendment in June 1941 of the Federal Crop Insurance Act to provide for a cotton crop-insurance program. For these actuarial computations individual farm-yield data, beginning with 1933, for sample farms in each county were obtained from AAA, and county yield data beginning with 1928 from the Crop Reporting Board. These data cover a total of more than 70,000 farm-yield histories in about 900 cotton-growing counties in 16 States.

Premium rates for farms under the 75-percent insurance plan are expected to range from a minimum of about 10 pounds of lint cotton per acre on low-risk farms to 30 pounds or more on high-risk farms.

Yield data for 1939 and 1940, which have become available since the preliminary actuarial computations were made, must still be brought into the computations in order that consideration may be given to differences in yield levels and risks occasioned by changes in yield-trends in part of the Cotton Belt since the beginning of the Agricultural Conservation Program.

Experience gained in the insurance of three wheat crops under the Federal Crop Insurance Corporation provided much of the basic material for the cotton crop-insurance studies, and will likewise contribute substantially to the practical application of crop insurance to other crops. Actual corn-yield histories were obtained for more than 20,000 farms in the Corn Belt. All possible sources for such data have been explored, and loss-cost figures based on a 5-year period have been determined for most farms for which data were obtained. As in the case of cotton and wheat, data are to be extended to reflect the experience of a longer period by the use of county yield figures. These are available for the States in the commercial corn area and for several other States from 1928 to date.

Basically different problems are involved in the insurance of a tree crop, like citrus fruits. Unlike the situation in wheat and other annual crops, an average of past yields for an individual citrus orchard might not be the best indication of future yields. Any insurance coverage provided will have to take into consideration the fact that yields increase with increased age of trees—particularly, of course, in the case of young trees. Administration of an insurance program for citrus fruits will be facilitated, however, by the fact that commercial production at present is concentrated in three principal areas—about 13 counties in southern Florida, the 10 in southern California, and 2 in the Lower Rio Grande Valley of Texas.

Records for approximately 1,200 individual groves are being used to develop an actuarial basis for citrus-fruit insurance. These records also provide basic information for determining an average relationship between yields and tree ages for each major kind of fruit in the three principal producing areas. Citrus fruit, unlike wheat or cotton, cannot be stored from year to year without deterioration; hence, insurance reserves could not be carried in "kind." How to carry reserves in cash without undue hazard to the insuring organization from fluctuations in price is a major problem now being studied.

Research work on the possibilities of tobacco crop insurance is still in a preliminary stage. Data to be used in an experimental analysis have been assembled from representative counties in each of the important type-producing districts. Analysis of these data is giving some indication of the risks involved and is providing a factual basis for developing a plan of insurance suitable for tobacco. Under consideration is a plan which combines yield histories and quality ratings into a "yield-quality" coverage.

An analysis of the hazards in rice-growing was also begun. Arrangements have been made with State and county offices of the A. A. A. in Arkansas, Louisiana, and Texas, and with canal companies in Texas, for assembling yield data regarding rice farms. Indications are that the risks in rice production are not so great as in other major crops but losses of rice crops from unavoidable hazards do occur. The fact that serious losses are infrequent would seem to indicate that

insurance protection, similar to that already available to wheat growers and to that available to cotton growers beginning with the 1942 crop, would cost rice growers considerably less. Storms or excess rainfall (particularly at harvest time), failure of the water supply, the incursion of salt water in drought years (in canal irrigation), ravages of insects and plant diseases, appear to be the most common causes of crop losses.

#### IMPROVING LOW-INCOME FARMING SYSTEMS

A large part of the farm program for the last few years has been directed to aiding the lower one-third in agriculture. Maladjustments in size and type of farm, uneconomically located farm families, inequitable tenure systems, and many other problems of low-income groups have been studied throughout the country. New impetus has been given to this phase of the work as a result of the interest of the Farm Security Administration in improving its rehabilitation program. Both the Bureau and FSA are concerned with remedying situations that cause hardship to large numbers of farmers and farm laborers, and their families.

At times the distress of these groups has led to the introduction of stop-gap programs which must now be replaced by permanently sound assistance. The goal aimed at by FSA is rehabilitation along lines that will give the low-income farm groups reasonable security and adequate levels of living. One of the current tasks of this Bureau is to examine the farming systems now in use in various areas and suggest ways and means for achieving larger incomes on rehabilitation farms.

On such a basis, the job of rehabilitation becomes more tangible, and allows the establishment of objective goals in terms of more land, more livestock, fewer uncertain cash crops, and more stable and cheaper credit. These goals have long been recognized as needs; the Bureau is now interested in where, how, and how much. After examining typical farm situations, a basis for action in type-of-farming areas all over the country can be laid out.

In addition, an experimental farm program has been set up by FSA and the Bureau. For 10 years new farming systems that are adapted to areas containing large numbers of low-income farmers will be tested in actual practice. The systems which prove successful by test can then serve as a guide to better incomes and greater well-being for other farm families in these areas.

## II. UNIFYING POLICIES THROUGH INTERBUREAU COOPERATION

Coordinated planning for the solution of problems in many separate areas was carried on this year as last by interbureau committees made up of representatives of all interested agencies. As the central planning agency for the Department, the Bureau has been active in all of these committees and has been assigned the chairmanship of most of them. One, for example, was the Interbureau Coordinating Committee on Production Goals for 1942 which developed the production goals described in a preceding section of this report.

Through these committees the accumulated data of years of research by all agencies of the Department can be focused on specific problems

in specific areas; and the wisdom and experience of farmers and State agencies in the areas can be drawn upon through the State, county, and community agricultural planning committees. The work of these committees, like that of the Bureau itself, has been weighted heavily by defense and post-defense considerations.

One interbureau committee is now at work on the vital task of building post-defense programs for agricultural areas. The committee has been organized into three subcommittees, each concentrating on different broad aspects of the problem. A rural-works program to provide useful employment to persons living in rural areas is the concern of one subcommittee. Included in this program, as now conceived, will be projects to restore and further develop the physical resources upon which agriculture depends—such projects as soil conservation, water development, forest improvement, flood control, and the development of submarginal or new land areas. Likewise included are projects for the provision of better public and private facilities to rural people. Better rural roads, better rural housing, rural hospitals, rural electrification, improvement of terminal-market facilities, and provision for quick-freezing plants and food-storage facilities and recreational centers are some of the possibilities already outlined.

Another subcommittee is examining current developments in the national economy which will have a bearing on agriculture in the post-defense period. National fiscal policy, the potential markets for farm products, international relations, possible changes in the agricultural plant, and the return of defense industries to peace-time production are among the fields staked out for analysis.

Means to raise levels of living to a desirable minimum standard are the primary concern of the third subcommittee. Nutrition, an adequate health program, sanitation and medical care, are being explored, along with possible programs for improved rural education, the modernizing of farm equipment, and increased security of tenure for farm operators.

#### THE COLUMBIA BASIN AND MISSISSIPPI DELTA JOINT INVESTIGATIONS

An outstanding example of integrated planning for a specific area is the series of joint investigations being carried out in the Columbia Basin Irrigation Project. The special interbureau committee set up for this purpose has greatly facilitated cooperation of the Department with the Bureau of Reclamation in the Department of the Interior and with other Federal, State, regional, and local agencies. An area leader from the Bureau has been designated by the Secretary of Agriculture as the field representative of the Department in these investigations.

The Columbia Basin Project is one of the largest irrigation developments ever undertaken by the Federal Government. When completed, it will provide water for 1,200,000 acres in central Washington, affording family-sized farms for 15,000 to 20,000 families. Preliminary reports on the types of farm economy best suited to the area to be opened up indicate that dairying is expected to be the most important livestock enterprise. Tentative estimates set the number of livestock probable in the area when the project is finally completed at 260,000 dairy cows, 120,000 beef cattle and 650,000 lambs for feed-

ing, 150,000 hogs, 159,000 sheep in farm flocks, and more than a million chickens and turkeys. Alfalfa is reported as the most successful foundation crop.

To develop this big area in a way that will be profitable to the settlers and that will promote the welfare of agriculture and the consuming public as a whole will require a carefully worked out program. This can be done only on a basis of painstaking studies of a wide variety of problems ranging all the way from technical problems of soil management to economic problems to be met in marketing and sociological problems related to community settlement and standards of living.

Representatives of the Bureau have worked with other agencies on practically all of these problems. In addition, the Bureau is taking the primary responsibility for studies of marketing problems, necessary living standards, and types of settlements.

One of the most common economic problems which must be faced by a large new area of this kind is to find satisfactory market outlets for the products to be raised. Naturally some will be consumed locally by the settlers themselves, but it is apparent that substantial surpluses, especially of some dairy products, will be shipped to markets in the Northwest and to some extent to markets throughout the country. In planning the types of farming for the area, therefore, it is necessary to have reliable estimates of the quantities of farm products that can be sold in the markets of the Northwest. In many cases it is also desirable to have some reliable estimate of changes in market prices which are likely to occur as production is increased. The Bureau has made a detailed study of potential market outlets for the principal farm products that are likely to be produced in the area.

Marketing studies have also been concerned with the most efficient sizes, kinds, numbers, and locations of processing facilities such as creameries, slaughtering plants, quick-freeze plants, and canning factories that may be needed. There seems to be a definite possibility of having lower costs of processing, transporting, and marketing the products to be grown in the Basin than generally prevail. A well-planned system of creameries would mean savings of perhaps 3 cents a pound on butterfat. These savings would be extremely valuable to all settlers. In fact, they would practically pay for the cost of the whole irrigation project. However, these studies have shown conclusively that these savings are not likely to be made if the development of processing plants and other marketing facilities is left to the stimulus of competition alone. In all parts of the country the Bureau has found a great deal of unnecessary overlapping and duplication of facilities which greatly increase the costs. This must be avoided if maximum savings are to be made in the Columbia Basin. It will require careful planning and definite procedures of zoning, licensing, or similar means of preventing excessive and unnecessary plant capacity.

Analyses now being made of two areas in the West from which prospective settlers into the Basin may be expected to come—the Northern Plains and Washington-Oregon—indicate that, on the average, farmers with an income less than \$1,000 in Washington-Oregon and less than \$1,250 in the Northern Plains have only slightly more than a 50-50



chance of continuing a solvent farm enterprise. The proportion of families at these income levels who show annual deficits is so high that agricultural stability is jeopardized. Insecurity of this type leads to an undesirable turn-over of settlers or a costly relief load.

Farm plans and budgets prepared by the farm-management workers, based on 80-acre units, show a prospective farm income for many parts of the Basin of much less than the averages given above, frequently falling to a few hundred dollars and averaging not more than \$600 yearly except in a few favorable parts. Other studies of farm operations in irrigated areas similar to the projected development in the Basin and on resettlement projects of the F. S. A. further substantiate the low-income figure from a general-type or dairy-type farm enterprise of 80 acres. Legislation now pending to allow the homesteading of farms larger than 80 acres will permit the establishment of units large enough to yield an adequate level of living and a reasonable measure of farm stability. This is a desirable change in the present law, for experience has proved the social and economic inefficiency of undersized units.

Overshadowing even the Columbia River Basin as a new frontier for agricultural settlement are the poorly drained cut-over areas of the Mississippi Delta in Louisiana, Mississippi, and Arkansas. The problem there is not whether they should be opened for settlement: A new land rush of national significance is already under way. The real problem, of mutual State and Federal concern, is to protect the settlers against questionable land-selling schemes, extortionate interest, and impossible purchase contracts; and to develop an agricultural program that will aid in the adjustment of people to the land.

About 5,000,000 acres of undeveloped land in the Delta are suitable for farming after proper drainage and development, according to the report of a study by the Department committee. This is more than three times the acreage to be brought under irrigation by the Grand Coulee Reservoir in the Columbia River Basin. Properly developed, this part of the Delta country could provide 40-acre farms for 125,000 families.

