SOIL SCIENTISTS HAVE A PLANNING JOB

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Probably most of the men in this audience are graduates of agricultural colleges and spent part of their younger years on farms. Many, no doubt, can recall the way their minds worked before they became scientists — how, as they rode the sulky at 15 or 16 years or walked behind the plow, they watched the shining steel moldboard turn over the soil, and suspected that the clods held countless secrets that were being unlocked by the emerging “scientific agriculture”.

We all knew how essential to the welfare of our families was the behavior of the soil and related climatic factors. We knew the importance of soil in determining the yield of our crops which, in turn, determined the amount of livestock and crops that could be sold to keep our farms going. We had heard that politics had something to do with our welfare, and knew that prices were important, but somehow we rarely connected politics with prices, and neither was a part of our concept of scientific agriculture. We were something of fatalists in political and economic matters, but we felt that if we could somehow unlock the secrets of soil, crops, and livestock management, we might do something within our own line fences to change our destiny.

What is more, we could. So we went to an agricultural college to study agricultural science — many of us with the idea that we would use such science as farmers — but we had no idea that scientific agriculture comprised so many specialized fields whose long names were impressive, if not informative.

Before long we learned that whatever else the college of agriculture might have been, it was also a collection of departments, each manned by specialists. Back on the farm we had been constantly aware that the betterment of farm living was the unifying purpose of all we did. True, this was an all-inclusive purpose, but it was not so abstract that we could not see its relation to every day’s activity. In a single hour on the farm we had performed tasks and made decisions that at college had been allocated for study to at least a half-dozen departments. If you had my experience, however, you had difficulty in discerning any unifying purpose of the college when compared with the farm.

The reason was that the institution had major purposes, but it had no single department the recognized responsibility of putting together teachings and findings of all the other departments into either a coherent whole for the student or a unified program for the college. The synthesizing tasks were performed generally presumed as the function of the dean or president, but these officials often were so preoccupied with the immediate office problems that the student either had to make his own synthesis or he had to be aided by whichever professor might choose, under a laissez-faire system, to assume the responsibility.

It was into this kind of situation, and into an obvious need for considering and evaluating the influence of the findings and teachings of the scientists as applied and utilized in farming, that there has emerged, during the last quarter-century, the type of department variously called “economics”, “farm economics”, “agricultural economics”, and other names having similar connotations.

The new breed of agricultural “scientist” in these departments has generally managed to get into trouble with most of the other scientists because his specialty was the “economic and social implications” not only of his own work, but also of the work of all scientists. In other words, he was, in at least, a specialist in generalization. In performing this specialty he invariably “got in the hair” of the other specialists who considered, and sometimes correctly, that they knew as much about the economic and social implications of their own work as did the economist.

To make matters worse, the economists (particularly the earlier varieties of a very heterogeneous profession) imitated the physical scientists by emphasizing “natural” economic “laws”, when they were really concerned mostly with artificial phenomena — artificial in the sense that they are made and purposeful, and not natural in the sense of the physical and purposeless.

Then there were other drawbacks. The economists, like all other specialists, were put in a “department” in accordance with the traditional or- ganization of educational institutions, and this did nothing to emphasize their function as integrators.