RURBAN DEVELOPMENT-RADICAL PERSPECTIVES ON A PERENNIAL PROBLEM

Graham S. Toft

Proceedings of
Regional Research Committee NC-161

FINANCING AGRICULTURE IN A CHANGING ENVIRONMENT: MACRO, MARKET, POLICY AND MANAGEMENT ISSUES

St. Louis, Missouri
October 2-3
1989

Department of Agricultural Economics
Texas A&M University
College Station, Texas 77843-2124
May 1990

Copyright 1989 by author. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.
RURBAN DEVELOPMENT—RADICAL PERSPECTIVES ON A PERENNIAL PROBLEM

Graham S. Toft

Summary

Rural development has returned as a public policy issue. Our challenge is to understand the problem. In the light of a changing economy—one that is moving toward an industrial, information-based society utilizing advance technology. "Rural" in the context of the last nine decades has meant the hinterland serving metropolitan areas which in turn drive national and international economies. "Rural" in the coming new economy has the potential for becoming "rurban." We must seek policy interventions that support the potential for dramatically different economic dynamics for non-metropolitan areas. Such interventions must be directed at the multi-county level rather than at individual communities, and at networks of firms rather than at individual companies. If we are to help rural areas we must take an areawide, systemic approach to the functioning of such economies.

In short, the problems of rural economic development are a little different today from what they have been all this century. What is new is the reemergence of these problems at a time of rapid and radical advances in manufacturing, inventory control and distribution, pursuit of quality of life and advances in telecommunications. These new trends of change have the potential to change the rules of the game for rural development.

The Rural Economy Today

In this discussion rural areas are defined as non-metropolitan, namely, those areas with population concentrations of less than 50,000. In Indiana, there are 67 non-metropolitan counties and approximately 1,800 communities of size less than 50,000.

The term rural is a source of confusion. In 1976, Luther Tweeten coined the term "micropolitan" which he associated with smaller urban concentrations. Later in this article the term "rurban" is proposed to highlight the notion that traditional urban growth forces now have the potential to shape rural economies.

The rural economy is made up of much more than the commodity and livestock markets. In many parts of the U.S., medium-technical service companies provide a significant portion of rural income. Telemarketing is one industry moving into rural America. Manufacturing has been a major contributor to rural income, as has been the retail, tourism and recreation sectors. In Indiana, rural income; therefore, 68% of rural income is either retail, manufacturing, or other non-agriculture related income. In terms of farm occupant income, net farm income as a percentage of total farm income has increased from 16.46% in 1982, to 27.94% in 1986 according to the Indiana Agricultural Statistics Service. This figure indicates a larger percentage of farm resident income is being derived from the farm; however, farm occupants are still collecting off-farm income at a rate two and one-half times their net farm income.

Myths About Rural America

This brief description of the rural economy provides a backdrop to three myths about rural America proposed by Don Paarlberg, previously of Purdue University and USDA. First, that "farmers are poor;
second, that farm and rural are synonymous; finally, that big commodity programs for corn, wheat, and other crops are needed to overcome agriculture's disadvantages and, because farm and rural are synonymous, these programs are advantageous to the entire rural community." Addressing the first myth, Paarlberg notes that while some farm families are poor, per capita incomes of farm people are 86% of those of non-farm people. In terms of net worth the average per household for the farm family jumps to four times the national average.

Discussing the second myth that rural and farm are synonymous, Paarlberg notes that in 1984 the rural non-farm population outnumbered the farm population by 6 to 1, and farms employed only 32% of the rural workers. For the entire United States, farm-related employment accounted for only one percent of total employment. In terms of income, off-farm income accounted for 56% of the total farm family income; thus, less than one-half of farm income is derived from the farm.

Paarlberg's argument against the final myth, that big commodity programs are needed for agriculture and are advantageous to the entire community is that the funds of these programs do not necessarily become evenly disbursed; thus, they are not necessarily advantageous to the entire community. Farms with $500,000 per year income account for only one percent of the total number of farms; however, they collect nine percent of the total number of direct payments. Additionally, only one-half of all farms are involved in these programs. Since farmers are only one-sixth of the rural population, and only one-half of their income is from farm production, and only one-half of the farmers participate in the big commodity programs, Paarlberg argues that the total financial assistance amounts to only 1/24th of the rural income. This argument is stated to indicate that while these programs are significant, they will not carry the rural areas' economic efforts alone. Thus, rural development deals not only with agricultural programs but with much broader aspects of economic vitality.

