

THE ECONOMIC POSITION OF AGRICULTURE IN THE
NORTHWESTERN GRAIN RAISING AREAS.

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The conclusions I have reached with reference to this subject are as follows:

1. The serious problems confronting farmers in the northwestern grain raising area are the product of economic causes and are not to be cured by political or legislative processes.
2. The failures, foreclosures, and abandonment of land that have occurred are an inevitable part of a profound change and readjustment of agricultural conditions parallel to the reactions of the Civil War in the western areas then devoted to grain. They will continue until they have run their course, although they have probably reached their peak.
3. The future of agriculture in the northwestern grain raising area has not been impaired. It has not lost an appreciable percentage of its capable men. It has been undergoing a drastic purging process involving the elimination of the unfit, the deflation of excessive land values, the collapse of credits built on an unsound basis, the wiping out of farming operations on marginal lands, and changes in the type of production and agricultural methods, which are tending toward the establishment of the business upon a sound basis.
4. Failures, abandonment of land, foreclosures, and other results of depression and distress in this area, have been given an emphasis out of proportion to their importance. The percentage of failure among the grain raising farmers is not greater than the percentage of failure of banks in the grain raising area, and is approximately the same as the mortality in commercial business within the same sections. The failure of those in farming looms larger only because the number is far greater than the number engaged in banking or other business activities.

In the paper which I presented a year ago, I called attention to the rapidly increasing costs in agriculture in the northwestern grain raising area and gradually decreasing yields, heavily increased taxation, and the increasing difficulty of the farm labor problem. I suggested that the changes then impending would involve the elimination of the unfit, would necessitate the creation of new sources of revenue, and compel drastic changes in agricultural methods. Within the period since that time, costs have risen higher, yields have fallen lower, the farm labor problem has become still more difficult. There has been a large amount of abandonment of land and failure of individual farmers. Changes of so drastic a character have occurred that substantial areas that were in farms a few years ago are now deserted. The mortality has been heavy. First impressions would convey the thought that the agriculture in the entire northwestern area had suffered a terrible blow from which it may not recover except after a long period of years. I believe that a close study of the facts will demonstrate that this is an unsound conclusion, and that the changes which have been occurring are the

product of well defined economic causes. While the developments of the year have been of the most serious character, involving very heavy losses and disaster, not alone to individuals but to commercial business, banking, and all of the other activities of the district, it is still true that the future of agriculture has not been impaired. These changes are necessary in order to establish it upon a basis that will permit it to become properly founded and enjoy prosperity in the future.

Brief reference to the history of the past is necessary to an understanding of the problems of the present. During the "depression following 1893, when wheat sold at one time for 49 cents a bushel in the Chicago market", the conditions were similar to those of the present time. There were numerous foreclosures. There was much abandonment of land. There was heavy failure in farming and in business. But after the low point of depression had been passed, there was a large investment of eastern funds in northwestern lands and mortgages. Agriculture came back slowly and steadily with gradual increases in land values, which continued until the collapse in 1920. During the last half of this period, the farm mortgage indebtedness in the four states of Minnesota, North and South Dakota, and Montana, increased from \$169,220,509 to \$530,791,929. It may be said that in very many instances the farmers believed themselves to be prosperous because they did not distinguish between the accretions due to rising land values and the income from farm operation. During the war years there was a general and very widespread disposition to invest profits in additional land, and there was an abnormal increase in the rate at which farm mortgages were being made. In some localities there was heavy inflation in land values, although over the Northwest as a whole, the inflation was moderate or negligible. The effect of the collapse of 1920 was to destroy the already impaired market for mortgages, deflate the value of land to a value based upon a production basis, and to create conditions under which only competent, experienced and resourceful farmers were able to escape acute distress. War years had produced heavy inflation of commercial and banking credits. Following the collapse in prices of 1920, banking, Federal reserve, and War Finance credits, underwent an acute abnormal secondary inflation for the obvious reason that farmers caught in the collapse could not continue without immediately available resources, and no funds were available for current operations or to meet maturing indebtedness except by borrowing from the banks.

The tremendous outflow of credit made necessary by these conditions increased the loans and discounts of the commercial banks of the four states to a peak of \$1,290,996,000 on June 30, 1921, as compared with \$543,910,000 on June 30 in the pre-war year of 1913 --an increase of 137.4%. In the states of Minnesota, North and South Dakota and Montana, this was supported by extraordinarily heavy advances from city correspondents to country banks, a radical up-turn to the high point of 115 million dollars in the credit extensions of this Federal Reserve Bank, advances by the War Finance Corporation reaching a high point of 65 million dollars, and Federal Land Bank advances through first mortgages on farms totaling 50 million dollars.

