# TAXATION AND ASSESSMENT OF RURAL AND FRINGE AREA LANDS IN NEVADA

by

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# PREFACE

This study was completed within the provisions of Senate Bill 610, approved by the Governor of Nevada on April 20, 1973.

Section 5 of this legislation provided, among other things, that "the committee shall submit to the governor a report of the committee's findings as to assessment and tax equities and shall also present recommendations as to a more appropriate and effective composition or structure for the Nevada Tax Commission if the committee considers such a restructuring to be in the best interests of the people of the state."

Because of the importance of AJR No. 23, the impact on "assessment and tax equities" of this proposed Constitutional amendment was accorded major emphasis.

One aspect of property taxation equity considered in some depth is the inability of the middle-income person to compete for land ownership and for the family farm to hold onto its land as a result of the Federal tax system's impact on after-tax earnings. Another one is the relative tax burden carried by farm land in Nevada and farm land located in other Mountain and Pacific Coast states.

The Nevada Tax Commission responsibilities are seen to be broad policy functions and therefore requiring broad citizen representation on the Commission.

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## PART I AGRICULTURAL LAND VALUE TRENDS

The U.S. Department of Agriculture through its Economic Research Service provides agricultural land value data for each of the states. The changes in the value of Nevada's agricultural real estate reported in these USDA publications provide a general idea as to the changes in the absolute value of Nevada's agriculture property and the Nevada situation relative to other states.

The farm real estate value tables developed from this USDA data include New Mexico, Arizona, Utah and Oregon as comparison states. At this time an effort has not been made to compare the relative level of assessed values to the USDA totals of the different states. Only the assessed total trends in Nevada have been developed for this sort of analysis. In the comparison of tax levels the comparison states used are Arizona, Utah, Washington, Oregon and California. A final table gives a summary of the cash receipts of Nevada ranchers from marketing meat animals and feed crops. These cash receipt data are not given for the comparison states.

Table 1 illustrates a surprising picture of Nevada agricultural land valuations for property tax purposes. After a substantial increase between 1968-69 and 1969-70 when acreage increased by about 5 per cent and valuations by about 9 per cent, the valuation level remained about constant and acreage gradually drifted down. In 1972-73 acreage was 11,860,728 and valuation was

$94,960,820. The valuation is $2,363,244 less than in 1969-70 and acreage is down by 397,979 acres.

The USDA finds a quite different value picture for Nevada as is shown in Table 2. In 1970 total value of farm real estate less the building value equaled $528 million. In 1973 the value of farm land was up to $855 million.

In addition to showing a steady upward climb in the value of Nevada's farm real estate, Table 2 shows that Nevada's rate of increase was somewhat greater than that of the selected comparison states.

Table 1

Total Assessed Valuation and Acreage of Classified Agricultural Lands of Nevada

| Year | Acres | Valuation* |
|---|---|---|
| 1968-69 | 11,662,067 | 88,163,660 |
| 1969-70 | 12,258,707 | 97,314,064 |
| 1970-71 | 12,135,446 | 98,319,262 |
| 1972-73 | 11,860,728 | 94,960,820 |

*35 per cent of full value

Source: Annual Comparative Statements of Segregations of the Tax Rolls by Counties and Classes.
Table No. 1, p. 17.
Prepared by the Nevada Tax Commission, Carson City, Nevada

Table 2

Farm Real Estate: Total Value and Building Value
1970-1973 (in millions of Dollars)

| State | 1973 | | 1972 | | 1971 | | 1970 | |
|---|---|---|---|---|---|---|---|---|
| | Total Value | Building Value | Total Value | Building Value | Total Value | Building Value | Total Value | Building Value |
| Nevada | 927 | 69 | 787 | 59 | 670 | 50 | 571 | 43 |
| New Mexico | 2,436 | 229 | 2,204 | 209 | 2,073 | 199 | 1,959 | 188 |
| Arizona | 3,469 | 163 | 3,263 | 153 | 2,908 | 137 | 2,664 | 125 |
| Utah | 1,394 | 252 | 1,307 | 239 | 1,173 | 217 | 1,040 | 194 |
| Oregon | 3,641 | 630 | 3,324 | 582 | 2,985 | 525 | 2,707 | 382 |

Source: USDA, Economic Research Service
Farm Real Estate Market Developments,
CD78-July, 1973, Table 7

Table 3 provides for the period 1968 through 1973 the USDA index of graxing land values for the five comparison states being used. Table 4 gives the total valuation as set by the Nevada DOAS for grazing land privately owned in fee.

The USDA grazing land value index for Nevada increased from 115 in 1968 to 276 in 1973 for an increase of 140 per cent. The Nevada valuations for grazing land from 1968-69 to 1972-73 increased from $15,196,887 to $17,724,231 for an increase of 16.5 per cent. (Table 4)

The Nevada USDA grazing land value index in its increase from 115 to 276 between 1968-1973 rose more rapidly than in the four comparison states. Oregon's index in its upward surge from 112 to 223 came the closest.

Table 5 gives valuation and acreage of Nevada's pasture lands for the period 1968-69 to 1972-73. The acreage increased by 79,359 or by less than 2 per cent and the valuation during the period went up by $457,408 or by less than 1 per cent. Acreage increased 100 per cent more rapidly than valuation.

Table 3

Grazing Land Value Index
(1967 = 100)

| Year | Nevada | New Mexico | Arizona | Utah | Oregon |
|---|---|---|---|---|---|
| 1968 | 115 | 107 | 108 | 110 | 112 |
| 1969 | 136 | 114 | 119 | 128 | 129 |
| 1970 | 163 | 123 | 135 | 147 | 148 |
| 1971 | 194 | 132 | 150 | 168 | 171 |
| 1972 | 231 | 142 | 175 | 192 | 197 |
| 1973 | 276 | 159 | 190 | 209 | 223 |

Source: USDA, Economic Research Service,
Farm Real Estate Market Developments,
CD 78-July 7, 1973
Table 2

Table 4

Total Assessed
Valuation and Acreage
of Grazing Lands in Nevada

| Year | Acres | Valuation* |
|---|---|---|
| 1968-69 | 6,826,998 | 15,196,887 |
| 1969-70 | 6,758,807 | 16,071,214 |
| 1970-71 | 6,601,620 | 15,736,031 |
| 1971-72 | 6,519,505 | 15,241,007 |
| 1972-73 | 6,482,021 | 17,724,231 |

*35 per cent of full value

Source: Annual Comparative Statements of Segregations of the Tax Rolls by Counties and Classes, Table 1, p. 15.
Prepared by the Nevada Tax Commission, Carson City, Nevada

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The basic data used in constructing farm real estate value totals and in constructing value indexes such as those given in Table 3 are gathered from the regular crop reporters. They are instructed to consider land used primarily for farming purposes. Although it is impossible to entirely exclude the impact on value of non-agricultural use it is believed a better job is done than in the case of census estimates.[1]

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[1] U.S. Department of Agriculture, Major Statistical Series of the Departments of Agriculture. Handbook No. 365, Volume 6, Land Values and Farm Finance, April, 1971, p. 10.

Table 5

Valuation and Acreage of Pasture Lands in Nevada

| Year | Acres | Valuation* |
|---|---|---|
| 1968-69 | 4,323,519 | 48,884,586 |
| 1969-70 | 4,947,996 | 55,087,587 |
| 1970-71 | 4,962,121 | 55,268,418 |
| 1971-72 | 4,954,588 | 55,217,029 |
| 1972-73 | 4,402,160 | 49,341,994 |

*35 per cent of full value

Source: Annual Comparative Statements of Segregations of the Tax Rolls by Counties and Classes, Table 1, p. 15.
Prepared by the Nevada Tax Commission, Carson City, Nevada

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Table 1 shows that in 1969-70 the Nevada Tax Commission placed on the rolls $97 million of assessed valuation. In the same year the U.S. Department of Agriculture Table 2 valued farm lands in Nevada at $528 million. Although the base of the assessed farm land total is less, because of exempt land, etc., it is of interest that it is only about 18 per cent of the total rather than 35 per cent, the legal ratio of assessment to total value. It is of much greater interest that during the next three years the U.S. Department of Agriculture estimate of farm land value in Nevada increased by 60 per cent while the assessed valuation of agricultural lands of Nevada Tax Commission decreased by about 3.5 per cent.

This record speaks for itself.

Tables 6 and 7 provide per acre valuation of all farm land in Nevada and the four comparative states. Again, it is only for Nevada that valuation for tax purposes is also given.

The dollar increase in per acre average value was the greatest in Oregon where the value increased by $54 or 36 per cent. In Nevada the increase was $34 for a percentage increase greater than Oregon's, or 64 per cent.

The average assessed value of agricultural lands of Nevada during this same period increased from $7.56 to $8.01 (35 per cent valuation) or by about 6 per cent. The USDA data show that the value of an acre of Nevada agricultural land increased about 10 times more rapidly than the average assessed value per acre. This is a substantial difference.

Table 6

Average Value Per Acre
of Farm Land
(1970-73)

| Year | Nevada | New Mexico | Arizona | Utah | Oregon |
|---|---|---|---|---|---|
| 1970 | $53 | 42 | 70 | 92 | 150 |
| 1971 | 63 | 44 | 76 | 103 | 166 |
| 1972 | 73 | 47 | 87 | 115 | 185 |
| 1973 | 87 | 53 | 93 | 124 | 204 |

Source: USDA, Economic Research Service
Farm Real Estate Market Developments,
CD78-July 7, 1973
Table 6, p. 18

Table 7

Total Agricultural Lands
Average Assessed Value
per Acre

| | 1968-69 | 1969-70 | 1970-71 | 1971-72 | 1972-73 |
|---|---|---|---|---|---|
| Per Acre Value | 7.56 | 7.94 | 8.10 | 8.21 | 8.01* |

*35 per cent of full value

Source: Annual Comparative Statements of Segregations of the Tax Rolls by Counties and Classes, Table 1, p. 17.
Prepared by the Nevada Tax Commission, Carson City, Nevada

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Through the years the level of assessed valuation of the Nevada Tax Commission has become a smaller portion of the U.S. Department of Agriculture's valuation. In 1973 the average value per farm acre in Nevada was set at $87 by the U.S. Department of Agriculture and $24 (3 times assessed value of $8) by the Nevada Tax Commission, for a difference of $63. In 1969 the difference was about $45 or only about one-half as great.

One is hard pressed to come to any conclusion other than that the Nevada Tax Commission and the county assessors are including year by year a smaller and smaller portion of the value of Nevada farm lands in the property tax base.

The granting of these favors is not justified by an unusually heavy Federal tax burden. For example, corporate income taxes paid by agriculture as a per cent of value added is less than 18 per cent of the national average of all industries.

Tables 8, 9 and 10 provide additional information as developed by USDA that is related to the value of agricultural land in Nevada and the four selected comparison states.

Table 8 makes very clear that since 1967 farm real estate values in Nevada have risen much more than in the four comparison Western states. With 1967 equaling 100 the farm real estate value index for Nevada had reached 286 by November 1973, up 73 points from March 1972. During the same period the New Mexico index rose by 44 points, the Arizona index by 23 points, the Utah index by 38 points, and Oregon's by 31 points.

This substantial strength in the Nevada farm real estate market does not show up in the irrigated land value index of Table 9 or the price paid as rent per head for pasturing cattle on privately owned land of Table 10. The income and payments represented in the data of Tables 9 and 10 do not include rights to use BLM lands. The data of Tables 3 and 6 are affected by BLM grazing permits and they demonstrate some of the same strength shown by the Nevada farm real estate value index of Table 8. If the special lands classification includes all lands tainted with urban and recreation value, the increase in Nevada farm real estate valuations cannot come from these sources.

Table 8

Farm Real Estate Value Index
(1967 = 100)

| Year and Month | Nevada | New Mexico | Arizona | Utah | Oregon |
|---|---|---|---|---|---|
| 1973 (Nov) | 286 | 180 | 182 | 211 | 201 |
| 1973 (Mar) | 251 | 151 | 170 | 186 | 187 |
| 1972 (Nov) | 238 | 143 | 164 | 180 | 170 |
| 1972 (Mar) | 213 | 136 | 159 | 173 | 170 |

Source: USDA, Economic Research Service, Farm Real Estate Market Developments, CD78, January 1974, p. 5.

Table 9

Irrigated Land Value Index
(1967 = 100)

| Year | Nevada | New Mexico | Arizona | Utah | Oregon |
|---|---|---|---|---|---|
| 1968 | 106 | 103 | 101 | 105 | 101 |
| 1969 | 111 | 106 | 101 | 110 | 106 |
| 1970 | 114 | 110 | 102 | 117 | 119 |
| 1971 | 116 | 110 | 102 | 124 | 123 |
| 1972 | 118 | 113 | 103 | 131 | 129 |
| 1973 | 122 | 120 | 104 | 136 | 129 |

Source: USDA, Economic Research Service
Farm Real Estate Market Developments,
CD78-July 7, 1973, Table 2.

Table 10

Average Monthly Cash Rent per Head
for Pasturing Cattle on Privately Owned Land
(1970-1973)

| | 1973 | 1972 | 1971 | 1970 |
|---|---|---|---|---|
| Nevada | 4.36 | 3.94 | 4.32 | 4.76 |
| New Mexico | 4.10 | 3.92 | 3.40 | 3.62 |
| Arizona | 2.79 | 2.92 | 2.78 | 3.44 |
| Utah | 4.81 | 4.34 | 4.05 | 3.78 |
| Oregon | 4.01 | 3.80 | 3.61 | 3.70 |

Source: USDA, Economic Research Service, 1973-Farm Cost Situation, FCS44, February, 1973, Table 31.

## Agricultural Property Tax Payments

Tables 11 and 12 provide data that compare Nevada's property tax payments as a percentage of income and full value of farm real estate with that existing in other Mountain and Pacific region states. The data are not as current as one would like and the most recent year is 1971. In addition data are given for 1970, 1965 and 1960.

