Toward Scientific Farm Property Assessment

By Baldur H. Kristjanson¹ and Gordon A. Johnsgard²

The time seems to be approaching when a serious effort should be made to improve our methods for assessing farm lands in North Dakota for taxing purposes. Many states already have taken important steps in this direction with distinctly good results. Some counties in North Dakota likewise have made significant headway.

The aim is an old one. What we are after is a method of land valuation which makes it reasonably certain that each piece of land pays its fair share of the tax burden. One of the most important ideas in this connection is the notion that taxes should be in line with ability to pay. For the farmer this means that he should pay less taxes on poor land than on good land in the same taxing unitthat there should be a close connection between what he pays in taxes and what his land will produce as income.

The idea is simple and generally accepted. But how do you rate land so that differences between units are shown accurately? Does our present method of assessment do this or is there a better way?

Research has shown time and time again that the average assessor, without good soil surveys and fairly complete figures on yields and incomes, overvalues poor land and undervalues good land.3 Experience has likewise shown that it is entirely possible to devise a scientific method for accurately estimating the relative income-producing capacity of our farm lands. As indicated earlier, many states are on this system now and some counties in North Dakota (for example, McKenzie and Sargent counties) have done excellent work on the problem. But we have not gone very far in this direction in the state as a whole.

Basically, two sets of facts are needed for a scientific land classification. First, the soils must be described, their locations established and their productivities determined in sufficient detail to show all the relevant differences in physical productivity. When this has been done the classification can be said to rest on a more or less permanent basis. At any rate, it is the most stable feature

Agricultural Economist, North Dakota Agricultural Experiment Station,

Associate Agricultural Economist, North Dakota Agricultural Experiment Station, Farso, North Dakota.

Professor of Soils, North Dakota Agricultural College, Fargo, North Dakota.

See study of 458 tracts in Morton County by E. H. Tyner and Harry A. Steele, The Reliability of Past Rural Assessments in Morton County, North Dakota, Measured by Soil Productivity Ratings, reported in the proceedings of the Soil Science Society of America, Vol. 2, 1937.

of any classification. Second, the classes established in this physical inventory must be refined or adjusted in terms of what is known about the economics of production on these soils. The type of farming, location with respect to market, changing water table levels, costs of drainage, frequency of hail damage, and other factors, must be considered. Above all else, the work must be systematic and fully dedicated to determining actual differences in income-producing capacities of each parcel of land, under specified systems of management common to and adapted to the environmental controls of the area. And it follows also that any classification should be open to the public for further information and improvement.

The North Dakota Experiment Station was represented at a land classification conference held at Great Falls, Montana, June 21-24, 1950. At this conference scientists in the Northern Great Plains studied seriously the question of how science could combine with local judgment in improving our assessment methods. The report on Montana's work was particularly encouraging and suggests strongly that we should proceed with our work in North Dakota.

In Montana there is widespread cooperation between the State Board of Equalization, State County Commissioners, State County Assessors' Association, Montana Taxpayers' Association, farm organizations, and the State College, Experiment Station, and Extension Service. This type of cooperation is necessary. Furthermore, the Montana group has proceeded from the "grass-roots", so to speak, always obtaining the active participation of the local people.

Tax Commissioner John Gray has repeatedly pointed to the need for a scientific land classification in North Dakota. But unfortunately no law exists whereby the funds needed for this work can be obtained. Furthermore, no law prescribes that a township assessor must follow such a classification when made.4

How much basic information do we have to do this job? To date, Morton, McKenzie, and Billings counties have modern detailed soil surveys. Renville County is now being surveyed. Semidetailed surveys have been made for Bottineau, McHenry, Traill, and Cass counties. Approximately 75 per cent of the state has been covered by broad general surveys by the Soil Conservation Service. While these broad surveys are inadequate for detailed classification work, they nevertheless are of considerable value in a start on the problem and much better than no information. In ad-

Where basic soil information is not available it may be desirable to proceed without it. Local committees would obtain the best judgment available as to the relative value of each parcel of land in the community. The "best quarter" could be rated as 100 and all others placed in relation to it. But the value of a good soil survey should never be overlooked.

Those interested in the report of this conference are invited to contact the Department of Agricultural Economics, North Dakota Agricultural College, Fargo, North Dakota

Dakota.

The law created for this purpose in 1921 did not appear in the revision for the 1943 Code, leaving no legal basis for levies for classification purposes.

One of the states reporting to the conference referred to above pointed out that as the amount of local tax money going to the State Treasury increases the local assessors are under political pressure to keep their valuations as low as possible. This of course leads to a ridiculous situation but points to the need for a state-wide system of valuation.

dition, crop yield data from P.M.A offices, aerial photographs, hail ratings, and farm business studies could be used.

If the people in the state feel that action should be taken toward achieving scientific valuation they could proceed safely on the basis of information now available. This is not to deny the fact that more information is needed. But on the basis of progress already made in other states it is obvious that local farm groups, in cooperation with technical personnel, could make some real gains in this field. Neither the technician nor the local taxpayer can do the job alone—there must be the fullest cooperation between all concerned.

One final point. Each state has its own problems. We cannot simply borrow blindly from the work done elsewhere, because of differences in laws, land conditions, etc. We can only study what others have learned, use the relevant ideas, and then proceed under our own steam. That steam, if generated, will come from a belief that we are able, and that it is necessary, to improve our land valuation methods.

PROPOSED NEW BREAD FORMULA CONTAINS 16% MORE FLOUR

By Rae H. Harris²

Samples of bread containing 16 per cent more than the normal weight of flour, which had been baked in Hutchinson, Kansas, were featured in House and Senate restaurants this summer. Wheat-state senators and representatives sponsored the distribution of 500 of the loaves. Much interest was shown in the bread in Washington circles because of mounting wheat surpluses and the decline in per capita consumption of wheat flour.

The idea was developed by Morris Coover of Kinsley, Kansas, and was promoted by the Western Kansas Development Association. The formula includes 110 pounds of white flour and six pounds of whole wheat flour rather than 100 pounds of white flour commonly used for the same number of loaves. The increased proportion of flour tends to reduce the shortening, milk, and sugar content of the loaf and might provoke criticism from the shortening and dry milk industries. Should the new formula become widely used it would very substantially increase the utilization of flour and wheat.

A Washington baker reported that it was possible to produce an acceptable loaf with the formula using a blend of 70 per cent Kansas wheat flour with 30 per cent hard red spring wheat flour. A sponge method was used. When a 50-50 blend was employed, the bakery equipment refused to handle the stiff, compact mass of dough. In this instance a "straight" dough was made.

The new formula produces a very compact loaf. Whether the American consumer will accept a loaf of this type remains to be seen. Bread interests feel that the introduction of new bread types, especially unconventional ones, may lead to the discovery of a bread that will have enhanced consumer appeal and result in a reversal of the downward trend of per capita bread consumption.

¹Condensed from reports in the Northwestern Miller, page 9, March 28, 1950. ²Corcal Technologist