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DISCUSSION: FINANCING AGRICULTURAL RESEARCH AND EDUCATION IN A PERIOD OF TIGHT BUDGETS

Herbert H. Stoevener

Most of us will react to a topic such as the one assigned to Dr. Flatt on the basis of our personal experience rather than from the vantage point of a well-reasoned conceptual framework. As Dr. Flatt points out, there is a multitude of means through which institutions finance agricultural research and education. Hence, there is the danger that the biases of a view from personal experiences will cause our observations to be off the mark. However, I found myself generally agreeing with Dr. Flatt's comments. Encouraged by this, I shall add a few more specific observations of my own after picking up briefly on one point made by Dr. Flatt.

FUNDING HISTORY

I am not certain that I am in full agreement with the implications drawn by Dr. Flatt from the argument attributed to Ruttan. You will recall that it was suggested that the decentralized nature of the U.S. Agricultural research and education system leads to high efficiency in resource allocation but relative ineffectiveness in resource acquisition. I find the statistical evidence which Dr. Flatt cites on this point somewhat confusing. In the aggregate, agricultural experiment stations have done well. Appropriations from their respective states increased in constant dollars by 57% between 1966 and 1979 (Table 2). In comparison, USDA research expenditures during this period remained virtually level in constant dollars (Table 1). Dr. Flatt says that we may have "the best of both worlds" in the state agricultural experiment stations: decentralized decision-making yet centralization for fund raising through the state government. With the latter aspect, I wonder why the role of the experiment station in the individual states should be so greatly different from that of the USDA in relation to the federal government.

There may be other hypotheses to explain the divergent history of appropriations for agricultural research and education at the federal and state levels. Differences in entitlements and inflation-driven commitments to other programs at federal and state levels may be one source of such hypotheses. Political scientists might also look for differences in the political influ-

ence of agricultural groups at state and federal levels. The opportunities, referred to by Dr. Flatt, to be responsive to the short-run needs of state citizens may be another explanation.

To disentangle all of these influences may only be an academic exercise. But then again it may not be. If we decide that we can enhance our future by falling in step behind the drummer for a national research agenda and this does in fact, not lead to improved resource acquisition, we will suffer on two accounts. First, we will not have achieved the objective for expanding our resource base, and secondly, we will have given up some of the allocative efficiencies of which Ruttan speaks. I am most concerned about this latter aspect. Continued high productivity of our operation is the best, if not the only defensible argument for our support.

IMPACT OF TIGHT BUDGETS ON INDIVIDUAL RESEARCHER PRODUCTIVITY

The subject of productivity brings me to the second part of my remarks. Here I want to add to some of Dr. Flatt's comments on how financing affects the environment of the individual teacher, researcher, or extension specialist, the person who is entirely responsible for the output of our enterprise. My focus will be on the financing of these activities as it may be handled by our individual institutions, once funds have been allocated to them by federal and especially state governments. In this area the prerogatives are largely ours.

Let us turn first to the allocation of personal financial rewards for faculty. As budgets tighten, there may only be sufficient funds to make on the average very small increments to salaries. Under these circumstances there is a tendency to substitute "across the board" for merit increases. A common occurrence at the present time is salary freezes, which totally rule out any attempt to reward productivity financially. Our universities must resist this tendency or the long-run consequences will be serious. Faculty morale may decline, recruitment of high-quality people into the faculty ranks will be hampered, and many of our most capable faculty will increasingly look to outside opportunities to supplement their incomes. All of this will

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have serious long-run consequences for our collective output.

Tight budgets can also have devastating impacts on operating budgets. Different institutions have different practices concerning what are classified as operating funds. Some include monies for teaching and research assistants, secretaries, and technical support staffs. In others, these are allocated to departments as positions. In this case, operating funds cover merely travel, publications, supplies, repairs and maintenance, telephone service, and whatever is left over is for general teaching, research, and extension support, and equipment purchases. Generally, the more narrowly operating funds are defined, the more serious the impacts of budgetary cut-backs. Operating funds are considered to be the uncommitted portion of the budget and therefore subject to recall. The smaller the portion of operating funds relative to the total budget, the greater the portion of these funds that will have to be given up to make a given percentage of the total budget. At the same time, opportunities for making adjustments and reallocations within the operating budget are also more limited when this budget covers fewer expenditure categories. Under these circumstances, we can encounter situations where it is no longer possible to make substitutions for operating funds, and we have to fall to a lower isoquant.

What accompanies or precedes the operating fund call-back is usually the hiring freeze. This presents an opportunity for universities to make savings in the personnel budget. Obviously the hiring freeze is necessary for any substantial budget reduction since universities have more than 80% of their budgets committed to wages and salaries. Everyone knows that the consequences of a hiring freeze are almost totally randomly distributed. Such consequences can hardly be supportive of an objective of allocative efficiency. If not modified (and modifications are administratively difficult), hiring freezes can seriously affect faculty morale and the outputs from those programs and administrative units that happen to have a large number of staff retirements or resignations.

You may wonder where I am leading, having ruled out salary and hiring freezes and substantial reductions in operating funds. How are we to deal with budget re-

ductions? We may want to use any or a combination of the above tools to deal with a short-term fiscal emergency. But for long-run adjustments to tightened budgets, there must be another solution. I would like to come back to Dr. Flatt's advocacy of decentralized decision-making. I believe we need much more of it inside our universities and colleges of agriculture than we currently enjoy.

Ideally, I would like us to approach a system where administrative units, down to the departmental level, would have the flexibility to work within one budget from which they would finance their entire operations. This would include everything from faculty salaries to the purchase of typewriter ribbons. Of course there would need to be appropriate guidelines and supervision from higher administrative units. When overall budgets tighten or expand, adjustments (hopefully on a reasoned, non-across-the-board basis) could be made in these unit budgets by higher-level administrators. Decisions concerning resource allocation would generally be made at that level where information on their effects is most readily available. The system would also accommodate adding, eliminating, or combining any number of program areas as administrative units.

Time does not permit us to speculate about many of the likely effects associated with such a scenario. I would hypothesize, however, that under this proposal we would generally find fewer tenured and tenure track faculty than we now have. Administrators and their faculties would no longer be forced to act as if the budgetary pool from which faculty salary funds are drawn were a free good. The same would be true for all kinds of other expenditure categories in which the current system protects the advocate for their consumption from an incentive to economize in their use.

What I am suggesting would obviously help our agricultural research and education system not only during this tight budget period, but at other times as well. Currently we should be more open-minded and willing to put forth the necessary effort to be innovative in financing our operations. We may be able to make an opportunity out of the current hardship and assure that the productivity of our system can continue to be a source of great pride to us.