



Inequalities in the tax burden borne by agricultural lands in Montana
by Howard H Lord

A THESIS submitted to the Graduate Committee In partial fulfillment of the requirements for the Degree of Master of Science in Agricultural Economics
Montana State University
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Abstract:

1. The laws of Montana require that, "All taxable property must be assessed at its full cash value", and the State Board of Equalization has been established with the authority, "to do all things necessary to secure a fair, Just and equitable valuation of all taxable property among counties, between different classes of property and between Individual tax payers*."
2. Inequalities arising from unequal levies among counties and school districts are as damaging and as unjust as those arising from unequal assessments. The tax per acre ensures the combined effect of these two sources of inequalities.
3. The only "fair, Just and equitable" system of assessing and taxing agricultural land is a system based upon the productivity and hence upon the tax paying ability of the land.
4. The most important inequalities are among the grades of land, fourth grade farm land is overburdened more than any other grade with a tax amounting to more than 400 per cent of its tax paying ability; third grade farm land is second with a tax amounting to about 330 per cent of its ability to pay. Second grade farm land carries its Just burden of taxes while first grade farm land pays only about 75 per cent of its ability to pay. With the exception of first grade grazing all grades of grazing land carry a tax burden averaging about 250 per cent of their ability to pay. first grade grazing land pays a tax that is 175 per cent of its tax paying ability.
5. The second most important group of inequalities is that among the counties. The tax on third grade farm land varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties.
6. There are less important yet significant inequalities among individual properties, among school districts, among ownership classes and among lands of the same grade devoted to different uses.
7. Generally speaking, inequalities are due to the following causes: (1) lack of an adequate system of assessing farm lands; (2) failure on the part of government officials to appreciate the significance of tax inequalities; (3) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment; (4) over expansion of social services in areas of low grade soil; and (5) over capitalization of farm and ranch real estate.
6. Inequalities in the tax burden are one of the causes contributing to 'the large amount of farm tax delinquency in Montana.
6. Equalisation of tax burdens is a necessary part of a constructive land utilization program because in many instances the present taxes are higher than the land could pay in any conceivable type of production.

10. The results of this study indicate the need, in Montana, of a system of assessing and taxing farm lands on the basis of their ability to pay.

11. Two plans have been proposed, both based upon a scientific soil survey and an objective determination of the best use of the land, by which Montana farm lands might be assessed and taxed according to their ability to pay.

INEQUALITIES IN THE TAX BURDEN BORNE
BY AGRICULTURAL LANDS IN MONTANA

by

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A THESIS

Submitted to the Graduate Committee in
partial fulfillment of the requirements
for the Degree of Master of Science
in Agricultural Economics at
Montana State College

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June, 1936

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SUMMARY AND CONCLUSIONS

1. The laws of Montana require that, "all taxable property must be assessed at its full cash value", and the State Board of Equalization has been established with the authority, "to do all things necessary to secure a fair, just and equitable valuation of all taxable property among counties, between different classes of property and between individual tax payers".

2. Inequalities arising from unequal levies among counties and school districts are as damaging and as unjust as those arising from unequal assessments. The tax per acre measures the combined effect of these two sources of inequalities.

3. The only "fair, just and equitable" system of assessing and taxing agricultural land is a system based upon the productivity and hence upon the tax paying ability of the land.

4. The most important inequalities are among the grades of land. Fourth grade farm land is overburdened more than any other grade with a tax amounting to more than 400 per cent of its tax paying ability; third grade farm land is second with a tax amounting to about 330 per cent of its ability to pay. Second grade farm land carries its just burden of taxes while first grade farm land pays only about 75 per cent of its ability to pay. With the exception of first grade grazing all grades of grazing land carry a tax burden averaging about 250 per cent of their ability to pay. First grade grazing land pays a tax that is 175 per cent of its tax paying ability.

5. The second most important group of inequalities is that among

the counties. The tax on third grade farm land varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties.

6. There are less important yet significant inequalities among individual properties, among school districts, among ownership classes and among lands of the same grade devoted to different uses.

7. Generally speaking, inequalities are due to the following causes: (1) lack of an adequate system of assessing farm lands; (2) failure on the part of government officials to appreciate the significance of tax inequalities; (3) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment; (4) over expansion of social services in areas of low grade soil; and (5) over capitalization of farm and ranch real estate.

8. Inequalities in the tax burden are one of the causes contributing to the large amount of farm tax delinquency in Montana.

9. Equalization of tax burdens is a necessary part of a constructive land utilization program because in many instances the present taxes are higher than the land could pay in any conceivable type of production.

10. The results of this study indicate the need, in Montana, of a system of assessing and taxing farm lands on the basis of their ability to pay.

11. Two plans have been proposed, both based upon a scientific soil survey and an objective determination of the best use of the land, by which Montana farm lands might be assessed and taxed according to their ability to pay.

INEQUALITIES IN THE TAX BURDEN BORNE BY AGRICULTURAL LANDS IN MONTANA

I. INTRODUCTION

The amount of taxes paid by Montana taxpayers has more than trebled in the past sixteen years. During the same period the population of the state has remained almost stationary and property values have decreased by 400,000,000 dollars. (2) The largest part of this increased revenue is derived from taxes on the sale of gasoline, liquor, and other commodities. But, with this increase in sales taxes there has been no corresponding decrease in the property tax. Property taxes have remained the same, in spite of the fact that the value of the property has decreased by 400,000,000 dollars.

What does this mean to the owner of agricultural land in Montana? It means this: As a consumer he must pay his share of the increased sales taxes and as a property owner he must continue to carry the same burden of property tax. Moreover, he must pay this increased tax from a decreased farm income. "In 1933 it took nearly twice as much wheat to pay the average tax per acre on Montana farm real estate as it took in 1913, three times as much lamb, and about one and a half times as much wool".(3) Hence, the tax burden carried by the Montana farm owner has not only trebled, but his ability to pay has decreased to such an extent that farm taxes are probably four or five times more difficult to pay now than they were sixteen years ago.

The best evidence that a readjustment is needed in Montana farm taxes is the fact that many farm owners have either refused or been unable to pay their taxes. By the end of 1936 approximately 3,500,000 acres of

farm land will have been taken by counties through tax deed. (2) Such large-scale delinquency is not only a problem from the standpoint of decreased public revenue, but it is ample evidence that the tax load on Montana farm land is either too great or that it is not distributed according to the ability of the land to pay; or as is most probably the case the burden is both too great and unequally distributed.

Purpose of the Investigation.

This investigation is designed: (1) To analyze and determine the extent of inequalities in the taxation of agricultural lands in Montana; (2) to discover the nature and cause of such inequalities as may exist by a thorough study of the operation of the prevailing method of assessment and taxation; and (3) to study the tax and assessment problem with a view toward finding facts upon which to base recommendations for a more equitable system of taxation.

II. METHOD OF THE INVESTIGATION

The philosophy underlying the method used in this study as well as the method itself is so different from the approach used in previous studies dealing with tax inequalities that it will require somewhat detailed explanation. The following discussion is presented with a two-fold purpose: (1) To acquaint the reader with the method used in the study in order that he may better understand and evaluate the results; and (2) to justify, if possible, the basic premises upon which the statistical results are based.

Previous studies of the inequalities in the taxation of agricultural

lands have confined themselves to the inequalities in assessments. In most cases the inequalities in assessments have been based upon the sale value of the property. Investigations of this type based upon the unequal relationship between assessed valuations and sale value rest firmly on the time tried and legally supported premise that inequalities in assessment are the only inequalities and unequal levies among different minor civil divisions and among counties are not inequalities because they have the support of the law and custom. The use of the sale value of property as the basis of inequality assumes that the play of economic forces will cause land to be sold for its "true" value. So much for other methods.

The property tax system now operating in Montana was put into effect in 1919 and is known as the Montana classified property tax. This system was put into effect with the specified purpose of obtaining a more equitable distribution of the tax burden among different economic groups and different kinds of property. In this connection the law states as follows, "all taxable property must be assessed at its full cash value". ^{1/} A State Board of Equalization was also created and delegated with the authority, "to do all things necessary to secure a fair, just and equitable valuation of all taxable property among countries, between different classes of property and between individual taxpayers". (4) Legally then, all agricultural land in Montana should be assessed according to its "full cash value". A study of farm tax inequalities in Montana measuring the disparity between sale value and assessed value would show the departures

^{1/} "Full cash value" is defined as the amount at which the property would be taken in payment for a just debt from a solvent debtor.

from the intent of the law. The question might be raised, however: would such a study bring to light the real inequalities in the tax burden on Montana farm lands? Let us consider the merits of sale value as a basis of assessing agricultural land for taxation. In the first place the sale value is known for only a small proportion of the total farm land. Circumstances other than the merits of the property may and often do effect the sale price. Furthermore, how are lands to be assessed that have never been sold? There has never been a detailed and accurate inventory taken of Montana's land resources for assessment purposes. Sale value does not necessarily reflect the true merit of farm land. At any given time the sale value is known for only a very small part of the total land to be assessed. Therefore, the only conclusion that can be drawn is that sale value is entirely inadequate as a basis of assessing farm land or for determining the real inequalities in assessments.

Now let us consider the measure of only assessed value without considering differences in the rate of levy as a measurement of tax inequalities. In the eyes of the law, inequalities in assessments are the only inequalities. Thus, unequal tax burdens arising from the different rate of levy among counties and school districts are justified under the present law. The philosophy underlying such a system is the carry over from the days of the horse and buggy when the majority of the people were born, lived, and died within one small community. In the culture where it developed the small area tax base was well adapted, but today with our enlarged community growing out of the developments in transportation and

communication, the school district, the county and in some cases the state is too small a unit for levying taxes. People do not use only the roads within their own school district or even their own county or state. Today they travel over a much wider area. The gasoline tax now providing revenue for road construction in Montana and other states is a tax conceived to meet the modern conditions of travel. Unfortunately we have made no such progress in our system of deriving revenue for the support of our primary and secondary schools. Taxes for the support of our local school systems are still levied upon a school district and, in the case of the county high school, on a county base. The effect of such a system of taxation is that those who are unfortunate enough to own property in a district where there are children to be sent to school must pay for their education while in this modern age, not they as individuals, but the entire society over a nation-wide area derive the benefits of an educated citizenry. Furthermore, the children requiring education are not evenly distributed throughout the country nor are they distributed according to the value of the property. There may be and often is a concentration of children in poor agricultural areas. The land owners in that area pay for the education of the children while land owners in adjoining school districts, where there are no children, do not bear the burden of educating the on-coming generation.