These figures are significant in that the land lies close to areas that are as overpopulated and poverty-stricken as any in the United States, according to the report of the interbureau committee. Many of the families in nearby areas were found to be struggling to obtain a poor living on overcrowded land, or on land unsuitable for farming, whereas this nearby Delta area offers possibilities for new farm land capable of providing much better chances for farming. But this area is no Utopia, and present settlement too frequently has failed to develop along lines that are economic and efficient for the new settlers as well as for the farmers already there.

In nine representative Delta counties and parishes in the three States, an estimated annual average of 750 new farms per county have been brought under the plow during the last 10 years; but a large share of the settlers are low-income families already in straitened financial conditions, and unable by themselves to attain the security on the land which they seek. Lack of equipment and credit, inequitable terms of purchase, misguided choice of locations, and lack of knowledge about lowland farming are but a few of the problems with which the settlers are wrestling. Housing and health prob-

lems are acute. The general economic and social problems are such that, in the opinion of the interbureau committee, unless the settlers can obtain greater security the newly developed family-sized farms eventually may be combined into large holdings cultivated by tenants, sharecroppers, or farm laborers.

Research studies of this part of the Delta by the Bureau have shown that a number of coordinated social measures are necessary for the successful development of the new lands. Among these are: (1) Unification and improvement of drainage systems; (2) public purchase of large tracts for properly planned disposition to small farmers; (3) improvement of purchase contracts; and (4) technical advice and assistance. There is also need for further exploration of alternative opportunities in crop production. Growing cotton on the new-ground farms is already complicating further a difficult cotton-surplus situation; and possibilities in the production of food and feed crops, in forestry, and in the development of processing and manufacturing industries warrant further study.

#### SPECIAL REPORTS ON NATIONAL PROBLEMS

The series of special reports, initiated by the Bureau 2 years ago and prepared in cooperation with other agencies, has aroused gratifying worth while discussion. In several instances remedial action has followed. Of particular interest are the developments that have followed publication of the Bureau's Special Report on "Barriers to Internal Trade in Farm Products" in March 1939.

Perhaps the most important development was the recommendation made to Congress by the Temporary National Economic Committee. The Committee recommended that a continuing committee on Federal-State relations be established by Federal statute to "collect current information as to trade practices between the States" and to "devise ways and means of preventing or restraining uneconomic barriers to trade." The establishment of such a committee had been urged by the Council of State Governments and by the Federal Secretaries of Agriculture and Commerce in hearings before the T. N. E. C. in March 1940.

The 1941 sessions of the State legislatures have made a good record on trade-barrier laws. Most of the trade-barrier bills that were introduced were defeated, and several existing trade-barrier laws were repealed. Up to now the States have taken the lead in blocking the erection of new trade barriers and in repealing old ones. However, Federal action could help materially in eliminating many barriers, and joint action by both the Federal and the State Governments seems to offer the most satisfactory plan for eliminating many others.

Added to the Special Reports series this year were three new reports.

The Bureau's comprehensive economic analysis of the Food Stamp Plan was published as a Special Report in October 1940. Few measures undertaken by the Department have been received by the general public so favorably as the surplus-disposal programs which are designed to attack two major problems at once—that of relieving the farmer of burdensome surpluses and that of meeting the food needs of low-income people. These problems are obviously related, and the public has generously applauded the Department's effort to make one problem solve the other.

For four years the Bureau has been exploring the possibilities in various methods of surplus disposal. At present, the Department is spending millions of dollars on programs for removing price-depressing surpluses from the market. These programs are still in the developmental stage; hence, it is well that their potentialities and effects on the farmer and consumer be carefully analyzed now to see if the most effective methods are being used and if they are functioning efficiently.

The conclusion reached in regard to the Food Stamp Plan was that the plan probably could be expected to increase total farm income by at least as much as the amount of Federal subsidy it required, and possibly by more. Thus, in addition to the valuable contribution the plan is making to the diets of low-income families, the Food Stamp Plan, the school-lunch program, and similar surplus-disposal programs are of great actual and potential benefit to farmers. On this basis, the programs become a form of farm aid which is paying tremendous dividends in better national health and nutrition.

Similarly, the Bureau's analysis of the School Lunch Program (Special Report published November 1941) finds it to be a particularly advantageous outlet for so-called surplus foods. About 70 percent of the children participating received hot noonday meals. Nutritional analyses made by the Bureau of Home Economics in connection with the B. A. E. study showed that the surplus commodities made an important contribution to the nutritive value of these lunches. A greater contribution could be made, however, if greater emphasis could be placed upon nutritive criteria in selecting the commodities distributed. This emphasis should not reduce the total benefits to farmers although it might alter the division of benefits among various producer groups. In the long run it might facilitate needed agricultural adjustment through encouragement of greater production of nutritionally desirable foods. Most influential nutritionally would be the addition of milk or milk products to the list of foods distributed to schools, although this need may be met in the larger cities through the School Milk Programs. An analysis of this latter program is now nearing completion and the results will be issued soon.

The report on "State Legislation for Better Land Use" (published April 1941) points out that "for constitutional reasons, for administrative reasons, and for reasons inherent in our democratic system, government in the United States cannot do its part in enabling and helping the American people achieve a prosperous, permanent, conservational agriculture through national legislation alone. . . . The United States may exercise only those governmental powers that are granted expressly or by necessary implication in the Federal constitution. The several States, on the other hand . . . may exercise any governmental power that is not forbidden them. . . ." As a consequence, much of the legislation that is necessary if good land use is to be achieved can be provided only by the State Governments.

The report brings together the economic, administrative, and legal material bearing upon each of eight major types of State land use legislation: (1) State rural-zoning enabling acts that authorize counties and other appropriate local units of government to adopt rural-zoning ordinances; (2) statutes to improve the workings of the water laws, particularly in the Western States, to promote efficient and conservational use of water, probably including new legislation deal-

ing with the conservation of ground-water supplies; (3) legislation along the lines of the soil-conservation district laws now in effect in 38 States; (4) revision or amplification of farm-tenancy laws; (5) statutes offering a procedure for revising the structure of rural local units of government; (6) legislation to simplify existing procedures for the collection of delinquent taxes and the acquisition of a reasonably sound State or county title to chronically tax-delinquent lands; (7) provisions for State purchase of lands in the interest of land use adjustment; (8) authorizations of appropriate State agencies to examine and classify lands that come into public ownership through tax delinquency or other involuntary routes, to make again available for private use lands found to be appropriate for that use, and to administer the remainder in accordance with their best use.

Although it is generally necessary to treat all these problems as separate units to discuss or legislate upon them efficiently, they are more often so interlocking in actual existence as to be solved only when attacked as a group. For example, an adequate solution of the erosion problem may require modifications in tenure systems, or in taxation policies, or in rural-credit systems, or in all of these.

One of the real issues facing rural living is that of adapting governmental institutions to local needs. There are more than 175,000 local government units in the Nation. "In this multiplicity of small units," the report says, "lie many of the weaknesses of rural local government as now constituted." Readjustments needed to reduce the many wastes brought about by this situation would provide (1) areas of sufficient size, population, and administrative capacity to allow efficient and economical performance of public services; (2) areas having a sufficient productive tax base to guarantee local support for local services. The chief methods that have been followed or recommended to effect these readjustments have included consolidation of areas, administrative reorganization, reallocation of functions, and intergovernmental cooperation. (See conclusions reached in a study of the Ozarks in the following section of this report.)

Chronic tax delinquency has already become, or is well on its way to becoming, a problem of major proportions in many rural areas. This fact calls for a broad attack on such associated ills as land wastage through neglect or abuse; widespread abandonment of farms or of once-forested lands, often leaving stranded populations; impoverished local government and financial distress; excessive taxes on good lands, and a tendency for shrinkage in the tax-paying base to spread the infection of delinquency. Many States are currently seeking better ways of handling tax-delinquent lands.

State and local purchase for land use adjustment is suggested where public acquisition would: (1) Supplement zoning in eliminating excessive governmental costs for services rendered to isolated settlers; (2) supplement land use regulations on lands to which the regulations are inapplicable; (3) control hazards to the public health and safety and to adjoining property; (4) restore lands from idleness and depletion to productive uses yielding revenue to local communities; and (5) facilitate proper use of State or county lands which have been obtained through tax reversion or foreclosure or in other ways, but not acquired for some specific purpose.

State and county Governments in the United States now own approximately 155 million acres of land; in some localities this type of ownership accounts for 80 to 90 percent of the land area. This situation has brought administration of public lands into the foreground; and several States have recently passed legislation in this field. The first step in good public-land administration is an inventory of the lands to be administered. "Once the areas under State control have been classified," the report says, "action can be taken to put them to good use through \* \* \* (1) The transfer of public land to private ownership through sale, homesteading, or other methods of alienation—with or without restriction; (2) the direct public management of lands for such public uses as timber growing, wildlife protection, grazing, recreation, watershed protection; and (3) management through soil conservation districts and through cooperatives, grazing districts or other organized groups of private users."

As a continuation of this process, when specifically requested by local planning groups the Bureau has directed its efforts toward aiding in the formulation of State and local legislation designed to carry out appropriate policies. These legislative studies are of vital concern to the structure, procedure, and basic elements in rural Governments that are necessary for the maintenance of adequate democratic functioning.

As land use problems rarely if ever occur in complete detachment from each other and most of them require a program of related measures to meet the related problems of the area, the interbureau committee suggested two devices that should be helpful in obtaining necessary coordination: The grouping of certain related functions or agencies under one administrative head; and cooperative planning by agencies operating in the same area.

#### EFFECTS OF LOCAL GOVERNMENT ON LAND USE

Typical of several projects undertaken during the year is the analysis of needed local Government reorganization in Ozark land use adjustment areas. This project, carried out under an agreement with the Missouri Agricultural Experiment Station, was designed to discover reasons for chronic fiscal difficulties in a number of Ozark counties; to assess the effects on local government finances of land acquisition by Federal and State governments; and to develop feasible methods for adjustment or reorganization of local government to promote economy in government and more desirable patterns of land use.

Among the factors found to be contributing to chronic financial distress of many local governments in the Ozarks were an inappropriate division of responsibility between State and local governments for performance of State-local functions; cumbersome and inefficient organization and operation of local government; and the absence of effective State supervision of property-tax administration and other important local activities.

Considering the public value of Forest Service roads and other improvements available for local use, local residents and the counties may be said to have received genuine net benefits from the Forest Service program. However, two flood-control projects now under construction probably will have some net adverse effect on county revenues.

Locally raised school revenues will be seriously reduced in a number of districts, but virtually all the loss in continuing districts will be made up from State funds as a result of ordinary operation of the State-aid law. Several districts obviously should be discontinued. A comprehensive forest-purchase program probably would adversely affect revenues of some counties and school districts for a number of years.

Conclusions reached through the analysis indicate that a broad, effective program for improvement of local rural government in the Ozarks would include elimination of special road districts and organized townships; transfer of certain health and welfare functions to the State Government; provision of an optional, simplified form of county government to be made available initially to perhaps 30 to 40 low-valuation counties; establishment of a permanent State local-government commission to supervise budgeting, accounting, and financial reporting, to audit for counties and certain other local units, and to supervise and participate in tax administration; and reorganization of school finance and administration as well as improvement of organization and procedures for property-tax assessments, collections, and reversions.

Similar types of investigation have been made of the relationship of government to local and regional agricultural economics in southwestern North Dakota and in Arizona.

#### A SINGLE PLAN FOR A SINGLE FARM

Nearly one out of every six farms is now operating under some sort of Federally designed farm plan. Until this year, no coordination of this individual farm planning had been undertaken. The experimental work now begun is intended specifically to obtain a better fit of the various action programs to the individual farm by avoiding duplication or conflict of objectives. This can be achieved, as shown by the conclusions so far reached by an interbureau coordinating committee that is working on the problem, by some greater measure of unification of planning activities.

This committee is composed of representatives of A. A. A., F. S. A., S. C. S., F. C. A., O. L. U. C., B. P. I., Extension Service, and this Bureau. Their conclusions were published in April 1941 in a report entitled, "A Coordinated Approach to Individual Farm Planning." This report places emphasis on *the* farm plan, with the various programs of the Department marshalled to assist the farmer in achieving the objectives of the plan. This is in contrast to the earlier possibility of having an A. A. A. plan, an S. C. S. plan, an F. S. A. plan, and an F. C. A. plan all applied to the same farm, with some provisions of each perhaps not in line with long-time agricultural objectives.