In each of the years property taxes levied on Arizona farm real estate were a smaller portion of agricultural net and gross income than in any of the comparison states. In Nevada property taxes as a portion of net farm income have decreased sharply since 1960 and 1965. Nevertheless, the property taxes of Nevada in 1971 were as a per cent of gross income a bit higher than the Mountain region average and about 10 per cent higher when compared with average Mountain state net income. The taxes on farm real estate in the Pacific region states are much higher as a per cent of net and gross farm income than is true of the Mountain region states.

Nevada's property taxes on farm real estate as an amount per $100 of full value is the lowest of the states for which data are provided in Table 12. In Nevada in 1971 farm real estate taxes per $100 of full value as developed by USDA was $0.72. The California level was 346 per cent of this.

The relationship observed in Tables 11 and 12, in addition to those showing the much higher taxes in the Pacific region, is that

the net farm income of Nevada generates more real estate value for dollars of income than is true of Utah and Arizona. A portion of this difference undoubtedly exists because Nevada does not have an income tax or an inheritance tax, and this appears to be a relatively permanent situation.

The existence of the "no income, no inheritance tax" legislative position in Nevada make it possible to collect higher farm real estate taxes as a portion of farm income than other states, and still keep the property tax as a portion of farm real estate capital value below that existing in neighboring states. Of course, this relationship of land values and tax favors demonstrates the ability of land to absorb in capital value reduced taxes or higher incomes, and the intermingling of property and income tax impacts.

Sometimes the fact (Table II) that Oregon and California and to a lesser extent Washington collect as taxes on farm real estate a much higher per cent of net income than the Mountain states is explained as due to higher taxes generally on the Coast. This however is not entirely supported by the data. For example, in 1971 taxes as a per cent of personal income, which is the only way relative tax burden is measured, were 11.6 per cent in Oregon and 12.3 per cent in Washington while taxes were 13.0 per cent of personal income in Nevada. In California taxes were 13.7 per cent of personal income.[1]

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[1] U.S. Department of Commerce, Survey of Current Business, August 1969, and ACIR, 1973-74 Edition of Federal-State-Land Finance, p. 56.

The relative importance of direct out-of-state spending on tourism in Nevada undoubtedly provides a portion of the explanation for Nevada's high tax payments as a per cent of income and the light tax burden carried by agriculture.

Table 11

Taxes Levied by State on Farm Real Estate as Percentage of Net and Gross Farm Income for Mountain and Pacific Regions (a) (1960-1965-1970 and 1971)

| State and Region | 1971 Net Farm Income | 1971 Gross Farm Income | 1970 Net Farm Income | 1970 Gross Farm Income | 1965 Net Farm Income | 1965 Gross Farm Income | 1960 Net Farm Income | 1960 Gross Farm Income |
|---|---|---|---|---|---|---|---|---|
| Arizona | 5.2 | 1.6 | 5.8 | 1.7 | 3.8 | 1.3 | 4.0 | 1.3 |
| Utah | 9.7 | 3.0 | 9.7 | 3.0 | 13.6 | 3.7 | 13.3 | 3.5 |
| Nevada | 9.8 | 3.0 | 9.7 | 3.1 | 25.3 | 4.4 | 18.6 | 3.9 |
| Mountain | 8.9 | 2.6 | 8.6 | 2.6 | 8.5 | 2.8 | 8.6 | 2.8 |
| Washington | 16.8 | 6.0 | 16.0 | 5.5 | 9.7 | 3.6 | 8.4 | 3.2 |
| Oregon | 27.6 | 7.8 | 35.0 | 7.8 | 21.9 | 7.3 | 18.7 | 6.6 |
| California | 29.1 | 9.5 | 30.3 | 9.4 | 17.3 | 5.4 | 11.8 | 4.1 |
| Pacific | 27.0 | 8.8 | 27.5 | 8.7 | 16.5 | 5.4 | 12.0 | 4.2 |

(a) Net from income before deduction of farm and real estate taxes. Includes net rent paid to nonfarm landlords.

Source: USDA, Economic Research Service, Farm Real Estate Taxes, Recent Trends and Developments February, 1973, p. 21.

Table 12

Taxes Levied by State on Farm Real Estate as Amount per $100 of Full Value for Mountain and Pacific Regions (1960-1965-1970 and 1971)

(Dollars)

| | 1971 | 1970 | 1965 | 1960 |
|---|---|---|---|---|
| Arizona | 1.03 | 1.03 | 0.64 | 0.55 |
| Utah | 0.77 | 0.79 | 0.89 | 0.86 |
| Nevada | 0.72 | 0.70 | 0.73 | 0.66 |
| Mountain | 0.90 | 0.88 | 0.80 | 0.82 |
| Washington | 1.59 | 1.34 | 0.95 | 0.84 |
| Oregon | 1.66 | 1.68 | 1.66 | 1.68 |
| California | 2.49 | 2.26 | 1.26 | 1.04 |
| Pacifc | 2.26 | 2.06 | 1.26 | 1.08 |

Source: USDA, Economic Research Services Farm Real Estate Taxes, Recent Trends and Developments February, 1973, p. 19.

The data on Table 12 provide another demonstration of the relatively low taxes being paid by owners of farm real estate in Nevada. The average tax per $100 of farm real estate was 72 cents in Nevada. This is 18 cents or 20 per cent below the average for Mountain states, and $1.54 or 280 per cent below the average for the Pacific Coast states.

A portion of this low payment per $100 of value of farm real estate in Nevada arises from the relatively high net income per AUM when cost of land is excluded. Nevada's income and inheritance tax favors tend to be capitalized into real estate values resulting in relatively high AUM land costs. Also, of course, the low assessed values reduce the fiscal contribution of agricultural land to state and local budgets, but does not improve the competitive position of Nevada agriculture in the medium term, because these low taxes also become capitalized into higher land costs.

The agricultural industry of Nevada has been experiencing additional marketing totals because of higher prices and expanded production. The data of Table 13 covers only the 1970-72 period and includes only the cash receipts from meat animals and feed crops.

Between 1970 and 1972 cash marketings of meat animals increased by 37.2 per cent. During the same period USDA data of Table 6 shows the average value per acre of Nevada farm land increased by 37.7 per cent. Table 7 shows that the average per

acre assessed value of Nevada's agricultural land increased by only 3.4 per cent during the same period.

Data of Table 12 compared with that of Table 6 provide additional support for confidence in the U.S. Department of Agriculture estimate of farm land values. The cash receipts data of Table 6 are generally judged accurate for they are based upon a highly developed marketing reporting system. These totals in Nevada moved up steadily and relatively rapidly during the 1970 and 1972 period.

During this same period the per acre assessed value of agricultural lands in the Nevada area decreased slightly. (Table 7). Assessed per acre values declined as cash sales increased. On the other hand, the U.S. Department of Agriculture farm land valuation moved upward with cash receipts from marketing of farm crops.

Conclusion

Farm land values in Nevada on the basis of all measurements except that of assessed valuations and cash rent per head for pasturing cattle on privately owned land increased steadily and relatively rapidly during the 1970's. Because assessed values did not increase, taxes paid on farm real estate as a per cent of net farm income decreased sharply in Nevada between 1965 and 1970 and decreased gradually as a per cent of net income during the 1970's.

The failure of Nevada's property taxes to maintain themselves as a per cent of agricultural net income or gross income, arose basically from an expanding level of under-assessment of farm real estate. The explanation for the development of this situation is not apparent in the aggregate comparative data presented in this section. However, interviews and exploration of procedures in use seem to provide a portion of the explanation.

Table 13

Cash Receipts from Meat Animals and Feed Crops for Nevada (in thousand dollars)

| | 1972 | 1971 | 1970 |
|---|---|---|---|
| Meat Animals | 82,921 | 67,766 | 60,420 |
| Cattle, Calves | 78,293 | 63,157 | 55,849 |
| Sheep, Lambs | 5,956 | 4,099 | 6,045 |
| Hogs | 672 | 510 | 526 |
| Feed Crops | 8,058 | 7,668 | 8,255 |
| Hay | 7,527 | 7,028 | 7,728 |
| Barley | 492 | 611 | 494 |
| Oats | 39 | 29 | 33 |

Source: USDA, Economic Research Service
Farm Income, State Estimates 1959-1972
FIS 222 Supplement-August 1973, -.96.

## PART II USING INCOME TO ESTABLISH LAND VALUES

Income from land arises out of skillful use of the land's qualities to produce a product that can be marketed at a price greater than costs incurred other than those required to gain control over the land. The annual cost of renting or owning land will increase to a level that leaves a surplus above out-of-pocket production costs that is only sufficient to induce an operator to take the chance involved in putting the land to its highest and best use. When land owned for a period of time produces an annual net product when operated by the owner that is greater than the rent which can be received, too small an income is being allocated to the owner for his services. He as a skilled manager and technician is being underpaid.

The value of the land is the rent that will be paid for its use capitalized at the going rate of interest. Income realized above this amount is due to the operator as payment for his personal services. A market value above or below that set by income and capitalization indefinitely determined, arises from speculation and can only be established from confirmed sales.

### Concept of Income

The economist's definition of income is consumption plus the increase of wealth from one period to the next.[1] It is the

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[1] Robert M. Haig. The Federal Income Tax. (ed), (New York, Columbia University Lectures, 1921) and H. C. Simon, Personal Income Taxation (Chicago: University of Chicago Press, 1938)

Haig-Simons concept and it was not accepted by the original drafters of the U.S. income tax. The rejection arose basically because of administrative problems and because of the traditional British school of thought regarding what income is.

The names Seligman and Plehn are associated with the development of an acceptance of the British position that income does not include gifts, inheritance, capital gains realized or wealth level changes.[1]

Both in Great Britain and the U.S. the taxable concept of income subject to the income tax has changed very little. What change that has taken place during the past sixty years or so has been toward the economist's definition of income and therefore toward a relaxation of the periodic realization requirements. Also, step by step the taxation of capital gains realized is being expanded around the world.

Although income in the economic sense has not prevailed in the setting of taxable income, the concept does triumph in the market. The exclusion from the definiton of taxable income the imputed income from occupation of an owned home has stimulated condominium development and general payments for owned housing that are like rent payments. In the same way, the exclusion from taxable income of the AUM underpayment in the BLM rent charges increases the value of fee land with leasing rights,

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[1] Carl Plehn, "The Concept of Income, Recurrent Consumable Receipts: Amer. Econ. Rev. 14, (March, 1924) and E.R.A. Seligman, The Income Tax, 2d ed. (New York: Macmillan, 1914)

even though taxable income does not arise directly from the transaction.

The important role of unrealized capital gain in setting the income realized by ranchers and farmers generally has been largely neglected in income level studies of agriculture. The fact that income realized through wealth expansion is not taxable except under certain conditions has undoubtedly affected its treatment by students of the agricultural industry. More fundamentally, a problem exists in the very substantial shifts in wealth that can take place through relative small changes in the level of production or level of prices for borrowed funds or products marketed.

This problem is much more severe in wealth represented in ownership of common stocks or speculative urban property than in grazing land ownership, perhaps because grazing land values are closely tied to a basic food item without a close substitute. The additional price stability arising from this end product situation combined with the relative indestructableness of land and its inelastic supply acts to reduce the variation of value of wealth held in this form.

The impacts of these elements has developed a considerable difference of opinion as to how the income element in setting capital value should be treated. When income not realized through sale of land is excluded, but the rising price of land is included in the cost of production used in calculating an income

level to be used as the basis for setting the capitalized value, two different approaches to unrealized income or loss has been used in a single calculations. However, it can very accurately describe the economic position of a new purchase of fee land in Nevada. This accurate portrayal arises because the annual cost of full value for the fee land must be met out of current sales of cattle. In a few years, if present inflation and land value trends continue, the income realized in wealth expansion begins to become important and the portrayal no longer accurately describes the economic position of this particular rancher. Of course, the expectation of this future favorable condition had influenced the original offer.

The difficulty of developing acceptance of the income to be used as the capitalization base in setting value is not resolvable unless agreement can be reached on a definition of income. The Haig-Simon definition sees the increase in wealth between two periods plus consumption spending as income. The Plehn-Seligman definition requires realization in cash and regularity of receipt.

## Market Price and Income Concept

The market price of similar property, another generally accepted base for setting the appraised value of properties accepts the Haig-Simon income definition of income and largely rejects Plehn-Seligman definition. Actually, because the federal income tax still largely follows the Plehn-Seligman approach to taxable income the pressures have been toward

minimizing income that meets these requirements. The result, because like matter, a different form does not reduce its quantity, the Haig-Simon type income definition has been enjoying a relative increase in acceptance.

Concept of Capitalization Rate and AUM as Income Measure

The DOAS (Division of Assessment Standards) has adopted a procedure of setting a capitalization rate that is based on a reconstruction of gross income and total cost per AUM and relating this to the selling price of ranch land. The gross income is the charge made per year for one grown cow with the owner of the ranch bearing all the expenses. In Eureka County for example, this charge was $40,000 or $3.33 per month. The reconstructed expenses were:

| | | |
|---|---|---|
| $1.00 | - | grazing fee to BLM |
| 0.45 | - | riding costs |
| 0.17 | - | management charge |
| 0.10 | - | fence and misc. |
| $1.72 | | Total Expenses |

This leaves $1.61 as net income for AUM.

This net income for AUM provides for the payment of $1.00 grazing fee to BLM, and a payment of $1.61 after deducting all expenses associated with grazing BLM land and fee land. If the AUM for the ranch is 500 the net income 1.61x500x12 or $9,660. The capitalization of this income under the assumption that the going rate of interest is 8 per cent gives a value of $120,750.

If this value does not correspond with value at actual sales of relatively similar properties the thing to do is to change the capitalization rate to the height required to make the value correspond with confirmed sales prices. The justification for this procedure among appraisers is that for a variety of reasons this is the capitalization rate that is being used by buyers and sellers for the type of property under consideration, and efforts to go behind these forces are unproductive.

