The Michigan Land Economic Survey is making a detailed scientific inventory of the land resources of underdeveloped counties for the purpose of formulating a policy for the economic use of the land. The survey is supported by State funds and works on a county basis regardless of ownership. To date the field work and mapping have cost less than 5 cents per acre.

Loans to Ex-Service Men

Oregon, California, and South Dakota have attracted ex-service men to the land by granting them special loans for buying farms. In South Dakota the loans are granted jointly with loans from the rural credit board, and are secured by second mortgages. In Oregon the ex-service men borrow direct from the soldiers' welfare board up to 75 per cent of the purchase price of the farm, provided the loan does not exceed $3,000. The loans are granted only on improved land and are secured by first mortgage, payable on the amortization plan for a period of 28 years at 6 per cent interest. In August, 1923, over 1,500 ex-service men had used the loan system in buying farms. In California the loans are granted on land, which must be under ditch, with drainage provided but otherwise not improved, and must not exceed $7,500 in value. The soldiers' welfare board purchases the land and resells it to the ex-service men. In August, 1923, 12 men had bought farms with this loan.

Some of the irrigation States have adopted policies to attract both capital and settlers to their irrigation districts. A large number of States certify irrigation district bonds. In Washington the director of conservation is authorized to use portions of the revolving reclamation fund to purchase irrigation district bonds. Since the districts must conform to the regulations of the director before he will purchase their bonds he is able to exercise considerable latitude in governing the terms of sale for the land and other activities of the districts. Settlers in irrigation districts in Oregon are relieved from paying interest on the district bonds during the early stages of development, since the State is legally authorized to meet the interest charges during any or all of the first five years of the bonded period. No definite well-rounded program for directing and controlling land settlement has been adopted by any one State, but a few fundamental policies such as controlling the sale of real estate, land examination and certification, and specialized credit facilities have been inaugurated in several States.

B. HENDERSON.

LAND Value Changes from 1920 to 1926 The value of farm real estate, which includes from two-thirds to four-fifths of the value of the farmer's capital investment, has since the peak of 1920 shown an apparently steady approach toward stability, but considerable regional variation both in the amount of change since 1920 and in the rate at which the change is still taking place.

As indicated in Figure 130, the course of the department's preliminary annual estimates of the value of all farm lands with improvements averaged for the United States has shown a steadily lessening rate of decline, although there is as yet no assurance that the bottom has been reached. On March 1, 1926, the index stood at a point slightly greater than 70 per cent of its 1920 high point. Reports of the recent census of agriculture as of January 1, 1925, recorded a drop of approximately a fourth during the five-year period since January 1, 1920.

Although other factors enter, the value of farms is obviously in large measure dependent upon current income and future prospects

