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CRITICAL DEVELOPMENT ISSUES IN RURAL ECONOMIES

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The economic well-being of American farm families depends increasingly on the health of the local economy. More than 90 percent of farm household income was derived from off-farm sources in 2000 (see also Mishra et al. 2002). Well over one-half of all farm operators have off-farm jobs, and four out of five of these work full-time in those jobs. Counties in which a larger share of farmers worked off-farm in 1987 were also less likely to lose farms between 1987 and 1997 (Goetz and Debertin 2001). The critical development issues in rural economies examined here include the rise in rural proprietor employment, the growing importance of regional industry clusters, and the local investments that are necessary to ensure a positive outlook for farm and nonfarm rural families. Economic developers increasingly realize that effective and sustainable community development means tapping into, organizing, and amplifying all existing local assets through “soft” network infrastructures that synergistically and holistically include all sectors of the community.

1. Rural Growth and Decline

This paper provides a background for understanding the economic outlook for farm and non-farm households in the context of rural community development – including job creation, income generating strategies, human capital development, and entrepreneurial development. Before this background is presented, two stylized types of rural counties are briefly described: One set of counties has been profoundly impacted by the globalization of and technological change in the manufacturing and natural resource-based industries (logging, mining, agriculture). Located mostly in the Great Plains region, but also in the Mississippi Delta and significant parts of the Northeast (Figure 1), these counties lost more than 3 percent of their populations during the last decade, as economic opportunities evaporated. This paper focuses primarily on development issues in these types of rural counties.

Other rural communities are being subjected to rapid development because they are highly desired by higher-income urban residents seeking to escape congestion and pollution, or wishing to establish second homes for weekend getaways. Many of these rural communities are becoming urbanized as they attract growing populations. Rapid population growth has occurred in the Rocky Mountains, southeast Texas, around Atlanta, and in Florida in the 1990s. Farmland conversion for development purposes and the share of homes in counties that are used for seasonal or recreational purposes (i.e., second homes) are shown in Figure 2 and 3, respectively. In Figure 2, each red dot represents 2,000 acres of land newly developed between 1982 and 1997; the total amount of prime farmland developed during this period exceeds 7 million acres. Over time, Boston, New York and Washington are becoming one large metro area, as the green space between them is developed.