Rural Problems

Problems facing rural areas fall under four broad headings:

- Shortage of Leaders and Partnerships
- Inefficiencies in Rural Economies
- Inadequate Public Facilities
- Poor Fit With Programs From Senior Levels of Government

First, Shortage of Leaders. Most rural commentators recognize the critical role leadership plays -- "strategic leadership" to visualize, plan and influence and the "effector leadership" to mobilize and implement. Both qualities of leadership are in short supply in rural areas because:

(i) many potential leaders have left rural areas
(ii) in any social grouping, about 8-10% gravitate to leadership. In an area of low population density this translates to a rather small core group.
(iii) Issues facing local leaders today are increasingly complex—technologically, socially and organizationally. Within the larger supply of leaders in an urban area, specialization can take place. In rural areas, the leaders must be generalists -- each must know more about more issues.
(iv) rural leaders are largely volunteers. In the urban setting full-time development professionals can be employed.

Complicating these leadership problems is a related issue -- that of partnerships. The modern economic development process hinges on cooperation and collaboration among a variety of jurisdictions and private
groups. The "jurisdictional jungle" facing civic leaders in America today is no less complex in rural areas. This makes intergovernmental relations particularly important. Despite the fact that rural people are so friendly, parochialism gets in the way of area-wide cooperation. High school basketball rivalries may get in the way of leaders of nearby towns or counties working together decades after they faced each other in competition. Broadening the concept of "territory" and working together for the common the good of a whole substrate region or multi-county area is fundamental to a new rurban development.

Second, Inefficiencies in Rural Economies. Rural economies suffer from three inherent inefficiencies: cost-inefficient rural infrastructure, information costs and transactions costs.

(i) cost-inefficient rural infrastructure: Simply, this means many rural water, sewer and waste disposal systems are too small to be cost efficient. Using 1987 data, the average residential sewer billing for communities with fewer than 2000 population was twice that for communities greater than 25,000 population. We have built small systems to the design standards of large systems and we have failed to cooperate in such a way that area-wide systems could meet needs at lower costs. (This brings us back to partnerships!)

(ii) information costs: Information is more readily available in urban areas. Depositories of knowledge like libraries and universities are more accessible. On-line computer data bases are more regularly use. And, most importantly, informed people, the experts, are hired more frequently to help solve problems. (This brings us back to the generalists versus specialist dilemma!)

(iii) transactions costs: Economies function best when "market exchanges" of needs, ideas and information take place regularly and freely. Because of parochialism and weak public/private collaboration, significant barriers exist to the exchange of information and ideas in rural areas. It is not that rural residents are less creative; rather, fewer institutional and informal mechanisms exist for communicating, planning and coordinating, particularly across county lines.

Third, Inadequate Public Facilities. Much has been said about the infrastructure needs of rural areas. Clearly, rural economies depend on good transportation systems. Yet of all road needs in the U.S., off-system (non-Federal Aid) bridges in rural areas are the most deficient (33.2% in 1986 for Indiana). Furthermore, aviation is the fastest growing form of transportation as we move into the new economy. General aviation airports have received scant budgetary attention in Indiana in recent years. Rural water, sewer and waste disposal systems also face significant needs gaps. Nineteen small communities in Indiana faced sewer bans in 1987. In addition, many small sewer systems are operating near or above 100% design capacity. Using 1985 statistics and adjusting for those systems where improvements are either planned or in progress, 38 rural communities still face "crisis" capacity utilization problems in 1989, while another 33 have "severe" capacity constraints.

In addition to traditional public works needs, rural areas face the challenge and opportunities of a new infrastructure -- telecommunications, the electronic highway. In theory, telecommunications offers considerable promise to rural areas, which, however, might be the last to benefit. Most importantly at this stage, we simply do not know what the telecommunications capabilities are for rural Indiana and we do not have a plan to exploit the new opportunities that telecommunications might bring.

Fourth, Poor Program Fit. Over the years a plethora of programs, federal and state, have evolved to address particular rural development problems. Approximately 80 federal agencies have programs pertaining to rural areas. This bureaucratic maze can be confusing to a largely volunteer local leadership. Furthermore, with declining federal funds for many community and economic development programs, competition is fierce.
This competition has become quite sophisticated with successful communities utilizing experienced grant writers and analysts to compete for funds. Small communities may not have this luxury.