This procedure, of course, does not really provide an independent income determination of value. However, if the procedure used to set income is uniform for the type property in question and if sales are freely made the capitalization rate required to make the income and market values equal will be uniform.

The history of agricultural land values has been one of high capital values relative to before tax income. The data which have been examined appear to support the hunch that develops when income tax payments allocated to agriculture by the IRS and the Oregon Department of Revenue are compared with payments by other industries.[1] One source of the high capitalization rate of agricultural income is the relatively light income tax rate. In fact, Professor Houthakker has called this "The Great Farm Tax Mystery".[2]

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[1] Thomas Calmus, "Corporation Income and Excise Tax", Area 8 of A Description and Analysis of Oregon's Fiscal System, (Salem, Oregon: State Department of Revenue, 1971)

[2] Hendrick S. Houthakker, "The Great Farm Tax Mystery", Challenge, February 1967, pp. 12-13 and 38-39.

Agricultural operations have a unique feature that affects the net income. The unique feature is the great importance of land costs. Land is an asset with value determined nearly entirely by demand. The supply is basically fixed, i.e., completely inelastic, and does not have a cost of production. A result of this importance of land is to cause net income to disappear into higher costs for land.[1] An increase in profits from land use does not result in an increase in supply as is true when profits from apartment house ownership increase. Higher net returns from land ownership show up largely in a higher price for land. This higher price is a real cost to new buyers of operating farms, but to operators of established farms it is a phantom cost. The cost only exists in the sense that this sized income is required to support the price at which land was being sold.

The problem mentioned above when the economist's concept of income was under discussion is also fundamental in the difficulty encountered here in separating land cost from land income. Farm income in the manner in which it is typically calculated can only increase or decline when land costs have not been adjusted quickly enough.

## Independent Income Determined Value

Therefore, to make the rate of capitalization of income arising in agriculture correspond with market interest, requires

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[1] E. Lowell Harriss, Government Spending and Land Values, (Madison, Wisconsin: University of Wisconsin Press, 1973) pp. xii.xiii.

an adjustment of income tax to make it correspond more closely with the Haig-Simon concept. In the Nevada situation, this basically requires that wealth changes, tax relationships, subsidy provisions and the value of non-market pricing of BLM land be included in the income total. When this is done you have the foundation for a genuine independent income determination of the value of the fee land to which the going market rate of interest can be applied to arrive at a capitalized value.

## Capitalization Rate

The rate of interest in the market changes from month to month. The Department of Revenue in Oregon uses the lending rate on agricultural loans by the Federal Land Bank. This results in a capitalization rate somewhat higher than would be true if a more general market interest rate were used. The capitalization rate used should not be considered permanent, but should be declared each year along with the calculated income. Under this procedure the capitalization rate is not an artificial figure used to bring the capitalization value of an incomplete income figure up to a level observed in confirmed sales.

## Land Cost Treatment

The income calculation procedure required to bring income up to a level comparable with that of other industries, so that an independent capitalization rate can be used, is difficult and violates a number of widely accepted concepts of income. A considerable portion of establishing an income level could be

avoided and an agriculture income comparable with that of most other industries could be provided if the cost of land were eliminated. Land would be considered a free good. There are a number of justifications for this approach which seems at first blush to be unacceptable and even outrageous.

First, land does not require a price to be created, and therefore payment is for allocation purposes and not to meet cost-of-production requirements. Second, land cost, except for the most recent purchases, is an imputed cost that represents economic rent, an income item and not an expense item. Third, the exclusion of all land costs will avoid income levels to be capitalized problems-arising from speculation in land values and therefore unusually high and unusually low land costs to be allocated to agricultural operations.

If land is not included as a cost in calculating income to be capitalized, one avoids the mixing of unlikes in developing a profit and loss statement. Land, because it doesn't have a cost of production and has a price determined nearly entirely by demand, provides a destabilizing influence in calculating income amounts from period to period. It is a cyclical element in addition to the instability of income from fluctuations in selling prices and production expenses. Also, the exclusion of land in calculating cost effectively removes much of the difficulty arising from the difference between the Haig-Simon concept of income and the income concept adopted by tax legislation writers.

The cost figure developed when cost of land used is excluded is an artificial cost. A dollar spent to meet the price required to gain control over a piece of land is a cost just as truly as any other expense. However, the approach provides a procedure to prevent the circular flow back of losses or gains into higher or lower land costs and in this way eating up the conventional income increase or decrease from changes in taxes and prices, and transferring it into unrealized capital gains and losses in land values. It is a procedure for removing values endogenous within the system and sharply reduces existing collinearity.

## Conclusion

Any procedure of utilizing agricultural income as a determiner of land value possesses a degree of make-believe economics. The capitalization rate is often a procedure for keeping the net income arising from the income concept selected in line with market determined land values. The income concept used is selected because its calculation seems feasible and it corresponds roughly with income as defined by our income tax legislation. A re-examination of this justification would be appropriate. Also, it would seem to be appropriate to develop an income figure that excludes land costs, including land taxes. It would recognize the basic economic position of land values as an endogenous value within the system of general agricultural operations.

The basic assumption of the U.S. Department of Agriculture

economic studies is that an income from operations sufficient to cover costs plus a normal rate of profit is a justifiable expectation for the agricultural industry. In taking this economic position two basic relationships are being assumed that require some examination. These are:

1) that agriculture, despite the relative importance of the no-cost of production inelastic supply situation of land, can be compared with other industries; and
2) that income from operations which does not include unrealized capital gains, or an averaging of realized capital gains, is the correct base to use in measuring economic wellbeing of the agricultural industry.

Variable Capitalization Rate

The only procedure readily available to develop a variable capitalization rate would work like this. The average marginal federal income tax rate for the past five years of all owners of rural land would be taken off their federal income tax returns. This average marginal rate would be used to calculate three different capitalization rates. For example, if the average marginal federal income tax rate is 55 per cent or above, the interest rate used in capitalizing net income is 3 per cent, if between 42 and 55 per cent the rate is 4 per cent and between

30 and 42 per cent the rate is 5 per cent, and if below 30 per cent the rate is 6 per cent.

The above approach to working toward a solution of the problem arising from sales at much higher prices than assessed values encounters a number of "no-no's". The difficulties in adapting the variable capitalization based on a 5 year moving average marginal income tax rate are of a number of varieties. Some exist as a result of Nevada's failure to utilize completely the information it could gather from federal income tax returns. Also, the Nevada Constitution's use of "equal rate of assessment" could be interpreted either way when applied to an assessment based on a variable capitalization rate as affected by a five year moving average marginal income tax rate. Finally, the procedure would violate a basic idea of value that sees it being determined by what is produced rather than by the income capitalization rate of the owner.[1]

The variation in capitalization rate depending on marginal income tax rates points to the need to coordinate the property tax with the income tax. This has been realized at the lower end of the income distribution and the "circuit breaker" concept has swept the country since its introduction in Wisconsin in 1964.[2]

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[1] The ideas considered here are included in discussions of Sherman J. Maisel and Daniel M. Holland.

[2] Advisory Commission on Intergovernmental Relations, Information Bulletin, "Circuit Breaker Updated", July 13, 1973, p. 9.

However, the interrelationships of expensing improvements on working as well as semi-hobby ranches, the importance of the lower capital gains tax on realized gains arising from the sale of land by high income receivers and the special treatment real estate receives under court interpretation of state inheritance tax legislation, plus the loopholes in the federal estate and gift taxes, have not been sufficiently integrated into the administration of the property tax.[1] In addition, the unique characteristics of land, i.e., basically indestructable, largely inelastic supply, little cost of production, large number of uses, make it particularly attractive as the receptacle of basically inactive capital resources.

All of these income and death tax advantages given to realized and unrealized income arising from land ownership under current economic conditions become visible in sales prices. On the other hand, it is very difficult to develop procedures for reconstructing these sources of income in order to arrive at a value based on a reasonable rate of capitalization. The difficulties encountered in attempting to reconstruct value from income information without taking the federal income tax and unrealized capital gain income into account, point to a need to integrate the effort with the federal income, capital gains and estate taxes.

The reconstruction of income efforts of the U.S. Department

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[1] For example, under Oregon law an estate consisting of out-of-state land would be exempted from the Oregon inheritance tax.

of Agriculture's Economic Research Service and the revenue departments and commissions of the various states have been notably unsuccessful in reaching a figure that can support real estate market prices. The values developed are much lower than market prices, yet these low prices are seen by the average rancher and farmer to be too high a base for use in applying the ad valorem property tax. Because of this failure of "use" value to support market price, there has arisen a belief that market price is unrealistic, and in its place a laboriously developed capital value of ranch and farm land should be constructed from operational expense and income data. It is argued that it is this base to which the ad valorem property tax rate is correctly applied.

Federal Income Tax Adjustment Procedure - Property taxes due would be adjusted by federal income tax (corporate and individual) of taxpayer. The property tax payable will be increased by the amount necessary to make the dollar tax burden of the property tax equal for all property owners, as required by the state Constitution under one possible interpretation.

Calculation - If property taxes are $1,000 and the minimum marginal income tax rate (14 per cent) of Schedule Z is applicable and the marginal income tax rate paid is 62 per cent. The property taxpayer would make the following calculation.

.62 - .14 = 48 .48 x $1000 = $480, $1000 + $480 = $1,480, property tax payable.

Equality Clause - The "uniform and equal rate of assessment and taxation" is preserved. The term taxes is made somewhat more fundamental and the concept of equal burden is included. Income taxes of a number of states including Oregon have been declared to meet the uniformity clause when federal income taxes are deducted from base to which state taxes are applied to reduce tax payments. Nothing basically different has been done when federal income taxes paid are taken into consideration in a uniform fashion to raise property tax payments. Also, in the example given the increase in property taxes is less than tax deduction benefit.

The idea that all should have an equal chance to own property and to benefit from the security property ownership provides is deep-seated. Treating the federal income tax in the fashion described above helps to do this.

Administration - The property tax records would remain open as at present. However, the actual payments made after adjustment for federal income taxes would be treated as income tax information is treated in income tax using states.

Property taxes would be paid to the State Treasurer and he would credit as considered appropriate the accounts of the County Treasurer who would then allocate the funds to the various users of property taxes.

Conclusion

Equating the competitive position of those setting the market

price of land requires consideration of the impact of the federal income tax. Tying the property tax to federal income taxes is a practical way to increase the progressivity of the Nevada tax system while at the same time making land ownership easier for middle-income receivers.

## Land Value Concepts

The Zubrow 1960 study of the Nevada tax system emphasized the importance of the assessment ratio plan introduced in Nevada in 1955. The program owed its existence to a critical problem of justice in the allocation of state funds to pay the costs of primary and secondary education. As a side or additional benefit it provided a definite procedure to evaluate the degree to which assessed values corresponded with the full value of the property.

Although Zubrow used the term "full value" in discussing the goal of assessment practice in Nevada this is not the goal established in the Constitution. The Constitution speaks of "uniform and equal rate of assessment" and "just valuation for taxation of all property."

When the Nevada Constitution uses the phrase "equal rate of assessment" it is, of course, referring to some sort of base. This base could be what Zubrow had in mind when he used the phrase "full value."[1] It is more likely that neither the writers

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[1] R. A. Zubrow, Financing State & Local Government in Nevada, Carson City, Nevada: Nevada Legislative Tax Study Group, 1960 p. 221.

of the Constitution or Zubrow knew "of what they wrote."

Adams in writing of "Defects in Assessments" in Nevada notes that, "very commonly such property is assessed at about twenty or twenty-five per cent of its actual value." In another instance he just uses "value" when referring to the assessment ratio.[1] Apparently reference is being made to market value, but sales data or a rate of capitalization of a calculated net income is not given.

Land Value Theory

Professors Hicks and Vickrey are examples of two knowledgeable economists who have been concerned with the problem of the assessment of land values. They have attempted to answer the question set by the Nevada Constitution in the use of the phrase "equal rate of assessment". Their doubts and final conclusion after examining a number of procedures for setting the base or "assessed value" to which the tax rate is to be applied are of interest in developing an understanding of the relationship between the unrefined concepts of market and use value methods of assessment. In addition, they provide a start toward a relatively sophisticated understanding of the two concepts of the real estate base to be developed through actual appraisals.

Professor Ursula Hicks is after the original value of land before improvements but including the potential value of the land. The emphasis is on urban areas, but reference is made to rural

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[1] Romanzo Adams, op. cit., pp. 54-55.

practices. She concludes that efforts to outforecast sales values as a measure of potential value is not likely to be helpful. For example, the multivariate analysis procedure is seen to fail to develop useful potential value forecasts. When income of some sort is used to set the value of land she finds the difficulty of establishing the capitalization rate to be too fundamental to be slipped over, and impossible to overcome.[1]

Professor William Vickrey goes over some of the same territory as Professor Hicks and he is also most interested in the urban environment. He concludes that the base to be used in applying the actual assessments to develop an "equal rate of assessment" by ratio comparisons is a "theoretically defined market value." What he really means by market value in this sense is not made clear. However, his analysis does make it abundantly clear that efforts to add this and subtract this to arrive at a better measure of value than that provided by the selling price in the market is not helpful.

Because the Vickrey analysis is in terms of moving to a land only property tax in urban areas his "theoretical defined market value" is concerned with separation of the value of improvements from the total market value of the property. This is not an important portion of the establishment of values for rural land in Nevada.[2]

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1 William S. Vickrey, "Defining Land Value for Taxation Purposes" in The Assessment of Land Value (ed. Daniel M. Holland). (Madison, Wis.: University of Wisconsin Press, 1970).

2 Ursula K. Hicks, "Can Land Be Assessed for Purposes of Site Value Taxation", in The Assessment of Land Value (ed. Daniel M. Holland). (Madison, Wis.: University of Wisconsin Press, 1970). pp. 9-24.

