The recent extensive use of soil maps in land appraisal work has emphasized the need for the assistance of trained soil men in evaluating the various soil types indicated on the maps. Since in many cases only a part of the states have been covered by soil surveys, there is a necessity on the part of the land appraiser to recognize the soil type as well as to be able to evaluate it in terms of crop production. The crop productivity ratings and indices worked out for most of the areas surveyed have been of great assistance.

In connection with the crop adjustment service in Ohio it seemed desirable to classify the lands in appraising contracted areas. It was recognized that each soil had a certain inherent productive capacity, but that this could be modified very greatly by the system of management followed. In connection with the corn adjustment program a score card was devised, giving for each of the major soils the yield of corn under average conditions. From this "standard" yield a certain number of bushels was added or subtracted dependent on whether the conditions existing in each individual field were found to be above or below the average. The algebraic sum of these values gave the appraised yield for the field.

As the appraisal work was to be carried out by men, largely farmers, unacquainted with the details of soil classification, it was necessary to make the soil groups rather general so that the soils could be readily recognized. The accompanying sheet shows the score record used in the area of Miami— Crosby— Brookston soils.

This system of appraisal of contracted acres was employed on several hundred farms in a number of counties, and proved to be very usable. That improved systems of soil management were given recognition was very gratifying to the farmers. That a definite statement of the soil and management factors was on record gave the appraised rating considerable weight. In at least one county this definite record meant several thousand dollars to the farmers of the county in increase in the amount paid on contracted acreage.

In the Muskingum Valley in southeastern Ohio the Muskingum Watershed Conservancy District is putting through a huge program of flood control, water conservation, and related projects. The plan calls for the construction of fourteen or more reservoirs at a cost of approximately $35,000,000, of which about $22,500,000 has been furnished by the Federal Government. Slightly over 18,000 acres of land will be permanently covered with water, and 88,000 acres will be flooded when the waters reach the maximum flood level. The project necessitates the purchase outright by the State of many thousand acres of land, which will be permanent.

In order to adequately evaluate the soil factor in the appraisal of the lands to be purchased, the Conservancy District has requested the cooperation of the various agencies in soil investigations in the watershed. The U. S. Bureau of Chemistry and Soils and the Soil Conservation Service in Ohio has been of great assistance.

The U. S. Army Engineers who have responsibility for making the plan have a base maps constructed from air photographs. These maps are being prepared, the Conservancy District has requested that these maps (land use maps) are being prepared. The various soil types existing in each reservoir. The accompanying table gives the data for one reservoir.

Since a large proportion of the area to be purchased are bottom lands on which corn is the most important crop, productivity indices for this crop have been worked out, showing a range in productivity as well as the crop produced under average conditions. In order to evaluate the management factor, a schedule of land values in relation to corn yields has been worked out. This schedule approximates the relationship between the value of the crop produced and the productivity of the land as well as in productive capacity.

Attempts to check these values by actualizing the value of the crop produced have been entirely satisfactory. On land where yields the values appear to be approximate, correct, but with high yields they are even when the cost of crop production is deducted. Apparently other factors must be considered in applying this method in obtaining land values.

It is recognized that the schedule worked out are not perfect; we do not have all the information to make them so. The method have value in that it attempts to take consideration the system of soil management, well as the inherent productivity value of the soil type. That it is a step in the right direction in attempting to work out land values seems self evident.