For the preliminary experimental work during the fiscal year 1942, one county in each of the following States has been selected: New York, Kansas, South Dakota, and Virginia. The counties are being selected to represent as nearly as possible the diverse conditions that would have to be met if the project were applied nationally.

To facilitate eventual national application, a very simplified approach to the plan will be used, one that can be carried on by the farmer himself or with the aid of a farmer-committeeman. Simple

planning forms, brief manuals of local information in planning, and schools for training farmer-committeemen are viewed as part of the process. Emphasis is being placed on developing the best possible long-time plan for each farm, flexible enough to allow for improvement as time goes on. Part of the plan will be a yearly-intentions sheet which will dovetail with eventual achievement of the long-time goal.

Although this program is still in the experimental stage, a simple yearly-intentions or farm-plan sheet is already being used by the A. A. A. in connection with the Department's production program for 1942.

#### GENERAL SERVICE TO OTHER AGENCIES

Throughout the year the Bureau has carried forward its customary broad program of assistance to other agencies of the Department. The defense program has measurably increased the scope and extent of this work by channeling into the Bureau numerous requests by agencies both within and outside the Department for data and information which it was qualified to supply. Special economic analyses necessary in the planning and execution of action programs and in the coordination of these programs with the new defense economy have been provided from time to time.

A Nation-wide study of standard loan rural rehabilitation borrowers of the Farm Security Administration, begun last year through a Work Projects Administration project, has been continued. At first, the study was limited to a sample of about 38,000 borrowers located in 11 of the 12 Farm Security Administration Regions. During this year, arrangements were completed for incorporating, in the Nation-wide study, a similar study made in the Corn Belt, so now data are available for all 12 Farm Security Administration Regions and for all 48 States. The records covered the 3-year period, March 1936 to February 1939. Data were collected concerning loan records, grants, purpose of loans, liquidations, debt adjustment, family characteristics, tenure status, lease arrangements, actual and planned receipts and expenditures, actual and planned crop acreages and yields, livestock production, and assets and liabilities.

These data are being analyzed to ascertain the social and economic characteristics of borrowers at the time they received their first standard rural rehabilitation loan, the trend in the type of borrowers being selected for participation in the F. S. A. program, the progress of borrowers and the factors associated with the progress or lack of progress, and the purposes for which loans were made; and to compare farm and home plans with actual practices.

All the data from the F. S. A. records have been collected and tabulated. Many of the preliminary analyses have been completed and memoranda covering these data have been submitted to the Farm Security Administration.

The Bureau likewise has cooperated with the National Resources Planning Board in developing a systematic procedure for appraising rural-works programs. These studies included determination of employment instability, its causes and consequences, as well as future trends of employment in various agricultural and industrial groups.

The specific place of the public-employment programs was diagnosed in relation to general programs of development.

In related studies, the Bureau has participated with a working committee of representatives from other agencies in the South Central Region in delineating homogeneous, natural-economic land areas, and in preparing an accompanying analysis of the economy and its problems, area by area. Through joint consideration by representatives of the several agencies in the region, the map and accompanying area analyses have provided an initial factual basis upon which program coordination is being achieved. Action agencies in some instances have already moved far toward adjusting their programs to this common orientation. Bureau attention now is being directed to the extension of this approach to the other regions of the country.

Establishment of numerous camps for migratory workers during the year caused a material expansion in the Bureau's service work in administration of payments in lieu of taxes for F. S. A., as authorized under the Bankhead-Black Act in 1936. Payments in lieu of taxes are made to local government units for services to resettlement property and to occupants of resettlement projects.

Research on concentration of control of land was requested by the Farm Security Administration so that this agency could better plan its future programs designed to encourage family-sized farms. The Bureau made a preliminary study during the fiscal year and in connection with this research, supplementary measures to deal with the problems of concentration were explored. Some of these measures apply to credit, significance of action programs within the Department, and taxation reform. In addition, the Bureau contributed direct service to the Farm Security Administration in connection with landlord-tenant problems, directing the work particularly at development of more satisfactory leasing arrangements.

Wherever possible effort has been made to anticipate the needs of the action agencies by developing new techniques and new information or data that would be basic to sound agricultural programs. This type of work has required the development of means for estimating farmers' responses to various demand conditions; patterns for more efficient and productive feeding; indices for measuring costs and returns from farming in terms of income from typical farm units (discussed in detail later in this report); and analyses of basic data on production, consumption, and prices for various farm commodities.

Despite the drain upon the time of commodity specialists by the special defense work, the regular monthly analyses of the current agricultural situation were continued. Monthly analyses of a kind useful to administrators, extension workers, and tradespeople were prepared of the demand and price situation, the farm-income situation, and the situation as it affected the following commodities: wheat, cotton, wool, dairy products, feed grains, livestock, poultry and eggs, fruits, vegetables, and fats and oils. Analyses were made quarterly of the tobacco situation, semiannually of the rice situation, and annually of the sugar situation.

A round-up of the monthly situation and outlook for all commodities, together with special articles on current aspects of the agricultural scene, was given wide general distribution each month



through *The Agricultural Situation*. The Bureau's other printed periodical, the *Land Policy Review*, devoted to discussion of current thinking in all phases of agricultural policy, was changed from a bimonthly to a monthly publication to meet increasing public interest.

### III. FOCUSING BAE ACTIVITIES ON FARMERS' LOCAL PROBLEMS

The value of research has long been recognized by the American public, and this Bureau already has a long tradition in the field of social and economic research. During the last few years, efforts have been made to utilize this research and planning work better and to focus it more definitely upon the problems that are facing the farmers or the administrative agencies of the Department.

Some of the ways in which this research and planning work have been utilized have been described, but the field in which the Bureau works is as wide as the field of agriculture itself, and some of the chief lines of research or interesting developments warrant further discussion.

#### THE FAMILY-SIZED FARM IN A CHANGING WORLD

The family-sized or family-type farm has been a part of the agricultural tradition of this country. But social and economic factors have wrought changes in the nature of this type of farm as well as in the relationship of the operator to the farm. The President's Committee on Farm Tenancy pointed out that the rapid increase in the number of tenants was threatening to destroy the traditional American system of independent, family-type farms, owned by the people who tilled them. The Bankhead-Jones Farm Tenant Act, which authorized the Farm Security Administration to make loans to a limited number of worthy tenants, sharecroppers, and farm laborers to enable them to buy farms of their own, was an attempt to eliminate some of the "abuses in our system of land tenure" which "have been developing for two centuries", according to the report of the President's Committee.

Upon F. S. A. suggestion an attempt was made to learn, What is a family-sized or family-type farm? If the family were to be an independent farm family within the American tradition, the farm would have to be one that is large enough to meet the family living expenses, the operating expenses of the farm, and over a period of years to contribute enough to pay for the farm. The Bureau was requested to establish minimum levels of living for various type-of-farming areas and the farm organizations required to provide them. Preliminary results have been reached for the Southern Plains, the Northern Plains, the Mississippi Delta, the Great Lakes States, and the Southeastern Piedmont. Studies are being continued with a view of extending this work in other type-of-farming areas.

A project undertaken a little more than a year ago was to evaluate the various shifts in production and changes in farm organization which have been made on family-sized farms as a means of increasing farm income. The project is being made by regions and by types of farms. The general procedure has been to get data on farm organization, year by year, from 1910 to the present time, and to evaluate such factors as changes in size of farms, shifts in acreage,

introduction of new crops, changes in extent of mechanization, later changes in production and method of operation, and the changes in prices received for farm products, from the standpoint of profitable farm operation.

From such evaluations detailed plans can be worked out—and are being worked out—for improved operation of representative family-sized farms in the major types-of-farming areas. Alternative plans are being developed for each type-of-farming area so as to meet differences in the productive capacity of soils, differences in sizes of farms, and varying degrees of mechanization.

On the basis of the data so far accumulated, from such sources as the Census, crop and livestock statistics, and numerous formal publications, indices of net farm income and of the purchasing power of this income have been made for typical farms in several farming regions of the United States. The index numbers are based on the years 1910–14 as 100, and all farms are considered on an owner-operated basis.

The indices already completed show that farmers in the winter-wheat parts of the Southern Great Plains area, for instance, have kept up their farm incomes during the last 30 years by changing the size of their farms to keep in step with technological changes. Many small farmers who did not, or could not, make such changes found it unprofitable to remain in the area. When they left, more land was made available to those who remained; and the way was open for them to increase the size of their holdings, and thus utilize their machinery more effectively. The remaining farmers, in general, have had favorable incomes, as compared with those in 1910–14, in most of the years since 1914.

Income on these farms, however, has varied considerably from year to year. Wheat farmers, in general, have had the best income record, and the wheat-corn-livestock farmers the poorest. Related to this record of the wheat producers is a striking technological change apparent in the wheat areas. An almost complete shift from horse to tractor operation has taken place. Together with accompanying changes in harvesting equipment and fairly steady increases in the acreages operated, this shift has tended to adapt the wheat-farming systems to a more efficient use of mechanical power and equipment.

#### EFFECT OF THE DEFENSE PROGRAM ON FARM TECHNOLOGY

Similar technological changes, though on a less striking scale, are taking place throughout agriculture. They are likely to be speeded up by the requirements of the defense emergency because of labor shortages, thus introducing the possibility of serious maladjustments later. Moreover, the problem of farm technology will be increasingly aggravated by the diversion of peace-time production to war needs. A preview of such possibilities—even without the heightened tempo brought on by the defense program—was contained in a special report of a preliminary survey called “Technology on the Farm,” published early in the last fiscal year. Thus, in this emergency, agriculture is confronted on the one hand by the prospect of too rapid mechanization in certain regions and, on the other hand, by the possibility of equipment shortages in other regions.

Here, as elsewhere, in meeting the problems raised by the defense emergency, an effective correlation of local and central planning in terms of definite recommendations for immediate action has been found to be essential. In meeting new conditions much depends, of course, on the nature of the technological changes taking place. A technical improvement, such as hybrid corn, for instance, can be adopted quickly by farmers without serious difficulty because its use involves no perplexing changes in the internal organization of the farm, although its adoption may entail some increase in farm disbursements. Tractors, on the other hand, represent a type of improvement which must come into use gradually if serious maladjustments in internal farm organization are to be avoided. In the present situation, expanded markets and defense industrial employment give agriculture a chance to make many needed adjustments to technical changes. Priority shortages may limit the adoption of tractors and equipment, but advances in farm practices, particularly those involving the adoption of new crops, should be accelerated. High farm incomes can be used to facilitate short and intermediate credit repayments that might be burdensome in periods of depression.

Farmers, technicians, and administrators, by working together and pooling their information and experience, can preclude much of this danger by planning practicable emergency adjustments now in a way to minimize the need for counter-adjustments later.

#### THE PROBLEM IN THE DAIRY REGIONS

One of the most important problems facing the country is how to get an increase in dairy production. Increasing employment for defense increased the demand for dairy products in this country. With greater employment, workers could buy and consume more milk, butter, and cheese. War developments in Europe and a shortage of shipping reduced the imports of cheese, making it necessary that this country produce a larger proportion of what it consumes. At the same time Great Britain asked that the United States supply some cheese, and the lend-lease arrangement provided for buying other needed dairy products, including, particularly, condensed milk, for the United Kingdom. Taking cognizance of these requirements the Secretary asked for an increase in dairy production in 1941-42. Factual data and analysis produced by the Bureau contributed to the prompt development of the program.

The value and timeliness of the basic research may be illustrated by reference to one project which had been under way 3 years, and had been developed to the stage where it could make a material contribution to an understanding of one of the main problems involved in obtaining a marked increase in dairy production.

The conclusions reached in the analysis of input-output data indicate a considerable degree of elasticity in dairy feeding. More striking than this, however, was the finding that changes in production resulting from changes in quantities fed—whether increases or decreases—were much smaller than had hitherto been assumed.