The sources of the relative usefulness of the "appraisal" approach in setting the value of a building that are not available in the case of land are often neglected. The failure to adequately consider these differences is not unlike the typical tendency to treat the tax on real estate as a single tax, and not as a tax on structures and a tax on land.

For example, there is the relatively substantial depreciation item that is a current deductible expense by owners of a building. This deduction has the effect of increasing the immediate aftertax income. A similar deduction from taxable income is not available to the owner of land. This depreciation relationship encourages investors to purchase and to contract to build structures.

On the other hand, depreciation is appropriate because a building is to a degree a depreciating asset, because it does wear out, become outmoded, and because demand for the particular service a building provides often declines. These qualities permit giving a building a life expectancy--a point in time when it becomes valueless. As a result errors that are made in setting the interest rate used in calculating the capitalized value of the income are of much less importance because the capital base is declining year by year through the operation of the above factors. The decline in capital value from physical deterioration reduces the importance of the concept of capitalization of a permanent annual income.

Because a piece of land is not a deteriorating assest like a building and because land, generally speaking, does not have a cost of production like a building, it is also true that the quantity available does not change. As a result, the price the market sets for land is a price that allocates land to those bidding for control. The price set is therefore a price determined entirely by demand.

Agriculture Credit

The substantial increases in farm real estate prices in 1973 include a number of elements that have been discussed elsewhere in the analysis of the Nevada farm real estate assessment process. An additional element has been the liberalization of lending terms offered through FHA (Farmers Home Administration) and the FLB (Federal Land Banks).

Between 1972 and 1973 the FLB loan limits were increased from 65 per cent of normal agricultural value to 85 per cent of market value. Where some value was being provided by recreation and urban influences, this meant a very substantial increase in the borrowing ability of a landholder and prospective land buyer. The effect is to increase demand and with the fixed supply of land the impact is higher prices which in time became a cost of production that needs to be covered by market price set on products and services of the land.

The FHA has provided liberalized credit terms by increasing the debt limit for individual farm ownership borrowers. Debt

from all sources has been increased from $100,000 to $225,000. The FHA may loan or guarantee up to $100,000 of the amount borrowed from all sources.

Although the President's Council of Economic Advisors forecast short-term interest rates to decline somewhat in 1974, USDA market condition reporters felt in October 1973 that interest rates paid on loans to purchase land would increase. Some 87 per cent believed interest rates would increase and only a slightly lower portion, 80 per cent, believed land prices would increase. What these agricultural reporters were saying is that land prices would continue to be sufficiently strong to absorb the expected rising cost of borrowing.

Farm Profits and Land Values

This scenario does not correspond with USDA's expectations. They see farm profits declining because of the practical eliminations of farm program payments, reduced worldwide demand for U.S. agricultural products and less expansionary monetary policy. Nevertheless, USDA expects farm real estate prices to continue to rise in 1974 despite an expected decline in net land income.[1] In order for this relationship between net income and land values to exist price determination of land must not be entirely the result of net income enjoyed. In this instance USDA must be expecting falling interest rates to increase the

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1 USDA, Economic Research Service, Farm Real Estate Market Developments, CD-78, January 1974, p. 7.

PERSHING COUNTY RANCHES

## SUMMARY OF VALUES

### MC DOUGAL LIVESTOCK

APPRAISED VALUES

| | 1971 - 1972 Assessor's Value | N.T.C. Bulletin Value | Market Value |
|---|---|---|---|
| Land | $358,369 | $ 499,090 | $ 896,500 |
| Improvements | 636,257 | 603,500 | 603,500 |
| Total | $994,626 | $1,102,590 | $1,500,000 |

ASSESSED VALUES

| | | | |
|---|---|---|---|
| Land | $125,429 | $ 174,680 | $ 313,780 |
| Improvements | 222,690 | 211,230 | 211,220 |
| Total | $348,119 | $ 385,910 | $ 525,000 |

### MC GOWAN RANCH

APPRAISED VALUES

| | 1971 - 1972 Assessor's Value | N.T.C. Bulletin Value | Market Value |
|---|---|---|---|
| Land | $ 49,290 | $ 63,090 | $ 115,850 |
| Improvements | 10,170 | 19,150 | 19,150 |
| Total | $ 59,460 | $ 82,240 | $ 135,000 |

ASSESSED VALUES

| | | | |
|---|---|---|---|
| Land | $ 17,250 | $ 22,080 | $ 40,550 |
| Improvements | 3,560 | 6,700 | 6,700 |
| Total | $ 20,810 | $ 28,780 | $ 47,250 |

rate of capitalization to such an extent that a declining net income will be able to support a higher capital value. However, this may not be the explanation of higher land values with lower net land income. The higher prices may be due to speculation, i.e., a higher value is given to land than net income and the going rate of interest justify. When these conditions exist on either the up side or the down side the market price must become dominant in setting full value by the agricultural land appraiser of the Nevada Tax Commission.

Conclusion

The efforts of economic theorists to develop a procedure for determining the value of land through calculation of net income and turning this into capital value through the use of a rate of capitalization have been noted for lack of success. The establishment of a value by using cost of reproduction data or original cost less depreciation are not available for the land portion of real estate. This leaves adjusted market value as very nearly the sole useful base for setting land values.

Market price is affected by many forces from tax treatment to transportation costs, to interest rates. The influence of all these forces can only be roughly estimated. However, the market in setting a price includes consideration of existing conditions and all expectations and therefore must dominate land appraisal procedures.

## PART III EVALUATION OF ASSESSMENT PROCEDURES

### Concept of Carrying Capacity

The property tax is fundamentally a tax levied with an *ad valorem* rate on a valuation established by appraisal. The purpose of appraisal is to set a value that would represent what both a buyer and seller, each well informed and each operating without coersion of any kind would find to be acceptable.

The procedure used by DOAS on land that is entirely cattle country land and with a value unaffected by future use as irrigated or recreation property rests upon the familiar animal unit month (AUM). This provides a widely accepted measurement of range land productivity in its highest and best use. A million dollar study completed by the Bureau of Land Management (BLM) concluded in a 1966 report that the AUM support ability provided the best measurement for use in setting rent levels on BLM land.[1]

### Treatment of BLM Grazing Permit

The cattle and sheep ranches themselves provide feed during the winter from hay raised during the summer. Land leased from the BLM at current rates provides range pasture during the summer. The careful survey of the BLM in 1966 found that the market value of a permit to use BLM land for grazing was $14.41 per AUM.[2]

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[1] Statement by Boyd L. Rasmussen, Director, Bureau of Land Management, Department of Interior, before the Subcommittee on Public Lands, U.S. House of Representatives, March 4, 1969.

[2] *Ibid*, p. 2.

Since 1966 there has undoubtedly been a considerable increase in the value of an AUM permit to use BLM land. Because the BLM permit to graze goes along with the fee land, the rent paid or purchase price paid and therefore the value of the ranch includes the value of the permit.

For example, using the $14.41 per AUM capital value figure the owner of a ranch with an ability to feed 1,400 (1,000 cows and 400 calves) AUM for the six months of the winter also possessed (14.41 x 1400 x 6 = $121,044) a right to graze worth $121,044. Currently the DOAS in setting the assessed value of a ranch does not utilize a capital value figure for the permit to graze a certain number of cattle on BLM land during the summer.

The procedure followed avoids the problem of establishing a separate value of the possessory right to use BLM land. The failure to give a separate capital value to the grazing possessory right is perfectly all right but it is also true it sets a single high value on the fee land. The net income arising from the fee land of the ranch's winter feeding operation also includes the income from the possessory right to benefit from an equal number AUM's on BLM land.

This split source of AUM could be divided between possessory right value and fee ownership value. The Nevada Constitution definitely provides for the inclusion of possessory rights in the property tax base (see discussion of this point). However, because the value of the possessory right and the value of the fee ownership are dependent on each other, and have very little separate

usefulness, not much except identifying the source of income is gained through separate calculation. Nevertheless, the process might be useful because the present procedure comes up with an income that arises only from the AUM provided by fee land while the market price of fee land includes in addition the income arising from the AUM provided by the possessory right to graze on U.S. government land that is owned in fee by all the American people. It is because of this reduced AUM income base that the interest rate used for capitalization must be so low, i.e., 1.9 or 2.0 per cent, to come up with a value approaching that observed in the fee sale of rural ranch land.

The reduction of the economic rent arising from the ownership of fee land in Nevada cattle country, and therefore the market price of fee land and the appropriate capitalization rated to be used in determining the value of fee land, will take place when BLM sets a charge per AUM that absorbs a much larger portion of income arising from BLM grazing rights.

Reconstructed Income and Other Value Determiners

When the supply of product cannot be increased, and the product is largely indestructable and in addition, the demand arises from many sources, you also have a product with a very secure annual income. Rural land meets these product parameters and as a result value arises from a basically permanent income assumption. The result of this situation when related to capitalization of a net income arising from the operations of a particular user of land is to give relatively small shifts in income a very substantial

impact on the current capital value and market value of the land.

This explosive effect becomes exaggerated when it rests on a reconstructed net income figure that doesn't even have the first basic factual requirement, i.e., the federal income tax return submitted to the Internal Revenue Service. In addition the use of a generalized capitalization rate fails to take into account those demands with a low capitalization rate and therefore those willing to offer the highest price and become the purchasers of land offered for sale.

If it is assumed that rural land is purchased as an investment that will double in value, then a person with a capitalization rate of 3 per cent can afford to hold for 20 years while a person with a 10 per cent capitalization rate can only afford to hold for 7 years.[1] This variation in capitalization arises from the progressiveness of the federal income tax and the special tax treatment afforded to maintenance expenditures and capital gains. The effect, of course, is to cause rural lands to drift toward corporate and wealthy individual ownership. The experience of Nevada's DOAS has been that rural land sales are made at prices far above the "value" they have arrived at through the application of their reconstructed income and capitalization procedures. These market prices that are so out of line and always on the high side have pushed the DOAS to use a

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[1] An additional out of pocket cost for carrying land rather than securities is set at 0.5 per cent.

capitalization interest rate much lower than had been used previously, when market rates of interest were 6 and 7 per cent rather than an interest a third higher when 9 and 10 per cent rate are normal.

The abandonment of the market value of farm land and its replacement with a constructed "use" value is an effort to give a value to land ownership that corresponds with its value to the weakest holder. The market on the other hand sets values at the price paid by the last, i.e., marginal purchaser, of a product. The property tax is a tax on capital value or price of a product therefore the abandonment of market price requires a basic adjustment of the fundamentals of the tax.

The procedure adopted by many state departments of revenue, tax commissions and the U.S. Department of Agriculture sets a value to be applied to all owners that is considerably below market price. The idea that onwership of land has the same value to all holders has always been unrealistic. The higher levels of income taxes and the particular "tax expenditure" provisions of the income and estate tax laws have substantially increased the variation in the value of rural land ownership. In fact, it can be argued with some justification that the relative value of land ownership when related to the income and total wealth of the owner has been reversed.

When ability to sustain oneself rested on individual effort, and the support of social security and welfare of various types

was not available, the ownership of some land--clear and free--could be the difference between life and death. Under these circumstances, and before the days of the income and the estate tax, the money value placed upon the ownership of farm land could have been higher by the person of modest means than by the wealthy.

Some support, for example, exists for this position in the generally accepted belief that equal taxes collected from each acre of equal fertility with equal access to the market will result in the breaking up of large landholdings. It was, of course, when this belief was strong and was seen to be working in the United States and Australia, as examples, that the modern property tax and its concept of uniformity developed. In other words, during this period equality appeared to have the effect of benefiting the small low income and least wealthy holder of land. Undoubtedly some truth remains in this position, and even this type of equality relative to the property tax has not been achieved--partially because of the relationship of benefits from the expenditure of property tax collections.

Land Demand Levels and Value Estimates

The U.S. Department of Agriculture carries out an annual study titled Farm Real Estate Market Developments. The current studies are for the years ending March and November 1973. These were relatively active years in agriculture real estate. In March of 1973 some 62 per cent of the reporters used by USDA and in October 1973 some 61 per cent, expressed the opinion that more

people were looking for farm and ranch land than had been the case a year ago.[1]

In 1972-73 the voluntary and estate transfers of 10 or more acres which excludes most urban dominated agriculture land sales, totaled 125,000 and included 36.8 million acres valued at $10.6 billion. This amounted to a one year increase of 33 per cent in acreage and 55 per cent in the value of sales.[2]

The per acre increase in farm land of Nevada during the 1972-73 period, as measured by sales prices, was excelled by only five states (Colorado, Wisconsin, North Carolina, West Virginia, Pennsylvania). A number of these states with substantial increases in farm land values are characterized as having considerable recreation acreage. Recreation potential is an element in the increases of acreage values which will quite likely be reduced in 1974 and in the immediate future because of higher energy costs.

The Nevada Tax Commission reports assessed valuations of rural lands in 1972-73 to be lower than in 1971-72. The Nevada total rural lands valuation for 1972-73 was $94,960,820 and in 1971-72 it was $98,092,957. The Nevada Tax Commission's approved valuations of rural lands before exemptions and after equalization decreased by $3,131,237 or 3.19 per cent during the same period

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1 Economic Research Service, USDA, Farm Real Estate Market Developments, CD-78, January 1974, p. 6.

2 Economic Research Service, U.S. Department of Agriculture, Farm Real Estate Market Developments, CF-78, July 1973, p. 7 and Report 1972-73, p. 29.

that the Economic Research Service of the U.S. Department of Agriculture reports per acre farm real estate values in Nevada increased by 18 per cent.

Nevada's Tax Commission Valuation Activity and Powers

The Tax Commission is largely concerned with making ratio studies of assessed values to full values. The full values used are those established by the Tax Commission for the (1) four classes of cultivated land, (2) two classes of meadow or wild hay land, (3) four classes of pasture land, and (4) four classes of grazing land. These fourteen classifications of rural lands have been developed, along with the general production characteristics, by the Nevada Tax Commission.