A state program such as Main Street has a minimum population requirement of 5,000 population limit; therefore, these underpopulated areas typically are written off as too risky for public funds. As argued later, the real need for assistance is at the areawide, even multi-county level. Some states such as Michigan and Iowa combine rural regions into "development districts" which qualify for many programs for which individual communities would be ineligible or ill-equipped.

So What's New?

The above problems have been with us for much of the century. While a few twists exist, such as the potential impact of telecommunications and the increasing complexity of governmental aid, haven't we heard all this before?

While problems of rural areas are not new, the opportunities and threats are. These stem from significant trends of economic and social change sweeping America. Three trends are so consequential for rural areas criteria of businesses, the pursuit of quality of life, and the telecommunications revolution. Each are briefly described below.

In the industrial era, manufacturers located according to the relative importance of four or five traditional locational factors -- access to raw materials, access to markets, labor availability and supply, cost and availability of energy, and transportation. These factors caused manufacturing and related services to concentrate in urban areas.

Nowadays the criteria are changing. Plants are downsizing while becoming spacious in layout, trucking and transportation costs as a percentage of operating costs have declined, goods produced are becoming lighter and more value-added, and production decisions and inventory controls can be keenly managed on computers with commands sent instantaneously via telecommunications anywhere in the world. With these trends, it is not surprising that we are observing a dispersion of manufacturing into rural areas.

Furthermore, related services industries are displaying similar trends. Take, for example, warehousing and distribution. In the industrial era warehousing depended on mail, telephone and direct wire service for communications. These are of lesser importance today with the advent of satellite and microwave technology, directed automated transmission through computer terminals, and sophisticated inventory management techniques such as just-in-time delivery. As long as transportation capabilities are superior and congestion and traffic delays are minimized, non-metropolitan areas have considerable appeal -- witness the major new retail distribution center in Seymour.

This leads to a second transforming trend. Americans more than ever are seeking quality of life. This means satisfaction with schools, civic amenities, health care, crime prevention, etc. To a significant number, it also means spacious and natural surroundings -- thus the growth of the exurbs/ruburbs. As a result, the occupational and educational structure of rural residents is changing. As demonstrated earlier, farming and farmers are but one segment of a newly-emerging rural cosmopolitanism. Sociologically, the boundary between rural and urban is becoming increasingly blurred. As John Naisbitt puts it in Megatrends:

"This is not the abrupt change in lifestyles that is presented in the popular press, but is actually a deconcentration, a spreading out or thinning out, a blending of lifestyles that is partly urban, partly suburban, and only partly rural in nature."
The third transforming trend is the impact of telecommunications, briefly touched upon earlier. The direct impact on the efficiency to business is obvious, but the indirect impacts will be even greater. It will lead to more “telecommuting” -- freeing individuals in various information-based occupations to live and work in rural settings. It will enhance access to information by rural decision-makers. And, most significantly, it will enhance networking rural areas, breaking down parochialism and building cooperation and collaboration.

**THE RURBAN APPROACH**

The rurban approach to rural development is to recognize, study and exploit these transforming trends. It recognized that these trends of change have areawide consequences and that any effective effort at rural economic change in the nineties must be multi-county, even regional, in approach.

The rurban approach hinges on the tenet that the economic forces that have brought cities into being and keep them vital are the same forces that must be channeled to transform rural areas. It so happens that the trends of change described above are congruent with these economic growth forces, described below.

**Five Reasons Why Cities Form and Prosper.** There are five growth forces that make and continue to make urban areas happen. These same forces can be brought to bear on rural areas more easily now than ever before. They are as follows: economies of scale, agglomeration economies, the innovations process, critical mass for specialization, and efficient information access. Very briefly these are described below.

**Economies of scale** refers to the delivery of local public services and infrastructure. Many governmental operations are more efficient at higher volume. While well understood for public infrastructure, like water and sewer services, the principle also applies to such programs as specialized education and training. Furthermore, governmental administration may experience some economies of scale, in that small governmental units may not be as efficient as large ones in handling non-routine, complex matters. A simple case in point is the merit of a region-wide grant writing service serving rural jurisdictions.

**Agglomeration economies** refers to the synergy that comes about when many firms are in close proximity to each other. These firms tend to be more competitive, stealing ideas and people from each other but they also collaborate more with each other, leading to higher productivity for the group.

Somewhat related to agglomeration is the **innovations process** in urban areas. The noted urban scholar Jane Jacobs contends that urban areas are the progressive and innovative sector of society because the concentration of people stimulates interaction which leads to articulation of wants (new markets) and the generation of ideas.