Figure 1: US Population Change, 1990-2000

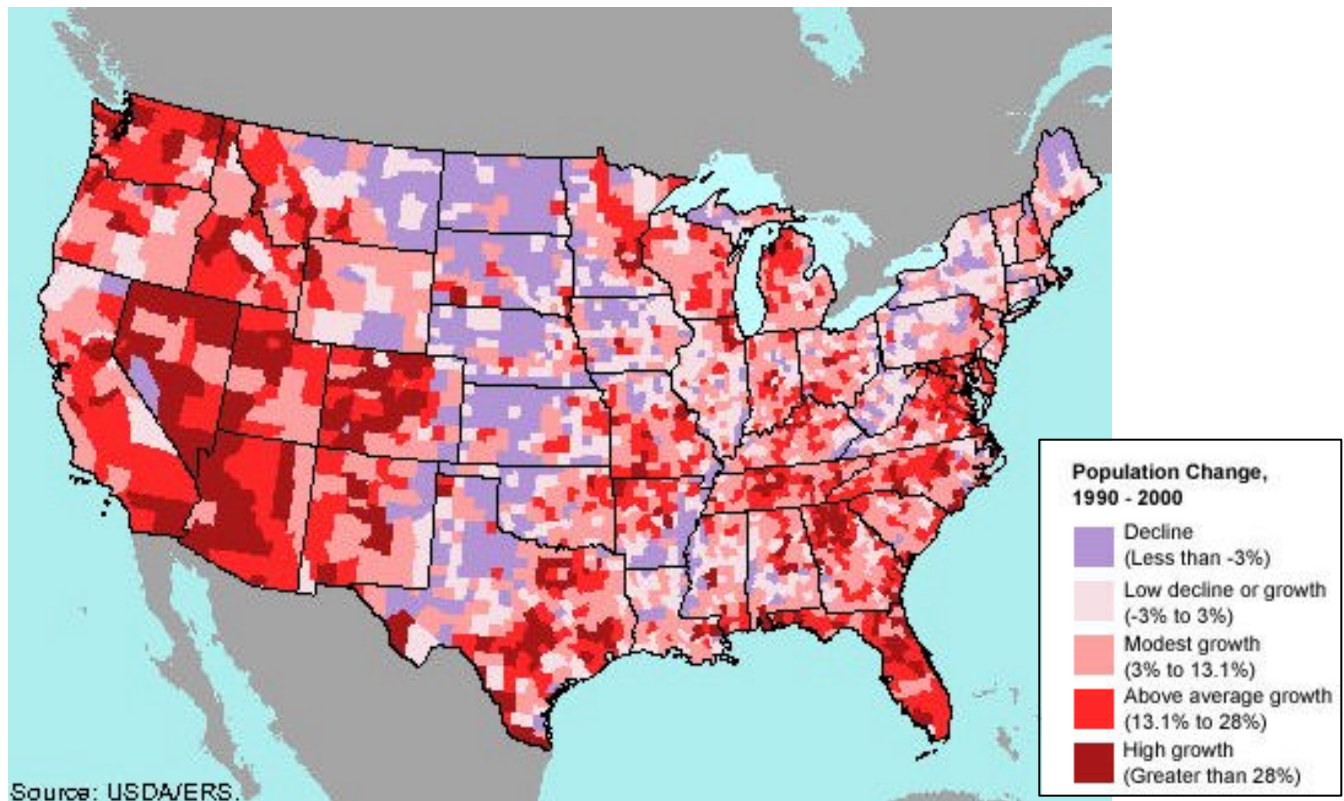


Figure 2: Farmland Conversion, 1982-1997

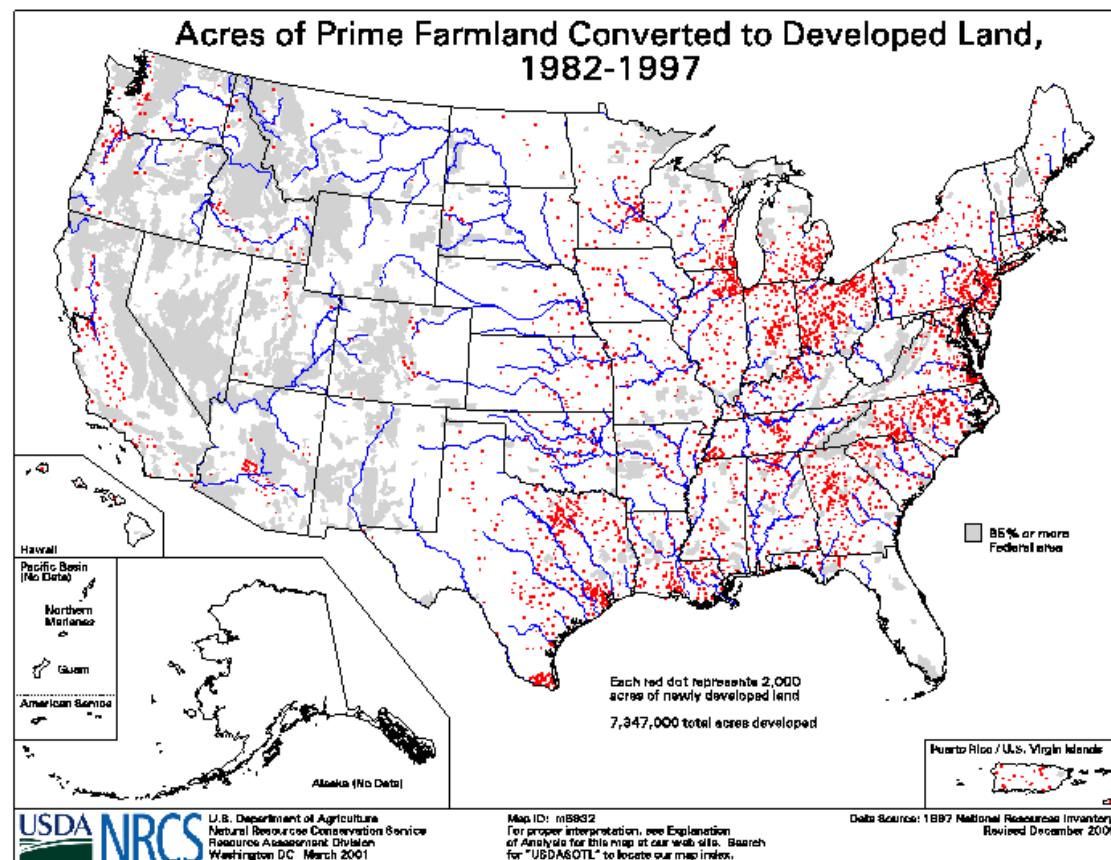
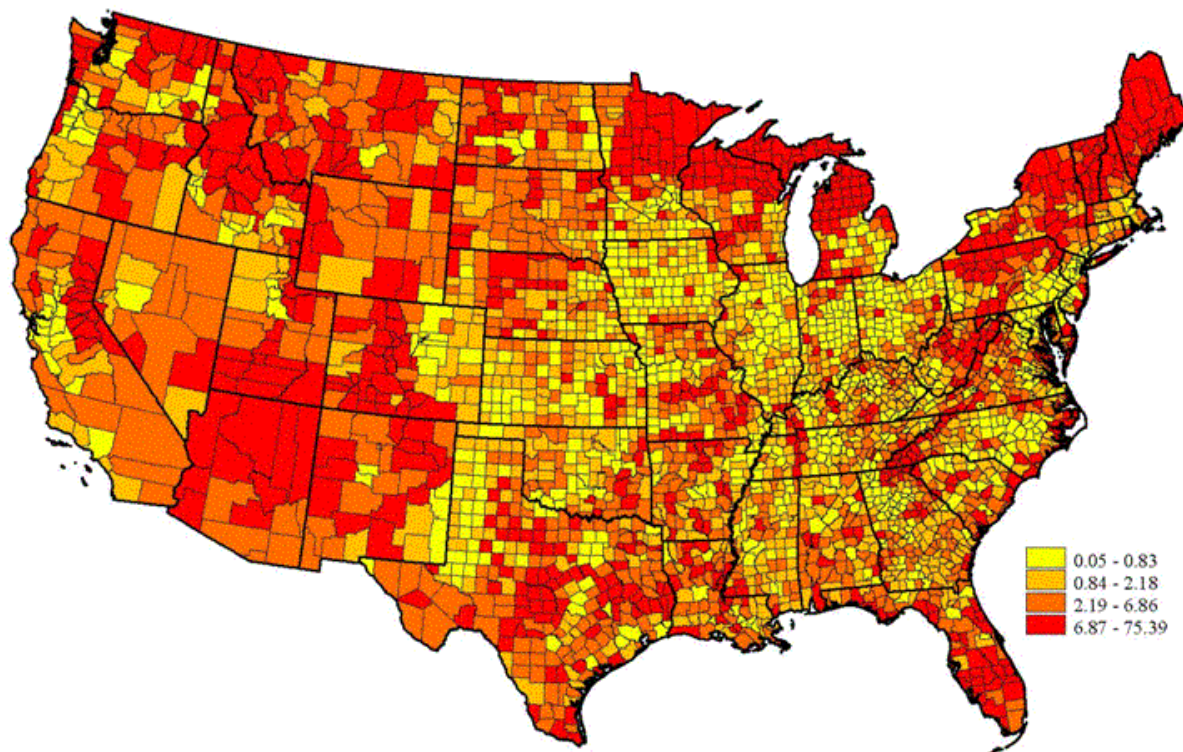


Figure 3: Second Homes as a Percent of All Homes, 2000



2. Economic Development Strategies: Overview

Rural communities can use a number of strategies to create jobs and generate income, or prevent economic decline: 1. recruit new employers or firms; 2. retain and expand existing firms; 3. create new local entrepreneurial activity or firms, and 4. capture grant and other funds from external sources. The first three of these strategies are discussed below in more detail. *Development* involves more than job and income creation: it includes improvements in community engagement and leadership capacity, and the adoption of processes that balance economic growth with quality of life objectives. Some communities inherently have higher levels of social and leadership capital that allow them to deal more effectively with emerging challenges and take advantage of new opportunities as they arise.

Recruitment of Firms

Economic developers have historically focused primarily on the recruitment of manufacturing firms to create jobs, and they were usually concerned more with job counts than with wages paid. Manufacturing jobs frequently were “lured” using incentives from the high labor-cost Northeast and Midwest US to the South, from where the jobs in turn often left for even lower-cost regions overseas. While this strategy cannot be summarily discounted as one path to economic growth – the details of the type of industry, how much it pays relative to the state-wide average wage, and how it complements existing firms have to be sorted out first – it is increasingly clear that most rural communities will not be able to bring back through recruitment the manufacturing jobs that they have lost to lower-wage regions and countries.