The Nevada Tax Commission has the right to lower or raise any valuations, exclusive of livestock enumerated in Sec. 5 of their Act. (1917).[1] (It is railroad public utility and in the Constitution mining property that are enumerated).[2] Article X of the Nevada Constitution provides for the taxation of mines on the basis of "proceeds only." Adams reports that during the first years of its life

> "The Commission.....devoted much attention to the valuation of land, establishing classifications and increasing the valuations in a market degree in such (a) way as to equalize

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1 28th Less. Chapter 177, Sec. 7. The first legislation providing for the Tax Commission was adopted in 1913, amended in 1915 and again in 1917 when it became a stable unit of government.

2 Romanzo Adams, Taxation in Nevada, (Reno, Nevada; Nevada Historical Society, 1918), p. 63.

the taxes as between counties better than before."[1]

The emphasis on classification of rural lands for purposes of assessment was apparently very much a portion of the thinking relative to agricultural land assessment from the very beginning. It was expected that once legislation establishing the Tax Commission was adopted the business of establishing a system or rural land classification would be gotten underway.

Classification

The Classification of land into rural, urban, residential, commercial and other subclassifications based on use has been widely adopted. Use classification is usually associated with zoning as well as establishing a procedure for assessment below the value being set in the market place, even though zoning may be restricting current use to a less intensive development than the market considers appropriate.

The Nevada Classification of range land into various qualities of pasture and grazing land is similar to the "site classes" assigned to Oregon Timber land for purposes of valuation. The five sites used are based on "The estimated total height of the dominant and co-dominant trees on the land at 100 years of age." If the height is 200 feet it is Site I land if only 80 feet it is Site II land.[1] This, of course, is a concept identical with that of number of UAM's the range land of Nevada can support.

It, however, does not provide a procedure for the Oregon Department of Revenue to set value because the problem of

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[1] Oregon's Laws and Administrative Rules Relating to Property Assessment and Taxation, 1971, par. 321, 745, p. 233.

DEPARTMENT OF REVENUE
PROPERTY VALUATION DIVISION
CLASSES & GRADES FOR MONTANA AGRICULTURAL LAND CLASSIFICATION
AS APPROVED BY THE DEPARTMENT OF REVENUE - 1973

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## TILLABLE IRRIGATED LAND

| Grade | Tons of Alfalfa Per Acre |
|---|---|
| 1A | 4.5 and over |
| 1B | 4.0 - 4.4 |
| 2 | 3.5 - 3.9 |
| 3 | 3.0 - 3.4 |
| 4 | 2.5 - 2.9 |
| 5 | 2.0 - 2.4 |
| 6 | 1.5 - 1.9 |
| 7 | 1.0 - 1.4 |
| 8 | Less than 1.0 |

## NON-IRRIGATED FARM LAND

| Grade | Bu. of Wheat per Acre On Summer Fallow |
|---|---|
| 1A5 | 34 and over |
| 1A4 | 32 - 33 |
| 1A3 | 30 - 31 |
| 1A2 | 28 - 29 |
| 1A1 | 26 - 27 |
| 1A | 24 - 25 |
| 1B | 22 - 23 |
| 2A | 20 - 21 |
| 2B | 18 - 19 |
| 2C | 16 - 17 |
| 3A | 14 - 15 |
| 3B | 12 - 13 |
| 4A | 10 - 11 |
| 4B | 8 - 9 |
| 5 | Under 8 |

## WILD HAY LAND

| Grade | Tons of Hay per Acre |
|---|---|
| 1 | 3.0 and over |
| 2 | 2.5 - 2.9 |
| 3 | 2.0 - 2.4 |
| 4 | 1.5 - 1.9 |
| 5 | 1.0 - 1.4 |
| 6 | .5 - .9 |
| 7 | Less than .5 |

## GRAZING LAND*

| Grade | Acres for 10 Month Grazing Season Per 1000 lb. Steer or Equivalent |
|---|---|
| 1A2 | Under 3 Acres |
| 1A1 | 3 - 5 Acres |
| 1A | 6 - 10 Acres |
| 1B | 11 - 18 Acres |
| 2A | 19 - 21 Acres |
| 2B | 22 - 27 Acres |
| 3 | 28 - 37 Acres |
| 4 | 38 - 55 Acres |
| 5 | 56 - 99 Acres |
| 6 | 100 Acres or over |

## NON-IRRIGATED CONTINUOUSLY CROPPED FARM LAND

| Grade | Bu. of Wheat per Acre Every Year |
|---|---|
| 1 | 34 and over |
| 2 | 32 - 33 |
| 3 | 30 - 31 |
| 4 | 28 - 29 |
| 5 | 26 - 27 |
| 6 | 24 - 25 |
| 7 | 22 - 23 |
| 8 | 20 - 21 |
| 9 | 18 - 19 |
| 10 | 16 - 17 |
| 11 | 14 - 15 |
| 12 | 12 - 13 |
| 13 | 10 - 11 |
| 14 | Less than 10 |

*NOTE: About 4 range ewes with lambs are considered the equivalent of a 1000 lb. steer. Calves are usually not considered until weaned, and 4 yearling steers or heifers are considered as equivalent to three 1000 lbs. steers. A dry cow is considered the equivalent of a 1000 lb. steer. About 4 cows with calves are considered the equivalent of five 1000 lb. steers.

establishing an annual income to this growth potential remains, and so does the problem of a proper independent rate of capitalization.

In Montana, as the attached copy of their classes and grades for agricultural land classification shows, grazing land is divided into 10 grades based on the support the land is normally capable of providing. The Montana grades and classes are aimed, again, at providing a productivity measure of a piece of land. Of course, again, it is ability to produce that is considered and not actual productivity. The steps for setting a capital value on this productivity remains.

The use of net and gross income by the USDA demonstrates their uncertainty as to the best income base. Also the USDA places substantial weight on values set in the market through sales and purchase of agricultural land and in addition they gather information from reporters as to expectations.

None of these well established steps should be hindered by an honest and carefully considered classification procedure. However, as this brief review makes abundantly clear, classification should not mean a procedure has been established for reducing valuations for property taxation base purposes. When this does take place along with classification, it means another decision, in addition to that of classification, has been made.

Division of Assessment Standards (DOAS)

The Division of Assessment Standards (DOAS) is the operating

arm of the Tax Commission in carrying out its property assessment and property value equalization functions. The Nevada Revised Statutes 361.333 requires the Tax Commission to annually set the "average ratio of assessed value to full cash value of all tangible property in each county."[1]

The full cash value of agricultural land has been determined as that "of the production or income potential of a working ranch of farm."[2]

The calculations made by the DOAS to arrive at value continue to be based on this concept. However, the possessory rights that accompany private spreads is not included in establishing animal unit of month of feed (AUM) associated with a particular acreage.[3]

The composition of the Tax Commission is largely determined by the assessment and valuation assignments given to it by the Legislature. Two of these are related to agriculture, i.e., the valuation of farm land and of livestock. One member of the Tax Commission is identified as being associated with land and another to livestock.[4]

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1 Nevada Tax Commission, Annual Report 1972-73, p. 28.

2 R. A. Zubrow, Op. cit., p. 204.

3 Constitution of Nevada, Article X, Sec. 1. "The legislature shall provide by law for a uniform and equal rate of assessment and taxation, and shall prescribe such regulations as shall secure a just valuation for taxation of all property, real, personal and possessory, except miner and mining claims..." The Nevada Constitution, Origin and Growth by Eleanore Bushnell, Nevada Studies in History and Political Science No. 8. (Reno, Nevada; University of Nevada Press, 1968), p. 163.

4 In 1972 the land member was Louis W. Bergevin and the livestock member Ira H. Kent.

It was mentioned previously that interviews and an examination of the qualifications of the DOAS staff made apparent that new approaches were needed if assigned duties were to be adequately performed. The responsibilities of DOAS are very great and require first class professional attention and acceptance by the Tax Commission of decisions arrived at.

The role of DOAS is to establish values uniformly throughout the state. The role of the Tax Commission is basically to defend these hard decisions when they are attacked by special interest pleaders. In addition, the Tax Commission should be on the lookout for undervaluations that may indicate evidence of corruption of DOAS staff. It is not the Tax Commission's responsibility to enter its judgement alongside that of DOAS relative to valuation results unless proof of fraud or error is developed by the Commission.

The professional efficiency of DOAS arises from a combination of the property assessment expertise of the DOAS staff and the support the staff receive from the Tax Commission in the decisions made. Commission treatment of DOAS determined values as values that can be readily tampered with whenever a complaint is registered violates the intent of Article X, Sec. 1 of the Nevada Constitution. On the other hand, the Tax Commission has full responsibility for seeing that DOAS is properly staffed, and managed in a fashion that assures the carrying out of its valuation responsibilities.

The record of agricultural and open-space property valuations

in Nevada during the past five years, the assessment revisions of the Tax Commission (as reported orally), and the backgrounds and salary levels of DOAS staff point to a deteriorated situation. The existing undesirable condition of DOAS's internal efficiency and external relations with the Tax Commission and taxpayers will not right itself. Administrative and legislative action is needed if justice is to prevail in the area of appraisal of agriculture land in Nevada for the purpose of taxation.

Colorado Experience

The inability of broad based equality of treatment of agricultural land with other property in the application of property taxes is illustrated by a recent series of events in Colorado. In 1964 when Colorado introduced fractional assessment at 30 per cent of actual value and also legislated six factors to be used uniformly in setting value on residential, commercial, agricultural and industrial property,[1] the result was a relative increase in agricultural assessments. The agricultural community protested.

A result of the protest was new legislation in 1967 that provided a unique procedure for assessing agricultural lands. The

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[1] The six factors in determining "actual value" as established in the 1964 Colorado legislation stayed with the traditional cost, market and income approach. The six-way breakdown provided is as follows:

1. location and desirability
2. functional use
3. current replacement cost, i.e., new less depreciation
4. comparison with other properties of known and recognized value
5 market value in the ordinary course of trade
6. earnings or productive capacity

new legislation provides-

> "The actual value of agricultural lands exclusive of improvements thereon shall be determined by consideration of the earning or productive capacity of such lands during a reasonable period of time, capitalized at commonly accepted rates."[1]

The aim of the legislation is apparently to avoid setting a higher value on farm land when compared with income earned than on other land. The interest of agriculture landowners in Colorado in avoiding market prices of farm land as a basis for assessment is understandable. The Economic Research Service of the U.S. Department of Agriculture reports that farm real estate in Colorado during the November 1972-73 twelve month period rose more rapidly than in any other of the 47 contiguous states.[2]

A major portion of the Colorado effort has been centered on developing uniform assessment procedures for all real estate. This was at least legislatively achieved in 1964 but was lost three years later in 1967 when agriculture gained a special position. The special treatment of agriculture, as demonstrated by the price index, was not needed to protect agriculture from paying a higher percentage of its capital value in property taxes. The change gained the political support needed even though the

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1 CRS 137-1-3 (5)

2 Florida has not been included since March 1972.

owners of agricultural land were paying a smaller portion of the value of their farm real estate as property taxes. Today, ten years later, rural land values in Colorado are increasing more rapidly than in any other state but the 1964 uniform assessment provision requiring the treatment of agricultural land like other land, that was repealed in 1967, has not been revived.

Conclusion

The AUM procedure of setting value of range land requires that the AUM of possessory interest in BLM land be included. In addition, because the procedure of use value tends to set the value of land as it exists for the weakest holder, market value of land must be reduced when it is used as an item in cost of operation.

DOAS has failed to keep its assessments current with the increase that has been taking place in Nevada range land values. This shortcoming exists in other Western states but appears to be more serious in Nevada. The shortcoming arises largely because under the Bulletin method rising land prices are not included in the income total while the rising cost of land is considered as an expense to be deducted from gross income.

Evaluation of Study Titled
Taxation of Rural Lands in Nevada
Presented at Nevada Tax Commission Hearing, May 1971.[1]

Concept of Economic Rent

The discussions of the two introductory paragraphs of the study confuse ability to pay of the owner of land with the surplus of a particular piece of property. A piece of very productive land may be owned by a relatively poor person and by a very wealthy. The assessed value of the land and the property taxes collected from that valuation should not vary under Nevada law with the relative wealth and income of the owner. Therefore the concept of the property tax does not lend itself to traditional ability to pay analysis. (See discussion of integration with income tax.)

The property tax levied on rural land is a method to allocate to local and state government a uniform portion of the potential economic rent arising from the intensive application of modern agriculture techniques. Economic rent exists because location and fertility of the land is such that labor and other variable inputs can be paid out of the productivity with a surplus remaining.

The portion of this surplus, potential or realized, collected as property taxes reduces the surplus available or potentially available, to the private owner. The reduction of this surplus

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1 Study was funded by the Nevada Tax Commission and was carried on in cooperation with the Nevada Cattleman's Association, the Nevada Farm Bureau, the Nevada Woodgrowers' Association and the Southern Pacific Railroad.

reduces the price that the market will set for the land. The price is reduced by the rate at which the market is capitalizing net income arising from the full utilization of agricultural land. If this capitalization rate approximates that existing on income from ownership of other properties, then each dollar of additional tax payments is capitalized into a reduction in the cost of land equal to the capitalized value of the tax payment in the capital and money markets.

Under the conditions described above, which is a description of the basic concept of land rent developed in economic literature, the necessity of paying property taxes does not increase the cost of production because the cost of acquiring land is reduced by the capitalized value of this payment.[1] The cost of the property tax payment arises only in its retarding effect on profits from land speculation. If property tax rates continued to increase sufficiently to absorb additional economic rents arising from improved techniques or expanded real demand for products and services of the land, the cost of land as an input in agricultural production would remain constant. "The...enduring appeal of taxes on land values arises from the fact that economic rent can be taxed away without affecting the allocation of resources."[2] When land values in real terms, i.e., taking into account changes

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1 Richard G. Lipsey and Peter O. Steiner, Economics (New York: Harper and Row, 1966), pp. 375-377.