*January, 1895.

The danger of so inflated a credit structure resting upon an insecure base, was readily apparent then, and it should have occasioned no surprise that, notwithstanding extraordinary efforts to protect it, it collapsed in part. Of necessity, unwise and poorly founded credits were found to be worthless, with the inevitable results of bankruptcy, foreclosure, business mortality, and banking insolvency.

The commercial and banking structure of the northwestern grain raising area is founded upon agriculture, which constitutes the larger part of its business. Depressed agriculture is reflected in all of the businesses affiliated with or dependent upon it, and the evidence indicates that the resulting distress has been proportionate in every line affected.

The gradual building up of an inflated condition had the result that, just preceding the price collapse of 1920, the district contained 3,875 banks, the acreage in wheat had increased, merchandising establishments had crowded in where there was no economic necessity for them and all lines of activity showed evidence of having been overdone. Nothing could be more characteristic than the then existing banking situation. Based on the ratio of population per bank for the United States as a whole, North Dakota had five banks where one would have been sufficient, South Dakota four, Montana three, and Minnesota twice as many as the national average. The increased acreage of wheat had not produced a proportionately increased production. The over-banked condition had encouraged unwise extensions of credit. A collapse was inevitable. So thoroughly has the process worked itself out that the wheat acreage has already been brought back by elimination to very nearly a normal basis, while in banking, in merchandising, and in the distribution of goods, the volume of service has been brought into a right relation to the necessities of the population,

A glance at conditions following the Civil War is of particular interest because these conditions are curiously parallel to those existing in the grain raising areas of the Northwest today. During the decade from 1860 to 1870, Iowa almost doubled the amount of wheat produced. Wisconsin increased its population more than one-third. The Prairie Farmer observed in 1864:

"There must be something radically wrong with the farmer who does not now free himself from debt. Every cultivated product bears a highly remunerative price".

Toward 1870, when prices were beginning to drop, farmers in Iowa and Wisconsin considered the slump but temporary, and on the strength of the prosperity they had enjoyed for six years, they did not hesitate to go into debt for choice land. About 1870, there was considerable holding of wheat in the Mississippi Valley states. In 1866 and 1867, wheat sold for \$3.50 a bushel. In January, 1870, it was worth 77 cents on the Chicago market. In the following years prices fell to an exceptionally low level. An excellent authority says that when farmers felt themselves pinched by falling prices, they tried three different means to relieve themselves. First: they attempted to reduce the cost

of transporting their products; second: they tried to eliminate the middleman through co-operative buying and selling; and, third: they demanded that the United States Government increase the circulating medium. In 1870, a total of 18 million bushels of wheat was marketed at Milwaukee, and in 1880, only 11 million bushels. The Secretary of the Iowa Agricultural Society said in 1878, that there never has been a time in history of so great a depression in business of all kinds. Corn was being bought for 8 cents a bushel. In 1866 the farm value of an acre of wheat in Iowa was \$22.72, and in 1876, only \$5.42. So rapidly did conditions change that in 1879, the Secretary of the Wisconsin State Agricultural Society was able to say that large areas in wheat were a thing of the past. An authority states that during the years of falling prices, discontent and agitation, the farmers in both states who had developed dairying were prosperous and contented and paid little attention to the Greenback movement.

There are in the northwestern grain area 388,242 farms, embracing 72,250,000 acres. It is noticeable that in the well diversified sections, the amount of agricultural distress is vastly less than in the grain areas. The former were the areas which years ago underwent forced abandonment of one-crop farming. A survey of the circumstances and condition of 203,040 farmers within the area properly classified as wholly or principally grain raising, discloses many important facts. Of the total number, 5,388 are bankrupt or being foreclosed; 9,302 so involved as to be in imminent danger of bankruptcy; and 4,959 have been forced to abandon their farms and leave the country. In view of the inclusion of those who have abandoned their land in the number of those bankrupt, the survey indicates a total of 14,690 as having failed, or 7.2 percent. The percentage by states is interesting and is as follows:

| | | | |
|------------------------|-------|-------------------|------|
| Montana | 17.7% | Minnesota | 3.7% |
| North Dakota | 10.5% | South Dakota | 7.3% |
| Northwestern Wisconsin | 3% | Northern Michigan | 2.8% |

