

SOIL CONSERVATION IN ILLINOIS IN RELATION TO THE AAA PROGRAM

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AN ABSTRACT

Widespread interest in soil conservation in the United States is very recent. Although we have all known that China is poverty-stricken because of long-time soil erosion, it is only because of the emphasis placed on soil conservation through the AAA programs here, backed up by our experience with the dust storms of 1934 and 1936, that we have really begun to accept the problem as of concern to United States citizens, city dwellers as well as farmers.

Just how important is this problem of soil conservation? Let me give you the answer in the words of Mlle. Odette Keun: "You must listen to some statistics. It is my duty to give them. . . . If I, a foreigner, have been frightened by them, every American should be panic-stricken by them. They prove the staggering fact that America is not a permanent country; that another century of the present processes will leave her unable to maintain the agriculture on which her civilization rests; and that she is on the way to join those decedent or dead parts of China, Mesopotamia, and Asia Minor, which were once opulent and now are stripped forever of their fertility. Unless something effective is done, and done within a generation, it will be too late to cure her earth-diseases. . . . Did you hear me? It will be irrevocably too late."

The facts referred to are these: Of the 1,900,000,000 acres of land in the United States, only 37% is subject to no erosion or to only a slight amount; about 41% to moderate erosion; and the remaining 22% to severe erosion or is eroded beyond usefulness. The picture for crop land is even worse: Less than one-fourth

of all the land was devoted to crops and only 39% of this can be farmed safely under present practices. With improved practices, however, this figure could be increased to 82%.

The situation in Illinois would seem not quite so serious as that of the United States in general, but certainly worthy of real concern. Forty-seven per cent of the total land area in Illinois can be classed as subject to slight or no erosion, as against 37% for the United States as a whole; 35.4% is subject to harmful or moderate erosion, with about 17.5% subject to serious or destructive erosion. However, the areas in crop land in Illinois represent nearly 60% of the total land as compared with about 22% for the whole country. The use of land for crops will of course speed up the process of erosion unless protective measures are taken, and since 89.1% of the land in the State is in farms, the problem of soil erosion looms large.

An indication of how the land in harvested crops was utilized prior to the AAA program and in 1939 is shown by the Illinois Crop Reporting Service figures given in table I.

In 1939 the total acreage of crops harvested in Illinois was about 6% less than the 1930-32 period, even though 1939 was an excellent crop year, with little crop failure.

The most important difference in individual crops harvested in 1939 as compared with the 1930-32 period was the striking decrease in corn and oats acreage and the increase in soybean acreage. This shift to soybeans has come about partly because of the interest shown

ACREAGES OF IMPORTANT CROPS HARVESTED IN ILLINOIS, 1930-32 PERIOD AND 1939
WITH DECREASES AND INCREASES

Crop	1930-32 Average	1939	Decreases	Increases
Corn.....	9,603,000	8,051,000	1,552,000	-----
Wheat.....	1,932,000	1,865,000	67,000	-----
Oats.....	4,337,000	3,118,000	1,219,000	-----
Barley.....	343,000	169,000	174,000	-----
Rye.....	74,000	88,000	-----	14,000
Broomcorn.....	30,000	29,000	1,000	-----
Soybeans.....	810,000	2,726,000	-----	1,916,000
Cowpeas.....	104,000	214,000	-----	20,000
Tame Hay.....	2,554,000	2,877,000	-----	323,000
Total Harvested Crops.....	19,598,000	18,418,000	1,180,000	-----

in the development of a new crop, partly because of the replacement of horsepower farming by motor-power farming, and partly as a result of the influence of the AAA program.

Not only has there been a decrease in the acreages of all harvested crops and of specific soil-depleting crops, such as corn and oats, since the AAA program has been in operation, but there has been an increase in the seeding of soil-building legumes and in the amount of limestone spread. The sweet clover acreage for 1930-32 averaged about 830,000 acres; for 1939 1,100,000 acres. The alfalfa acreage increased from an average of 250,000 acres to about 500,000 acres in 1939. The amount of limestone spread in 1930-32 averaged about 385,000 tons annually as compared with the 1,788,000 tons in 1939, reported by the farm advisers. This is only four tons per 100 crop acres, but some AAA cooperators used more and did not report it as they did not need the credit. The use of phosphates increased three-fold over 1938.

It is not possible to say just how many of the changes in cropping practices and increases in soil-building practices have been due to the influence of the AAA program. The AAA program and the educational work carried on in connection with it have stressed good farming and soil conservation. Acreage allotment procedure has given considerable weight to good soil management. Payment under the AAA program for adjusting special soil-depleting crops, such as corn and wheat, and for reducing the acreage of all soil-depleting crops has indirectly aided in soil conservation. Soil-building practice payments under the AAA program for spreading limestone and phosphates, for contour farming, for planting trees, for seeding legumes, such as alfalfa, red clover, mammoth clover, alsike clover, sweet clover, and lespedeza, and for seeding grasses, such as red top and timothy, have greatly increased these practices beyond their normal adoption. Increased use of soil-building practices have been made by non-cooperators as well as by cooperators in the AAA program, probably due to the extensive educational work of the AAA.

Preliminary figures tabulated in the State AAA Office give an indication of the extent of the influence of the AAA. They show that the cooperating farms in

1939 included 70% of the farm land and 75% of the crop land and were given 75% of the corn acreage allotment.

If we assume that the cooperating and non-cooperating groups each produced in 1930-32 total corn acreages proportionate to their corn acreage allotments in 1939, we find that the cooperators reduced their corn acreage nearly 27% below their 1930-32 average acreage, while the non-cooperators increased their acreage slightly more than 12% above their 1930-32 average acreage. Perhaps some of the non-cooperators received less favorable corn allotments than did the cooperators, but certainly there are other reasons why many of the non-cooperators did not go along with the program in 1939.

Total soil-depleting crop acreage allotments for 1939 represented a reduction of about 15% as compared with the 1930-32 total soil-depleting crop acreage.

The problems of soil erosion and methods of control have definitely come into the picture. Farming in Illinois has changed since the 1930-32 period. Total acreage in harvested crops has decreased; corn acreage in particular has been greatly reduced. There has been a great increase of important soil-building practices, such as spreading limestone and phosphates and seeding legumes and grasses. All these factors have worked together to decrease soil erosion and to increase soil fertility. Many of the practices incorporated into the AAA program encourage, either directly or indirectly, greater conservation of the soil. Furthermore, a review of the farming operations of the group of farmers participating in the AAA program as compared with those not cooperating in 1939 shows that the cooperators made a much greater reduction in important soil-depleting crops and devoted more of their land to legumes and grasses than did those not cooperating.

Finally, increased interest in and educational emphasis on soil conservation on the part of various agencies in Illinois has resulted in increased use of limestone and increased seeding of sweet clover by non-cooperating farmers, as well as by those cooperating in the AAA program. Conservation of the soil is definitely being recognized as an objective of a good soil and crop management program by a majority of Illinois farmers today.