The Montana Soil Survey--The Basis for Measuring Inequalities.

The measurement of inequalities in this investigation is based upon the Montana soil survey and land classification. This survey has been com-

pleted in only 21 counties and the study is therefore limited to the area shown in Figure 1. The area represented is quite large and is quite typical of the part of Montana east of the continental divide. Thus the results of this study should be applicable to more than three-fourths of the agricultural lands in Montana.

A soil survey is essentially a scientific inventory of the soil resources in any area. The reconnaissance survey, upon which this study is based, furnishes information in regard to: (1) Soil resources, (2) adaptability of the topography to agriculture, and (3) the carrying capacity of the different soil areas for livestock. ^{2/}

In using the soil survey as a basis of determining inequalities in taxation certain factors effecting the value of land are not taken into consideration. For example, nearness to schools, towns, markets and improved roads is not considered in evaluating the land solely on the basis of the soil survey. Although these factors should be given their proper weight in assessing agricultural land they have been omitted from this study because of the difficulty in measuring their effect statistically. Furthermore, although these factors do effect the value of the land as a place to live they do not materially effect its ability to pay taxes. ^{3/}

Another question that might be raised in connection with the use of the soil survey land classification as a basis for determining the pre-

^{2/} For Land Classification see Sec. I. Appendix.

^{3/} The land used in this study was devoted either to dry land farming or to grazing and generally speaking had no other important alternative uses. In these uses the productivity of the land as determined by the soil survey is by far a more important criteria of its value than the location or other factors.

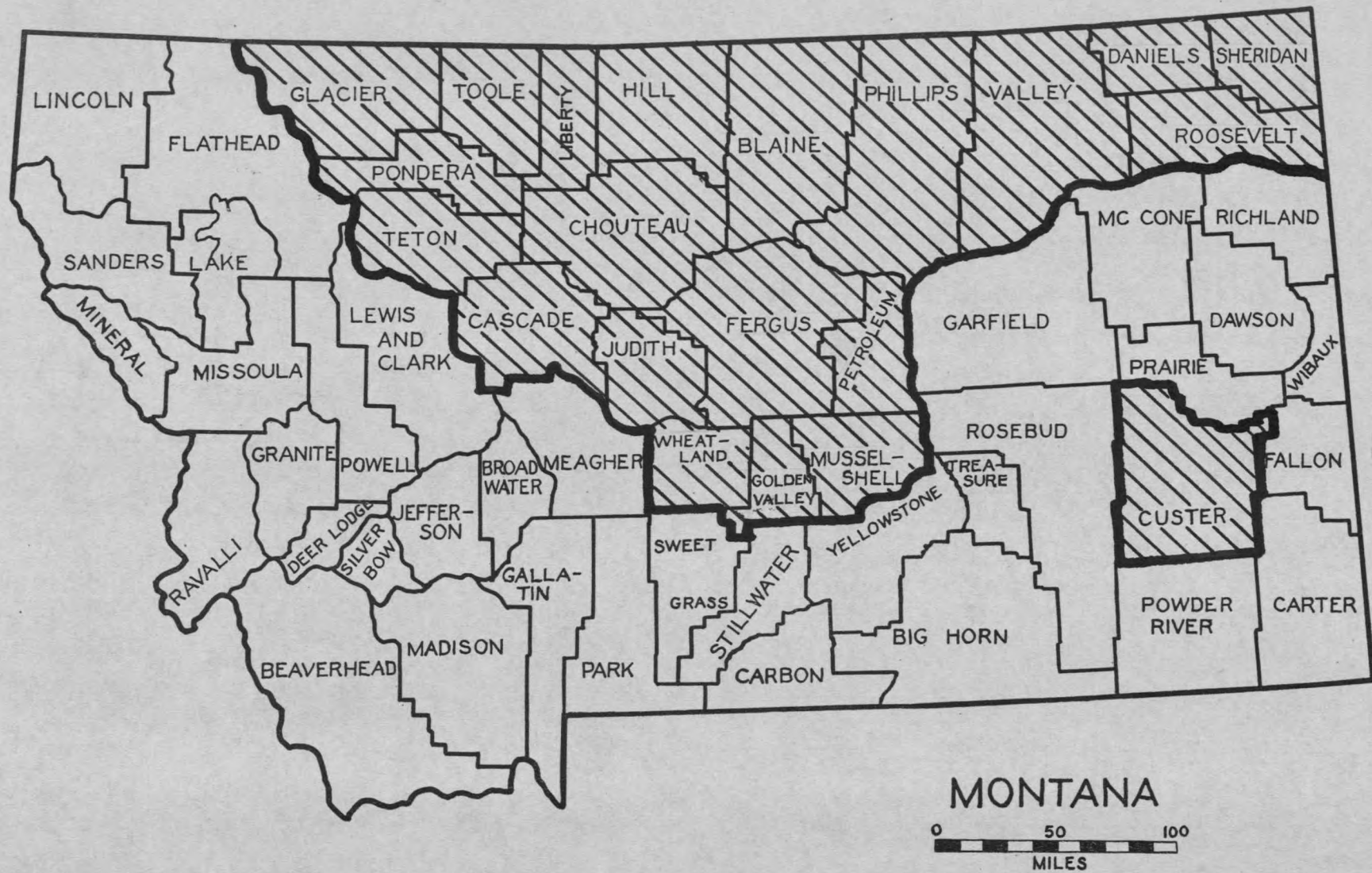


Figure 1. MAP OF MONTANA SHOWING THE 21 COUNTIES COVERED IN THIS STUDY.

sence of inequalities is the accuracy of the survey itself. Part of the survey was completed about eight years ago and it is known that some of the land has deteriorated physically since that time. Furthermore, in many areas the reconnaissance survey is more general than would be needed to provide a basis for equal assessments. In spite of all of these questions that may be raised regarding the use of the Montana soil survey as the sole criteria for determining inequalities, it still is the best information available for measuring the true value of the land over a large area, and will serve adequately to bring to light the more important inequalities under the present system.

Source of Data.

Data relative to the tax burden borne by each parcel of land was obtained from assessment and delinquency records in the files of the Department of Agricultural Economics, Montana Agricultural Experiment Station. These records represent all tracts of Montana farm land that have been delinquent in recent years. Since these records represent more than three-fourths of the agricultural land within the area studied they provide a good cross section of the various classes and grades of land to be sampled. These records give the number of acres, the legal description, the owner, the value and the tax paid for each parcel of land. Since the inequalities are caused jointly by unequal assessments and unequal levies these two factors have been measured concurrently in terms of the tax paid per acre. Inequalities in assessment have also been measured in all cases and may be found in Table VI of the Appendix.

Limitations of Data.

The size of sample used in the investigation was limited by two factors : (1) The number of parcels of land that were available having only one grade of land within their boundaries; and (2) the amount of data that could be assimilated and analyzed within the time available.

About 3000 separate parcels of land averaging about 350 acres per parcel were used in the study. The sample was taken as nearly as possible at random; the only limitation being that each parcel selected could represent only one grade of land. The assessed valuation and tax upon each parcel were available for a period varying from one to six years during the period 1928 to 1933. The average parcel of land used in the study was represented in about four years of that period. Since there were variations in the assessed valuation and tax from year to year the data were analyzed both by years and for the entire period. However, since the important inequalities continued without exception over the entire period, the results of the study have been presented for the six year period rather than for any single year.

III. VALUE AND TAX PAYING ABILITY OF DIFFERENT GRADES OF MONTANA LAND

It has been necessary in many cases to compare the tax and the assessed valuation on one grade of land with that of another. This could not be done without having some notion as to the relative value and relative tax paying ability of the different grades. The following table shows the relative value and relative tax paying ability of each grade of land.

Table I. VALUE AND TAX PAYING ABILITY OF EACH GRADE OF LAND. ^{4/}

	Value Per Acre	Tax Paying Ability Per Acre
Farm land:		
First Grade	\$20.00 per acre	40 cents per acre
Second "	11.50 " "	23 " " "
Third "	3.00 " "	6 " " "
Fourth "	1.50 " "	3 " " "
Crazing Land:		
First Grade	3.75 per acre	7½ cents per acre
Second "	3.00 " "	6 " " "
Third "	2.00 " "	4 " " "
Fourth "	1.50 " "	3 " " "
Fifth "	1.00 " "	2 " " "

^{4/} c.f. p. 14-16.

The valuation and estimated tax paying ability of first and second grade farm land is based upon their earning capacity in wheat production. Since third and fourth grade farm land do not return a net profit in wheat production at prevailing prices, their value and tax paying ability has been determined along with that of all grades of grazing land by their value as grazing lands.

The relative value and tax paying ability of grazing lands has been published in Montana Bulletin No. 311, Readjusting Montana's Agriculture by M. H. Saunderson. The following quotation explains the method used in computing these values.