When new jobs are created in a community through industrial recruitment, the jobs are often filled by individuals moving (back) into the community (Barkley, Henry and Warner 2002). Often these are locally-born residents who moved elsewhere when the local economy deteriorated, and they may have picked up new skills that make them more competitive for the new jobs than those who remained behind. The local unemployment rate may therefore remain unchanged after the new jobs are created, and local residents may not experience expanded employment opportunities. Our own research suggests that many rural communities face challenges generating the critical mass needed to attract or to spawn high-tech firms (Goetz and Rupasingha 2002).

Firm Retention and Expansion

Many states and communities have turned to business retention and expansion through technical assistance (TAP) and other programs as a development strategy. Here, technical expertise is brought to bear from the outside on existing firms to help them become more competitive, with the goal of both retaining the firms in the community and allowing them to expand their operations and labor forces. Experts are drawn from Universities or from the state and local government sector, and they work with individual firms and stores or associations of Main Street merchants. These programs may help “Mom-and-Pop” stores remain competitive, for example, by developing niche markets or providing superior services when large box retailers or discount stores move into an area. West Virginia University’s Retail Analysis Program (REAP) provides the types of services to independently-owned small retail businesses that chain stores receive from headquarters, for example.

Local Entrepreneurs and Nonfarm Proprietors

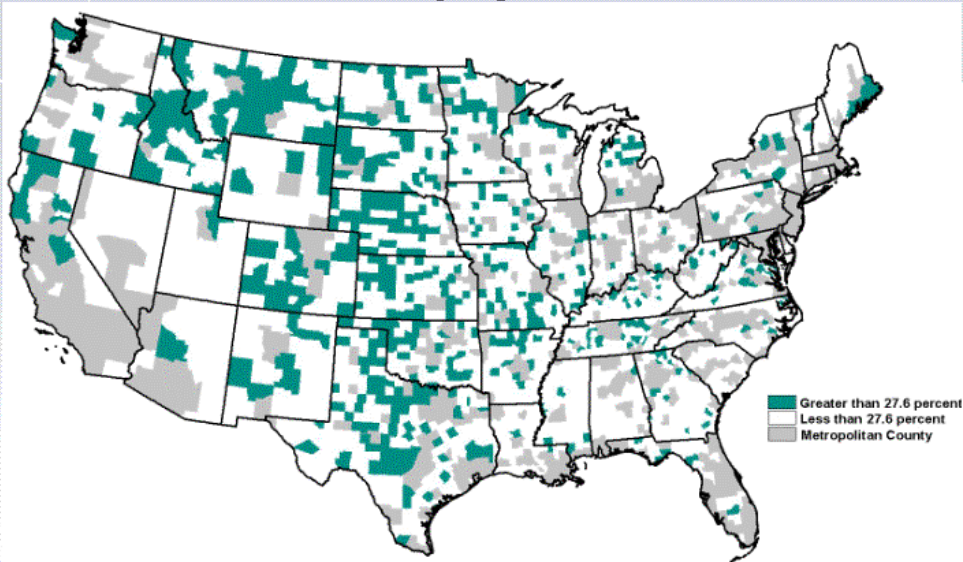
The third strategy is to enhance local entrepreneurial activity. One advantage of this approach is that local entrepreneurs have obvious and strong ties to the community, which means that they are less likely to be lured away to other regions, they reinvest profits locally, and they are active philanthropists for local causes. Not everyone has the characteristics required to be an entrepreneur, but a large pool of potential entrepreneurs exists among those who have lost their wage and salary jobs, or their farms, and who also want to remain in the rural community in which they have always lived.

Economic developers and local government officials have only recently started to focus on local entrepreneurs, the self-employed or nonfarm proprietors as sources of job growth or income generation (Goetz and Freshwater 2001, Pages and Poole 2003). Yet a significant rural employment trend, which has not been generally recognized, is the rise of proprietor employment as a share of all employment. The share of nonfarm proprietor jobs in all full- and part-time rural jobs increased from less than 14% in 1969 to 18% in 2000 (Goetz 2002). In the Northeast region, one out of every four rural jobs will be in the form of nonfarm proprietors within 10 years if current trends continue (compared with one of every five jobs at this time). Figure 4 shows counties with high shares of proprietor jobs as a percent of all full- and part-time jobs.

