DISCUSSION OF AGRICULTURAL ECONOMICS AND THE CHANGING STRUCTURE OF HIGHER EDUCATION*

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Professor Coutu is to be commended for synthesizing in a brief paper a great many insights bearing on the management of teaching, research and extension in the next decade. As a discussant, I feel much as a blind man trying to describe the Taj Mahal—I can only reach so high. The future is as yet unknown and any predictions are at best pretty wild guesses. But there are insights gleaned from the past that can guide us in anticipating the future.

In developing his anticipations, Professor Coutu drew upon several important sources of information, including his personal observations on the status of the university, his recent research on organizational structures used by the University of North Carolina system to manage research, and the Carnegie Commission report on higher education. Among other conclusions, two major predictions concerning the environment for management in the next decade stand out in his paper:

(1) Student numbers will increase much more slowly in the next decade than in the past, with only a 33 percent increase projected through 1985.
(2) Major emphasis will be on humanizing higher education along with its technology-generating counterpart. This will include greater attention to the social issues of equity and environment.

These two predictions would follow logically only if certain unspecified conditions could be expected to occur in the next decade, namely,

(1) Either a 33 percent increase in the college age population or changing career opportunities for agricultural economists to absorb more students relative to other professions,
(2) Increased affluence and
(3) Low food and energy prices.

Let us evaluate the likelihood of these conditions and the implications of some alternatives. Coutu's conclusion that education is no longer a growth industry is sound, but it may be worse than he predicted. Since we know the current population of 8-12 year olds, we can quite reliably predict college-age population in ten years. The Department of Health, Education and Welfare [3, p. 154] has done that, predicting only a net four percent increase from 1972 to 1982. Based on the previous eleven years' trends in enrollment and retention rates [3, p. 10], only a seven percent increase in college enrollments in that ten-year period is further projected. Add to these projections the fact that university enrollments in Agricultural Economics expanded at a slower rate during the 1960s than the average of all departments [1, p. 720], and we face the very real prospect of near-level enrollments during the decade.[1]

Several rather clear implications follow from such a premise:

(1) Because student numbers are our bread and butter, departmental faculties will take a more aggressive role in searching for alternative employment opportunities for graduates.
(2) Departmental programs will be expanded to prepare students for a wider array of careers. (This conclusion is similar to Coutu's.)
(3) Unless career opportunities are expanded substantially, few net additions will be made to the teaching staff. Although retirements within the profession may be high during the

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[1] Although enrollments in Colleges of Agriculture have very recently increased faster than other colleges at some institutions, such increases may not continued over the decade without overt efforts by faculties to further expand career opportunities.

next decade, teaching opportunities for new Ph.D.'s will be much more limited than in the past.

(4) A larger percentage of the teaching faculty will be tenured.

(5) There will be more emphasis on sabbaticals since flexibility will not be provided as much by new blood.

(6) Teaching salaries will increase at less than the rate of inflation.

(7) Pressures will increase to modify and soften tenure policy.

Addressing Coutu's conclusions that major emphasis will be given to humanizing the institution, consider some likely worldwide prospects for the next decade:

(1) International turmoil will continue, at least at current rates, resulting in further crop destruction and shifting productive resources into defense functions.

(2) Energy supplies will be expanded but not faster than demand.

(3) Weather conditions will be less favorable for agricultural production than in the recent past. This prospect has been suggested by several climate experts looking at long-run trends and cycles [2, 4, 6].

If the above prospects prove correct, we can expect high food and energy prices and little increase, if any, in relative affluence. The implication to research and extension in Agricultural Economics is that a higher rather than lower priority will be given economic efficiency. Although public euphoria for scientism has diminished in recent years, there is general recognition of the prior success of the agricultural technology industry in increasing efficiency of food and fiber production.

Therefore, accompanying continued high food and energy prices will likely be additional pressure and resources from outside the unversity to solve these problems through improved technology. Hence, funding for research and extension efforts in traditional production and marketing areas plus energy may well expand. However, in agreement with Professor Coutu, due to the general concern for public accountability, these funds will likely be accompanied by greater accountability requirements than in previous decade.

The combination of these conditions suggest that any expansion in faculty numbers will be largely for research and extension in traditional areas, plus energy. We may see more rapid changes in organizational structures to capitalize on the synnergistic opportunities between research and extension, just as between research and teaching. Joint administrative structures for research, teaching and extension are likely to increase. Separate structure will probably decrease. While management of educational and technological activities remains more art than science, we can expect greater emphasis on managing for maximum contribution by research and extension in a goal-oriented environment. A considerable body of literature has been developed on supposedly useful ways to accomplish such management (see Shumway [5]). However, a crucial unknown is the interrelationship between priority-directed management and scientist morale. The real issue is how to capitalize on high personal and professional motivation to accomplish any particular set of organizational goals.

Intuitively, I tend to concur with Coutu's conclusion that increased interdisciplinary emphasis will occur through cooperation between departments rather than through interdisciplinary institutes. I expect this will be true even in accomplishing efficiency-related research.

In the long run, emphasis should again turn to humanization of the institution. But during the next decade we are likely to be more concerned with economic efficiency in production and marketing. Feeding the world and doing it more efficiently are like to be dominant social issues affecting agricultural economists in this period.

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