"The annual land lease values on a cow or ewe basis of \$4.00 and \$5.00 a cow and \$1.00 to \$1.25 a ewe, applied to these grades of land and their grazing capacity, give a basis for the determination of lease values for different grades of lands;

Lease value of first grade range land, 18 to 22 cents per acre
" " " second " " " 12 to 17 " " "
" " " third " " " 9 to 11 " " "
" " " fourth " " " 7 to 8 " " "
" " " fifth " " " 4 to 6 " " "

"A comparable investment value per acre for these five grades of range lands, based upon a total investment of \$50.00 to \$60.00 per cow and \$12.00 to \$15.00 per ewe in land and improvements, would be :

First grade range land	\$2.50	to	\$3.50
Second " " "	1.50	to	2.50
Third " " "	1.00	to	1.50
Fourth " " "	.75	to	1.00
Fifth " " "	.50	to	.75

"These investment values for range lands are based upon a land tax situation that would not take more than one-third of the annual lease value of such lands. Such an annual tax rate upon these five different grades of range land would amount to:"

On first grade range land	6 cents	to	7 $\frac{1}{2}$ cents	an acre
On second " " "	4	"	6	" " "
On third " " "	3	"	4	" " "
On fourth " " "	2	"	3	" " "
On fifth " " "	1	"	2	" " "

A basis for the relative value and relative tax paying ability of the various grades of farm lands is found in an unpublished study conducted by the Department of Agricultural Economics, Montana State College. The results of the study show the comparative net income from growing wheat on the four grades of farm land.

Table II. - COSTS AND NET RETURNS PER ACRE ON VARIOUS GRADES OF FARM LAND: 800 ACRES ALTERNATE CROP AND SUMMER FALLOW SYSTEM: WHEAT 75 CENTS PER BUSHEL

Farm Land	Bushels Per Acre	Gross Income	Total Cost	Net Profit or Loss	Value Per Acre	Tax Paying Ability Per Acre
First Grade	22	\$16.50	\$10.62	\$5.98	\$20.00	\$.40
Second "	18	13.50	10.07	3.43	11.50	.23
Third "	14	10.50	9.52	.98	3.00	.06
Fourth "	11	8.25	9.02	-.77	1.50	.03

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An 800 acre set up is probably somewhat larger and is a more efficient sized unit than is typical of Montana wheat farms. Also the assumed yield per acre is higher for all grades of land than their historical record would justify. Neither of these factors, however, has any effect upon the relationship between the net profits to be made on the different grades of land.

The figures representing the tax paying ability of the various grades of land, as shown in Table II, are derived as follows. A value of \$20.00 per acre has been assumed for first grade farm land. This is the valuation used in computing the land charge used in the cost study cited. On the basis of this valuation the tax paying ability of number one farm land was set at 40 cents per acre. Forty cents is 2 per cent of the assumed valuation of \$20.00 per acre. Two per cent of the valuation was chosen as a just tax for two reasons: (1) The Federal Land Bank has established precedent in this connection by refusing to make loans where the tax is greater than 2 per cent of the appraised valuation, and (2) the tax paying ability of the five grades of grazing land is approximately 2 per cent of their value.

The relative tax paying ability of second and third grade farm land has been determined in the same way as in the case of number one. A tax of 23 cents and 6 cents respectively on second and third grade farming bears the same relationship to the net profits to be made raising wheat on those grades of land, as the tax on number one farm land bears to the profits to be made on that grade of land.

There is no net profit to be made by raising wheat on fourth grade farm land. See Table II. Since it has no tax paying ability as farm land,

it can be taxed only as grazing land. The value of fourth grade farm land for grazing purposes will vary widely, depending upon whether or not the land has been tilled, and in case of land that has been tilled and since abandoned, the extent to which the forage cover has returned. The carrying capacity of these lands will range from that of third grade grazing down to that of fifth grade grazing. On an average, the tax paying ability of fourth grade farming land will probably not be above 3 cents an acre.

With the relative tax paying ability as a base it is possible to compare one grade of land with another in terms of the per cent the actual tax paid is of the tax paying ability for the same grade of land. If any parcel of land is paying a tax amounting to 100 per cent of its tax paying ability, it is paying a tax in a just proportion to its productivity; if the tax paid is 200 per cent of its tax paying ability then the tax burden is just twice as large as the tax paying ability of the land, and so on. ^{5/}

IV. ANALYSIS OF INEQUALITIES

Inequalities Among Grades of Land.

Figure 2 shows the assessed valuation of each grade of land in terms of the per cent the assessed valuation is of the valuation based upon its productivity. Figure 3 gives about the same picture except that it shows the tax paid in per cent of the tax paying ability. Comparing the two charts it will be noticed that the inequalities in tax paid per acre are

^{5/} By referring to Table II of the Appendix the reader may convert the "tax paid in per cent of tax paying ability" into the actual tax paid, and from Table III of the Appendix the "assessed valuation in per cent of production value" may be converted into actual assessed value.

PER CENT

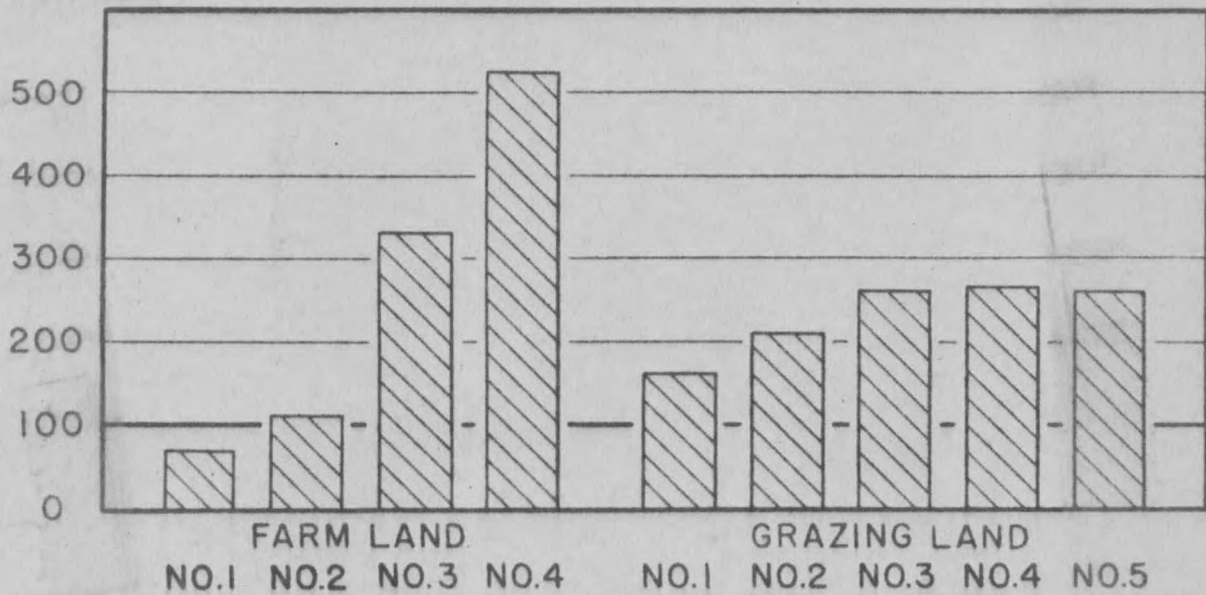


Figure 2. INEQUALITIES IN ASSESSMENTS AMONG GRADES OF LAND
Assessed Value in Per Cent of Production Value
(Source of Data, Table IX. Appendix)

PER CENT

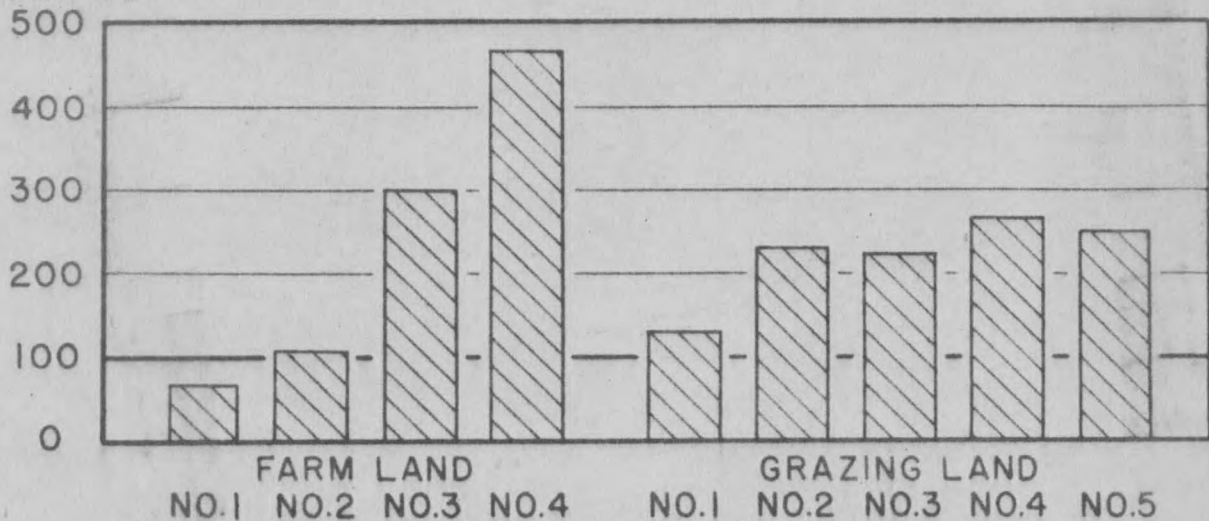


Figure 3. INEQUALITIES IN THE TAX BURDEN AMONG GRADES OF LAND
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table IX. Appendix)

not quite as great as the inequalities in the assessed valuation. In other words, the rate of levy has tended to correct the inequalities in assessed valuation. The most salient fact brought out by these two charts is the inequality in the tax burden among the grades of land. First grade farm land is not carrying its full share of the tax burden. Second grade farm land is carrying just about its just load, while third grade farm land is paying a tax amounting to 300 per cent of its tax paying ability. Fourth grade farm land is still further out of line with a tax burden amounting to more than 450 per cent of its ability to pay. First grade grazing land is paying only a little above its ability to pay but second, third, fourth, and fifth grade grazing are all paying a tax that is well over 200 per cent of their tax paying ability.