2 Ibid, p. 376.

in the value of money, increase, it is indicative of property tax collections insufficient to keep constant the economic rent available to private owners. Property taxes levied on land have the potential of preventing an increase in rent payments for the use of land.

Definition of Returns

In the first paragraph of Recommendation 2 last sentence should read "Agriculture, recreation and forestry require large investments in real estate, and land used by these industries generally earn lower returns than land used by commercial and industrial enterprises which use land more intensively." Even after the sentence has been reconstructed its meaning remains unclear. The first portion of the sentence "returns" apparently refers to an amount in excess of normal "returns" from the investment of a dollar in a non-depreciating and inelastic supply asset such as land. The second half of the sentence seems to infer that the price of land suitable for more intensive use, such as land occupied by industrial and commercial structures, will have the same market price and the same costs tied to its utilization as land with a highest and best use in agriculture, recreation or forestry, and, therefore, the "return", again over and above cost of funds and the market's evaluation of the risk will be greater on the more "intensively" utilized land.

This variation in the "returns" from a dollar invested in land is not supported by data. Yet, of course, it is fundamental

to a position that considers market value a satisfactory base for land used for industrial, commercial and residential use but not for agriculture, forestry and recreational use.

Market Value Considered

In the second paragraph of 2 of the Recommendations two major faults of the market value approach are given. They are given to strengthen the position adopted that a property tax based on reconstructed use income capitalized at a reasonable rate is superior to valuation based on market value. Again data are not presented to demonstrate market prices are higher than justified by the economic contribution of land sold to the wealth and income of the buyer. (see analysis related to a possible approach to this problem.)

As the authors of the second paragraph of Recommendation 2 point out, the agricultural land market is different from the egg market. However, the land market also bears important similarities to a market for replaceable consumer goods. First there are offer prices as well as traded prices. The authors have not made an effort to gather this sort of information, and because of assumed legal restrictions assessors have not adequately plumbeted this land value information source, either. Second, the price set in a free market is always, unless supply is completely elastic, higher than some are willing to pay and below a level at which some are willing to sell. All buyers and sellers are not willing to do business at the market price as the

authors seem to assume. Also many buyers and sellers are willing to do some business at the market price to meet pressing needs or to "hedge their bets" but are unwilling to sell their entire supply or purchase their total needs. Finally, the market procedure for setting price under all conditions allocates windfalls to the lucky and the smart and losses to others less well endowed. The market for agricultural land in Nevada is not unique in this respect. The role of government procedure under these conditions is to iron out some of the rough spots, and not "to throw out the baby with the bath water."

Land Valuation Increases

The theme of the conclusions of this study is that increased land valuations would place a hardship on the small and medium sized spread that the owners could not readily bear, but this would not be true of the large operator. The cost and income data presented support this conclusion. The remedy offered for this condition is the investigation of alternative methods of property value assessment and property taxation.

The introduction of a system providing for the deferral of the property tax on the difference between market value and use value of rural land, as recommended, is as pointed out, a rather popular property tax gimmick, particularly for rural land tainted with urban use speculation. It is also true, again as pointed out, that a number of states with constitutional property tax requirements similar to Nevada's have made legislative

provision for the taxation of agricultural, forest and recreation land at a use value basis. These developments which cause a reduction of current property tax revenues obviously require either a decrease in the level of government services or an increase in the rates of other taxes. On the other hand, an increase in tax collections from rural lands make increased government service support possible and/or a reduction in the rates or an increase in the exemptions existing under other taxes.

PART IV PROPERTY TAX DEFERRAL AND/OR ABATEMENT

The deferral of property taxes accomplishes two related investment management effects. First, it reduces the cost of holding an inventory of land. Second, it slows down the speed of land development.

The first effect, the reduction it causes in the cost of holding land, is obvious on the face of it and only requires a couple of additional statements. The reduction of the holding costs tends to increase land prices by some level of capitalization of the reduction of this cost. It is possible that the interest charged on the deferred taxes is equal to the market rate and that interest is also charged at the market rate on unpaid accrued interest. Under these conditions the only effect of the deferral is psychological, and that some holders with unacceptable credit ratings are granted credit in this manner that would not otherwise be theirs. In other words, it somewhat increases the possibility of land speculation to the under-capitalized operator.

The effect of slowing down of development and actually less efficient and desirable development arises when the deferral does grant an economic benefit of considerable value. This is the case, for example, when interest is not charged on the deferred taxes, and the interest itself is not included in the base, in addition to the deferred taxes.

A tax deferral procedure can be established that largely absorbs any economic benefit, except in effect, the benefit of a

debt that need not be repaid and despite additional unpaid taxes does not grow beyond a legislated number of years of accumulation. If this ceiling of number of years of accumulation of deferred taxes was not provided, accumulated unpaid taxes and interest would approach the full value of the land. This neutrality is avoided in all existing legislation by limiting the number of years of deferral that become payable when the land is sold for a more intensive use than agriculture. As long as the legal period of accumulation is sufficiently short, that deferred taxes plus interest and interest on unpaid interest does not equal the difference in the selling price actually received and what could have been received at the beginning of the deferral period plus compound interest for the period involved, the owner enjoys an economic gain by having property taxed at agricultural use value.

Legislation providing for deferral of taxes on property value above a reconstructed use value in agriculture or straight taxation based on this lower use type valuation has been advocated and adopted for a number of reasons, which in most cases are becoming about as convincing in Nevada as in other states.

A basic element in the growth of use value as reconstructed with income data has been the development of income as the more important of the three-way (market value, depreciated reconstruction cost and income) traditional property appraisal procedures.

(See discussions under income and land values.) When these procedures are transferred without considerable readjustment to agricultural land valuations or the valuation of any type of land, circular causation of value take over, and ridiculous results, such as raising alfalpha at a loss in Nevada or a Wisconsin dairy industry operating at a loss, are obtained.

## Problems & Shortcomings

The tax abatement or tax deferral movement as it has been applied to typical urban-rural fringe areas has used as its principal argument the preservation of open spaces. In addition, ability to pay inequities arising in the case of long-held family farms, for example, are used as a basis for a general legislation reducing property tax liabilities of all owners of land of the type selling for sharply higher prices. In the past these pressures in the Western states arise as frequently from recreation demands as from basic urban use needs.

### Taxation & Market Value

The problem of setting a value on land approaching ripening to a more intensive use is very difficult. The difficulty is expanded when divergence from information gained from sales and offer prices plus appraisal procedures are considered necessary.[1]

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[1] Frederick D. Stocker, "Assessment of Land in Urban-Rural Fringe Areas" in The Property Tax and Its Administration (ed. Arthur D. Lynn, Jr.) (Madison, Wis.: University of Wisconsin Press, 1967) p. 149.

Also, of course, the loss of a tax abatement of the portion of property taxes that had been deferred during the previous seven years is a weak reed indeed to be used to hold back sale for use as a high density recreation, industrial, commercial or housing use.

The literature does not appear to provide any examples of the preservation of green belts through property tax abatement. The use of land value taxation to absorb more of the economic rent could however be helpful by reducing demand for land at the fringes and increasing full use of space within the city. Help can also be expected from the tougher land use legislation being adopted, the higher gasoline and the county-wide master plans and comprehensive zoning.

The higher market prices for land have two basic effects. The one most frequently emphasized, when the healthy citizen game of "reducing the taxes I pay" is being played, is that costs are substantially higher because land costs more. The other basic effect is a substantial increase in the economic income of those owning agricultural and other lands. One estimate, made before the explosive agricultural land boom of the 1970's, placed increases in market price of farm real estate equal "to 46 per cent of the average annual net farm income".[1] The same study also found that farm operators and their families had net worths about twice that of other families.

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[1] Federal Reserve Bank of Chicago, Business Conditions, June, 1968, p. 8.

New Jersey Plan

More than likely the preferred procedure for tackling the property taxation problem associated with the urban-rural fringe area is to move in the direction that both Hawaii and New Jersey are very seriously considering, and in fact, they have already taken some implementation steps. Also, the philosophy provided by the betterment tax is being adjusted to meet the political and economic conditions existing.[1]

Basically what is involved is provision in the state constitution for the setting aside of land for a particular use, say agriculture. This land acquires a value based on the conditions on which it is set aside and is purchased and sold as the owners see fit. If the appropriate government decides a different use is required, it purchases the land at the going market price and sells it to a private purchaser on conditions set down, at the highest price bid. The difference between the buying price and selling price is revenue for use by the designated government entity.[2]

Business Equity of Land Tax

Standing not far away from cost and income positions for special property tax deferral and abatement is the feeling of

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1 R. Denman, Public Appropriation of Unearned Land Values, Occasional Paper No. 4, Faculty Commerce and Business Administration, University of British Columbia, Vancouver, B.C. 1969.

2 Phillip Alampi, "A New Approach to Saving Farm Land", State Government, 66, Autumn, 1973, No. 4, pp. 211-212.

industries such as agriculture, timber and recreation that they are being treated unfairly relative to industries with balance sheets showing only a small portion of assets consisting of land. There may, of course, be two businesses one owning very few physical assets of any kind, jobbers for example, making substantially larger profits than the other an operator of a resort area utilizing a considerable quantity of land.

There is only one answer to this type of attitude and situation, and it is not particularly politically acceptable. It is that no one has forced the resort owner to engage in a business utilizing land. Therefore the fact that he owns land demonstrates that he has perceived certain advantages from this position. Business tax equity requires that all businesses with a given income and given type of assets and sales be treated alike, and not that each business with the same number of employees, or what have you, pay the same tax total.

Incidence of Property Tax

The strong outcry that arises when the land tax rules are changed and the taxation of land is increased, while less political difficulty arises when social security or sales taxes are increased, is explainable in economic terms because a property tax increase is capitalized in a one time burden felt entirely when the tax is increased. On the other hand, the portion of the higher social security tax paid by the income earner obviously does not affect the capital value of a free worker, but is a tax establishing a burden on savings and consumption that is paid

bit by bit through the years. The impact of higher social security taxes on the employer is perhaps like a higher retail sales tax. It results in higher selling prices, and in addition, some substitution of machines for labor, so again, but in a less transparent fashion, the social security tax increase is not capitalized.

The incidence of the portion of the property tax resting on personal property and structures is a payment that must be added to allocated annual cost of this capital. This allocation through time must equal replacement cost of the property. Therefore the tax has increased costs. The portion of the property tax resting on land looks the same at date of imposition. However, because this portion of a firm's or individual's property need not be replaced and because it does not have a production cost, the tax payment only results in a reduction of economic rent which acts to decrease price of new purchases and the level of rents being set in the market. The upward impact on prices is largely limited to a reduced expectation of gains on land holdings.

## PART V GRANTS ECONOMICS AND THE AGRICULTURE INDUSTRY[1]

### Local Government Grants

The use of the property tax by both the state and local governments to give grants to owners of land being partially or completely used for agricultural purposes makes its appearance in a number of studies. In these studies the grant is assumed to be given if agricultural property, usually largely land, is assessed at a portion of market value below that of property used by other industries, this practice is often referred to by the euphemism, use value assessment.

The justification for the more favorable valuation treatment given land used by the agriculture industry can be divided into two categories. First, there are the justifications arising from the belief that agriculture because it is a large user land cannot afford to pay the portion of property taxes made up of land at the same level as other users. Second, there are those explanations related to the belief that for various reasons the market price of land has been bid up above its value for agricultural purposes.

These two positions are to a degree supported by data. For example, it is obvious that land used for agriculture seldom

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[1] Based on paper given by Thomas Muller presented at the Symposium on the Grants Economy held between the Association for the Study of the Grants Economy and the American Association for the Advancement of Science in December, 1969 in Boston, Mass.

supports the intensity of capital investment of land used by, say the chemical industry, or in most cases to land used by the housing industry. Therefore the portion of property taxes levied on land weighs more heavily on agriculture than on other industries. It also appears to have been true, prior to the rapid inflation of 1973-74 which is still working itself out in terms of land prices, that agricultural land values as well as urban land values have been increasing more rapidly than prices generally, or than the values of alternative investments. However, currently (1974) the price of agricultural land has not kept up with price increases of wheat and corn, as examples.

The agricultural industry's costs have become less dominated by land costs as fertilizer, machine and direct labor explanations have increased even more rapidly than land costs, including property taxes. Nevertheless, economic rent costs arising from land continue to be more important to the agriculture industry than is true of most industries.

## Regressiveness

Where local government services, including education, are seen to be as beneficial on a per person basis to small land owners and to residents of agricultural related cities, as to the owners of large properties, it is often a portion of the justification for assessing small properties at much nearer full market value than the large properties. The logic of this political-economic decision appears to rest on service benefits. The owner of a small

farm is quite likely to utilize most local government services as much as the owner of a large acreage of good land. It is not a tax levied on the basis of land ownership or wealth or income, but instead largely on the basis of benefit enjoyed by expenditure of tax collections.

Large and Small Holdings

The above relationship between taxes and land demonstrates an aspect of the property tax that is frequently discussed. It is that large and valuable properties are assessed at a lower percentage of their full value than are small properties. This is often pointed to as proof of the regressivity of the property tax. In fact some purests point out that it is this tendency--higher relative assessment on small and less valuable properties--that consitutes regressivity of the property tax.[1]

When property tax payments are considered as a per cent of the income of the payer of property taxes, the relationship established is between income and taxes paid. However, the property tax was never meant to be a tax that was paid because of the current income of the particular owner. Instead, the tax is based on the capitalized value of the potential income from the control of the property. The owner, under the theory of the

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[1] Jewell J. Rasmussen, "Conference Hour Discussions" in Property Taxation - USA (editor, R. W. Lindholm), (Madison, Wis.: University of Wisconsin Press, 1967), p. 282.

property tax, who makes better use of his property than the average pays taxes that are a smaller percentage of the income arising from the property. Of course, the reverse relationship between taxes and property related income exists when the property is being badly managed.