**Critical mass for specialization** relates to the capability of urban areas to accumulate knowledge in very narrow fields of inquiry and to have resident experts in these areas. Included in this category is the capability to amass a cadre of leaders from both public and private sectors.

**Efficient information access** refers to accurate and timely information on markets, suppliers, competitors, etc.

**Matching Transforming Trends with Growth Forces**

The prevailing theory of rural growth is that rural areas are “hinterlands” meeting special needs of urban areas. This has led to a largely export-based approach to rural development, in which the primary focus has been on how to help rural communities produce for the urban machine. As a consequence, aid to rural areas has been predominately community by community -- each being helped individually to compete
against the others to export products to urban centers.

What if we took the five growth forces that make urban areas what they are and seek their application to a rural economy? Our goal would be to build a more integrated and dynamic local marketplace. For example, if rural infrastructure systems were studied from an areawide perspective, economic efficiencies and appropriate new civil engineering and construction technologies might be applied. A simple case is the opportunity to connect sewer systems of two or more communities, some of which were overbuilt with federal funds in the '70s and early '80s and have excess capacity, and other of which are in noncompliance with EPA requirements and are unable to finance new construction. Or, undertake needs and opportunities assessment of existing or potential businesses that might take advantage of improved telecommunications technology. Or, form a multi-county public/private progress committee that would openly draw on new residents to the rural area, bringing fresh blood and new ideas. Or, develop and implement a multi-county "marketplace program," the intent of which would be to inventory and inform local firms of suppliers and purchasers in the vicinity. This would have the effect of strengthening backward and forward linkages in local rural markets that are frequently quite weak. Surprisingly, rural firms use services of distant firms (frequently in urban areas) when expertise is closer at hand.

A Pilot Program for Action

How could we begin to test some of the concepts proposed above? A pilot project comprising three counties would be large enough, while manageable. Strong endorsements by civic leaders would be necessary, backed by financial support of state government and full participation of the regional/state representatives of pertinent federal agencies.

The project would consist of studies, civic leader participation, negotiation, and action planning. A tri-county forum would be created in a task force format, with guidance from a facilitator. Studies would be commissioned and used by the task force in deliberation, strategy formulation and decision making. Negotiation among participants would be key as action plans began to take shape. Participation by federal agency personnel would be essential to the negotiation process, more closely assuring that federal aid would be brought to bear on the critical issues at the appropriate time. (This negotiation process would resemble the Negotiated Investment Strategy methodology developed for urban areas in the early '80s). This whole process would lead to a more rational, strategic approach to rural development.

A variety of studies are possible under each of the five key growth forces:

Economies of Scale:

- study of efficiency and effectiveness of infrastructure systems
- study of efficiency and effectiveness of small governmental units
- study of efficiency, adequacy and equity of local tax and revenue generation systems
- study of efficiency and effectiveness of preparing the local labor force, especially retraining the adult work force
- study of quality and availability of sites and facilities for business relocation, expansion and areawide marketing efforts
Agglomeration Economies:
- study of existing linkages/networks among local firms
- study of inventory buy/sell needs among local firms
- search for and investigation of the use of waste and by-products of existing forms as input to other processes

Innovations Process
- determine the entry and exit rates of small businesses
- investigate effectiveness of existing entrepreneurship/small business programs through the local Small Business Development Center, colleges and other sources
- study problems and prospects for closely-held family firms

Critical Mass for Specialists
- report on the effectiveness of local leadership academies
- investigate the effectiveness of multi-county delivery of services such as those through regional plan commissions and private providers

Efficient Information Access
- study of telecommunications capabilities and future needs for state-of-the-art telecommunications
- investigate the need for shared computer power among small and mid-sized firms and possible role of post-secondary institutions in this regard
- determine the adequacy of economic and market information to local firms

Conclusion
By the end of the nineties a quite different spatial economy will have emerged. Given the trends of change affecting rural areas, they need no longer be totally subservient to urban areas. A new type of rurban economy is possible, one which is more internally consistent in a viable and dynamic "marketplace."

To help rural areas rapidly and thoughtfully adjust to change, rurban development must be approached at the multi-county level. The efficiency and effectiveness of "systems" such as infrastructure systems, information systems, coordination and collaboration systems must be explored, evaluated and improved upon. Such a systemic, areawide approach can be contrasted with the present business-as-usual approach which treats rural communities and rural firms as independent economic units. Through thoughtful analysis, careful design and tough negotiation, the economies of rural areas have the potential to exploit some of the economic forces that have made urban areas what they are today.