The reason for the radical drop in the percentage of failure in North Dakota as compared with Montana, and in Minnesota as compared with either of the Dakotas, is not clear except to those who understand the character of colonization in Montana, the type of men who engaged in farming in that area, and the conditions under which their farm operations were attempted. Montana's heavy proportion of failure is a reflection of unwise colonization methods, of sincere but unfortunate attempts to farm non-agricultural and marginal lands, and of results that were inevitable after a period of years had clearly demonstrated the moderate probability of success upon unsuitable land and under adverse conditions. In the areas of heaviest failure in that state, 48 percent of those who went upon the land were without previous farming experience. The attempt of inexperienced and unfit men to succeed under conditions requiring a high type of agricultural ability and experience, produced its natural results. North Dakota's rate of failure is traceable in part to the same conditions and in part to persistent adherence to one-crop farming, lack of rotation, and to the attempt to farm too much land. The lesser rate of failure in South Dakota

reflects increasing rotation and diversification, and the almost negligible rate in Minnesota indicates the degree in which the state has ceased to be a grain raising state, and the rate at which its agricultural methods have been improved. The average of 7.2 percent of failure may be discounted by the normal rate of failure, which is continuous and persistent in any year, and which may possibly reach 1% or more, and includes the failures which were deferred because of war inflation and temporary prosperity.

A statistical examination of failure lacks significance without some knowledge of the character of those involved. Of the 203,040 farmers covered by this survey, the proportion of those rated by the bankers with whom they transact their business as being competent and experienced men of requisite training and ability is as follows:

| | | | |
|------------------------|-----|---------------|-----|
| Montana | 75% | North Dakota | 80% |
| South Dakota | 85% | Minnesota | 85% |
| Northwestern Wisconsin | 80% | Nor. Michigan | 60% |

The higher percentage of competents than ordinary observation might indicate is a very significant fact, and it is still more significant, that within this class the rate of failure is less than 1 percent. The failures are confined to two classes, namely, the renters, and those who, through lack of resources, through lack of proper experience or the necessary personal qualities, could not have been expected to survive excepting under very favorable conditions. The necessary conclusion is, that the rate of failure while high, is confined, except to a limited extent, to those who would naturally be the first to suffer from adversity or depression and to those whose contribution to a permanent and successful agriculture would be negligible.

An inquiry into the causes of failure throws much light upon the statistical data obtained. These causes may be divided into two classes, consisting of those outside of the control of the farmer, and causes within his control. One of the principal causes outside the farmer's control is unfavorable marketing conditions. This includes dry years, poor growing conditions, yields too small to afford a profit at the prevailing market, and advancing costs in practically every item entering into operation. Some consideration should be given to the fact that high industrial wages and high labor rates in mines, lumber camps, on road construction, etc, have created a competitive condition that has been very burdensome to the farmer, when in the market for farm labor. It has also afforded a strong invitation to the farmer with short yields and an unsatisfactory market to abandon farming and join the labor ranks, particularly in cases where his previous experience was in the trades or in factory or clerical work. In numerous cases abandonment and foreclosure have been assisted by the relatively better compensation in industrial employment or at day wages.

Among the causes of failure within the farmer's control, lack of business capacity leads all others. This includes deficient experience, lack of thrift, and lack of energy and application. Other causes in the order of their importance were, lack of capital, poor farming methods, too much land, and too much credit. It is

interesting to note that in two-thirds of the causes of failure, additional credit in any form would have been of no assistance and would not have prevented disaster. This is corroborative evidence of the fact that the majority of failures are traceable to causes having no relation to banks or banking service, and which credit in any form has no power to reach. In fact, capable farmers generally agree that increased credit means nothing but increased debt, which sooner or later must be paid with interest added, and affords no prospect of leading them back to prosperity.

War broke out in Europe just before the wheat harvest of 1914. The effect of the war was shown in the spring of 1915 by an increase in wheat acreage in the four states of 1,946,000 acres, and an increase in the aggregate production of 148,448,000 bushels. During the war years, 1915-1918 inclusive, the wheat acreage underwent a heavy expansion, averaging in the four states 16,553,000 acres annually. On the entry of the United States into the conflict, every agency and influence was brought to bear upon the farmer to urge him to increase his production, and he responded in a most patriotic and energetic way. But with the signing of the Armistice, there was no voice of authority to tell him "The War Is Over -- Reduce Acreages To A Normal Basis".

In fact, the planting of wheat, amounting in the Armistice year 1918 to 17,055,000 acres, was increased the following year, when the war was over, to 17,731,000 acres, and did not reach its peak until 1919, when 20,408,000 acres were planted, with a short crop of 132,227,000 bushels. In 1920, the acreage dropped back again to 17,513,000 acres, with a small decrease in 1921, and a gain again in 1922, but a drop in 1923 to a little less than the pre-war planting of 1914. In fact, 1923 was the first year in which north-western farmers succeeded in bringing their wheat acreage to the pre-war level, and the return to a pre-war basis was not accomplished until six years after the end of the war. The corn acreage showed much the same course as that of wheat, rising gradually during the war, but reflects strongly the unsatisfactory return on wheat in the years since the Armistice, during which the acreage has risen one-third. This gain in all probability is permanent, as corn has been making inroads into what was formerly wheat territory.