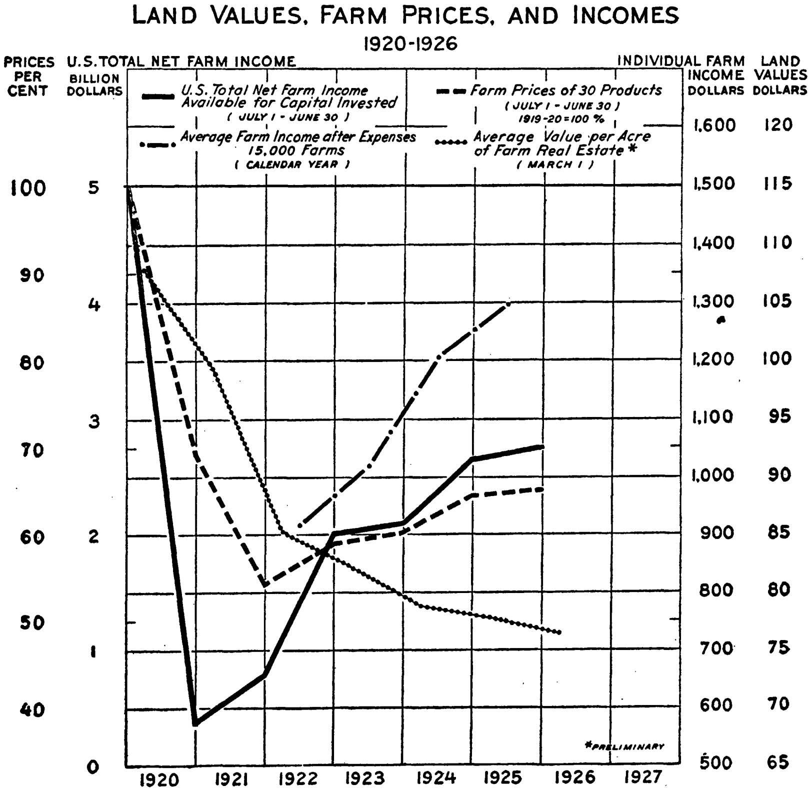

FIG. 130 —Land values, farm prices, and incomes, 1920–1926

of income. Available net farm income data and the prices of farm products, as also indicated in Figure 130, have all shown a steady upward trend since the low point of the depression period. This has been reflected in an apparently progressive checking of the rate of decline in land values. When this declining curve of average values for the United States will be fully checked obviously depends in large measure upon the future course of the prices and yields of farm products, and of the various elements that enter into costs, including possible changes in methods or in products grown.

Two other factors which will assist stability in values in many cases are:

(1) In a number of areas the foreclosures and other forced liquidations of the depression have probably already exerted most of their influence upon values, and their depressing effect may be expected to be progressively less as market absorption thereof gains momentum.

(2) Reductions in mortgage rates of interest have already been announced in a number of regions and an easing of the credit situation elsewhere appears to be underway with an improvement in country banking conditions and an apparently increasing general supply of funds seeking investment.

Relationship to Commodity Prices

With respect to this adjustment of the value level it may be noted that, in relation to a dollar now worth in purchasing power but two-thirds of pre-war, farm real estate values (that is, land including buildings and other improvements) as returned by the 1925 census were really worth 11 per cent less per acre than in the census of 1910, although in current dollars averaging 35 per cent more. In 1925 on the basis of comparative total values, however, the aggregate value was in current dollars 42 per cent above 1910, but in unchanging dollars of a constant purchasing power, 6 per cent below. Comparison of the Bureau of Agricultural Economics' annual per-acre index of the value of all farm lands with improvements as of March 1 indicates the value (in current dollars) reached in 1926 to be slightly above that recorded for 1917, or about 25 per cent above the 1912, 1913, 1914 average; in terms of pre-war dollars as of 1912, 1913, 1914, approximately 20 per cent below the base period.

From this comparison, however, it can not be inferred that land values will necessarily readjust themselves to the general price level in the same relationship as existed before the war. That is to say, values expressed in dollars of a constant purchasing power may tend to reach stability at less than the 100 per cent which denotes pre-war parity. The general price level, for example, as measured by the United States Bureau of Labor Statistics' index of wholesale prices of all commodities has for the last four years fluctuated within relatively narrow limits about a horizontal trend about 50 per cent above pre-war. The index of average land values, on the other hand, is still declining and, as elsewhere mentioned, stood at about 25 per cent above pre-war (1912, 1913, 1914) early in the year.

Taxes a Factor in Land Values

That this inference does not necessarily follow rests in the first place on the obvious basis that a general price index is not a net farm-income index, and the 50 per cent higher general price level of the last few years has by no means been coincident with a net income 50 per cent above pre-war, as farmers well know. In particular, the rise in farm taxes has been seriously out of proportion to the movement in the prices of farm products. Since taxes form one of the principal costs in farm ownership, the proportion of income required for their payment under postwar price levels has been and will continue to be a factor of no small importance in determining the level at which farm-land values will reach adjustment.

In the second place, it is not altogether improbable that land values in relation to income may reach stability in a changed relationship over that earlier obtaining, at least in certain regions. Studies made by the Bureau of Agricultural Economics[9] indicate that the ratio of current land income, as measured by cash rents, to current land value declined steadily from the opening of the century to 1920. In Iowa, for example, in which cash renting is fairly common, the ratio of gross cash rent to value fell from 7.7 per cent in 1900 to 4.3 per cent in 1910 and to 3.6 per cent in 1920. The subsequent sharp break in land values which for a generation "had never gone down" may serve for a time, at least, to check this apparently increasing capitalization of anticipated future increases and result in a higher ratio of current income to current value. Likewise, the disastrous experience of many "boom-year" purchasers of lands in which gross income ratios after deduction of taxes, depreciation, and upkeep of buildings netted in some areas of the Middle West less than 2.5 per cent upon value may have served to emphasize the importance of a more ample income ratio than had previously been accepted.

Regional Variations

Although farm real estate values as returned by the agricultural census of January 1, 1925, showed an average decline from the 1920 peak of about a fourth, differences between regions in extent of the change were marked. Also, the year-to-year trends and turning points as indicated by this bureau's annual per-acre index have shown considerable regional variation.