Figures 4 and 5 show the distribution of farming and grazing lands among inequality groupings. Notice the total number of acres and the amount of each grade of land, coming within each grouping. These charts show not only the intensity of inequalities among grades of land but also the number of acres that are affected.

Some of the factors that may be responsible for these great inequalities in the tax burden among grades of land are: (1) Failure on the part of government officials to appreciate the significance of tax inequalities; (2) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment, (3) inability of assessors to determine the production value of farming and grazing lands, (4) over expansion of social service in areas of low grade soil, and (5) over capitalization of farm and ranch real estate.

THOUSANDS
OF ACRES

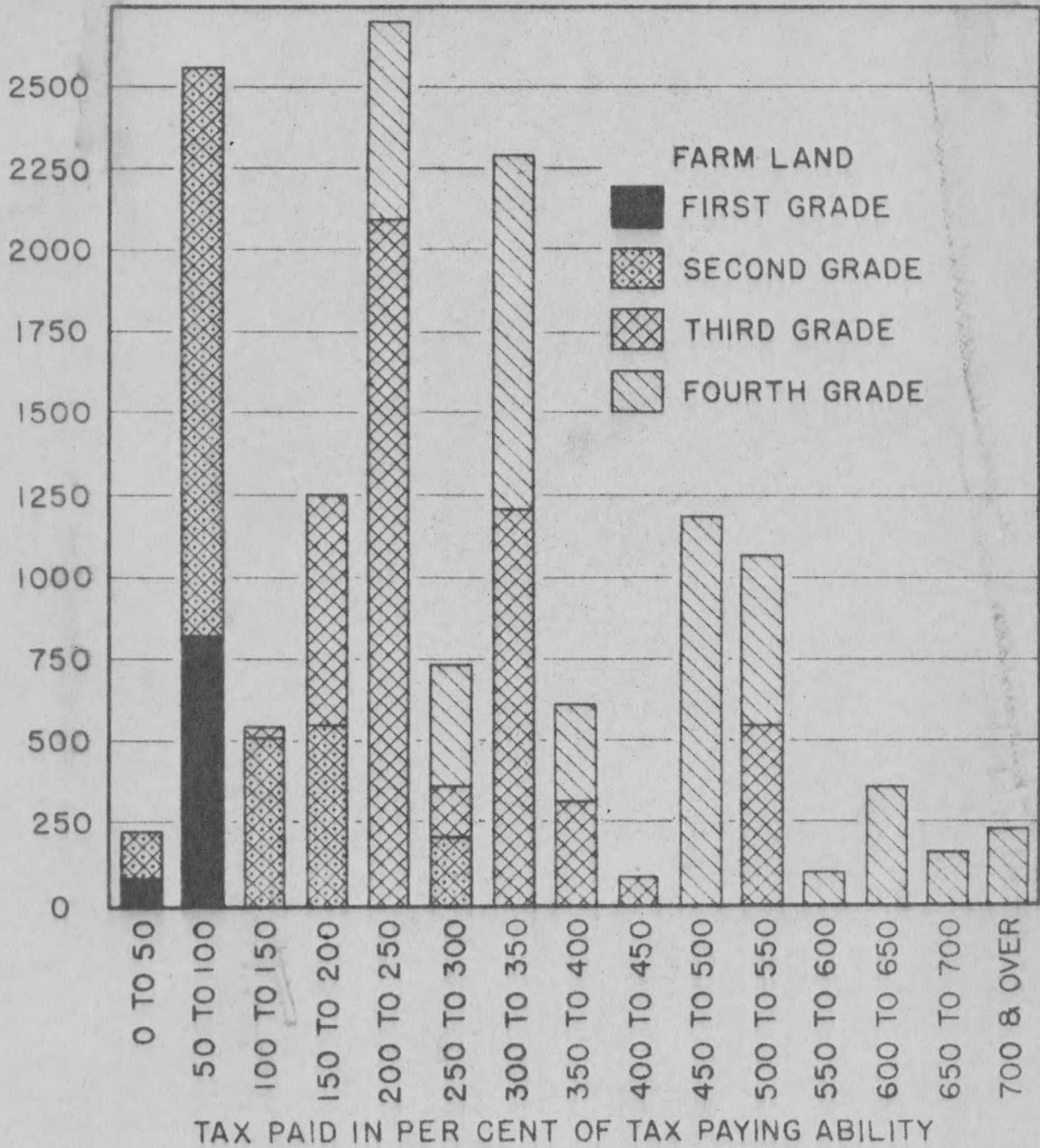


Figure 4. ACRES OF FARM LAND IN 21 COUNTIES BY INEQUALITY GROUPS
(Source of Data, Table IV Appendix)

THOUSANDS
OF ACRES

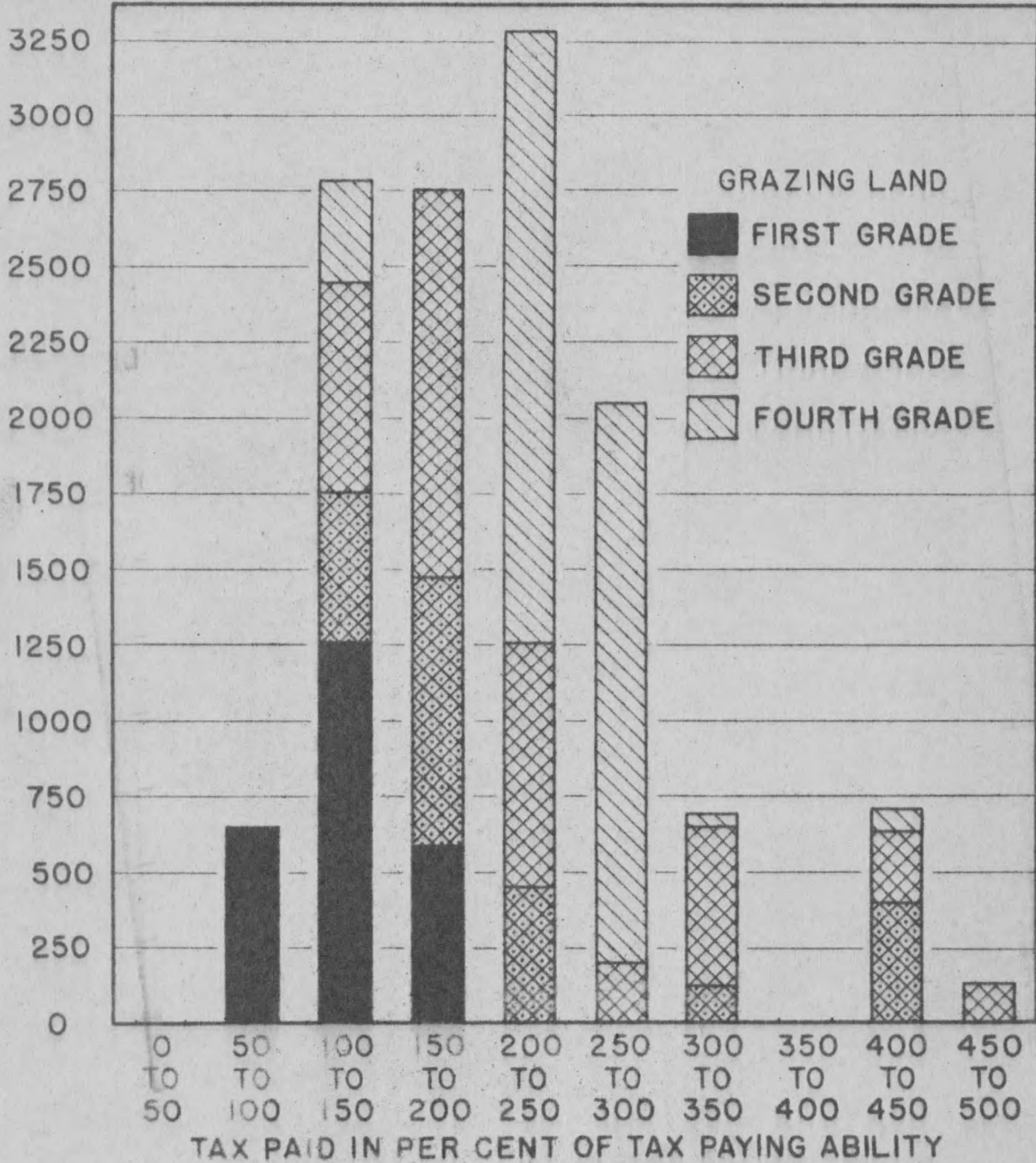


Figure 5. ACRES OF GRAZING LAND IN 21 COUNTIES BY INEQUALITY GROUPS
(Source of Data, Table IV Appendix)

Inequalities Among Individual Properties.

Although inequalities among individual properties do not lend themselves to such sweeping conclusions regarding their nature and cause as do those among different grades of land, they are, nevertheless, of great importance. Figure 6 illustrates the inequalities among individual properties in Fergus County. The total sample of farm land taken in Fergus County is grouped into inequality classes. The classes are expressed in terms of the tax paid in per cent of the tax paying ability. Farmers on first grade farm land are paying from below 50 per cent to above 200 per cent of the tax paying ability of their land. There are still greater inequalities among the individual owners on the lower grades of land. Farmers on second grade land pay from 50 to 400 per cent of their just tax; and those on third grade pay from 50 to more than 700 per cent of the actual tax paying ability of the land they are farming. In other words farmers on third grade land are paying a tax that varies from 6 to more than 42 cents an acre.

It is hard to explain such extreme inequalities among individual parcels of land of the same grade. Some of the more important factors are probably: (1) Indifference of county assessors, (2) inability of assessors to make accurate assessments, and (3) inability of farmers to know or offer proof that they are carrying an unjust burden of taxes.

Inequalities Among School Districts.