The crop acreage figures of 1922 and 1923 throw much light upon the manner in which the farmer has been meeting his problems. There was a reduction in wheat acreage in the four states in 1923 of 1,201,000 acres. There was a reduction in barley of 424,000 acres, and in rye of 555,000 acres, these decreases being compensated in large part by an increase in corn acreage previously referred to. In the years from 1910 to 1914, inclusive, an average of 56,913,227 bushels of wheat was exported annually together with an average of 10,678,635 barrels of flour. That there has been no lack of a foreign market is indicated by the exports of 208,321,091 bushels of wheat and 15,796,824 barrels of flour in 1922, an increase in wheat exports of 256 percent and an increase in flour exports of 49 percent, as compared with the five pre-war years. While market conditions were the principal factor in producing the substantial wheat acreage reduction, many farmers who were watching the course of exports noticed that the tendency during 1923 was for wheat, corn and barley to decline. For the year ending June 30, 1923, wheat exports fell

from 208,321,091 bushels to 154,950,971 bushels. Corn fell off from 176,385,614 bushels to 94,064,053 bushels. Cornmeal and corn flour showed a moderate decrease from 776,207 barrels to 633,760 barrels. Barley fell from 22,400,393 bushels to 18,192,809 bushels. Rye, oats, oatmeal and rolled oats, showed an increase. There was an increase in rye from 29,683,602 bushels to 51,411,550 bushels, indicating the substitution of rye for wheat. The 1922 and even the smaller 1923 European demand for wheat does not indicate the failure of foreign wheat markets, which for the year ending June 30 last, were still very nearly three times as good as during the pre-war years, 1910-1914 inclusive. Flour enjoyed a one-third better market. The foreign market, while narrower than before, must, therefore, be eliminated from the causes of unsatisfactory wheat farming conditions. The declines in wheat and flour exports in 1923 must be considered in the light of the foreign exchange situation, the shipping situation, and the availability of wheat and flour supplies in countries competing with the United States. Of these factors, the difficulty in building up exchange in the United States against which to buy is one of the most important.

In regard to domestic consumption, it may be said that the statistical evidence from 1890 to 1921 tends to give weight to the view that price has an effect upon the demand of the American people for wheat. A majority of the price declines within that period showed increased consumption, indicating that a better domestic demand may reasonably be expected to result from the present price position of wheat from the consumer's standpoint, as compared with other food stuff prices.

During the year, the farmer has been brought into sharp contact with familiar phases of the labor problem -- strikes and high day labor rates, and efficiency decreasing with the advance in wages. He has sought labor upon a narrow market, and has found it not only organized in considerable part, but organized under radical leadership. In several areas where the wheat crop was better than the rather discouraging general level of production and necessitated temporary employment of a considerable amount of day labor, the farmer was confronted with labor combines and a demand for wages on an eight hour basis running to 6 or 7 dollars a day. Whatever may be said of the justice of such rates from the labor standpoint, it is clear that from the farmer's standpoint, they are ruinous compared with the present price level for wheat. They resulted during the year in a considerable reduction in the amount of labor employed and increased effort to conduct farm operations with the labor available in the family and by exchange of labor with neighbors.

It is strikingly apparent that any practical measures of farm relief in the northwestern area must include as one principal objective the creation of an adequate labor supply, preferably from the northern countries of Europe, such as was formerly available. Harmful results can hardly be expected from a liberalization of the immigration laws in this respect, since many thousands of farmers, who came as agricultural laborers, remained to become proprietors. It is of equal and perhaps greater importance that costs be brought down. Living costs, material costs, and cost of equipment and supplies, are still at a disproportionately high level as compared with farm revenues. The greater part of the existing discontent has its origin in this

unbalanced relation. The farmer asserts with much justice that the process of deflation has worked its course in his business, but not in the businesses of those from whom he buys. By controlling prices, they control his costs of operation, and are in large part protected by a tariff that bars the entry of foreign goods and defers the leveling effect of competition that might result from lower tariff rates. No sound plan of farm relief can ignore these factors, nor can it ignore the fact that 82% of what the farmer pays for equipment and implements represents direct and indirect labor costs, or that an average of 80% of the price he pays for goods and commodities is a labor charge.

The high cost of farm operation is therefore traceable in large part to disproportionate labor returns in industry and in farming.

