When and Where Is Soil Conservation a Problem?¹

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DURING the past 20 years the need for soil conservation has been recognized as a national problem. The principal factor which stimulated a national interest in this problem was the enormous loss of surface soil caused by water and wind erosion on land not protected by a vegetative cover. Two federally controlled "soil conservation programs" are well established in this country, both physically and politically. One of these federal programs has recognized the need for soil conserving and soil improving practices to maintain and increase crop production. The other federal program has not given broad recognition to the importance of soil fertility maintenance and improvement or to the problems of soil reclamation in its educational program, because the chief concern of that organization has been soil conservation.

Although soil conservation is an important problem, especially in regions of torrential rainfall, there are thousands of farms and ranches in this country that do not have a soil conservation problem and perhaps never will have one. Many of these farms, but not all of them, are on gently sloping land. Some of the farmers grow wheat, corn, vegetables, cotton or meadow crops. Others are livestock farmers. A high percentage of these farmers understand that farming is a business enterprise and that good systems of soil management must be used to maintain or increase crop yields.

The most important soil conservation problems exist on moderate to steeply sloping areas of cultivated land where farmers have been wasteful of soil resources because of bad soil and water management. There are thousands of these farmers. Many of them contribute little to the nation's food supply, but the land contributes to their existence and they should be encouraged to conserve and improve it.

For the past 50 years the word "conservation" has had a national meaning of resource protection and resource management to prevent wasteful exploitation. Within recent years, Jacks (3), an English author, wrote "There is nothing new in the idea of soil conservation. It is as old as agriculture, although nobody used the synonym which is a recent American invention."

Definition of the Term

Some people insist that the term "soil conservation" should include all phases of water conservation and management. This idea is absurd. Of the 14 "soil conserving" practices listed in the 1952 report of the Chief of the Soil Conservation Service to the Secretary of Agriculture, eight of these practices were used primarily in water management, three were used primarily in soil management, and three were used primarily in both areas. Soil conservation, a synonym for soil saving or reclaiming, serves as a key word in soil fertility maintenance and improvement or in the solution of local soil conservation problems. If there was any comment in this paper which might be disturbing to some soil scientists, it would be a paragraph describing the modern concept of soil conservation which would include not only practices, but also procedures for soil saving or reclaiming, and water management.

During the past year two papers (5, 6) entitled "What Do You Mean, Soil Conservation?" were written by William R. Van Dersal, chairman of a technical committee in the Soil Conservation Society of America. These papers were written to professional people, legislators, congressmen, senators, editors, farmers, and others, requesting them to put into writing their concept of soil conservation. Many of these ideas could have been absorbed into wide soil conservation educational programs. They do not include much information about established and important phases of soil science and engineering.