In a world at war this finding assumes unusual significance because today war is a battle of production between economic systems organized for war. The only appropriate slogan under such conditions becomes "Production and still more production." But, while the

demand for some products is insatiable the means for producing those products are definitely limited; consequently, efficient organization of these means is essential, for the successful expansion of production in a definitely limited time may decisively determine the outcome of the war and the future of the Nations engaged.

Under these circumstances inefficient practices which were tolerated in normal times when the Nation's economic resources were not fully drawn upon became a luxury which could no longer be afforded. Improved practices became a necessity, not an option.

Early in 1941, the Secretary of Agriculture had made clear the decisive part that American farmers would play both in our own defense effort and in supplying food to other Nations that are resisting aggression. Not generally recognized, however, was the magnitude of the task which the Secretary had pointed out. To meet total needs, production of various livestock and dairy products would have to be stepped up to an unprecedented degree.

Dairy production was increasing, and it was estimated early in 1941 that production would be about 5 to 6 percent higher than in 1940, and a record for all time. But it was already becoming evident that the increased purchasing power being placed in the hands of consumers was more than enough to absorb this increase, without a reduction in prices and without providing for any additional quantities to be shipped abroad. Thus in agriculture as in industry it began to appear necessary to extend efforts in production. Possibly a small increase would be obtained in 1942 over 1941, without any effort, provided of course, feed supplies remained abundant and relatively cheap. The Department decided, however, that in view of the necessity of providing large quantities for consumption abroad and at the same time continuing to meet expanding domestic demands, it would be necessary to expand dairy production as much as possible in 1942. To obtain the desired results the dairy industry would have to be treated as a defense industry.

The Bureau's new input-output data on milk production indicated that it is entirely possible to get as much as 20 to 25 percent more milk from a dairy herd by more intensive feeding; but the data also showed that when feeding is increased beyond usual feeding levels the increase in output for each additional unit of feed is much smaller than that obtained at lower feeding levels. The additional yield of milk is only about half the average output per pound of grain or its equivalent at normal feeding levels.

This knowledge changes considerably the ordinary computations of the profitableness of increasing milk production when milk prices rise. It provides a practical basis for computing the cost of the increased yield when more production is demanded for the same number of cows. From such data the individual farmer can determine for himself how far he can profitably go in meeting requests for heavier feeding, and the Department is in a position to determine what changes in feed-milk price relationships may be needed to induce heavier feeding if further increases in milk production are necessary.

#### TACKLING THE FARMERS' MARKETING AND TRANSPORTATION PROBLEMS

Defense emergencies have naturally heightened public interest in problems of transportation, marketing, and distribution. It has

served to make people realize that research and educational programs have not yet been adequate for working out a sound, reasonable national policy in the interest of the farmers and the general public. In the interests of defense it probably will be necessary to modify many laws and regulations which have been in effect during the last few years; and upon the Department will fall the task of working out policies that will not only promote national defense but also encourage efficient marketing, safeguard the public from unfair trade practices, and give the farmers as great an income as is consistent with providing the consumers with an adequate diet at reasonable prices.

Increased public interest in the marketing problem is thus timely and wholesome. But there is in it also a potential danger. The desire to do something immediately may lead to a demand for action before the appropriate action has been determined. Nobody knows the answer as yet to many marketing problems. During the year the Bureau has made progress in its search for answers, but much more work is needed to provide a proper basis for action and legislation. Otherwise needless mistakes may be made and huge sums of money wasted in steps which are injurious rather than beneficial.

About a third of the time and money allotted to marketing and transportation research last year was spent on problems connected with the defense program. These problems have involved transportation, storage, processing, distribution, and price control. Determinations were made of the available supply of box cars, and of the adequacy of storage and warehouse facilities, to take care of the prospective large harvest. A report was made to the President's Cabinet on refrigerated space available in ships for carrying food to Britain and other countries. Other projects have included an analysis of price-stabilization and storage programs; of the effect of the war on ocean shipping and shipping space, and on ocean-shipping rates; of the use of apparent surpluses to further the nutrition program; of the use of motortrucks in meeting the transportation problem more effectively; of the relation of marketing costs and charges to price control; and of the possibility of removing bottlenecks in terminal markets so food can be distributed more efficiently. The Bureau also cooperated with other agencies of the Department in working out programs for moving grain out of terminal elevators in order to avoid a bottleneck in storage, for avoiding a shortage of bags as a result of reduced burlap imports, and for priorities on machinery and materials needed in the processing and manufacture of foods and clothing.

#### ANALYSES OF MARKET FACILITIES, METHODS, AND ORGANIZATION

The fact that it often costs more to distribute farm products than to produce them is a natural cause for increasing public concern. The Bureau's interest in this situation has been in finding out exactly what it is in the marketing organization that is causing this, and in working out definite plans for operating the marketing system more efficiently. Marketing methods for particular groups of products have been analyzed during the year in a number of key cities and areas.

Field research work on duplication of wholesale produce markets by railroads has been completed in three cities—Philadelphia,

Buffalo, and Cleveland—and is being undertaken in a fourth, Baltimore. Final conclusions have not been reached, but preliminary results indicate that it is in the best interests of all concerned—producers and shippers of agricultural products, the distributing trade, the consumers, and even the transportation agencies themselves—to have in each city a single unified wholesale fruit-and-vegetable market, open on an equal basis to all transporting agencies and operating as a union terminal facility.

In marketing fruits and vegetables the cost of handling between the city limits and the consumer's kitchen often equals the amount paid for producing them and transporting them to the city. Enough work has been done by the Bureau to show that these costs of handling within the city can be materially reduced. An analysis of the wholesale fruit and vegetable market at St. Louis disclosed that annual savings of more than a half-million dollars (over and above all costs of bringing about the changes needed) could be effected by a new type of market. In other cities where studies have been made—New York, Philadelphia, Baltimore, Dallas, Hartford, and Huntington—substantial savings through relocation or modernization of existing markets could be realized along recommended lines.

In all of these market analyses the Bureau has been handicapped greatly by the lack of any agency that could take the recommendations and see that they were followed up with action. In the absence of such an agency it has done considerable follow-up work after the analyses and recommendations have been completed. An analysis of the methods used in handling fruits and vegetables between the city limits and retail stores in New York City, for instance, pointed out definite ways by which the cost of these operations could be reduced by more than 20 percent, but as yet it is not known whether any of these suggested improvements in the New York market will actually be made.

#### CHANGES IN MARKETING MARGINS

The fact that farm prices and farm incomes are depressed below their normal relationships to nonfarm prices and incomes is closely associated with the widening of distributive margins and other charges for marketing farm products.

How large are these charges for marketing services between farmers and consumers? In what way have they changed during the last few decades? Is the marketing system justified in absorbing half to two-thirds of consumers' expenditures for farm products, leaving less than half as payments to producers? In the answers to these questions a basis is being provided for programs of constructive remedial action.

Through an investigation of marketing charges it is possible to estimate the total bill for the marketing of farm products, and to find out how much, or what percentage of the total, goes to each marketing agency. This was done for food products produced in this country and consumed in 1940. The findings reveal that consumers spent an estimated 14.8 billion dollars for domestic food products in the calendar year 1940. Of this total retail value, 6.2 billion dollars (42 percent) was paid to farmers for producing these

foods; 8.6 billion dollars (58 percent) was paid by consumers for marketing services and processing. Of the latter amount, about 3.6 billion dollars was charged for retailing, 1.2 billion for wholesaling, 0.8 for transportation, and about 3 billion for processing and other services.

These figures take added significance when it is realized that farmers' cash income from the sale of food products makes up about three-fourths of the total cash income farmers get from their sales of all products. These products thus occupy a dominant place in the farm economy. Moreover, food products sold by the farmers require less processing to prepare them for consumer use than do nonfood products such as fibers and tobacco.

As food takes nearly a third of the average consumer's total expenditures for living (and takes a much larger share of the expenditures by low-income families), any reduction of marketing charges or any increased efficiency in marketing would contribute to the welfare of consumers as well as raise farm income.

In 1940 the per capita earnings of employed nonfarm workers were about as high as in 1929 but food costs were considerably lower. The workingman's family could buy its annual consumption of 58 foods for \$314 in 1940 as compared with \$415 for the same foods in 1929. More than half of this \$101 saving was contributed by the farmer through lower prices received for his products; the rest was made up by reductions in marketing charges.

Further reductions in marketing charges would appear to be possible. Take the universal staple, bread, for instance. In no great country in the world is the retail price of bread so high as in the United States. The principal cause of the high price in this country is the large baker's margin, which exceeds that in other countries by considerably more than the difference between domestic and foreign prices for bread.

An analysis of this situation is now being made to find the underlying reasons for this large consumer hurdle of costs intervening between the price the farmer gets for his wheat and the price the baker gets for his bread. From these findings a judgment can be made as to whether a definite lowering of the hurdle is feasible from the standpoint of consumer and farm welfare and efficient distributive services.

#### WHAT LIES BEHIND THE PRICE-MAKING PROCESSES?

In an agricultural system in which prices are depended upon to regulate production, it is obviously important that the price-making mechanisms function effectively. They must operate smoothly in establishing market prices that are correctly adjusted to conditions of supply and demand, and in adjusting prices within different markets. More than that, adjustments must be made smoothly and quickly for different classes and grades of commodities. In an economic system like ours, this efficient functioning of the price-making mechanism is achieved only by constant attention to shifts in the factors of supply and demand.

This attention is particularly necessary in periods of economic uncertainty occasioned by world-wide market disturbances. In view

of this situation, several projects bearing on price-making factors have been carried on. An analysis made of the factors affecting retail prices of meat is typical. This project has recently been concluded, and a few significant resulting facts and conclusions may be given briefly here:

Changes in total nonagricultural income per capita have practically no effect on the proportion of his income that the average consumer spends for meat. On the other hand, marked changes in the supply of meats do affect the proportion of total income spent for meats. When the supply is greatly reduced, as it was in 1935, the proportion of income expended for it tends to increase; when supplies become more plentiful, as they did in 1940, the proportion decreases. Apparently, then, when supplies are relatively small the increased competition among consumers with the higher income seeking to obtain their customary quantities tends to result in the expenditure of a larger proportion of total income for meats than when supplies are abundant and the usual requirements in meat products can be obtained more readily.

Consumer demand for beef has increased considerably during the last 6 years in comparison with the demand for other kinds of meats. This consumer preference has been most marked during the last 3 years. Just why this is true has not been fully learned, but it has obvious significance among the factors affecting price-making in the marketplace. Consumer expenditures for beef in 1938-40 were only 9 percent below those in 1924-30; expenditures for pork, in contrast, were 22 percent below those in the earlier period, and expenditures for lamb and veal were 17 and 28 percent smaller, respectively.

Justice in administering price-control measures requires a thorough understanding of the significance of prices to farmers, and of the relation between prices and the distribution of income to farmers as well as consumers. In price administration it is necessary to consider the relation of prices to production. In many industries it is possible to fix prices in terms of costs that are known; but in agriculture the costs are rather indefinite and the most significant consideration is that of exchange relationships between prices of what the farmer has to sell and what he buys. In agriculture as in industry, the price of the product must be sufficient to command the resources of production, including the labor that must be employed to maintain or expand production to the needed level. This is important from the national viewpoint as well as from the standpoint of the farmer. The Nation must provide the means of production, to obtain the product.

Farmers are also vitally concerned as to the facts of inflation and deflation commonly associated with wars. Many farmers remember well the experience of the last World War. Is it possible to prevent inflation? Or to control it so as to avoid the effects of deflation? The price analysts of the Bureau are building up and studying the record of the past, to provide a basis for following through the developments of this war period and anticipating deflation as well as inflation so as to be able to suggest possible measures for checking inflation and guarding against some of the evils of deflation.



## NEW FINDINGS IN TRANSPORTATION

Research in transportation has been in three general fields—railroads, motortrucks, and water carriers. Attention has been turned this year to such immediate problems as the availability of each type of transportation for moving agricultural commodities, but regular research on long-time problems of continuing importance to agriculture has gone forward.