There are appreciable inequalities in the taxation of the same grade of land within different school districts. Figure 7 illustrates the varia-

NUMBER OF
ACRES IN SAMPLE

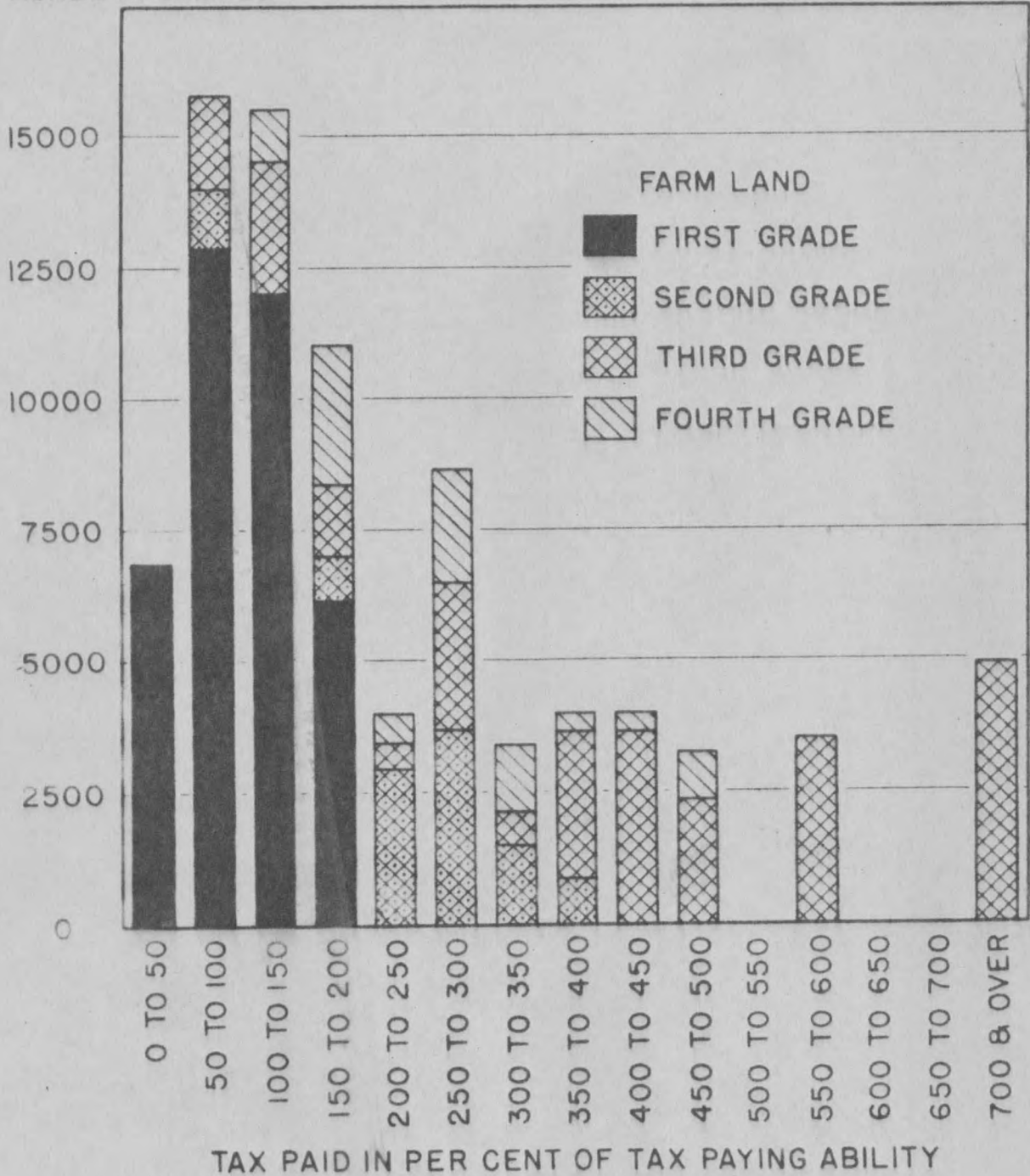


Figure 6. INEQUALITIES AMONG INDIVIDUAL TRACTS OF LAND IN FERGUS COUNTY
(Source of Data, Table V Appendix)

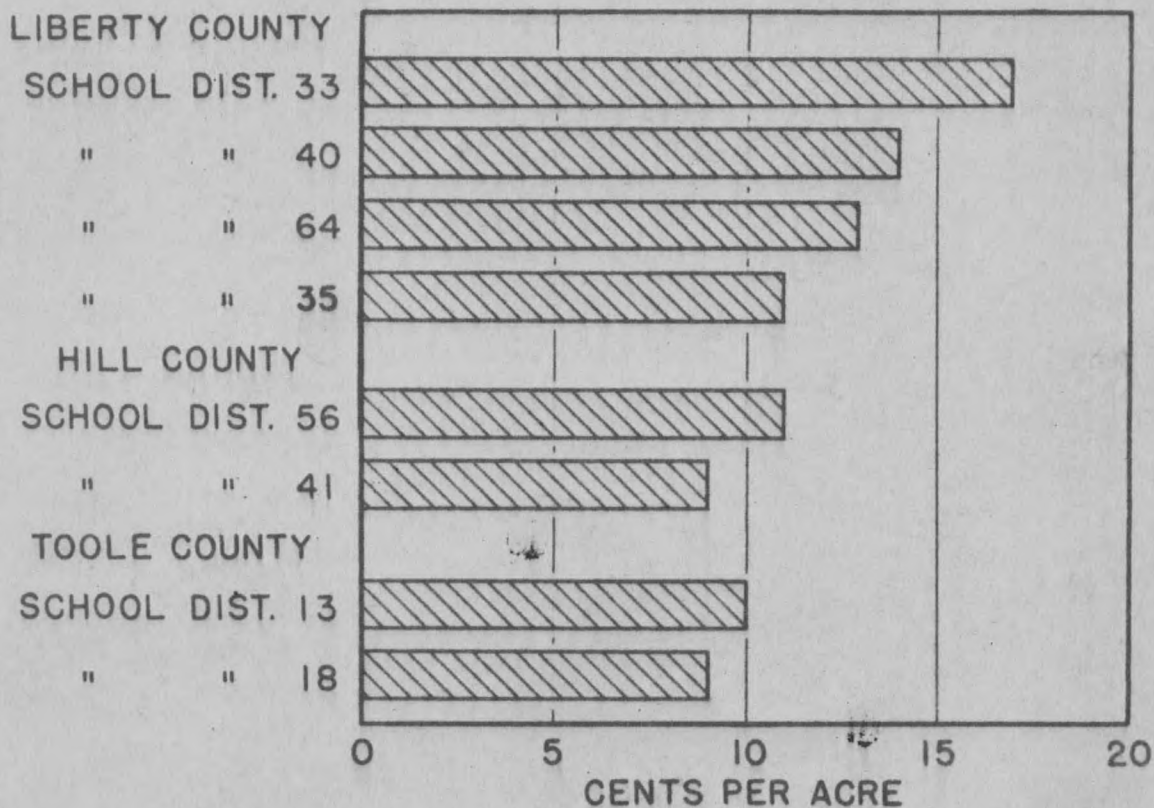


Figure 7. INEQUALITIES IN TAXATION AMONG SCHOOL DISTRICTS IN SELECTED COUNTIES:
Based on Fourth Grade Farm Land
(Source of data, Table VII Appendix)

tion in the tax paid per acre on fourth grade farm land in four different school districts in Liberty County and in two school districts each in Hill and Toole Counties. Liberty County affords the best illustration of the variation in the tax burden on the same grade of land in the same county but in different school districts. The difference in the tax burden on fourth grade land in different school districts in Liberty County ranges from 17 cents per acre in school district 33, to 11 cents per acre in school district 35. This is one of the minor types of inequalities, but it is nevertheless of some importance.

Variations among school districts are caused in a large degree by the following factors: (1) Variation in assessed valuation among individual properties in different school districts, (2) difference in levy among the school districts, and (3) the use of land in different school districts. ^{6/}

Inequalities Among Counties.

Second in importance only to the inequalities among grades of land are the inequalities among counties. Figure 8 shows the variation in the tax paid per acre on third grade farm land in twelve different counties. Notice that the tax varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties. If six cents per acre is the just tax on third grade farm land, farmers on third grade farm land in Daniels and Judith Basin Counties are paying about 500 per cent of their just tax load.

^{6/} See Figure 11.