The position of the grain farmer is clearly shown in the following tabulation of wheat yields per acre since 1910:

| Year | Minnesota | Montana | | North Dakota | South Dakota |
|--------|-----------|---------|--------|-----------------|-----------------|
| | | Winter | Spring | | |
| 1910 | 16.0 | 22.0 | 22.0 | 5.0 | 12.8 |
| 1911 | 10.1 | 31.7 | 25.2 | 8.0 | 4.0 |
| 1912 | 15.5 | 24.5 | 23.5 | 18.0 | 14.2 |
| 1913 | 16.2 | 25.6 | 21.5 | 10.5 | 9.0 |
| 1914 | 10.6 | 23.0 | 17.0 | 11.2 | 9.1 |
| 1915 | 17.0 | 27.0 | 26.0 | 18.2 | 17.1 |
| 1916 | 7.6 | 21.5 | 18.0 | 5.5 | 6.8 |
| 1917 | 17.5 | 13.0 | 9.0 | 8.0 | 14.0 |
| 1918 | 20.09 | 12.0 | 12.5 | 13.06 | 19.0 |
| 1919 | 9.4 | 5.2 | 2.3 | 6.9 | 8.2 |
| 1920 | 9.8 | 12.0 | 10.0 | 9.0 | 9.2 |
| 1921 | 9.7 | 14.0 | 12.0 | 8.5 | 9.1 |
| 1922 | 13.9 | 16.5 | 14.7 | 14.1 | 13.4 |
| 1923 * | 12.3 | 17.0 | 15.0 | 7.1 | 9.5 |

*Preliminary

North Dakota is pre-eminently a wheat state. In the past 14 years it has harvested only 6 crops that were above an average of 10 bushels per acre, and 8 that fell below a 10 bushel average. The average of the good years was 12.5 bushels per acre, and of the poor years 7.2 bushels. At the October 1 farm price of the current crop, which was 8 cents better than a year ago, or 91 cents, the per acre return on this year's average of 7.1 bushels was \$6.41 per acre. South Dakota, also a wheat producer, fared the same, with 6 crops above the 10 bushel average and 8 below, the average in good years being somewhat better than that in North Dakota, or 15 bushels per acre, and the average of poor years being 8.1 bushels.

At the October 1 farm price of 82 cents, the current crop in South Dakota brought a per acre return of \$7.79. Applying the cost per bushel for raising wheat, officially ascertained by accurate records on 122 representative wheat farms, or \$1.49 per bushel, it appears that at the average yield in that state, this year, the cost per acre was \$10.72, and the operating loss \$4.26 per acre.

In both states the poor yields of the current crops were popularly credited to damage from the period of unusual heat, and injury caused by black stem rust. There was, however, a third factor as important and perhaps even more influential in determining the yield than either of these; it was the increasing menace of weed growth, the results of poor preparation of the seed bed, poor methods of planting, and the other results that ordinarily follow attempts to farm too much land.

Before any consideration is given to artificial methods of improving the wheat price, it is fair to inquire whether any improvement would have made wheat growing, at present costs, a profitable business for the farmer in North Dakota who produced an average of only 7.1 bushels, or the South Dakota farmer, who was able to grow only 9.5 bushels this year.

North Dakota cost figures were based upon the low average yield of 8.2 bushels upon the farms under investigation. The doubling of the yield would have shown a fair profit, but the records show a declining rather than an advancing tendency.

If the trend of the production figures, which in both states has shown a majority of poor yields since 1914, cannot be reversed by improved farming methods and better cultivation, it is probable that wheat will be forced into a less important position, and that its place will be taken by other crops that can be grown at a profit.

Neither organization among the farmers, proposals for legislation, nor attempts to reverse the decline of wheat and flour exports can touch the real heart of the wheat problem, which is, that the average production has fallen to a point so low that stimulation of price is likely to make very little difference to the wheat farmer as an individual, who must first consider not whether the price is high or low, but how many bushels of wheat he has to sell.

There is nothing new in the proposals which have come from agriculture for the relief of its depressed condition. It has been noted that during the reactions following the Civil War, farmers turned to co-operative buying and selling, demanded reductions in the cost of transportation, and demanded that the United States Government increase the circulating medium. The proposals so far advanced in behalf of agriculture are identical with these, with the exception that instead of asking for increased currency circulation, agriculture has asked for and received new credit machinery, such as the farmers of no other country enjoy. This consists of the revived War Finance Corporation, the Federal land bank system, intermediate credit banks, land loan and rural credit mechanisms of numerous states, joint stock land banks, and a very important broadening in the discount powers of the Federal reserve banks as to agricultural and live stock paper.