Among the studies completed this year was an analysis of the effects of decisions under the Hoch-Smith Resolution on freight rates for agricultural products. The analysis indicates (1) that Congressional-mandate methods of obtaining action by the Interstate Commerce Commission are unsuccessful because of their contradictory and conflicting directions, (2) that mass methods of rate readjustment for agricultural products are too cumbersome to afford any timely relief, and (3) that horizontal rate changes made during emergencies (such as the present) may be particularly disturbing to the efficient movement of farm products.

Another project completed early in this calendar year was based on a request from the National Defense Advisory Committee for facts as to the adequacy of railroad facilities for moving farm products during the peak periods in 1941. Attention also was given to motortruck and water-transportation facilities. As the time allotted to the survey was limited and not all farm products could be covered, particular attention was given to grain, which makes heavy demands on rail transport during the harvesting season.

The analysis revealed that the supply of box cars was adequate for meeting agriculture's needs for rail transportation. It pointed out, however, that capacity could be increased through more efficient use of existing equipment. A serious situation in grain storage was revealed by the survey. Elevators in the grain area were almost filled to capacity at a time when their stocks normally would be decreasing to make room for the new crop. A timely warning was issued and steps were taken to alleviate the congestion in storage space that had been about to develop. Aggregate motortruck capacity was found to be large, but it is partially ineffective for maximum use because of lack of organization.

Farmers generally have opposed legislation to regulate the rates and services of interstate motortrucks on the basis that regulation would lead to higher transportation rates. An analysis completed this year supports the farmers in this view.

The findings are that motortruck regulation has made the transportation of farm products less flexible than it otherwise would be by (1) limiting the back haul, (2) preventing private carriers of farm products from hauling other goods and, (3) regulating the territory of the regulated carrier. Recommended by the Bureau as a result of the analysis were extensions of present exemptions from the regulations imposed by the Motor Carrier Act of 1935. Probably the most desirable extension would be the exemption of for-hire vehicles hauling farm products from an agricultural area to market with a back haul of farm supplies. Because such operations are not exempt now, many truckers haul farm products exclusively, and the return trip is

without a pay load. The proposed extension of the exemption would lead to lower rates on both farm products and farm supplies.

#### NEED FOR INTEGRATION OF MARKETING AND TRANSPORTATION RESEARCH

At no time in the history of the country have problems of distribution loomed so large as now. War conditions are dislocating markets and causing serious transportation problems.

Scattered efforts are being made to cope with these now-accentuated marketing and transportation problems but their effectiveness has too frequently been limited by lack of basic information and broad planning. Today Federal and State agencies are challenged by this situation to cooperate in working out plans that will be effective in meeting it.

Detailed studies in specific localities such as have been carried on in the past serve their purpose, but they need to be integrated within a sound general plan for the marketing and transportation of farm products for the entire country. Until such a plan has been worked out, much of the effort of agencies genuinely interested in bringing about improvements will be wasted. It is obvious that the desirability of specific measures cannot be adequately judged without knowing how they will fit into the over-all type of marketing and transportation system that must eventually be developed.

Whenever an over-all plan for a distribution system for farm products shall have been worked out, discussed, and agreed upon by all agencies concerned, then, and only then, will it be possible to enlist the support and cooperation of all groups in finding a way to bring about the desired improvements. The planning of such a system must be based, moreover, on fundamental analyses of the causes of the shortcomings in the present system of distribution. It must include consideration of both the economic factors involved and the actual physical movement of the products. Only in that way can the whole distributive process be made to operate so as to move farm products to consumers most efficiently.

Until resources are available to attack the distribution problem in this broad way it cannot be claimed that we have an adequate program of marketing and transportation research—one commensurate with the seriousness of the problems now imminent. The Bureau will do all it can to bring about a unified attack on the whole problem; in the meantime it will continue to work on as many as possible of the particular problems, selecting those for which the need for a solution seems to be greatest, and trying to determine what improvements are feasible and how they can be brought about.

#### WORK IN FLOOD CONTROL AND WATER FACILITIES

Its regular work in the administration and technical direction of preliminary watershed investigations authorized by Congress has been continued by the Bureau, and it has continued to provide technical assistance to the Forest Service and the Soil Conservation Service on surveys appraising flood damages, in evaluating benefits from proposed flood-control installations, and in providing procedures in computing cost-benefit ratios.

Nineteen preliminary investigations were completed during the first 9 months of the fiscal year. Ten reports indicated that flood

problems were significant, and that flood-control surveys to investigate detailed operations programs were justified. A survey of one of the watersheds examined—the Wasatch—has been approved by the Secretary of Agriculture for initiation during the fiscal year 1942. Four other watersheds are being considered for survey.

Six reports recommended that no surveys be made, either because flood damages were low or a watershed flood-control program was not feasible or justified. Three preliminary investigations indicated the need for additional work to determine more adequately the flood-problem areas and probable flood-control benefits of remedial programs. Additional work is being done in the Rio Grande watershed and work in two other watersheds where additional study is required will be undertaken in fiscal 1942.

As the chief purpose of watershed flood-control surveys is to design programs of land use that will reduce and retard water run-off and waterflow, and prevent erosion and sedimentation, the surveys have been directed principally toward investigation of physical problems of behavior of these forces and the means of controlling them. Because of the interest and cooperation of land operators and owners, a vital part of the work has been to consider flood and sediment problems and practicable remedial measures with farmers and representative local groups.

The county and State agricultural planning committees have been particularly useful in these flood-control surveys. Flood-control committees have met with county committees to explain their program. The committees have provided information concerning flood control damages, and have presented recommendations for desirable adjustments and watershed protection. Procedures are now being developed to expedite and encourage this type of collaboration.

The activities of the Bureau in forwarding the Water Facilities Program included making 16 area plans for approximately 21,000 square miles; 14 operations guidance proposals forming the basis for immediate operations for approximately 260,000 square miles; and 4 other types of proposals for 7,500 square miles. Details of this work, which covered an area of approximately 288,000 square miles, are available in 34 reports released during the year. In addition, there are 41 areas, totaling 77,000 square miles, under various stages of planning. For some the field work is completed; for others field work is still in progress.

Work in water facilities has been conducted closely with the State and county agricultural planning committees in the 17 Western States. All area plans prepared for the Water Facilities Program are submitted to the county committees, and comments and suggestions are solicited from farmer members in order to learn the practicability of the recommendations that are included. County planning committees likewise have utilized the services of water facilities technicians in developing agricultural plans for their localities. The local committees have initiated requests for water facilities plans, and the State committees have worked with the Water Facilities Board in determining the priorities that should be granted such requests.

#### APPRAISING THE FARMERS' FINANCIAL STATUS

Customary estimates of current farm income and the purchasing power of that income were made throughout the year. Rapid and

often unpredictable changes in prices of farm commodities induced by war conditions abroad have aroused increased public interest in such appraisals. The Bureau has sought continuously to improve its estimates from the standpoint of accuracy in method of calculation and of number of commodities covered. Refinements in the current estimates have required comparable revisions in estimates for earlier years, and these are being completed as rapidly as practicable.

At the close of the year renewed public and Congressional interest in methods of determining parity for farm prices and income led to renewed emphasis on the parity studies. Work now going forward seeks to evaluate present methods of determining parity as prescribed by Congress for various commodities. In addition, effort is being made to devise alternative methods that reflect more accurately recent changes in modes and types of farm production and consequent changes in the relationship between the agricultural and nonagricultural economies.

Annual surveys of market conditions regarding farm real estate indicate that land values during the year ended March 1, 1941, continued to rise in response to improved income and price levels. The value index compiled from these surveys shows an increase of 1 point for the year, bringing the level on March 1, 1941, to 86 percent of the 1912-14 period. This was the second consecutive year for which a moderate increase of 1 percent has been shown. In general, values for the United States as a whole have remained practically unchanged since 1937, the level in each of the last 5 years ranging from 14 to 16 percent below the pre-World War average.

Although the United States average has remained practically unchanged during the last 5 years, certain significant regional changes have occurred. Values in the Southern as well as in the East North Central States have been advancing, the trend has been downward in the West North Central States, and no material changes have taken place in the North Atlantic and Western States. During this year no change in values was reported in the West North Central and West South Central States; increases in other regions varied from 1 to approximately 3 percent, the largest occurring in the South Atlantic and East South Central States.

Annual estimates of farm real estate taxes for individual States and for the country as a whole show that levies in 1939 averaged slightly higher on a per acre basis than in 1938, but taxes per \$100 of value were unchanged. Preliminary estimates for 1940 show little change from the year before. In general, there were no significant developments in any State that would lead to a sharp change in the level of taxes per acre.

On the basis of estimates made for several States, real property-tax delinquencies were fairly stable between 1924 and 1928, averaging about 5 percent for the 5-year period. In the following years, despite a decrease of 19 percent in the levies, the amount becoming delinquent increased from 6.5 percent on the 1929 levy to over 18 percent on the 1932 levy. A principal factor in this rise in delinquencies was the severe drop in farm income. As the farm-income situation improved, there was some lessening in the percentage of current levies becoming delinquent.

In view of the improved farm-income situation in the last 2 years, and the fact that farm taxes have not kept pace with this increase

in income, the tax-delinquency problem has become less serious in the better agricultural areas. With a continuation of the recent trend in the relationship between farm taxes and farm income, prospects for further improvement in the tax-delinquency situation are very good. On the other hand, if the slack occasioned by the eventual stoppage of defense expenditures causes a slump in farm income, a tremendous increase in tax defaults and the threat of extensive loss of farms through nonpayment of taxes are a distinct possibility.

The several State estimates indicate that tax payments during the 15-year period, 1924-38, were practically equal to tax levies. Apparently for the period as a whole payments of back taxes and delinquency charges were about equal to the current defaults; and in general it appears that delinquency has worked little financial hardship to rural governments in the more productive farming areas.

This does not mean that tax delinquency has created no fiscal problems for rural governing bodies. On the contrary, problems of public finance have been severe in certain areas, such as the cut-over country of the Lake States, the Northern Great Plains, and the Ozarks. Indications of the scope of the problem and of the research and planning efforts devoted to it are pointed out elsewhere in this report.

#### FARM CREDIT FACILITIES AND THE FARMERS' CREDIT POSITION

A large part of the work on mortgage credit was devoted to studies related to farm-mortgage credit facilities. A research report reviewing historical developments in farm-mortgage credit, the operations of the Federal mortgage-credit institutions, and the major problems relating to the participation of Federal institutions in this field was submitted for publication near the end of the fiscal year. Two principal purposes of this work were to uncover and focus attention on the major problems relating to farm-mortgage credit and to summarize and analyze alternative methods for dealing with them. This publication will provide a background against which emergency problems relating to the proper role of agricultural credit institutions in the national defense effort can be more effectively appraised.

Work was begun on an appraisal of farm-mortgage risks. The wide variation in loan experience by areas, by types of farming, and by lenders during the depression of the 1930's emphasized the need for more complete knowledge of the factors associated with these variations. This knowledge will enable borrowers to appraise more accurately the risks involved in mortgage contracts, and will guide lenders to a better adjustment of their loan policies to the actual risks.

In this project, most of the basic information has now been assembled, and considerable exploratory work has been done on the development of guiding principles for sound lending on extra-credit risks. In this defense emergency, emphasis is being placed on the determination of areas and types of farming in which the impact of war and post-war changes is likely to cause the greatest financial strains and thus give rise to mortgage-debt difficulties. A better understanding of the reasons behind mortgage delinquencies should be of great help in avoiding in the post-defense period many of the debt-distress situations which developed at the close of the last World

War. Completion of this project is expected during the present fiscal year.