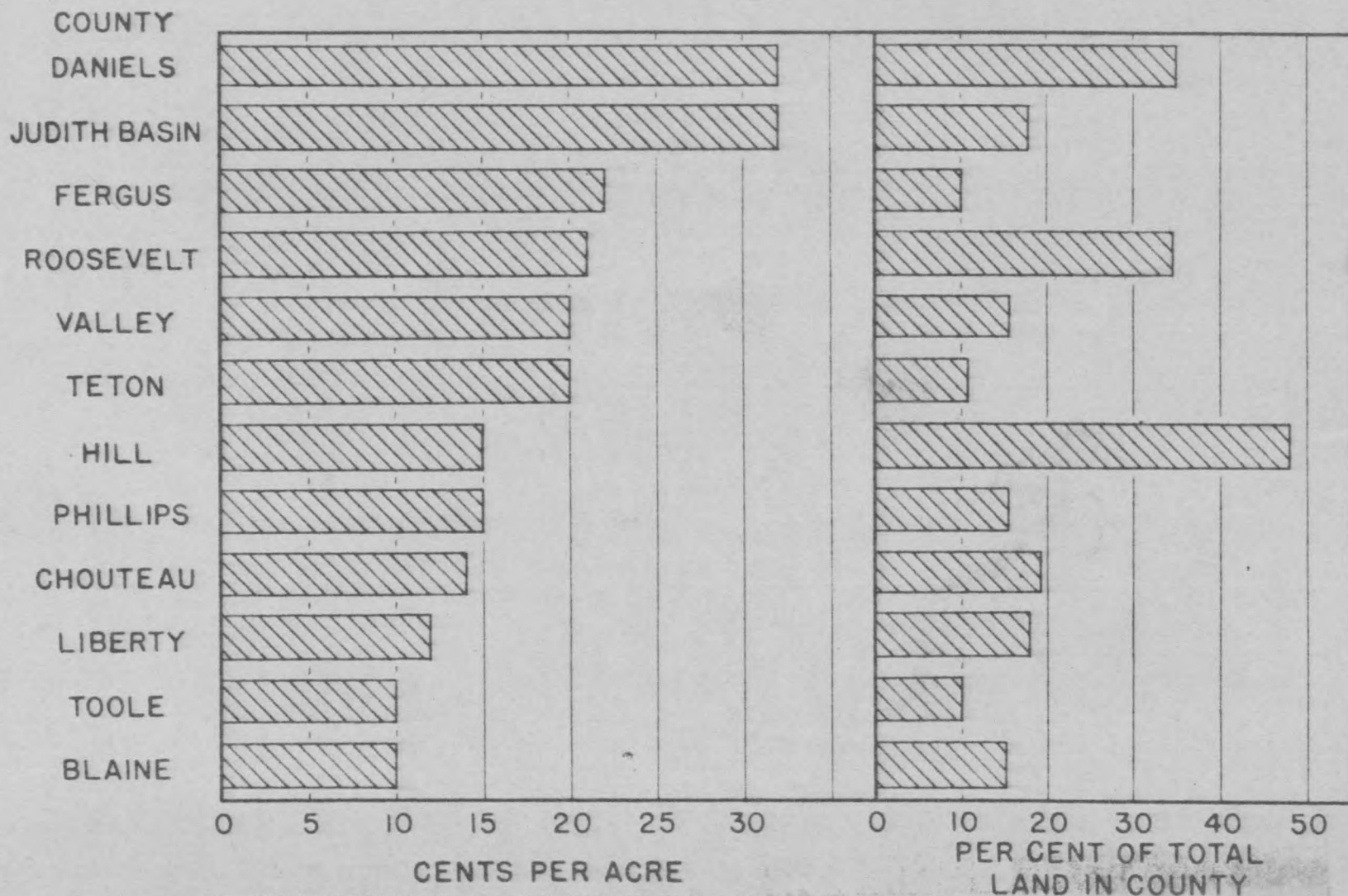


Figure 8. INEQUALITIES IN THE TAX BURDEN ON THIRD GRADE FARM LAND IN DIFFERENT COUNTIES
 (Source of Data, Table VI Appendix)

Figure 9 shows a comparison of the tax burden borne by farm land in Chouteau and Judith Basin Counties and the average tax burden borne by farm land in the 21 counties used in the study. On an average farm lands in Judith Basin County pay twice as great a tax as the same grades in Chouteau County and more than a third greater tax than is paid by the average of the 21 counties.

There are several factors causing the variation in the taxation of the same grade of land in different counties. Some of the more important causes are: (1) Difference in public expenditures among counties, (2) difference in the assessed valuation of the lands in different counties, resulting from the difference in judgment and methods among county assessors; (3) the variation in the quality of land among counties; and (4) failure of the State Board of Equalization to accomplish its purpose of equalizing the assessment of farm land among counties.

Inequalities Among Ownership Classes.

The entire sample used in this study was divided into three ownership classes: resident owned, non-resident owned, and corporate owned. ^{7/} Figure 10 shows the inequalities among the three ownership classes. Non-resident owners in all cases except that of first grade farm land pay an average of about three cents less tax per acre than the resident owners. The tax on resident owned land is higher for all grades of farm land than for either non-resident or corporate owned land, but on grazing land except

^{7/} Land classified as corporate owned is held by banks, loan companies, and railroads and does not include incorporated livestock companies.

GRADES OF FARM LAND

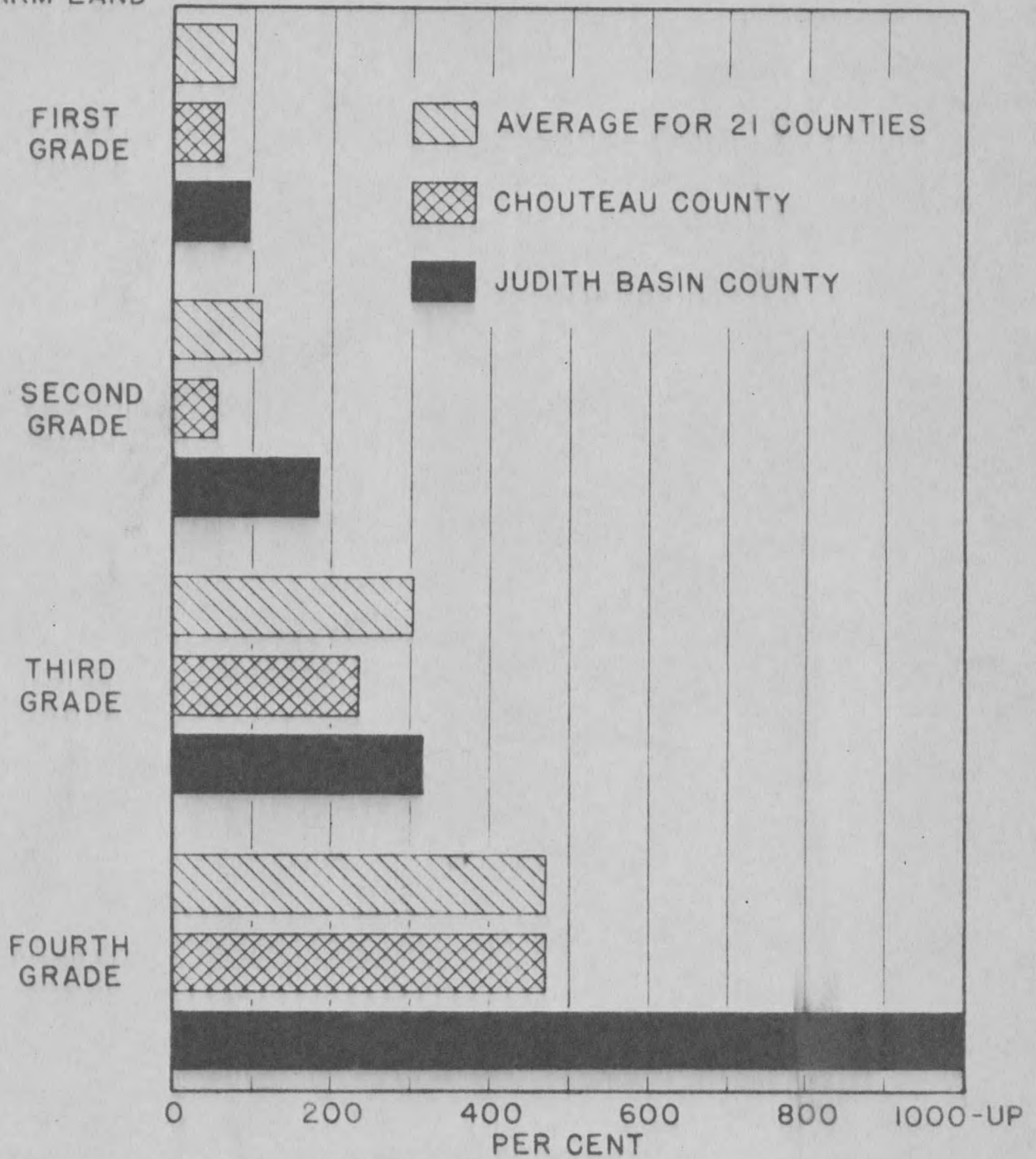


Figure 9. COMPARISON OF TAX BURDEN IN SELECTED COUNTIES WITH AVERAGE FOR GROUP
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table VI Appendix)