Figures 131 and 132 present the percentages of change from 1920 to 1925, by States, as returned by the census.[10] Figure 131 shows the change in acre value; Figure 132, the change in total value. The latter, particularly in some of the Mountain States, may give a somewhat truer picture of the change in the value level because of the downward influence upon the per-acre average caused by large additions to the farming area of land of a relatively low average grade and value. The truth, at least, probably lies somewhere between. Conversely, considerable declines in total farm acreage in some of the Southern and Eastern States, presumably owing to the poorer grades going temporarily or otherwise out of agricultural use, had the opposite effect upon percentage change measured in terms of values per acre.

That values in a general northeastern group comprising primarily the North Atlantic States but extending westward into Michigan and Wisconsin and southward into Delaware, Maryland, and the Virginias should have declined little relatively to the country at large, or have actually increased, is owing in part to the fact that farm prices of dairy, poultry, fruit, and vegetable products so largely grown in these States maintained the highest levels during

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[9] CHAMBERS, CLYDE R. RELATION OF LAND INCOME TO LAND VALUE. U. S. Dept. Agr. Bul. No. 1224; 132 p., illus., 1924.

[10] 1925 figures preliminary. Comparisons with available final figures, however, indicate the differences to be negligible.

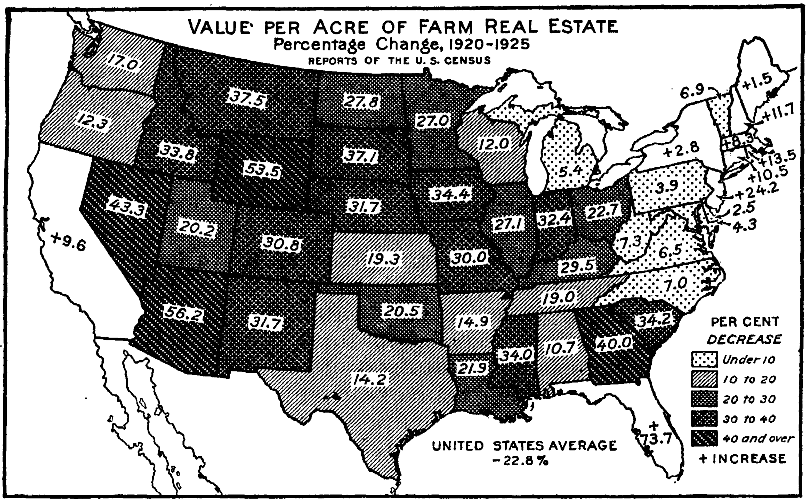

FIG. 131.—The extent to which farm real estate values changed from 1920 to 1925 varied considerably in different sections of the country. In some of the Mountain States large additions to the farming area of lands of relatively low value tended to exaggerate the declines in terms of value per acre. Conversely, the elimination of presumably poorer lands in portions of the South and East tended to minimize the per-acre declines

depression of any of the major farm-product groups. In some of the densely populated industrial sections of the East sustained or rising values were partially attributable to an apparently active demand on the part of urban workers for small farms easily accessible to city employment by motor bus or automobile. Although not directly entering into the census enumerations, considerable demand for farms for use as summer homes, camps, country estates, etc., probably exerted a sustaining influence in areas where farms had potential use as such.

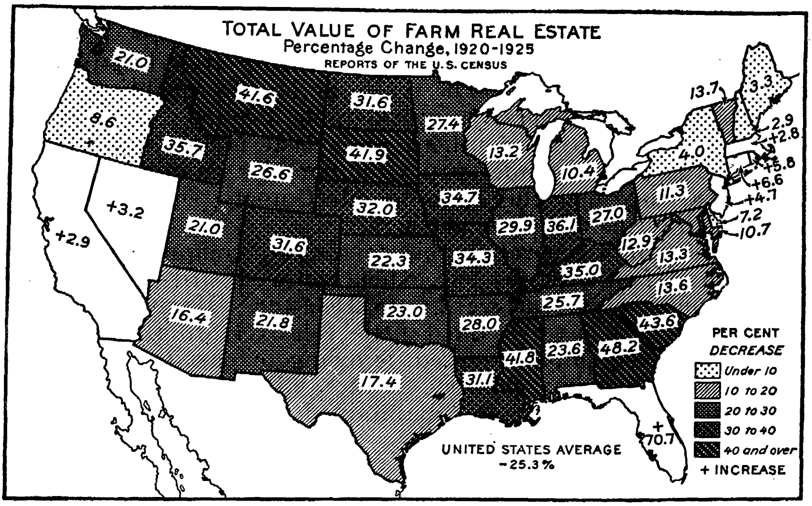

FIG. 132.—Changes in total value of farm real estate, 1920–1925

Similarly in Florida and the Pacific Coast States residential influences, as well as relatively well-sustained prices for some of the specialized products there grown, aided in supporting the values returned by the census. Residential development consequent upon population growth also widens local demand, particularly for dairy, poultry, and truck products.