As in the early 70's, there has been a revival of proposals for co-operative organization on a very broad scale. The success of co-operative enterprises in other parts of the country is cited as evidence that the co-operative plan which is at present popular may be applied with equal success to wheat. Whether the results of co-operative effort as applied to commodities growing within a limited area and differing from wheat in their relation to world production and world markets, may be expected when applied to a grain crop, the

price of which is governed by the surplus and fixed in Liverpool, is questionable. Very likely the result can only be determined by experiment. Co-operation in wheat involves business and organization problems of tremendous magnitude, since in the northwestern area alone, wheat farmers numbering approximately 250,000 are scattered over a territory 1000 miles wide. It cannot be too forcefully repeated that the problem of the wheat farmer is not to organize for the handling and sale of the wheat he now grows, but to improve yields sufficiently to make wheat a business proposition.

The history of the early 70's has repeated itself in the insistence of farmers for a drastic reduction of transportation rates. Much misinformation about transportation facts has been disseminated and many farmers have been led to believe that the railroads enjoy a fixed rate of income guaranteed by the Government, and therefore have an advantage over agriculture in which there is no guaranteed return. No such guarantee exists. Under the Transportation Act, northwestern lines are permitted a return of 5-3/4 percent, but only when earned. The same causes which have depressed agriculture have depressed railroad revenues. At no time since the adoption of the Transportation Act have the revenues of the northwestern grain carrying lines shown any prospect of reaching the rate of return established but not guaranteed by the Government. In fact, their earnings for the first nine months of 1923 were about one-sixth the average earnings of a well managed grocery store.

During the three year period of operation under the Transportation Act, ending September 1, 1923, western railroads of the United States earned net operating incomes of 3.85 percent of their valuations as established by the Government. This fell short of the "fair return" contemplated under Section 15 A of the Transportation Act by 1.9 percent or \$484,705,000. The railroads, therefore, and the grain carrying lines especially, which did not come up to this low average, evidenced the same need of cost plus a fair return as the farmer, but the figures show they are not receiving it, due to the same conditions that have depressed the farmer's income.

An inquiry into transportation conditions discloses many pertinent facts. In Minnesota, the average freight rate amounted to only 6.5 percent of the average September terminal price for No. 1 Dark Northern wheat. In North and South Dakota, the average freight rate amounted to 9.6 percent of the terminal price, and in Montana, where the transportation distances to market are from 600 to 1200 miles, it amounted to 18.2 percent. Interesting as these percentages are as evidence of economical transportation of grain, it must be borne in mind that freight rates are not, and should not be based upon price, but upon the value of the service rendered and the cost of supplying it. In the 1923 crop, the average production of wheat per farm was 606 bushels. In North and South Dakota, even so drastic a reduction as a cut of 25 percent in freight rates on wheat, would have helped the average farmer to the extent of only \$24.24.

The losses a year ago, due to the heavy shortage of grain cars, stock cars, and in motive power, cannot, of course, be accurately computed. Farmers lost their markets through inability to move their crop at the right time. Stockmen took heavy losses through inability to load at the right time, and through shrinkage because of the slow movement to market. The aggregate money losses were in all probability far greater than any amount that freight rate reductions would have

involved. It seems clear that the farmer's outstanding requirement is a full measure of prompt and adequate service. Questions of rate are of far less importance.

Official investigations into the cost of wagon haul indicate that in two of the representative Montana wheat areas, the cost to the farmer to haul wheat to the local station is in one area 2 cents per bushel per mile and in the other 1-7/10ths cents per bushel per mile. These figures, while very accurately computed, seem somewhat high. A better basis of cost is probably presented in the rates charged in a number of areas, where it is necessary to haul wheat varying distances, and where the trucking rates are usually 1½ cents per bushel for the first three miles and one cent per bushel per mile for the remaining distance.

An investigation of the records of a leading grain carrying line, which moved more than 2 million tons of wheat of the 1922 crop, showed that the railroad moved a ton of wheat one mile for the trucking cost to the farmer of moving one bushel one mile. The average wheat haul by rail was 340.6 miles, and the average rate per ton per mile was 1.091 cents. Converted to a bushel basis, the railroad charged for hauling one bushel one mile less than three one hundredths (3/100ths) of a cent.

The figures make it obvious that the profit in wheat traffic to a grain carrying line depends not upon the rate, which is exceptionally low for the service rendered, but upon the volume, and that without a volume of grain traffic running into very large figures, the grain carrying lines could not remain in the business at the present rates.

