

## DISCUSSION: AGRICULTURAL ECONOMISTS IN RURAL DEVELOPMENT: RESPONSIBILITIES, OPPORTUNITIES, RISKS, AND PAYOFFS

**Curtis Braschler**

There is little disagreement with the paper by Nelson and Doeksen. These authors have considered the history of and the justification for the Land-Grant System from its nineteenth century origins to the late twentieth century. They have distinguished between the traditional or primary charge of the System in terms of its responsibility for agricultural development and its recent secondary responsibility for rural development.

The general lack of support for research and extension programs in rural development was measured by Nelson and Doeksen by comparing percentages of land-grant university funds (3 percent) and percentages of Cooperative Extension personnel (7 percent) working in the rural development area. Obviously, by either measure rural development is considered a low priority item by those individuals who establish budget priorities.

The facts presented by Nelson and Doeksen regarding support by land-grant programs involving rural development activities raise the serious question as to why there is this lack of support? Part of the lack of support could be attributable to the failure of those of us working in rural development to adequately state our case. This possibility was brought to the attention of this discussant while making the distinction between agricultural development and rural development for a group of managers of the experimental farms of the Missouri Agricultural Experiment Station.

It was noted that agricultural development activity is pursued with the purpose of increasing the output of agriculture from a given resource base or maintaining the output of agriculture from a reduced resource base. However, it appears to shock some of our colleagues in technical disciplines and even some social scientists to point out that success in agricultural development will invariably create one or more rural development problems. Yet, we know that it is the displacement of resources (particularly labor) from agriculture brought about by the application of agricultural production

technology that originally set the stage for most of what is called rural development problems. The need for providing off-farm employment either in rural areas or the distant city is a familiar one to the rural development social scientist. Problems arising from changes in the demand for public and private services arising directly and indirectly from the development and application of agricultural technology is also a familiar one to those of us working in rural development.

Even at the risk of over emphasizing the obvious, it is important to note that public support for agricultural technology development or, for that matter, general development of technology without concern for the societal adjustments that may be necessary is not only contradictory, but actually may be deleterious.

### GENERAL ECONOMIC CHANGES WITH IMPLICATIONS FOR RURAL DEVELOPMENT

Some major trends have developed in the overall U.S. economy which will substantially impact rural development problems during the next 10 years. Since Doeksen and Nelson chose, probably wisely, to forego any prognostications on these matters, it might be useful to consider some of these trends along with some speculation about how these changes may relate to extension and research activities in rural development. How we as rural development workers respond to these challenges may well have profound implications for our support and even survival in the future.

#### Major Trends

The biggest single challenge for the U.S. economy during the next 10 years will be the need for creation of new jobs. *U.S. News and World Report* has projected a need for the creation of 20-25 million new jobs by 1993 if unemployment is to be reduced to the 6 percent level (English). The magnitude of this challenge can best be considered by comparing this projection

---

Curtis Braschler is a Professor, Department of Agricultural Economics, University of Missouri-Columbia.

Invited discussion presented at the annual meeting of the Southern Agricultural Economics Association, Nashville, Tennessee, February 5-8, 1984. Invited papers are routinely published in the July *SJAE* without editorial council review but with review of the copy editor (as per Executive Committee action June 25, 1982).

to past employment growth. During the highly touted prosperity of the 1960s, the U.S. economy added only 8.5 million new jobs. During the 1970s, 21 million jobs were added and that number will need to be duplicated in the next 10 years. This task will be complicated by changes in technology in agriculture and other basic industries which will reduce the need for some skills and increase the demand for others.

During the decade of the 1970s, major shifts occurred in the location of economic activity away from the old industrial belt centered in the Great Lakes States, to the Southeast and Southwest regions. Although the magnitude of population and employment shifts from the old industrial belt or heartland may slow in the next 10 years, or even reverse, this trend has already resulted in major changes for those regions with relative declines as well as for those regions growing more rapidly than the national average.

Viewed from a shift analysis standpoint, this spatial shift in employment appears to have been more extensive than may have been recognized at the time. Texas, California, and Florida were the large gainers in relative employment during the decade of the 1970s with positive shifts of 1.96, .96, and .9 million, respectively. Large relative employment losers were New York, Pennsylvania, Illinois, and Ohio with relative employment shifts of 1.8, .8, .6, and .6 million, respectively.

Structural changes in the U.S. economy will be a major factor in the working environment for extension and research workers in rural development. Different hypotheses have arisen recently to explain these observed structural changes. The "shift to a service economy" hypothesis was recently examined in a book by Shelp. To simplify this analysis, the service shift hypothesis holds that as economies develop they shift from agriculture to manufacturing, and then from emphasis on manufacturing to the service industries. This hypothesis argues that the most advanced state of economic development is the service economy of which the U.S. economy is the first example.