Causes of Relative Stability

That values in the cut-over country of northern Minnesota, northern Wisconsin, and the Upper Peninsula of Michigan should have declined relatively little or should have actually increased may be accounted for in part by the considerations that agriculture here is more self-sufficient and hence perhaps less price-sensitive than elsewhere; that clearing and other improvement is a more or less continuous process among those who stay; that settlement promotion by land companies often to city prospects and often with various methods of financial aid is a more or less continuous process; that sales of timber products and the opportunity to work in lumber camps, mines, etc., aids in maintaining an income; that prevailing values are in some areas dominated by the price policies of land companies; and that in some areas, particularly near lakes and streams, the uses of land for recreational purposes have been accelerated with the improved highway program of recent years. In some of these counties an increase in the number of farms is indicated by the 1925 agricultural census.

In the cotton States the exceptionally severe declines in Georgia and South Carolina are primarily the result of several years of unparalleled damage by the boll weevil. The exodus of negro farm labor, both because of virtual ruin of his income, as in Georgia, and because of the attraction of relatively high industrial wages, constituted another important factor, especially in the plantation area. A combined average of farm real estate values in the principal cotton States,[11] however, though showing a greater percentage decline than in the northeastern dairy-poultry-truck group,[12] fell less than a similar combined average for the grain and livestock-raising States of the Middle West.[13] This is largely because cotton prices and cotton incomes, though in 1920 and 1921 declining the most severely of all of the major product groups, thereafter recovered to levels lower than for dairy, poultry, fruit, and vegetable products, but appreciably higher than for the grain and meat-animal group.

Increases in Mountain Counties

The increases in value to be observed in the mountain counties of western North Carolina and eastern Tennessee appear to have been associated in part with active development of the territory for residential and recreational purposes.

Sharp increases in the Texas Panhandle are largely an accompaniment of the rapid conversion of the former extensive cattle

[11] North Carolina, Tennessee, Arkansas, Oklahoma, and all States south thereof, Florida excepted.
[12] North Atlantic States, Michigan, and Wisconsin.
[13] West North Central States, Illinois, Indiana, and Ohio.

ranches into smaller cotton farms. So adapted to raising this product cheaply has the area been found that activity in farm real estate took on the proportions of a boom. Increases in the southernmost group of Texas counties were associated with a considerable acreage cleared and made suitable for crops, by an increase in acreage planted to cotton, and in some sections by considerable expansion in the growing of fruits and vegetables.

On an average, apparently uniformly the most severe declines were recorded in the grain and livestock-raising States of the Middle West. Farm prices for the major products of this region and incomes therefrom held to the lowest levels of the country's major product groups. Severe declines in value in several of the Mountain States, even when total rather than per-acre changes are compared, are likewise largely traceable to the drastic decline in cattle and grain prices, particularly in wheat, and to droughts. In an area in western Kansas, however, values either held up relatively well or increased. At the same time the acreage in wheat increased. Cutting of costs by use of the combine and other power machinery was a large factor. This, together with the even more depressed conditions in the cattle industry, stimulated the breaking of former grazing lands and planting them to wheat as the better alternative.

A relationship between the change in land values and in the prices of products was observable during both the war and postwar period. For example, of the three groups, cotton, meat animals and grains (combined), and dairy and poultry products (combined), relative to pre-war prices, the first increased most in the war period, the second somewhat less, the last considerably the least of all. Farm real estate value averages for the Cotton Belt, the midwestern grain and livestock States, and the northeast dairy States increased in the same way. Taking 1919–20 prices as a base of comparison, dairy and poultry products thereafter fell least, cotton more, but the meat-animal and grain group most. Farm real estate values in the respective regions in which these provide the principal sources of income, moved likewise.

Declining Downward Trend

With respect not to extent of change, but to the year-to-year trend, it is significant to note that for only two of the nine geographical divisions of the country did the averages up to March 1, 1926, still show a pronounced downward trend. These two were the East North Central and the West North Central sections. In the remaining seven divisions, the averages in the New England, Middle Atlantic, South Atlantic, and West South Central sections had for several years shown a tendency to go no lower and, with the possible exception of the South Atlantic, had even shown some tendency to move into higher ground. In the East South Central, Mountain, and Pacific divisions, the trend of the averages, as far as can be told now, appears to have nearly reached stability in adjustment to prevailing conditions.

E. H. Wiecking.