Extraordinary efforts were necessary to overcome the car shortage following the crop of 1922. Early in 1923 the commercial and agricultural shipping interests in the northwestern area were organized as the Northwest Regional Advisory Board, and by intensive study of the transportation requirements of the area and close co-operation with the American Railway Association, it was able to forecast equipment requirements for the various crops and effect arrangements under which the storage of grain equipment began during the mid-year period. A sufficient shift was accomplished to meet all the requirements of the territory when the crops began to move.

What has been said of the essential character of the principle that railroad rates must be based upon the value of service rendered and cost of supplying it, forcibly suggests a common argument of the farmer, that he should have a guaranteed return based upon the "cost of service" -- cost of producing his crops plus a profit. This argument has appealed very forcibly to those who have been led to believe that the return to the railroad is based on government valuations and a guarantee. There are sharp differences between the economic relationships and position of the railroad and the relationship and position of the farmer. Transportation is a semi-public-private business. It is recognized

as a public service, and is under official regulation of the United States Government through the Interstate Commerce Commission; by the United States Railway Labor Board, and by the various commonwealths. The rates it may charge are governed by law and regulation, and its freedom of action is circumscribed in every direction. It has no discretion in originating traffic, but must take what its territory affords. Like the farmer, it is subject to the vicissitudes of good and bad years.

The farmer is under no regulation or control by law. His freedom in organizing his operations, determining from what source he shall seek his revenues, and in employing his personal initiative and resourcefulness to the highest degree, is in no respect impaired. While it would undoubtedly be to the public interest that the farmer receive not only his costs but a satisfying profit in addition, it is doubtful whether the farmer himself, in order to receive this benefit, would desire to put himself in the position of the railroad and submit to the same regulations and restrictions. A shorter and better way to the attainment of costs plus a profit, lies in the exercise of the individual freedom which is one of agriculture's greatest assets and attractions, the elimination of unprofitable lines of endeavor, and the substitution of production in which there is a profit. This, as a matter of fact, is a process which is making quiet but steadily increasing headway at this time, and is the shortest road to the establishment of the agriculture of the Northwest upon a right basis. Agriculture is a business and right foundations will not be achieved until it is a business in which those engaged may obtain a profit.

Farmers in the grain raising area suffer from a deficiency of information as to world crop conditions, acreage and production in competing countries, and other data necessary to intelligent formulation of planting programs. This has been noticeably true of wheat, which although in competition with the wheat of 38 other countries, has been continuously over-produced. In the Northwest the acreage did not shrink back to a pre-war basis until five years after the Armistice. An interesting proof of the necessity of such information was afforded this year. The statistical position of flax was put clearly before the farmers of this area at planting time, with information as to the average imports for the ten preceding years, and the probable domestic requirements for the year following the current crop. So quick were the farmers to utilize this information that the acreage in the four states in flax was increased 76.3%, the production increased 66.1%, and the value of the crop, which sold on a market showing an improvement of approximately 5 percent, was increased 74.2 percent. The production of the four states, which raise nearly all of the American flax, was raised from 11,383,000 bushels to 18,901,000 bushels, at which figures it is still far short of domestic requirements. The increase of 7,518,000 bushels in production added approximately \$15,000,000 to the income of the farmers.

The Department of Agriculture has promised a better organized and more efficient information service to northwestern farmers in advance of the planting season, which should prove of great value.

Requisite co-ordination and efficiency in farming operations throughout the northwestern area has not been achieved because it has not been made necessary except under the conditions of the past few years. During the period of gradual increment of land value, when operating costs were not burdensome and when mortgages were being made upon rising valuations, there was no necessity for the efficiency engineer, and conditions had not forced the adoption of economical and efficient methods comparable with those of commercial lines of business. Under the conditions of the present and under the conditions which will probably exist in the future, it is doubtful whether any farming operations except those founded upon a solid business basis will survive. Production will have to be held in line with consumption, and the business will have to be conducted with a view of putting dollars into the pocket rather than increasing the mortgage debt. In many areas, farmers have been surprisingly acute in finding new sources of revenue. In one section where wheat was formerly pre-dominant, they are taking one million dollars out of common white beans this year, and in a year's time have increased their revenue from sugar beets by \$500,000. In another, they are raising garden peas for eastern seed houses on a very satisfactory contract price made at planting time. In another, they have substantially increased the acreage devoted to the growing of garden vegetables for canning purposes, with large increases in their revenues. In another area, distant from the markets, and which was formerly almost entirely in wheat, the wheat crop has been in large part displaced by corn, and the farmers are concentrating their crop and shipping it in the form of hogs with an important saving in the freight rate,

The process of eliminating the unfit lands is working itself out with great rapidity. Farming is being confined to areas suitable to farm operations, where there are reasonable prospects for continuous crops. The elimination of unfit individuals has not been confined to farming, but has worked with equal force in banking and in all lines of commercial activities. The volume of banking, merchandising and commercial service is being brought down to the needs and requirements of the various communities, with a proportionate lessening of the overhead expense which the community must bear, and with desirable economic results, although the process has been accompanied by heavy loss and misfortune. Land values have been reduced to a basis that is consistent with the ability of the land to produce. An important shifting of crops has already occurred, and a further shift is in prospect, low revenue crops being displaced by those which involve either a lower cost or a higher return or both. The indebtedness of those who are continuing in the farming business is being decreased or re-adjusted on a basis permitting the farmer to work out. There has been unusual economy in farm operations.