Estimates of outstanding farm-mortgage debt, by States and by principal lender groups, have been prepared as of January 1, 1940, and a preliminary estimate for the country as a whole prepared as of January 1, 1941. As of the beginning of 1940, outstanding farm-mortgage debt for the country as a whole was estimated at \$6,910,000,000. This marks a continuation of the gradual decline following the sharp reductions in 1932 and 1933, when foreclosures liquidated a substantial volume of farm mortgages. Preliminary estimates as of the beginning of 1941 show the total as slightly reduced from a year earlier. The total is estimated at about 72 percent of the amount outstanding at the beginning of 1930 and at about 64 percent of the peak reached at the beginning of 1923.

Farm-mortgage interest charges for the country as a whole in 1940 are estimated at \$349,000,000. This is about 60 percent of the total for 1930, and only about one-half of the peak amount in 1922. In 1940, farm-mortgage interest charges were equal to 4.0 percent of cash farm income as compared with 11.4 percent in 1932, when farm prices were low and mortgage-debt and interest charges had not as yet been greatly reduced.

In the field of short-term credit facilities the Bureau completed an analysis of country banking in Wisconsin during the period of the depression. A similar analysis of country banking in Utah will be completed shortly. As in other analyses of banking already completed in other States, certain fundamental difficulties in the organization and management of country banks are disclosed.

Independent banks in rural areas are subject to drastic shrinkages of deposits when farm income falls, as the flow of funds into these areas at such times is exceeded by the outflow of funds to service debts and to pay for the things farmers must buy. Partly because of faulty investment policies, the banks often have been unable in times of depression to liquidate sufficient securities to meet depositors' demands and at the same time continue to meet the credit requirements of agriculture in the areas they serve. A fact often overlooked is that a bank may succeed in keeping open for depositors and yet be virtually a closed bank so far as meeting the credit needs of legitimate borrowers is concerned. Although the position of country banks has been improved during later years by the provision of extensive rediscount facilities and by deposit insurance, certain changes in policy and practice still seem to be necessary if farmers are to be served dependably in future periods of low farm income.

Analyses of production credit associations, begun last year, have been continued. Many of these associations are confronted with the same difficulties in obtaining adequate earnings as were experienced earlier by the privately organized agricultural credit corporations and livestock loan companies and by the national farm loan associations through which borrowers have obtained loans from the Federal land banks. Substantial Federal assistance has been necessary to enable many of the associations to meet their expenses, but in growing numbers the associations are improving their earnings. The improvement has resulted from several circumstances, including a considerable increase in the number of association members and in the volume

of their borrowings brought about by the establishment of additional field offices and the appointment of more local representatives in the loan territories of the associations.

A serious problem of earnings continues, however, particularly among associations in specialized fruit and vegetable areas, where risks are normally great, and among associations that finance seasonal staples. On the other hand, earnings generally are adequate among the associations that have obtained a substantial volume of livestock loans. Some of the larger associations serving the livestock industry have been very profitable.

#### LAND CONTROL AND MANAGEMENT IN THE NORTHERN GREAT PLAINS

Instability has marked both the agricultural economy and the governmental institutions of the Northern Plains. The combination of droughts and low prices on the one hand and poorly adapted systems of local government on the other, has led to widespread tax delinquency and reversion of land to public ownership, as well as to serious problems of control and management of land. In addition, thousands of acres have been abandoned, and large areas of land, held in speculative, absentee ownership, are interspersed with the locally owned and operated land.

Some means must be found for obtaining stable operating control over public and absentee-owned lands and for insuring their conservational use. Among the collective tenure devices developed to reach this objective are the grazing associations and the soil conservation districts. The Bureau is now engaged in appraising these methods with the view of ascertaining the most effective forms of organization to meet various problems of control and management. Management policies of the public land-owning agencies are being studied. Public ownership and collective tenure devices offer means of eventually stabilizing an important sector of the economy of the United States.

#### CHARTING POPULATION MOVEMENTS AND COMMUNITY CHANGES

Estimates of the migration from country to city and the annual fluctuations in the volume of this movement were carried forward, along with cooperative projects with 14 State Experiment Stations to develop similar estimates for their States. Results of the 1940 census have made it necessary to revise the figures previously released for 1930-40, but they do not change the preliminary conclusions already published revealing that migration from farms during the 1930's was considerably less than during the 1920's and that increases in farm population were largest in the poorest areas. The better land areas continued to send out migrants during the last decade, partly because they provided their potential migrants with training that enabled them to compete for work elsewhere, partly because of factors making for a displacement of population from commercial agriculture, and partly because of droughts in large parts of the Great Plains.

Studies of migrants in the Far Western States show that migration into these States during the 1930's was not unprecedentedly large. Migration into California was less than during the preceding decade.

The migrants into these Western States, moreover, did not come from any particular occupational, social, or economic group, but rather were a cross-section of the population of the areas from which they came. The movement to the West was not an aimless wandering but rather the purposive endeavor to seek reestablishment in a new economic environment. There was a net shift from farm to non-farm occupations and residences.

Migration into California differed from that in earlier years in that a larger proportion came from the States of the Southern Plains and the movement was concentrated in the latter half of the decade. The uneven distribution of migrants within the State, moreover, created exceptionally heavy burdens of absorption in some places; and the fact that the migrants came into a highly restricted economic environment increased the heavy load of public assistance. In both California and Arizona the former farm operators who came in found it difficult to establish themselves as operators, and a large proportion either entered nonagricultural occupations or became farm laborers.

In general, the findings for California and Arizona were similar, differing mainly in the permanence of residence of the new arrivals. In California, a high degree of permanence was indicated, but in Arizona there was a rapid turn-over of transitional population which stopped briefly on the way farther West.

To get a picture of the way in which rural communities have responded to changing outside influences by changes in structure or function of rural-community groups, the Bureau made intensive studies in 6 widely different communities. The studies were launched primarily to ascertain the influence of human and cultural factors in agricultural production and rural living; hence, the communities were so selected as to provide some localities of unusual stability and some which were extremely unstable.

The most stable community selected was a conservative Amish Mennonite community in Lancaster County, Penn.; the least stable was Haskell County, Kans. A few of the findings in the recently completed study made of El Cerrito, a Spanish-American village on the Pecos River in New Mexico are given below. Among the communities selected, El Cerrito ranked second in social stability.

The Spanish occupation of the village began during the first half of the nineteenth century. During the early existence of the village, the Spanish-Americans had ample grazing for their livestock; they thrived and increased rapidly in numbers. Most of the grazing lands were grants made by Spain or Mexico to groups, and only the small irrigated holdings clustered around the village and located on the river were owned in severalty by the individual families. As the population increased the people sought work outside the village—on ranches and on the building of railroads in the Southwest, or they traveled far to work in the beet fields, smelters, mines, and other industries of the West. With the coming of the depression, much of this outside work disappeared; and the families who then attempted to make their living from their livestock and small farming enterprises found that large livestock companies had managed to get control of much of the grazing lands.



With strong family ties, great attachment for their local village, and very little deviation from old and powerful family and religious mores and customs, the village is now extremely stable in its social aspects. But the economic base for the village is meager. Only a small proportion of the families now living in El Cerrito can survive there at a decent level of living without outside help or added land resources. If the culture (which aside from the meager economic base is unusually stable) is to be preserved, governmental agencies must provide means whereby the grazing lands they once used can again be made available and lands now being cultivated can be made more productive. Then, too, the people must learn to help themselves by making the most of their available resources, reviving old handicrafts, and developing new ones to make them less dependent on the outside market for labor.

#### ENCOURAGING FARMER OPINION AND DISCUSSION

The program for the encouragement of public study and discussion of agricultural problems, and of the national programs, which have as their objective the solution of these problems, has been continued. This work has seemed particularly needed in a year of strenuous defense effort to safeguard the Nation's right to its democratic traditions.

The aim has been to keep farm people perennially aware of their responsibilities to their way of life, and constantly alert to any slackness in the acceptance of these responsibilities. Democracy, a satisfactory life on the farms or in the cities or towns, the safeguarding of our natural resources and advantages, and an efficient and happy economy in which both farm and factory production are in a flexible balance with consumer needs—all of these vital interests of a free people are not attained once and for all time. They must be constantly sustained by a popular awareness that they are forever being lost.

Through widespread group discussion the Bureau has sought to make more and more fluid the voluntary assembly of farm men and women, so that an effective democratic opinion on essential policies may be kept alive and the way cleared for the devotion of the Nation's energies to the material production now needed for national defense. These activities have consisted, in the main, of holding "schools" for training rural leaders in the material and technique of informal, democratic group discussion. In the typical School for Rural Leaders about 200 rural spokesmen, including staff members of the Department and of the State agricultural colleges, hold a 4-day intensive-study session in which perhaps a half-dozen experts present the broader problems of agriculture. In the typical Discussion-Leader Training Conference some 50 or 60 prospective discussion-group leaders are brought together for 1 or 2 days to get technical instruction in the best ways of organizing and conducting discussion groups in their local communities.

During the year, 25 schools for agricultural leaders were held throughout the country with a total attendance of more than 7,000 farm spokesmen. Conferences for discussion-leader training, under the leadership of State Discussion Leaders appointed by the State Directors of Extension in 37 States, have run into the hundreds.

As a natural corollary to this work in encouraging an active and spontaneous farmer opinion, the Bureau has been interested in keeping in touch with the actual expression of this opinion as reflected in current reactions to the Department's programs. Therefore, its sample surveys of current farm thinking have been continued. The work has proved to be of distinct value in helping administrators use to advantage the administrative flexibility provided by Congress in setting up the agricultural programs on their present democratic basis.

#### PROGRESS IN LOCAL COOPERATIVE PLANNING

County and community agricultural planning committees were at work during the year in nearly 1,900 counties in 47 States. Altogether more than 10,000 community committees, comprising more than 82,000 farm men and women, were engaged in local cooperative planning activities; and at the county and State level an additional 40,000 farm men and women were cooperating with 18,000 representatives of Federal, State, and local governmental and research agencies in the work on county and State agricultural planning committees. Represented on the committees were various research and action agencies of the United States Department of Agriculture, cooperating agencies of other Departments, and State and local governing units.

Problems tackled by the committees have ranged from matters of purely local significance to those of far-reaching concern to the Nation's defense. In general, the committees last year turned their energies to the immediate problems raised in their particular localities by the defense program:

They have provided basic information showing where cropland was available for more extensive cultivation of the crops needed for defense, or for more intensive cultivation of crops already being grown. They have forestalled unwise expansion of cultivated acreages by instituting more efficient practices on acreages already in cultivation, so as to leave larger acreages available for crops more urgently needed. They have located sections having unemployed or underemployed farm people, so that as the Selective Service and rising industrial employment drew too heavily upon farm laborers in other areas these sources could be drawn upon.

In special areas where defense industries or military centers have been established, the committees have pointed out available homes and farms for the relocation of displaced farm families, have inventoried the local labor available for construction and industrial work, have aided in the location of defense housing so that it would be of permanent value to the communities after the defense program is over, and have been particularly useful in making locally grown perishable farm products available for consumption at nearby training centers with a minimum of handling and transportation charges.

#### MEETING NEW PROBLEMS IN FARM LABOR

An urgent problem raised by the defense program has been to use to the best advantage the available supply of farm laborers. Underemployment during the last 10 years has created a reserve of farm labor variously estimated at 2½ to 5 million workers. Although the defense drive has not reduced the number of available workers suf-

ficiently to effect a solution of the perennial problems of rural unemployment and underemployment, it has created temporary shortages of labor in some areas. These shortages had to be met quickly if agricultural output was to be kept at a maximum during the emergency.

To meet this situation, State agricultural planning committees in nearly all States have set up labor subcommittees. Similarly many county committees have organized subcommittees to deal with labor problems in their localities. The activities of these subcommittees have varied with local conditions, but major emphasis has been placed upon getting more cooperation between farmers and farm laborers and the public employment services in the States. In nearly all parts of the country these efforts have resulted in a significant increase in the number of workers referred to farm openings by the State employment services.

A typical county farm labor committee includes representatives of the State employment service, the Work Projects Administration, the A. A. A., the F. S. A., plus the county agricultural extension agent and representative local farmers. It is not an operating agency for the registration or placement of farm help; its function, rather, is to serve as a clearing house of information. Its members know the farmers and the crops in the locality, the precise dates of local seeding and harvesting, and the special places where workers are likely to be needed. It is thus in a particularly favorable position to help public employment agencies in meeting the need effectively and quickly.