CENTS
PER ACRE
30

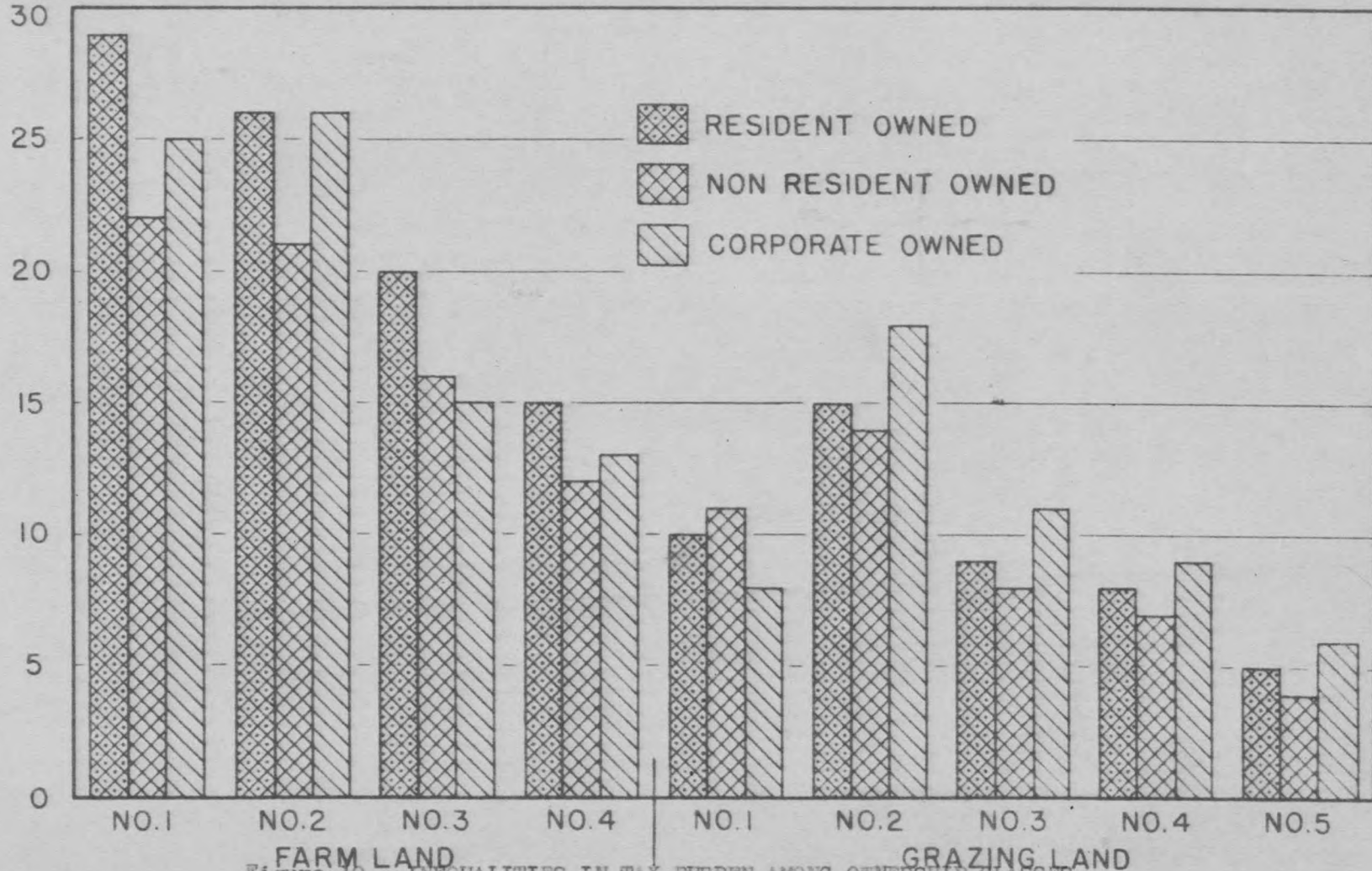


Figure 10. INEQUALITIES IN TAX BURDEN AMONG OWNERSHIP CLASSES
(Source of Data, Table VIII Appendix)

in the case of first grade grazing the corporate owned lands pay the highest tax. On all grades of grazing land except first grade, there is a consistent relationship between the tax paid by all three classes of owners. Although this difference in tax upon different types of owners is probably of some significance, it does not compare in importance with the inequalities existing among the different grades of land and among the different counties.

Inequalities Between Lands Devoted to Farming and Those Devoted to Grazing.

Lands that are farmed usually pay a higher tax than those of the same grade devoted to grazing (see Figure 11). Fourth grade farm land in Fergus and Teton Counties pays twice as great a tax when it is farmed as when grazed. The same tendency is evident in a sample of second and third grade grazing land taken from several counties. This inequality is probably due to the inability of county assessors to distinguish between land that should be graded as farm land and that fit only for grazing. Consequently lands that are farmed are taxed as farm land regardless of the quality of the soil.

V. SOCIAL AND ECONOMIC EFFECTS OF INEQUALITIES

The over-load of taxes upon third and fourth grade farm land has resulted in large scale tax delinquency in those grades of land (see Figures 12 and 13). A comparison of these figures brings out the prevalence of tax delinquency in those counties having a high percentage of third and fourth grade land. The second most important type of inequality is in the difference in the tax burden among the counties. Judith Basin County carries a tax approximately a third higher than the average of the 21 counties (see Figure 9).

PER CENT

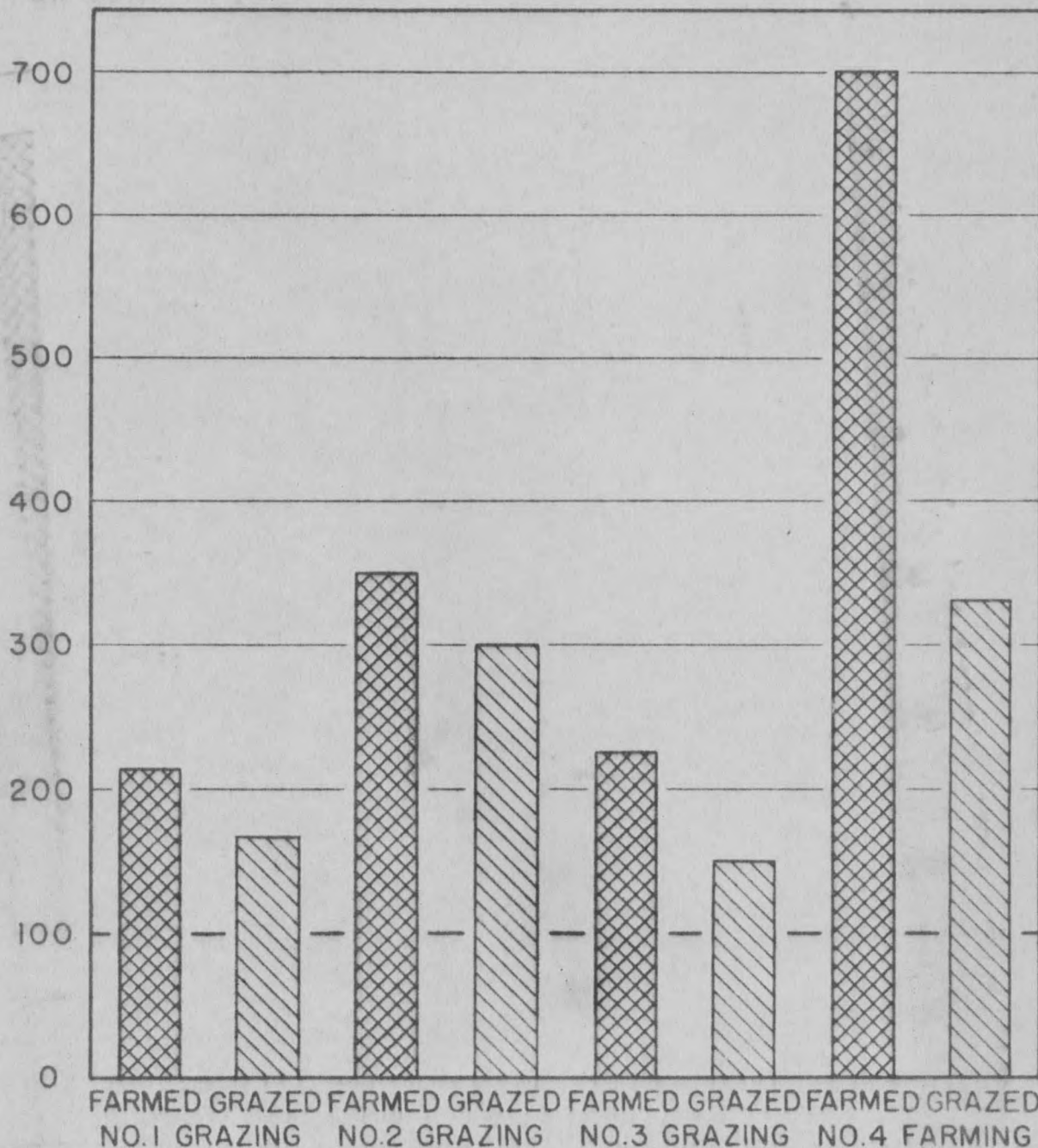


Figure 11. INEQUALITIES BETWEEN TYPES OF LAND
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table I - Appendix)

