S
oil capability work in Maryland was developed by the local Soil Conservation Districts in cooperation with their technical staff and the Maryland Agricultural Experiment Station staff. This work resulted from the details required by the Soil Conservation Service in their farm planning. The increase in detail of soil mapping has led to the recognition of new soil series or phases and the farmer and technical workers were often unable to understand and utilize correctly the new separations. In order to aid in this utilization, soil capability groups were proposed. There are seven of these national capability classes suitable for Maryland conditions. Each capability class group is colored differently for ease of distinguishing on the map. By this procedure the nontechnical worker is concerned with only a few, usually not over two or three, soil capability groups on a farm. This simplification permits a better understanding of the specific problems of a farm. As each Soil Conservation District developed its soil capability groupings under different conditions, there is some variation. The results of each district were summarized and presented on a state basis. This summary is believed to give a better conception of soil capability work.

The term “soil capability” is used instead of “land use capability” since land is a rather broad term and includes several features not associated with the term soil. Soil capability is usually defined as an arrangement of soil types into classes according to their capability or adaptability for general agricultural use under normal conditions. The normal conditions refer to the usual practices employed with such a soil. The capability of a soil to produce is usually described by soils workers as being based on its physical characteristics. The term, physical characteristics, as used in this manner, generally has broad implications and includes all factors in the soil which regulate crop adaptation. Soil capability, as used in Maryland, refers to all of the features of a soil, whether they be physical, chemical, biological, mineralogical, or morphological, which contribute to the suitability for crop production. These internal characteristics are also closely associated with climate, ecological, and topographic features, drainage, etc. All such features are evaluated in selecting a capability class, although many are not included in the classification. Soil capability classes are not based on the type of crop being grown, as such a classification would be too specific to the usual practices employed with such a soil. Soil capability is usually defined as an arrangement of soil types into classes according to their capability or adaptability for general agricultural use under normal conditions. The normal conditions refer to the usual practices employed with such a soil. Thus, the soil itself and its environment which controls its development is the basis for selecting the potential crop adaptability of the soil or its capability class.

Any system of classification regardless of the substances being classified, should be worked out. Such work should arrive at approximately the same class for a soil by starting either from a low or from a state or regional area; otherwise there would be little uniformity and consistency in soil classification. Possibly some districts have placed too much value on the productiveness of a soil because a certain farmer may have brought its productivity level much higher than is normal for the soil. Such cases should be considered as an exception to the normal usefulness of this soil for which adjustments no soil capability classification can be established. It would seem more logical to separate the extremes and use the means which are characteristic of the soil itself rather than man-made changes. A system of soil capability classification might be flexible enough to permit a soil to change its class to conform to type variation and specialization.

Since the capability classes have been established, individual Soil Conservation Districts in a state or regional basis, such classification of soil type may be a class I or II soil in one district and a class III, IV, or even VI in another. There are many causes for such variations. For example, soil type may be highly developed and its capabilities better understood. It might also be put in a lower class group. These man-made modifications are usually only temporary and the productivity of such soils generally returns to its original level, as shown in some cases. The quality of a soil is determined by the soil itself and its environment, which controls its development and development which controls its development and adaptation. Soil capability ratings often show influence of the individual farmer and either an abnormally high or low rating may be given the soil. The adjustments no soil capability classification can be made due to special climate conditions or topographic conditions, etc., that may influence the productivity of a soil. These man-made modifications, although temporary, may alter the potential possibilities of a soil and affect its productivity.