The changes and readjustments that are in progress are tending to establish the agriculture of the area upon a basis that is fundamentally sound, and which when attained will permit it to look forward with assurance to a return of prosperity.

Since the high point following the collapse of 1920, the repayment of loans by borrowers has reduced the credit extensions of the Federal Reserve Bank of Minneapolis from 115 million dollars to less than 30 million dollars. The credit advances of the War Finance Corporation in this area, amounting to 65 millions, have been reduced

by repayment to 25 million dollars. The loans and discounts as reported by commercial banks in the district have been reduced approximately 200 millions. The repayments involved in these three items alone aggregate 325 millions, and they indicate but do not disclose the reduction of indebtedness between business houses, between individuals, or other private debt. Approximately one-half of the banking deposits of the district, or 834 million dollars, is owned by farmers.

The farmer's aggregate indebtedness is not definitely ascertainable except in part. It is entirely probable, however, that his banking and mortgage indebtedness at the present time is within \$1,200,000,000, against which the value of his lands and their improvements is \$8,039,351,000. This is exclusive of salable products on the farm and takes no cognizance of a production in seven crops during 1923 having a farm value on October 1 of \$569,000,000, an increase of 68 million dollars as compared with a year ago. At least it may be said that the ratio of assets to debt for agriculture as a whole is satisfactory, although the same statement naturally does not apply in many individual cases.

The number of motor cars upon farms and in towns of less than 1000 people in the agricultural state of South Dakota is exceeded by only four states in the Union -- Massachusetts, Rhode Island, the agricultural state of Iowa and the agricultural state of Nebraska. The number of motor cars on farms and in the smaller towns of North Dakota is exceeded by only five other states. South Dakota's cities and towns are unimportant industrially and have practically nothing behind them but agriculture. Yet in communities of more than 1000 people, the number of motor cars per thousand is the highest of any state in the Union. The agricultural states of Minnesota, North and South Dakota, are among ten states of the Union leading in the number of motor cars per thousand of rural population. While a motor car is a convenience rather than a farm asset, the facts prove the ability of the farmers to indulge in conveniences as well as necessities.

These facts do not indicate a bankrupt and dejected agriculture, but an agriculture not without resources and able to enjoy some luxuries at least, which is facing its difficulties with resolution and devoting great energy to solving them.

In too many areas the sources of farm profit have been too narrow. There has been insufficient attention to the rounding out of collateral lines of production in such a way as to stabilize and improve farm income. If the costs of farming, including taxes and labor, are to remain high, it is clear that the remedy for the unbalanced condition must be upon the cost rather than the price side, since only by keeping costs down and bringing income up, can the right relation be re-established. The serious trouble at present is not the price of wheat, the cost of commodities, or the price of labor, although these are difficult problems to solve, but insufficient appreciation of the entirely business character of agricultural operations and the necessity of conforming to proven business principles in its conduct. There has been a failure to understand that farming and all other businesses are inter-linked by

economic law and that no one factor can suffer injury without injury to all.

One of the urgent necessities of the present is impartial and impersonal investigation into the money possibilities of agriculture in this district. Plans that hold nothing but a hope in the distant future, have little significance at the present time. Only those plans are worth considering which show a reasonable prospect of putting dollars into the pockets of the farmers.

Following the Civil War, the then wheat areas of the West were forced to undergo highly important changes in their agricultural methods. Unfortunately, the process was one of some years duration and was slow and difficult. All of the evidence indicates that the conditions of the present are parallel and that parallel results must be anticipated. Agriculture has, however, the assurance of enormous co-operation, which the state of development in earlier years did not permit.

In viewing the present situation in the Ninth District, I am more than ever impressed with the soundness and force of Dr. Adolph C. Miller's statement to businessmen, bankers and farmers, at a meeting at Helena, Montana, recently:

"The more tinkering I see by legislators and politicians in an attempt to remedy our economic ills, the more confidence I have in God Almighty, and the less respect I have for ourselves. The natural and unseen forces of nature have done and will do more to adjust our wrongs, real and imaginary, than any legislation we can pass."