An alternative view of structural change affecting the U.S. economy is the deindustrialization hypothesis considered by Bluestone and Harrison. This hypothesis holds that the U.S. economy is declining in terms of the basic industries' ability to compete in international markets with resulting losses in employment in manufacturing and supporting industries.

Some empirical evidence can be marshaled to support both of these seemingly contradictory hypothesis. The services shift hypothesis is supported by share decline in employment in tangible goods industries. Share of total employment accounted for by manufacturing de-

clined from 28.2 percent in 1960 to 22.4 percent in 1980. Share of total employment in agriculture, fisheries, forestry, and mining declined from 7.6 percent in 1960 to 4 percent in 1980. Share increases occurred in all service sectors except personal services during the period from 1960 to 1980.

Some empirical evidence also exists to support the deindustrialization hypothesis. The Commerce Department reports trade deficits for every year since 1973 with the exception of 1975 when a small surplus existed. The negative trade deficit has increased from less than \$20 billion in 1976 to a projected \$60-65 billion in 1983. The projection for 1984 is at the \$100 billion trade deficit level and it is doubtful that this can all be totally attributed to the high U.S. interest rates and an overvalued dollar. The U.S. is also near the bottom in productivity as measured by output per man hour. Among its major industrial competitors, only Britain had higher unit labor cost than the U.S. in the last 10 years.

Enough evidence exists to support the deindustrialization hypothesis with its policy implication of need for reindustrialization to cause concern. In a recent column in Newsweek, Lester Thurow concluded that the U.S. cannot exist on a service economy alone and maintain or improve living standards. He concluded, "Like it or not, if American industry goes down the tubes, most of the rest of us will go down with it."

The last major trend affecting the U.S. economy and rural development issues is the impact of technology (robots, office automation, and information systems) on the U.S. job markets. Many traditional jobs in offices, industrial plants, and on the farms are being eliminated by technological developments either already realized or on the horizon. Will this trend further complicate the problem of adding the 20 to 25 million new jobs that will be needed during the next 10 years?

### **Opportunities and Challenges for Rural Development**

The economic and social forces which produced relocation in the 1970s are not yet fully understood. How much of this relocation can be attributed to such factors as: industrial relocation and/or decline, popularity of the southern and southwestern locations as retirement centers with accompanying transfer payments, structural changes associated with the shift from tangible goods production, and to changes in the production of and demand for energy? All of these factors were probably involved in and had causal connections with the observed relocation changes of the 1970s. Yet, we do not have a good descriptive or predictive understanding of the causal connections relating these

variables to spatial relocations of economic activity. This would appear to be a major research opportunity for rural development workers. A better understanding of how the changes have affected and will continue to affect the demand for services at community, county, regional, and state levels during the next decade is needed.

What do the information technologies mean for the rural and general labor markets of the 1980s and early 1990s? Pressure for creation of 20-25 million new jobs in the next decade, while technology destroys many traditional occupations in the tangible goods industries, will provide enormous research and extension challenges for economic development research. What occupations will replace the jobs displaced by technological change? Where will new service jobs locate? Will rural manufacturing relocate offshore? Can small farmers survive in agriculture without off-farm jobs? Such questions need to be addressed in our research and extension programs.

How can research and extension programs be developed which will enable small business and small government to better and more productively take advantage of the rapidly developing technology associated with the computer industry? Much evidence suggests that technology

has greatly surpassed the ability of smaller units of business and government to effectively use it. Development of programs which will help these units more effectively use the new technology seems to offer one of the more important opportunities and challenges facing rural development extension and research.

#### SUMMARY

Doeksen and Nelson documented empirically what most of us working in rural development for the last 20 years have felt. Our activities are not well supported. Part of this problem, it was hypothesized, may be attributable to our failure to develop the case for rural development as a necessary adjunct of agricultural and general technological development.

This discussion also attempted to briefly expand and evaluate the meaning of some of the general trends in the U.S. economy for rural development extension and research workers during the next 10 years. In this sense, it was believed that a larger contribution could be made to the topic of consideration than could be made by providing a strict discussion of points made by Nelson and Doeksen. There was no serious disagreement with them.

#### REFERENCES

- Bluestone, Barry and Bennett Harrison. "The Deindustrialization of America," Basic Books, Inc., Publishers, New York, 1982. 323 pages.
- English, Carey W. "Wanted 20 Million New Jobs by 1990," *U.S. News and World Report*, September 5, 1983.
- Shelp, Ronald Kent. "Beyond Industrialization: Ascendancy of the Global Service Economy," Praeger Publishers, New York, New York, 1981. 243 pages.
- Thurow, Lester C. "A Non-Industrial Revolution, Our Service Sector is Growing Fast, But It Is Not The Route To Future Prosperity," *Newsweek*, January 9, 1984.
- U.S. Dept. of Commerce, Bureau of the Census, *Census of Population and Housing 1970 and 1980*. Washington, D.C.