Although the property tax and income potential from the property are very closely associated, the property tax and actual income from a property are not. The property tax on two spreads equal in all respects, except that on one a substantial profit is being enjoyed and the other one is losing money, should be identical.

It is also true that property tax payments in the above situation would not be changed because the owners of the profitable acreage had a large income from other sources while the unprofitable one did not. Neither the total income of the owners of taxable property or the current income being earned on the property, if it is out of line with average earnings, should affect property taxes due under the guidelines of the traditional property tax. (See discussion of possible integration.)

The property tax even though it is not an income tax is continually treated as though it were. The same perversion exists in analysis of the retail sales tax. It too is analyzed as though it were an income tax, and is criticized on this basis rather than as a tax on consumption expenditures, which it is.

In the case of the property tax the tendency to administer and judge it as though it were an income tax has resulted in

legislative and popular attitudes that have generally worked to reduce the effectivenesss of the tax. To illustrate this we can go back to the "regressive" tendency of the property tax to be levied on a larger portion of the value base of small and less valuable properties than on large and valuable properties.

The undesirableness of this practice from the point of view of property tax adminstration both theory and practice, is well documented. On its face it violates all general understandings of fair play, yet the practice continues. We find procedures approved by the Federal Internal Revenue Codes income tax provisions and apparently administrative practices also, that are blood relatives of the property tax treatment of large and small properties. Tax treatment favoring large income receivers under the income tax must substantially reduce anyone's belief that the property tax itself possesses an unique set of characterisitics that causes the favoritism it shows toward large and valuable property holdings. As pointed out, a portion of the explanation in the case of the property tax arises because the tax is partially seen as a payment for benefits received from government. The number of children going to school has in the past tended to be larger per acre, when ownership of property was divided into small units. Therefore education costs, which were largely financed out of property tax collections, were larger per dollar of assessed value in areas where operating units were small. The inequitableness of assessed values between large and valuable properties is therefore partially

supported by the benefit theory of tax justice. This is perhaps also true, but certainly much less so, of the favoritism of the federal income taxes.

As a Wealth Tax

Another aspect of the regressiveness of the property tax is related to the tax's characteristic as a tax on wealth. It is the only wealth tax used in Nevada. The federal government's estate tax is also measured by wealth and is the only federal effort to use wealth as a tax base.[1]

In several respects the amount of wealth controlled by an individual or a group is a better measurement of ability to pay taxes than annual realized income. However, the property tax largely excludes all wealth from its base other than real estate and personal property used in business and agriculture. The important question relative to regressivity is whether the portion of wealth included in the property tax base is owned largely by the poor as must be the case if the property tax is to be regressive.[2]

Some studies exist as to the distribution of the ownership of real estate. These are considered in studies included in the

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1 R. W. Lindholm, "Death and Gift Taxes" (Area 6), A Description Analysis of Oregon's Fiscal System, (Salem, Oregon, Department of Revenue, 1971). pp. 2-3.

2 Dick Netzer, "The Incidence of the Property Tax Revisited," National Tax Journal, 26 No. 4 (December, 1973), pp. 515-535.

bibliography of this report. At this point reference to common sense is enough. Real estate owned by the poor does exist, but it is the unusual situation which can be handled by provisions in the legislation along the lines of homestead exemptions and "circuit breaker" types of legislation. In other words, grants economics type of measures can be used in the area of the property tax to avoid hardship just as it is used through personal deductions and other devices in the personal income tax.

Farm Subsidies

The tools of grants economics have been intensively used in the analysis of the distribution of farm subsidies. These programs in the past have granted about $10 billion annually to farmers and others owning farms. The distribution has been roughly on the basis of marketable farm production. About $5 billion of the grants were from the federal budget and $4.5 billion in higher prices of food and fiber to purchasers.[1]

These subsidies which were initiated as a procedure to assist the low income farmer have in fact gone largely to high and middle income owners of farm land, because these are the main producers of farm products brought to market for sale. The original landowners at the time of the development of agriculture price support programs were benefited through capitalization into higher land

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[1] Charles Schultze, The Distribution of Farm Subsidies, (Washington, D.C.: The Brookings Institution, 1971).

prices of higher incomes from farm land ownership. The farm land they owned became more valuable by a multiple of the government grant.

As this farmland gradually changed hands (at about 3 per cent a year), and as cash rents were increased, the costs of farm production were increased by the amount of the federal budgetary support. Only the first generation holders of farmland benefited from the subsidies. Second generation landholders and renters find that higher land costs have eaten up the benefits of higher prices through production restriction and price support payments by the federal government.

The benefits the federal farm subsidy program provided in greater price stability through storage, and subsidized foreign sales of agricultural products in surplus at established prices are not measureable. However, they were undoubtedly substantial for the removal of much price risk made capital purchase planning practical. It is also true that this additional crop production efficiency to the extent that it decreases costs and increases net income, benefits only the first generation user. Later users find that either land costs or lower prices have used up the benefits.[1] Under price support programs it is only higher land costs that will absorb the additional profitability coming from the original technical innovation encouraged by an assured price

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[1] Peter Mieszkowski, "The Property Tax: An Excise Tax or a Profits Tax?", J No. 1, April 1972, pp. 73-95.

level for agricultural products.

The farm subsidy program to the extent it has through steady income increased the efficiency of agriculture has increased economic well-being of others in addition to the owners of farm lands. The increased efficiency of agricultural production has released workers to be productive in other areas. As a result of increased agricultural production efficiency, the economy has the potential for a greater real level of economic activity. It also has a group of first generation farm landowners that have enjoyed a considerable increase in the capital value of their investment.[1] This, of course, permits them to be substantial benefactors from the increased productivity.

If the original intent of the farm subsidy program, i.e., "increase the income of low-income farmers" is to be realized, and for that matter for the program to decrease the price of food which absorbs a larger portion of the budget of low income receivers than high income receivers, then the grants must not be capitalized into a higher price of land. Sometimes it has been said that the original goal can be accomplished by supplementary income grants to low-income farmers. Although this, an income support rather than a price support program, has potential, a move in this direction by the Secretary of Agriculture Brannon, back in 1949, did not develop wide political

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1 Jerry J. Jasinowski, "The Economics of Federal Subsidy Programs" in Government Spending and Land Values, (ed. C. Lowell Harriss), (Madison, Wis.: University of Wisconsin Press, 1973), pp. 10-11.

support, perhaps because of fear of low prices for land and agricultural products and lack of Negro political strength.[1] Also, income supplements have encountered administrative difficulties that are currently considered along with the analysis of the negative income tax.[2]

Conclusion

Land costs rise as the profitability of the use of land increases from any cause, including lower taxes on profits as well as lower real estate taxes. Therefore, within a relatively short period decreased costs that do not also increase supply sufficiently to reduce selling price to equal cost reductions of products produced from a given land space disappear as they are absorbed in economic rent charges, i.e., higher cost for use or purchase of land.

The property tax, at least the portion resting on agricultural and open space land, turns out to be a levy that absorbs economic rents arising within these areas of the private enterprise system. The impact is therefore on lower capital values of non-reproduceable assets and not directly in higher prices.

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1 Murray R. Benedict, Can We Solve the Farm Problem?, (New York: The Twentieth Century Fund, 1955), pp. 271-274.

2 Christopher Green, Negative Taxes and the Poverty Problem. (Washington, D.C.: The Brookings Institution, 1967), pp. 82-137.

## PART VI CONSIDERATION OF ASSEMBLY JOINT RESOLUTION No. 23 AND THE CONCEPT OF DIFFERENTIAL TREATMENT OF LANDOWNERS AND LAND USED FOR AGRICULTURE AND OPEN SPACE

### Assembly Joint Resolution 23

AJR 23 amends Section 1 of Article X of the Nevada Constitution by inserting

> "notwithstanding the provisions of this section, the legislature may constitute agricultural and open-space real property having a greater value for another use than that for which it is being used, as a separate class for taxation purposes and may provide a separate uniform plan for appraisal and valuation of such property for assessment purpose. If such a plan is provided, the legislature shall also provide for retroactive assessment for a period of not less than 7 years when agriculture and open-space real property is converted to a higher use conforming to the use for which other nearby property is used."

The following definitional aspects and provisions of this constitutional amendment are considered: definition of agricultural use, relation to agricultural circuit breaker, acceptable open-space use, tax deferral period, interest rate charged, impact of restrictiveness of implementing legislation.

## Defining Agricultural Use

Two conceptual approaches

1. productivity of land, either as a
   a. given value of production or as
   b. a per cent of potential productivity being realized
2. reliance of owner on income produced by the land.

The (1) (a) concept is used by Nevada and many other states. It was abandoned by Oregon in 1973. Problems with the approach point to a reduced use. It places a minimum value of productivity on agricultural products from the land to qualify for appraisal on a farm use basis.[1]

The difficulties arise because 1) productivity potential of land varies widely, 2) actual productivity cannot be readily checked by assessors, 3) amount established must be changed frequently as prices change and 4) the value set must be very low to avoid hardship to certain elderly and disabled landowners and to owners of unproductive land, a result it does not set a useful minimum.

If the objective of agricultural use valuation is to maximize agricultural production the potential agricultural productivity of all lands being placed in this category must be compared to actual productivity. The (1) (b) approach might provide that all land

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[1] NRS 360.200, Property Tax Regulation No. 5, Definition of Agricultural Land

not being used up to 90% of its potential would be taxed on the basis of market value and not on an agricultural use valuation basis.

Problems that might arise under this approach could be mitigated by a circuit breaker calculated as follows:

1. Develop a net income potential for all agricultural land
2. Develop a minimum farm family income
3. Calculate net income potential of land of a farm
4. Relate net income potential of farm to minimum farm family income
5. If (3) is less than (2) ascertain other income
6. Add other income to (3)
7. If total is less than (2) provide for property tax relief up to the amount required to bring (6) up to (2).

The basics of an equitable approach to a property tax overload on the farms is being actively considered in Vermont. The Michigan Farm Circuit Breaker is an effort to combine the relief of a property tax overload with the negotiation of a contract to keep farmland as farmland. It is really a procedure for limiting the availability of agricultural use valuation. (Effective July 1, 1974)

The (2) approach looks at the activity of the owner to determine if land is entitled to agricultural use valuation. It is whether the land owner is following agriculture as a way of

life that determines if a value less than market value is to be set on the land. The procedure is aimed at using the tax system to somewhat encourage the continuation of the family owned farm. The most practical way of doing this is to establish an income level based on per cent of total income. For example, if 50% or more of gross income of the owner arose from agricultural operations in Nevada, agricultural use valuation would be available.* This would rule out the benefits of agricultural valuation to many owners (corporate and individual) with large incomes from sources other than Nevada agriculture.

One effect of this approach would be to make it somewhat easier for those interested in farming in Nevada to acquire the land needed. Another effect would be to somewhat decrease out-of-state land ownership. Finally, it would increase tax revenues available to local governments without increasing the taxes paid by local farmer-owners.

Any of the procedures outlined for defining agricultural use land depend for effective administration on the availability of federal income tax returns and marketing receipts. Without this information the assessor's ability to differentiate land use is sharply reduced. Therefore any legislation in this area should require the landowner to present income tax returns and/or

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*In order to avoid a sharp change at just the 50 per cent point the saving could be graduated over the 40 to 50 per cent area. The law would provide for 20 per cent of difference at 40 per cent, 40 per cent at 45 per cent, 60 per cent at 47 per cent and 100 per cent at 50 per cent.

marketing receipts, depending on procedure adopted, to prove annually eligibility for farm use valuation.

Because of the sensitivity of income tax data to some owners of land a special state level review committee should be available upon the payment of the costs of the review. The cost billing would be based on actual outlays based on hours involved at average salary levels plus materials and allocated cost of office space.

The defense for agriculture use valuation does not rest on relatively high total tax payments of the agriculture industry. Neither is the favoritism advocated to encourage the purchase of Nevada land by wealthy corporations and individuals benefiting from a federal income tax law that makes it economically possible to bid high prices that can't be matched by ordinary folks. The justification that exists, after an agricultural circuit breaker (see above) has been provided, for favored treatment, rests on the desirability of preserving the family farm as a going economic unit in areas close to cities and in the far reaches of Eastern Nevada. This goal, to the extent agriculture use valuation can provide it, is most effectively met by defining agriculture use in terms of importance of income of the ranch to the owner-rancher.

Impact of Restrictiveness of Implementing Legislation

The purpose or goals of AJR 23 have not, and perhaps cannot be completely defined. In the discussion on page 85 it was accepted that the principal goal was (3) preserve owner-operated

family ranches and farms. Discussions with Nevada citizens involved in the formulation of AJR 23 elicited the following aims, or put somewhat differently, that the proposed constitutional amendment would permit adoption of legislation that would reach one or more of the following purposes:

(1) property tax relief for the rural poor
(2) preserve the quantity of land in farming and open-space use adjacent to urban areas
(3) preserve owner-operated family ranches and farms
(4) protect owners of land that is not being put to highest and best use
(5) create green belts
(6) expand and preserve land dedicated for recreational use
(7) maintain Bulletin valuation procedures
(8) increase ability-to-pay aspects of the property tax
(9) reduce trend of increased Nevada land ownership by the very rich and the large corporations

The degree to which each of the above goals--some of which are at least partially inconsistent--is reached depends on the enabling legislation adopted when AJR 23 becomes a portion of the Nevada Constitution. For example, what restrictions will be placed on a landowner's ability to enjoy benefits possible under AJR 23.

If the principal goal is (1) the benefits would be sharply limited to those having little wealth and low incomes. However, if this is done the progress made to reach goals (4) and (6) would be sharply limited, however, goal (8) would be directly advanced and this would also be true, but to a lesser degree, of goals (3), (7) and (9). Enabling legislation aimed primarily at (1) would be relatively neutral in its impact on goals (2), (5).