These labor subcommittees likewise have cooperated with local Selective Service Boards in furnishing background information against which to judge individual requests of farm workers for deferment; they have aided the W. P. A. in planning its project operations so as not to conflict with local seasonal labor requirements; and—perhaps most significant of all—they have promoted the actual use of available employment services among farmers themselves, a practice which farmers in most parts of the country have not resorted to during years when overabundant laborers were inadequately employed.

Two notable accomplishments of these committees will illustrate the scope and significance of their work. In Kansas, cooperating with the State employment service, they successfully analyzed the labor problem raised by the wheat harvest. They pointed out that in the eastern third of the State the labor supply was adequate, that in the central third labor requirements could be met by the temporary employment of W. P. A. workers, and that in the western third of the State labor requirements would have to be met by laborers from outside. As a result of this cooperative analysis and planning, the labor situation was handled effectively by the referral of a large number of workers to the places where outside help was needed.

In Maryland, committees were organized in all of the 23 counties of the State, and surveys were made by the committees to indicate the need for seasonal workers in the State by midsummer. Not all of the workers, of course, would be supplied by the State employment service, but the effectiveness of the cooperation by the committee is evidenced by the fact that by July 1 the State employment service

had placed more than 2,000 farm workers and had registered and directed an additional 3,000 migratory workers to farms on the lower Eastern Shore of the State, as compared with a placement record of less than 1,000 workers for the entire year 1940.

Activities of State and county committees have been greatly facilitated by Bureau technicians, both in Washington and in the field, who have assisted extensively in their work on farm-labor problems. Assistance has taken two general forms: quick appraisals of situations involving alleged farm-labor shortage, and direction and guidance to committees in surveying conditions themselves and in providing for relief. Suggestions on preparation of schedules, procedures to be followed, and analysis to be made of data pertaining to farm-labor shortages; participation, as technical consultants, in the activities of State farm-labor subcommittees, particularly in preparation of State reports; and submission to State and local committees, upon request, of all available technical farm-labor information; and many other helps have been freely extended.

In addition, the Bureau has been and is now engaged in the compilation and interpretation of Nation-wide data relating to farm-labor requirements and the composition and migration of the farm-labor force. This information is being continuously used by governmental agencies in the formulation of policies relative to the part that farm laborers must play in agriculture's effort to meet the food-for-defense goals.

#### MEETING PROBLEMS OF DEFENSE DISLOCATIONS

Several thousand farm families throughout the United States have been displaced as their farms have been acquired for army training centers and proving grounds. Agricultural planning committees in counties in which these centers are located have moved quickly to develop plans and programs for the relocation of these families.

In cooperation with agricultural planning committees in adjacent counties, they have inventoried available farms for rent or sale to which displaced families could be directed. They have reported on the needs of displaced farm families for guidance in obtaining new locations, their credit needs, and their needs for care of livestock and temporary storage of farm implements and household goods. Through the coordinated facilities of B. A. E., F. S. A., and F. C. A., and other credit agencies, credit has been arranged for these families. Similarly, arrangements have been made to give preferential treatment to any displaced farm families who might want work in the construction of defense plants and cantonment buildings, or in defense industries.

Here, again, a few examples of the work of these committees will illustrate the hundreds of suggestions, recommendations, and definite plans for action and cooperation which have been made in various sections of the country—work which has been of value not only in the effective operation of the defense program but also in providing a basis for the widest possible participation of the Nation's farmers in this program.

Surveys made in 12 Alabama counties in the Coosa Valley defense area, in 4 Virginia counties affected by the location of the bag-loading plant at Radford, and in other counties in Ohio, New York, and

Indiana, were the basis for the determination of housing needs in these areas. The surveys conducted in the 4 Virginia counties served as the basis for plans for locating defense housing in the area in such a way that the houses could be of permanent use to residents who remain after the emergency is over. In accordance with these plans, new homes for defense workers are being built on farms that are located on good roads within commuting distance of the bag-loading plant; and arrangements have been made to sell these houses, after they are no longer needed by defense workers, to farmers who need better housing. By June 1941 a total of 84 houses had been constructed in the vicinity of Radford, Va., following the recommendations of the four nearby county agricultural planning committees.

In the Coosa Valley country of Alabama a comprehensive survey was made of available labor resources. Approximately 30,000 farm families living in the area were interviewed, and the occupational skills of workers available for employment were classified so that needed help might be obtained quickly from nearby points.

In Brown County, Tex., the agricultural planning committees developed plans for the organization of a farmers' cooperative to supply fresh locally grown farm products to Camp Bowie. Work was begun in January 1941; by June 1941 a building to handle the business of the cooperative had been constructed and was in use.

In Barnstable County, Mass., a National Guard camp needed to be enlarged. To prevent the inclusion of good farm land in the enlarged site, the county agricultural planning committee furnished Army officials with information on types of land in the county and enabled the Army to acquire land which would not result in the withdrawal of any of the best land in the county from agricultural production.

#### BRINGING RESEARCH AND PLANNING CLOSER TO THE FARMER'S DAILY LIFE

A valuable result of this increased participation of farmers in the planning activities of the Department has been a much needed closer integration of the research activities of all Federal agencies and State Land-Grant Colleges with the needs and wishes of actual farming communities. For instance, a program for marking out communities and neighborhoods within the counties has been emphasized as one of the fundamentals of proper county planning procedure. With the assistance and guidance of technicians of the Bureau and of planning leaders in the State agricultural extension services, this work has now been done by county agricultural planning committees in a large number of counties in about 20 States.

By using the natural meeting places of communities as the focal point for the building up of community committees, a logical basis has been laid for the participation of farm people in tangible planning work; and means have been provided by which the research branches of Land-Grant Colleges and of the Federal Department of Agriculture can be of maximum practical value to farm people.

There is thus set up a channel for the two-way flow of ideas and experience between farmers and researchers. Already this natural mode of consultation between research workers and members of the local planning committees has resulted in the joint planning of new

research programs and, in many instances, the local planning committees later have helped to carry out the recommendations built on the results of the research.

Participation in the planning work thus has helped rural people to see anew the practical value which research can have for farmers, their families, and their communities. Seldom does community farm planning progress very far before the need for basic technical information becomes apparent. The State agricultural experiment stations and the various agencies of the Department are recognizing this situation, and are adapting their facilities to meet the needs of the planning committees. Several have already adjusted their activities to effect a closer tie-up between research and actual community needs.

In addition to continuing their regular research activities, these agencies have sponsored numerous service activities and short-time surveys for farmer-committee groups. The technical assistance given has included consultatory services, development of fact-finding forms, training of local interviewers, outlining of planning procedures, tabulation and interpretation of brief field studies, aid in the delineation of neighborhoods and communities, compilation of data from secondary sources, and summarizing and collating of pertinent research studies already completed.

All of this work has been helpful in the various activities that the agricultural planning committees have carried out during the year. Besides these activities relating to the defense program that have already been described, are others including the development of plans to extend and improve programs of farm forestry, rural zoning, rural-school consolidation, farm-tenure improvement, rural electrification, soil and water conservation, public-land purchase and administration, cooperative marketing, cooperative livestock and seed improvement, cooperative ownership of machinery, etc. Problems of farm reorganization, low farm income, tax delinquency, erosion control, farm labor, inadequate credit, and wild-life preservation are receiving this same kind of primary local attention.

Continuous research dealing with social and economic problems is necessary to provide the basis for effective planning all along the line. The agriculture of this country was much better equipped at the beginning of the defense effort in 1940 for making plans to do its part than it was when the United States entered the first World War in 1917. We have well-developed national agencies for dealing promptly with agricultural problems, so that it is now possible to obtain promptly Nation-wide cooperation in developing and carrying through any program relating to agriculture. Furthermore, we have the results of several years of accumulated effort in research and analysis to provide the basis for more intelligent planning. We know much more about price and income relations, the response of producers to price, and the necessary price to obtain production. We are in position to judge more accurately in advance what production will be needed.

But we are now facing a different set of problems. The country has been concerned primarily with surpluses. Now it must face problems of dealing with deficiencies. We have been concerned primarily with how to pull farm prices out of a depression. We are now facing the

problem of charting the course for farm production and prices through a period of inflation. The Department's research now must be directed to these emergency problems of expansion and to the problems of readjustment after the defense and war efforts have run their course. We have the machinery for action, and we must continue research to provide the basic material for fundamental planning. We must be continually looking ahead to anticipate the problems that must be dealt with, keeping research activities in line as well as possible to provide the solutions when the problems must be faced in terms of action.

At this time when national unity is imperative, this sort of planning by farm men and women, local administrators of farm programs, and qualified farm technicians, all working together, is assuring agriculture's maximum contribution to the defense of democracy at home and abroad. It is helping agriculture to keep its feet on the ground even while its eyes look forward to a happier farm future in a world once more at peace.





**APPENDIX A**  
**TABULAR EXAMPLES OF THE YEAR'S WORK**



EC  
RI

Army land purchase areas.

Relocation of farmers by land purchase

U. S. Department of Agriculture.

Defense housing

Food needs of a local farmer



# PLANNING THE WAR EFFORT

UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS

*Reports of Interbureau  
Coordinating Committees*

*Reports of  
Subcommittees*

IMPACTS OF WAR  
I

Domestic Demand  
Foreign Demand  
Methods of Reaching Farmers

IMPACTS OF WAR  
II

Demand, Price, and Income  
Margins  
Price Policy  
Priorities  
Exports and Imports  
Transportation  
Food for Defense  
Fats and Oils  
Special Crops  
Forest Resources and Uses  
Farm Labor  
Weather

IMPACTS OF WAR  
III

FATS AND OILS

PARITY PRICE AND INCOME

Cotton  
Fats and Oils  
Forestry  
Naval Stores  
Fruit  
Livestock and Feed Grains  
Tobacco  
Vegetables and Potatoes  
Wheat, Rye and Rice  
Sugar

PRODUCTION GOALS 1942

Nitrogen, Phosphorus, and Potassium  
Effect of Reduced Supplies Upon Agricultural  
Products and Financial Returns  
Economies in the Use of High-Analysis Fertilizer  
and in Fertilizer Placement  
Rationing Nitrogenous Fertilizers  
Supplementary Sources of Nitrogen

FERTILIZER

Farm-Production Machinery  
Processing Machinery  
Irrigation and Drainage Equipment  
Insecticides, Fungicides, Fumigants, etc.

AGRICULTURAL MACHINERY  
AND MATERIALS

COTTONSEED

FOOD DISTRIBUTION  
(Surplus Disposal)

FARM LABOR

NAVAL STORES

POST-DEFENSE PLANNING

{ Agricultural-Industrial Relations  
{ Rural Works  
{ Rural Welfare

{ A UNIFIED STATE AGRICULTURAL  
{ PROGRAM TO MEET THE  
{ IMPACTS OF WAR

{ 7 Regional  
{ Summary  
{ Reports

{ State Agricultural  
{ Planning Committee  
{ Reports

{ 775 Farm Men  
{ and Women  
{ 1,739 Administrative  
{ and Technical  
{ Workers

{ ADMINISTRATIVE REPORTS AND PROGRAM  
{ SURVEYS

## GENERAL STATE AND LOCAL DEFENSE PLANNING

*States*

*Counties*

Army land purchases: Delineation of  
purchase areas.

{ Rhode Island..... Washington.  
{ Massachusetts..... Barnstable, Middlesex.  
{ Indiana..... Ripley, Jennings, Jefferson.  
{ Tennessee..... Humphreys.

Relocation of farm families displaced  
by land purchases for defense projects.

{ Iowa..... Des Moines.  
{ Kansas..... Riley.  
{ New York..... Jefferson, Seneca.  
{ Virginia..... Caroline.  
{ North Carolina..... Onslow.  
{ Alabama..... Calhoun.  
{ Missouri..... Texas, Pulaski, St. Charles.  
{ Ohio..... Erie.  
{ Illinois..... Will.  
{ Arkansas..... Faulkner, Pulaski, White, Lonoke.