MONTANA

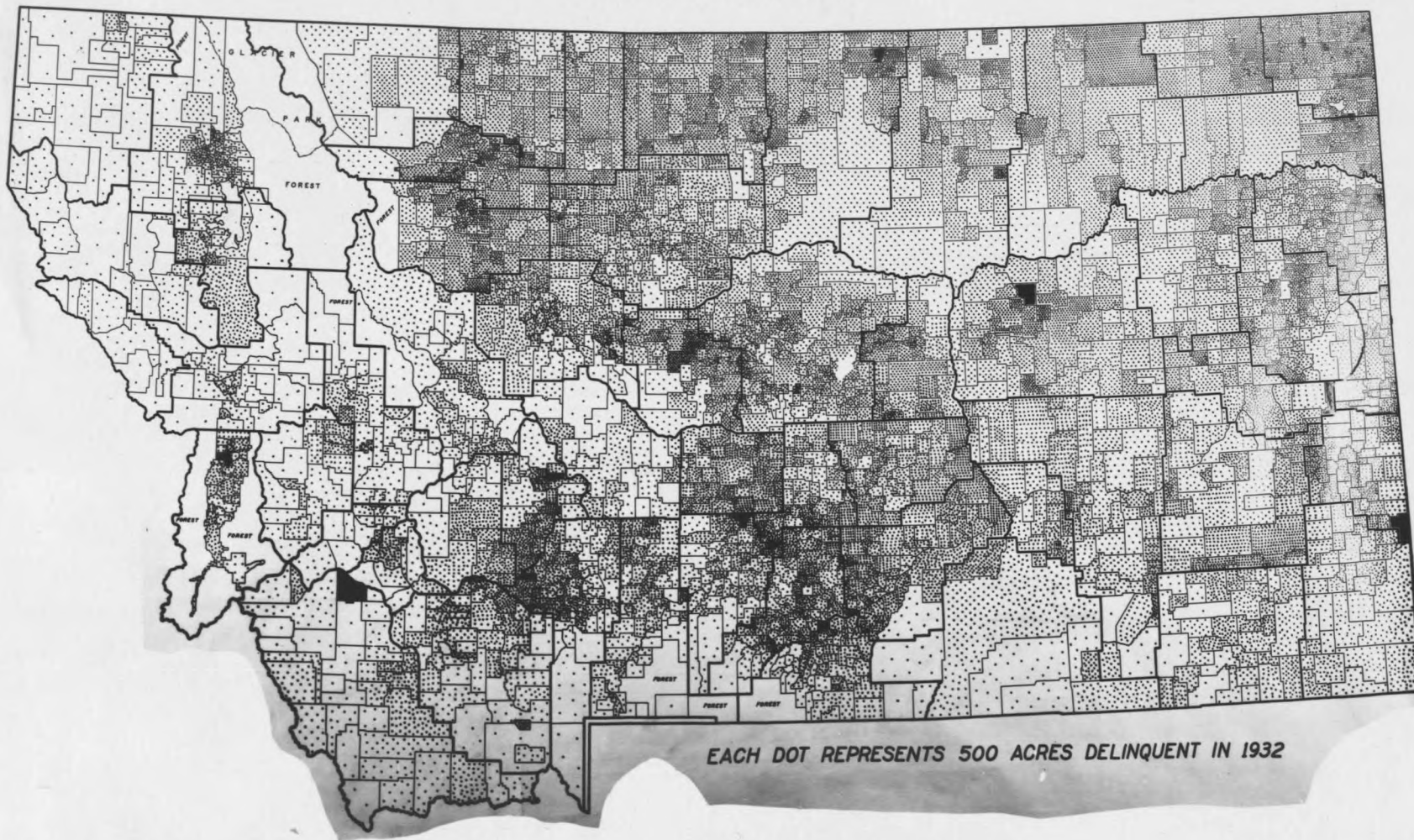
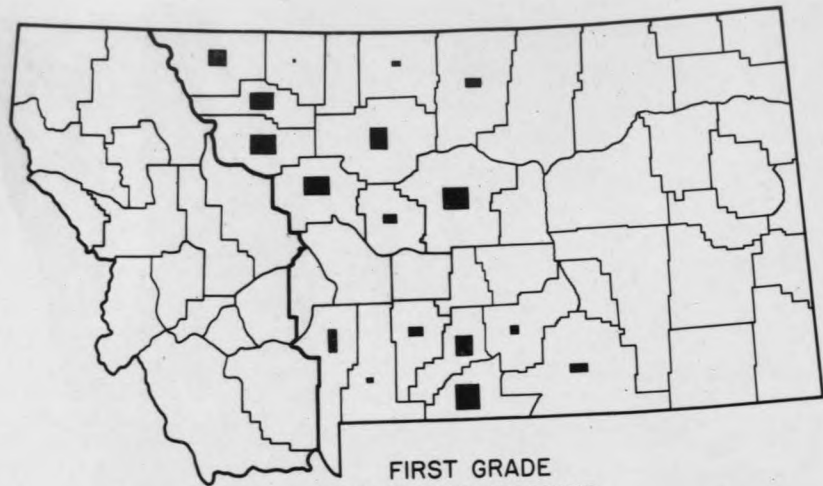
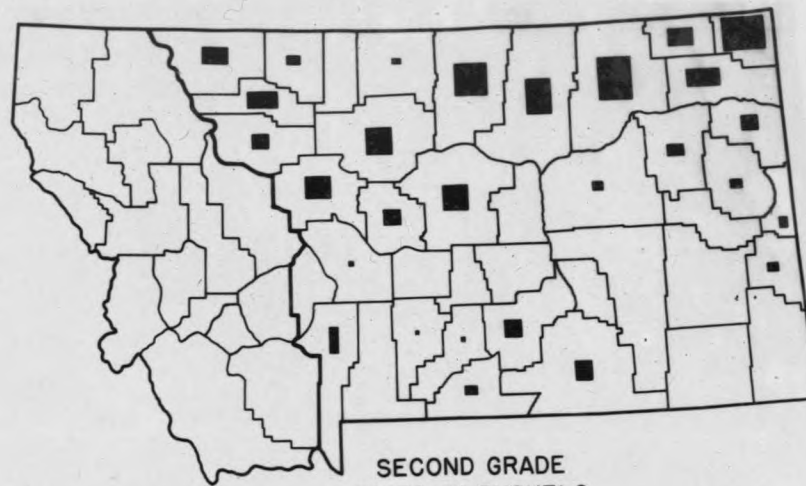


Figure 12. MONTANA FARM TAX DELINQUENCY

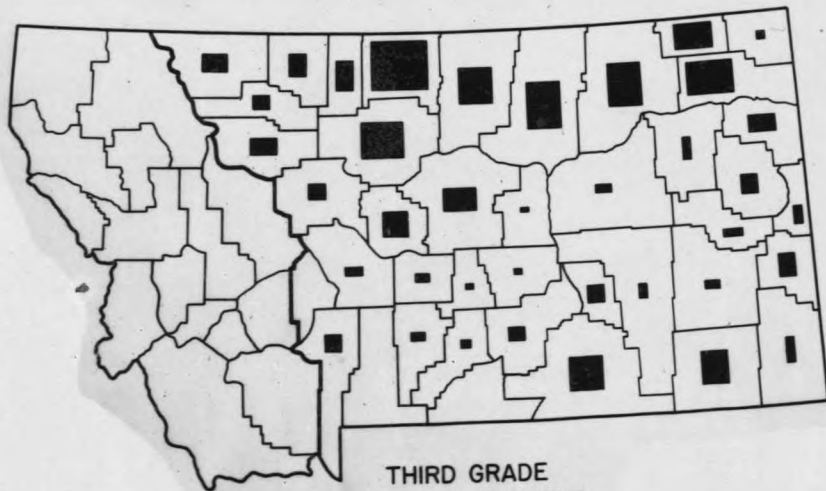
Compiled by - Department of Agricultural Economics, Montana Agricultural Experiment Station.



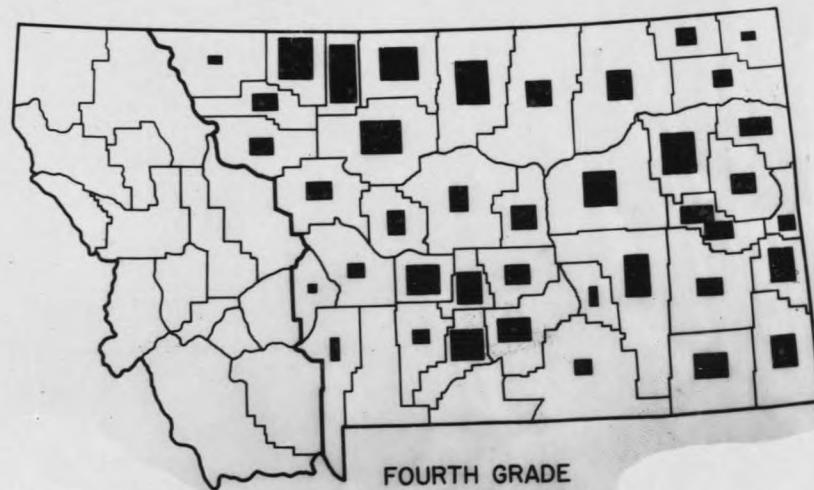
FIRST GRADE
22 BUSHELS OR MORE



SECOND GRADE
18 TO 21 BUSHELS



THIRD GRADE
12 TO 17 BUSHELS



FOURTH GRADE
8 TO 11 BUSHELS

Figure 13. PROPORTION OF EACH GRADE OF FARM LAND TO TOTAL AREA IN EACH COUNTY
Compiled by - Dept. of Agron. and Dept. of Ag. Econ., Mont. Exp. Sta., The Resettlement Admin. and
W.P.A. Cooperating.

Notice in Figure 12 the prevalence of tax delinquency in Judith Basin County. Such delinquency has far-reaching sociological and economic effects, such as; (1) increasing the tax burden on land remaining on the tax rolls and consequently (a) causing more delinquency due to excessive tax burdens, (b) discouraging private ownership of land, resulting in the exploitation of the land resources, because of lack of control and personal interest in the conservation of soil and plant life, and (c) inefficient farm organization, because the prohibitive tax makes it impossible for the farmer to own and thereby control sufficient land for an economic unit.

Tax delinquency is only one of the more obvious results of an unequally distributed tax burden. Certainly when the tax burden is greater than if justified by the productivity of the land, the money that pays the tax must be deducted from the money available for food, clothing, medical care, education, and recreation for the farmer's family. When such is the case the sociological effects of inequalities may be extremely damaging to society.

Equalization of tax burdens is a necessary part of any constructive land utilization program. The present assessments and levies were placed upon the land without determining its best use and productivity. The result has been that many lands that are assessed as high grade farm lands have proven to be suited only for grazing. If privately owned land of this type is to be reverted from its present condition into grazing, then the taxes must be reduced to a point where the land can be used profitably for grazing purposes. If such a reduction is not made land owners will allow

the land to go delinquent and to waste, rather than make an additional investment in the land in an effort to conserve and improve it.

VI. PROPOSALS FOR SETTING UP A SYSTEM OF ASSESSING AND TAXING FARM LANDS ACCORDING TO THEIR ABILITY TO PAY

A system of classifying farm land for assessment now in operation in McKenzie County, Western North Dakota has many features that deserve consideration in developing a plan applicable to Montana. ^{8/}

The following quotation presents the general features of the system operating in McKenzie County.

"Farming land is usually bought and sold in units of 40 acres, quarter sections, or sections, and taxes are generally levied on each 40-acre tract. Each farm is a unit by itself and its problems of management are small unit problems. Therefore, if the soil survey is to be an aid in the development of land utilization policies and in the classification of lands for the purpose of assessment and equalization of taxes it is necessary that the survey be sufficiently detailed to show the difference between these operating units. A generalized map has little value; in fact, it is quite misleading when used for the appraisal of land values or for determining the best utilization of any particular farm or tract of land."

"Rural land values and taxes on such land should be based upon the producing power of that land. In order to determine the appraisal of any particular tract of land having certain physical characteristics, such as soils, topography, and so on, the use to which this land is best adapted must be ascertained. A tract of land best suited for general farming should not be evaluated upon the basis of its grazing capacity; and land best suited for timber growing should not be evaluated on its potential crop production. After establishing the use group, the relative value of the various tracts within the use group can be ascertained."

"A determination of the use to which a piece of land is best fitted depends upon its physical characteristics and environment and the varied experiences of people using land of similar characteristics. This body of experience is not large in recently settled areas. As an agricultural area grows older, as economic conditions change, and as new agricultural

^{8/} The land resources and type of agriculture in McKenzie County are typical of the plains section of Montana.