On the other hand, if (7) is the principal goal and the legislation adopted carries out this purpose, the major accomplishment of AJR 23 would be to make existing conditions less subject to change. To the extent that existing conditions are vaguely considered undesirable and play an important part in the adoption of AJR 23 the will of the voters would not be carried out by a no action policy.

There are three types of programs being used by the over thirty states using some type of agricultural and/or open-space tax deferral or use value assessment procedures.

One is the preferential assessment. This is the Bulletin system being used in Nevada prior to adoption of AJR 23 and is believed by many to be a procedure that is in violation of the Nevada Constitution. A second is deferred taxes which is provided for in AJR 23. The third procedure is restrictive agreements which more than likely would also be possible under AJR 23 if its guidelines are met.

The abandonment of the Bulletin method of straight preferential assessment would not eliminate farm land valuations below highest and best use but the undervaluation would be reduced. The adoption of deferred taxes can be done in a manner that makes the procedure tough or easy. The same possibilities exist, of course, with restrictive agreements.

If the deferral or restrictive agreement route is made very strict very few owners of land in urban or recreation fringe areas would sign up. In Nevada with its general use of the

maximum rate, this would increase property tax collections. However, no progress would be made toward (5) "create green belts or (2) "preserve the quantity of land in farming." Under these conditions deferral would only be another way for the owners of agricultural and open space lands outside of fringe areas to benefit from current use value. Fringe area landowners would pay higher taxes. This would reduce taxes of others in the area, assuming constant expenditures, which may result in some reduction of scatteration, but that is about all.

If the deferral is made as easy as possible under AJR 23 provisions, and Bulletin valuation procedures are abandoned, more of the fringe area landowners would come in and this would decrease additional revenues currently and would also reduce revenues received when the land had ripened into a higher use. Again the change from the existing situation would not be major.

However, if the power to "establish a separate class for taxation purposes" and the existing circuit breaker legislation concepts are fully utilized along with county master plans and comprehensive zoning much more can be done to move toward a large number, maybe all, of the nine goals listed.

A warning relative to expanded use of the circuit breaker that is based on Oregon experience may be appropriate. Table I provides a summary of the results under the 1971 Oregon legislation. The drain of about $14 million on state revenues was considerably less than expected and more liberal legislation was adopted. As this is being written the results of this new circuit breaker type

property tax-rent relief legislation are becoming known. The cost to the state is over ten times that of the former legislation and considerably greater than forecast. In 1972 some 85,000 Oregon income tax returns included circuit breaker property tax relief. In 1973 (returns filed in April 1974) circuit breaker property tax relief was claimed by 516,000 taxpayers. One further word concerning Table I. The concentration in $0 - $30,000 bracket was further concentrated in the lower end of the bracket as the average income per return was only $2,019. The average property tax liability of those within this income bracket was $276 and the average property tax savings was $14. Also those using the circuit breaker accounted for 41.5 per cent of total wage and salary income and only 12.2 per cent of total interest and dividend income.

TABLE I
OREGON'S CIRCUIT BREAKER

Income Bracket, Property Tax Relief, and Source of Income, Oregon, 1972

| Income Bracket | Total Household Income* | Property Relief Total | Property Tax Relief as Per Cent of Household Income | Social Security*** | Social Security as Per Cent of Household Income |
|---|---|---|---|---|---|
| $0 - $30,000 | $ 50,305,175 | $ 5,127,395 | 10 | $ 31,017,227 | 62 |
| 30,000 - 60,000 | 143,641,105 | 5,776,110 | 4 | 59,791,468 | 42 |
| 60,000 - 80,000 | 86,158,470 | 1,698,928 | 2 | 18,813,640 | 22 |
| 80,000 -100,000 | 61,325,536 | 559,931 | 0.9 | 6,572,534 | 11 |
| 100,000-200,000 | 90,467,936 | 582,812 | 0.6 | 3,350,774 | 4 |
| Total | 427,344,641 | 13,964,231** | 3 | 119,735,592 | 28 |

Source: Calculated from unpublished summary tables of the Research Division of the Oregon Department of Revenue.

*Income of those applying for homeowner's property tax relief.

**Total for year turned out to be $14,278,664.

***Received by those applying for homeowner's property tax relief.

Referral Period, Interest, Tax Base and Penalties

The provisions of AJR 23 require a "retroactive assessment for a period of not less than 7 years when agriculture and open-space real property is converted to a higher use."

Retroactive assessment really requires that all agricultural and open-space property benefiting from use value after the adoption of AJR 23 be also given a true appraisal or market value under normal conditions. Although this rather substantial additional appraisal effort could be avoided by attempting retroactive appraisal when agricultural and open-space use is abandoned, the difficulty of doing this would be substantial. The best procedure would perhaps be to multiply the difference between full and use value of the year of conversion or sale to higher use by the number of years for which taxes were deferred. This is actually what recent legislation adopted by states modifying existing preferential assessment law provides.[1]

Because the year of sale or conversion to highest value use procedure will not be available in Nevada, the use of an interest assessment on amounts of taxes deferred year by year is appropriate.

The assessment of an interest rate on deferred taxes is not common but tends to be found in new legislation modifying a previous tax deferral law. For example, Oregon applies a six

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1 State Programs for the Differential Assessment of Farm and Open-Space Land, (Washington, D.C. US GPO. 1974), (Agricultural Economic Report No. 256), p. 2.

per cent simple rate of interest upon the amounts of additional tax due each year of deferral. The interest is payable when land is transferred to a higher use. Interest plus deferred taxes become an obligation of a purchaser of properties on the same basis as they applied to the former owner. Also in Oregon the length of tax deferral was lengthened to 10 years.

In order to make tax deferral on lands that are likely to be transferred to a higher use a just procedure and not a give-away the average interest rate charged on long-term mortgages secured by agricultural or open-space land should be charged on the taxes deferred. Also, compound interest should be used. Of course, in Nevada the length of the tax deferral cannot be less than seven years but can be longer. The largest number of states currently use a three year deferral period.

Penalties in addition to interest or in place of interest are also used in some states. For example, Hawaii requires the payment of all back taxes and a 10 per cent per year penalty when a ten year dedication of land for a particular use is violated. Oregon levies a penalty of 20 per cent on tax deferral granted after land is changed to a higher use but the assessor is not informed of the change. The interest due is not included in the base to which the 20 per cent penalty is applied.[1]

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[1] Oregon Assessment of Property for Taxation, Par. 308.395.

Because Nevada currently has not staffed its assessment offices sufficiently to make assessments current,[1] the provision of an additional penalty of 20 per cent, if change of land use that would have resulting in loss of deferral is not reported, would appear to be appropriate.

Acceptable Open Space

Land is limited and open-space use must be productive of maximum citizen satisfaction. This requires that open-space appraisal be available only when provided for in provisions of a county master plan that includes county-wide land zoning as a portion of the plan and which has been approved by the voters.

The plan and related zoning provisions must include areas that are definitely identified as areas that can be and that must be designated as open-space lands. Only when the requirements for land use of the master plan are met and the area is within the boundaries of land zoned for possible or required open-space use may land valuation for property taxation purposes be based on current use rather than market price.

The provision for open-space use in county master plans and related zoning should take into consideration current land use that enhances the opportunities for residents and visitors to enjoy the use of open spaces for recreation and landscape appreciation. For land to be defined as open-space both current

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1 Based on interviews carried out in Nevada.

and future use and enjoyment must be open to all on an equal basis free or on the payment of reasonable fees. If this degree of openness is not acceptable to the landowner the assessment for property tax purposes must be at market value.

The procedure used in Oregon of designating in some detail what constitutes open-space lands and authorizing valuation on the basis of current income and not on the basis of value for alternative uses takes too much power away from the county and municipal government in the determination of the revenues they wish to give up in the granting of open-space valuations.[1] The granting of open-space valuation must be a decision openly arrived at, at the local level. The use of master plan and zoning procedures is the appropriate way to do this.

All the residents of Nevada have an interest in the granting of agricultural or open-space use valuation for their property taxes are increased or service level decreased when this property tax favor is granted, this fiscal relationship makes general approval of an organized land use program a necessary requirement before open-space valuation levels are granted. Also, of course, the ability of an organized land use procedure to grant property tax favors in this fashion somewhat increases the interest of counties and municipalities in master plans and zoning procedures.

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[1] Oregon Laws and Administrative Rules relating to Property Assessment and Taxation, 1973, Par. 308.740.

If the state from its general revenues were to repay local governments for tax losses due to open-space valuation some change in the approach outlined above would be appropriate. For example, under state payment conditions the state might wish to approve all decisions to grant open-space valuation and to have the power of taking away the privilege.[1]

The adoption of AJR 23 should not be used to pull in under the open-space property appraisal tent all lands that are currently being used in a fashion that could conceivably be considered as open-space use. If property tax valuation benefits are now being enjoyed through unofficial open-space considerations, these should be removed and granted again only when the master plan and related zoning ordinances have been adopted. When this procedure is followed the benefits of AJR 23 would be available to open-space landowners.

As is currently the situation, structures would continue to be valued under AJR 23 at value determined under Nevada 361.327 provisions.

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[1] The circuit breaker provision for agriculture assumes state replacement of revenues as is true of the circuit breaker for the elderly. A similar circuit breaker could conceivably be granted to owners of land set aside for open-space use.

Non-Adoption of AJR 23

The failure of AJR 23 to be adopted would more than likely trigger court action to cause the declaring of the present Bulletin land valuation procedures of 361.325 unconstitutional. This would throw agricultural and open-space valuations appraisal standards back to those provided for under Nevada 361-227. It also might cause consideration of abandonment of the overall state-wide uniform maximum property tax rate.

Use of Other Appraisal Approach

Nevada 361-227 is basically a summary of appraisal procedures generally used in an effort to arrive at a fair valuation when market value is not available. It provides for an estimation of income under current use and the capitalization of this income at going interest rates. It also provides for a cost less depreciation approach and a cost of construction under current cost conditions.

Because land does not depreciate and does not have a cost of construction in the past or in the future its valuation rests largely on an estimated market price and the potential net income from use improvement measures such as irrigation, drainage, etc. Therefore, moving to 361-227 would result in a valuation somewhere between one justified entirely on (1) net income from potential AUM after the deduction of cost of land based on cost of capital provision and the application of a capitalization rate that because of the return on AUM included in possessor rights but not allocated to fee land held, was unrealistic and resulted from an

effort to relate income to land sales data, (2) and value based on sales data which was affected by offerer's position under the federal income tax and therefore tended to increase land holdings of outside corporations and the rich.

This chain of developments would increase the fairness of agricultural and open-space land valuation because it would move land valuation closer to market value which is basically the value set on buildings through the use of procedures outlined in 361-227. However, non-adoption would prevent the use of the property tax in combination with a master plan plus zoning to improve the effectiveness with which land resources are used and to improve the justice of the property tax as applied to agriculture and open-space land.

Abandonment of Uniform Overall Maximum Rate

The Nevada property tax provides for uniform valuation at 35 per cent of full and true value and an overall maximum rate of 5¢ per $1.00. The maximum rate is currently being generally applied to the assessed valuation of Nevada's taxable property.

The costs of government relative to value of taxable property vary widely from one area to another and the uniform overall limitation does not take this into account. The uniform rate is a temptation to low revenue need areas to spend extravagantly and places a high revenue need area into a serious revenue bind.

Adjustment to this variation in property values and revenue needs in a broad general way has been possible because the

agricultural areas are generally those with low revenue needs per dollar of taxable property at market value. On the other hand the urban areas are high revenue users for dollar of property assessed at market value. The adjustment has been made by developing the Bulletin method of valuation of ranch lands. The effect has been to establish a valuation of ranch lands that is often about 15 per cent of market value rather than 35 per cent. On the other hand property in urban areas has typically, except in the case of property classified as special lands, been assessed at very close to 35 per cent of market value.

There is much to be said for valuing all property at market value, for in this way a "real" valuation is being used and various procedures for constructing a value are avoided. The problem of the relationship between property valuation and local government needs could be met by the legislature setting up county maximum and minimum overall property tax rates rather than a state-wide uniform rate.

The use of varying maximum rates would avoid artificial assessment valuation pressures and all the difficulties associated with attempting to meet uniformity in valuation requirements of the Constitution. Also it would make everyone aware of the actual situation relative to local government revenue needs and the value of property located in the different sections of the state. Another impact, under existing law, would be to increase the equality of contributions made to state government, as a per cent of the market value of taxable property. This would also

be an expansion of one concept of equity in taxation, i.e., equal payments as a per cent of value of item taxed.

Conclusion

The provisions of AJR 23 do not define agricultural use or acceptable open-space lands. Progress toward a rather precise definition or explanation should be made. This should include required county plans and related zoning. In addition, the concept of defining agricultural use in terms of owner activity and income sources and not just in terms of use of land should be considered.

The expectations of accomplishment under AJR 23 vary widely and some of these are inconsistent with each other. A discussion of the specifics of realizable goals is appropriate and can be helpful in gaining an understanding of the usefulness of AJR 23.

The concept of the circuit breaker can be expanded to include agriculture and also renters and homeowners of all ages, including those near to what are called the middle income brackets. One must be careful of expansion for the Oregon experience definitely demonstrates this can absorb significant revenues and it certainly violates John Shannon's original purpose to be served by the technique.

Deferral of taxes to be equitable requires the payment of interest at the market rate when the deferral is ended. This position is being gradually accepted by the states. However, none of the states require payment of interest year by year on the amount of the tax deferral, which would be appropriate if

movement toward market value from use value of lands outside of the urban fringe areas was being seriously considered.

Open-space use tax provision--sometimes called golf course legislation--needs to take into account that all residents have contributed to the open-space use of land. This is best done by provision for some public use on very reasonable terms. Also, open-space use taxation areas must be locally determined under general state legislation if the state does not compensate local governments for revenues foregone.

The defeat of AJR 23 and movement to only the provisions of 361-227 in the administration of the property tax will eliminate Bulletin valuation and the inclusion of market value, perhaps on an equal basis with the capitalization of net income.

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