Defense housing surveys.....

{ Alabama..... Marshall, De Kalb, Blount, Etowah, Cherokee, St. Clair, Calhoun, Cleburne,  
Shelby, Talladega, Clay, Coosa.  
{ Ohio..... Portage.  
{ New York..... Seneca.  
{ Virginia..... Pulaski, Montgomery, Floyd, Giles.  
{ Indiana..... Clark, Floyd, La Porte.  
{ Missouri..... St. Charles, Jackson.

Food needs of army camps and ability  
of local farmers to supply such needs.

{ Texas..... Brown.  
{ Massachusetts..... Middlesex, Barnstable.  
{ North Carolina..... Harnett.  
{ Arkansas..... Pulaski, Faulkner.

THE  
SECRETARY  
OF  
AGRICULTURE

### THE PROGRAM BOARD

The Land Use Coordinator, Chairman  
Director of Research  
Director of Extension  
Director of Information  
Director of Marketing and Regulatory Work  
The Solicitor  
Chief of the Bureau of Agricultural Economics  
Administrator of the Agricultural Adjustment Administration  
Chief of the Forest Service  
Chief of the Soil Conservation Service  
Governor of the Farm Credit Administration  
President of the Commodity Credit Corporation  
Administrator of the Farm Security Administration  
Administrator of the Rural Electrification Administration  
Under Secretary  
Director of Finance  
Assistant Secretary

U.S. Department  
of Agriculture.

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1942

REPORT OF THE  
COMMISSIONER OF  
THE BUREAU OF  
RECONSTRUCTION  
ON THE  
RECONSTRUCTION  
PROGRAM IN  
THE RADFORD  
AREA

RECONSTRUCTION  
PROGRAM

RECONSTRUCTION  
PROGRAM

RECONSTRUCTION  
PROGRAM

reviews report and author-  
izes construction of several  
hundred houses in Radford  
area, including 100 for con-  
struction on nearby farms

RECONSTRUCTION  
PROGRAM

RECONSTRUCTION  
PROGRAM

• At the same time, other genera





# RURAL HOUSING FOR DEFENSE WORKERS AT RADFORD, VA.

OFFICE OF DEFENSE HOUSING COORDINATION

U. S. DEPARTMENT OF AGRICULTURE

VIRGINIA STATE AGRICULTURAL PLANNING COMMITTEE

FLOYD, GILES, PULASKI, AND WYTHE COUNTY AGRICULTURAL PLANNING COMMITTEES

38 COMMUNITY AGRICULTURAL PLANNING COMMITTEES

FARM FAMILIES IN RADFORD AREA

Requested assistance from the U. S. Department of Agriculture in planning a housing program for defense workers at the munitions plant, Radford, Va

Agrees to assist Office of Defense Housing Coordination and suggests investigation of local conditions to Virginia State Agricultural Planning Committee

Meets with 4 County Agricultural Planning Committees near Radford and suggests possibility of locating houses for defense workers on farms near plant. Houses to be leased to defense workers for duration of emergency and then be bought by farmers to replace existing inadequate farmhouses

With technical assistance provided by State Committee, develop plans for a survey of farms on roads leading to Radford whose owners would be interested in leasing small plots for construction of houses under suggested plan

480 members of Community Agricultural Planning Committees, working under supervision of members of County Committees, interview more than 7,000 farm families to collect information on housing needs\*

Summarize results of community surveys and recommended construction of houses on farms on condition that when bought by farmers after defense emergency is passed old farmhouses be demolished

Approves recommendation and transmits to U. S. Department of Agriculture

Transmits recommendation to Office of Defense Housing Coordination

Reviews report and authorizes construction of several hundred houses in Radford area, including 100 for construction on nearby farms

Cooperate with Farm Security Administration (the agency responsible for construction) in selecting and working out terms for leasing sites

To date, 84 houses built or under construction on farms within driving distance of plant

\* At the same time, other general economic and social information was collected, including data on the availability of labor to work in the munitions plants.

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# RURAL HOUSING FOR DEFENSE WORKERS AT RADFORD, VA.

OFFICE OF DEFENSE HOUSING COORDINATION

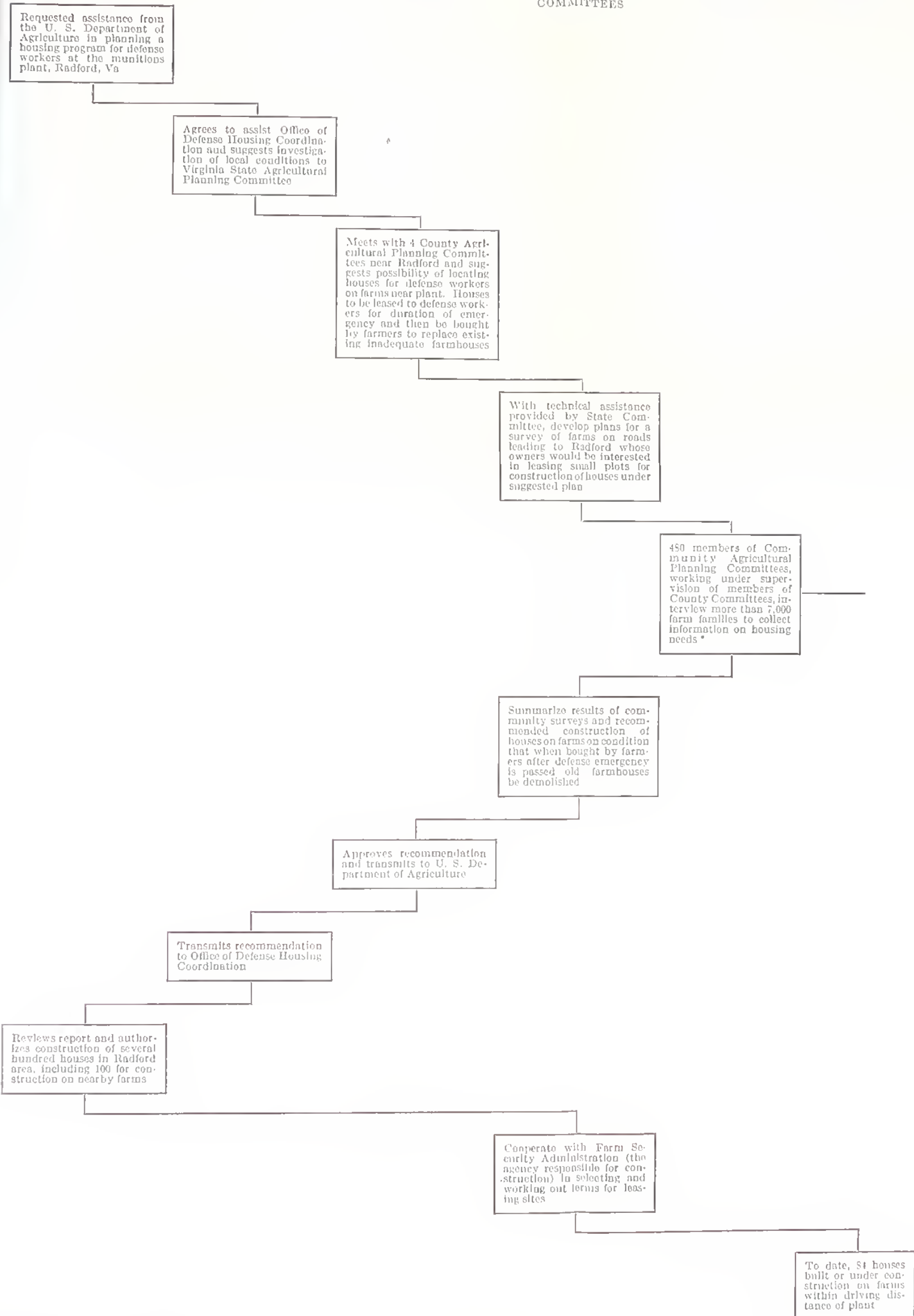
U. S. DEPARTMENT OF AGRICULTURE

VIRGINIA STATE AGRICULTURAL PLANNING COMMITTEE

FLOYD GILES, PULASKI, AND WYTHE COUNTY AGRICULTURAL PLANNING COMMITTEES

38 COMMUNITY AGRICULTURAL PLANNING COMMITTEES

FARM FAMILIES IN RADFORD AREA



\* At the same time, other general economic and social information was collected, including data on the availability of labor to work in the munitions plants.











## APPENDIX B

### PUBLICATIONS DURING THE YEAR

#### AGRICULTURAL FINANCE

- Agricultural Finance in the County Planning Program, by Norman J. Wall. Reprint. Processed.
- Agricultural Loans. (Series of processed reports by States) Arizona, Colorado, Illinois, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, New York, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, Oregon, Pennsylvania, Tennessee, Vermont, Virginia.
- Average Rates of Interest Charged on Farm-Mortgage Recordings of Selected Lender Groups. Processed.
- Average Size of Farm-Mortgage Recordings of Selected Lender Groups. Processed.
- Farm Land and Buildings: Average Value Per Acre, Census Years, 1850-1940. Processed.
- General Property Tax Structure and Irrigated Agriculture in Pinal County, Arizona, by O. O. McCracken and Frederick Arpke. Processed.
- Holding Surplus Farm Products with Government Credit, by George Y. Jarvis. Reprint. Processed.
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- Number of Farms Changing Ownership by Various Methods. Processed.
- Regional Trends of Farm-Mortgage Interest Rates, 1910-39, by Donald C. Horton. Reprint. Processed.

#### AGRICULTURAL OUTLOOK

- Adjusting Farm Family Living in 1941. Misc. Pub. 419. Printed.
- Agricultural Outlook Charts, 1941. Processed.
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- Dairy and Poultry.
- Demand, Credit, and Prices.
- Farm Family Living.
- Feed Grains, Fats, and Oils.
- Agricultural Outlook Charts, 1941. Processed—Continued.
- Fruits and Vegetables.
- Livestock.
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- Agricultural Outlook Charts for Vocational Agricultural Teachers. Processed.

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- No. 5. Pooling Ideas in Land Use Planning.
- No. 6. Communities and Neighborhoods in Land Use Planning.
- No. 7. Rural Zoning and Land Use Planning.
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- No. 9. Farm Tenancy.
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- Land Use Planning and the Agronomist, by William F. Watkins. Processed.
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- No. 88. Cotton Linters, compiled by Emily L. Day.
- No. 89. Anthropology and Agriculture, compiled by Kenneth MacLeish and Helen E. Hennefrund.
- No. 90. The Sampling Method in Social and Economic Research, compiled by Nellie G. Larson.
- No. 91. Uses for Cotton, compiled by Dorothy M. Ellis.
- Economic Library Lists. Processed.
- No. 11. The Dairy Industry in the United States, compiled by Louise O. Bercaw.
- No. 12. Planning for the Farmer.
- No. 13. Indirect Flood Damages, compiled by Louise O. Bercaw.
- No. 14. Relocation of Farm Families, compiled by Louise O. Bercaw.
- No. 15. Homestead Tax Exemption in the United States, compiled by Margaret T. Olcott.
- No. 16. Mate, compiled by Annie M. Hannay.
- No. 17. Exhibits, compiled by Annie M. Hannay.
- No. 18. Food and Cotton Stamp Plans, compiled by Mamie I. Herb.

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- No. 21. Delta County, Colorado, compiled by Howard B. Turner.
- No. 22. Relation of Environmental Factors to Cotton Fiber Length, compiled by Oliver M. Shipley.
- No. 23. Almonds, compiled by Louise O. Bercaw.
- No. 24. Crop and Livestock Insurance, 1937-1940, compiled by Mamie I. Herb.
- No. 25. Imperial County, California, compiled by Howard B. Turner.
- No. 26. Economic Aspects of Farm Tractor Operation, compiled by Nellie G. Larson.
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## DEFENSE AND AGRICULTURE

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- Sec. 4. Farmers' Expenditures for Operating Automobiles, Motortrucks, and Tractors.
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