Clearly, if these nonfarm proprietorships had not been formed, the population loss from many rural areas over the last few decades would have been even more pronounced. While we know relatively little about these proprietors, we do know that they are not only small-scale “Mom-and-Pop” operations, and that they cover a vast array of businesses, ranging from manufacturing of local crafts to services such as tax consulting or export marketing for farmers. The Center for Rural Affairs (2003, p.4) in Nebraska lists the following examples of rural businesses that have been helped by its Rural Enterprise Assistance Program: “wood craft businesses, bird house makers, a pottery maker, picture framers, a Christmas tree

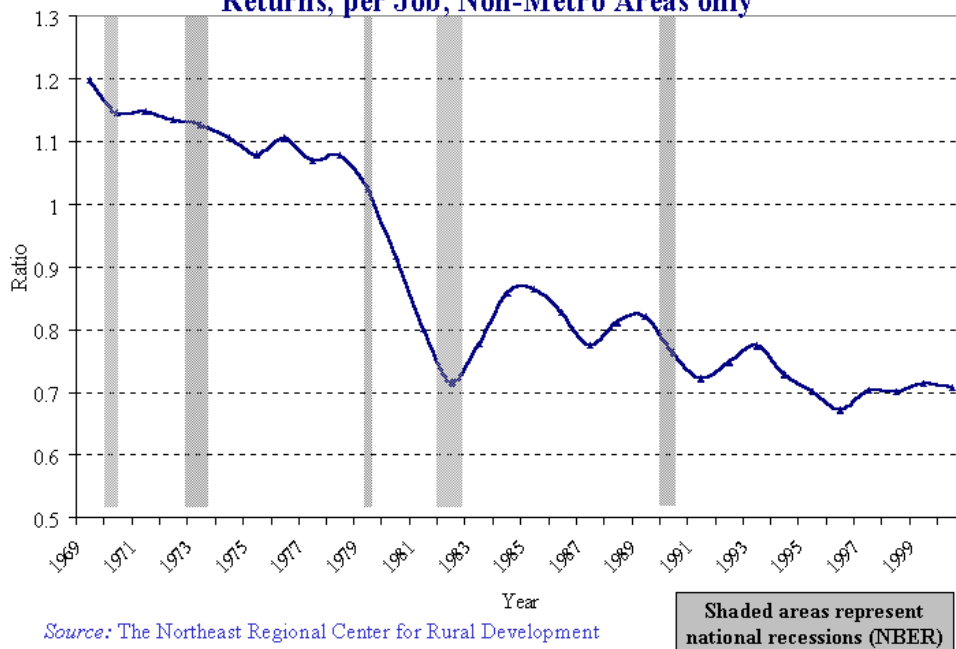
ornament maker, a meeting planner, caterers, day care centers, a fitness center, tanning salons, carpenters, auto repair businesses, makers of wooden barrels and casks for movie sets and many, many others.”

Figure 4: Nonfarm Proprietorships as a Percent of Total Nonfarm Employment: 2000



Source: The Northeast Regional Center for Rural Development (data averaged over 1998-2000)

Figure 5: Proprietor Returns Relative to Wage-and-Salary Returns, per Job, Non-Metro Areas only



Source: The Northeast Regional Center for Rural Development

Shaded areas represent national recessions (NBER)

The earnings of nonfarm proprietors in non-metro areas have fallen behind those of their counterparts in wage-and-salary employment (Figure 5), as well as those of their urban counterparts (not shown). These proprietors also do not have retirement contributions from employers, and most lack health insurance. In Canada, which offers universal health insurance, nonfarm proprietor shares in total employment are twice as large as in the US (Bollman 2002). While one way of looking at the falling relative returns to proprietor employment is that these individuals are making deliberate lifestyle choices and remaining in rural areas because that is their preference over living in congested urban areas, it is also clear that these nonfarm proprietors would benefit from a variety of entrepreneurial training and other forms of assistance such as access to information, capital and markets, as well as infrastructure investments, including broadband capability (see also NCOE 2002). Any assistance to these individual businesses will have a greater impact if it is provided in the context of a regional and industry-wide strategy. One example of such an industry is that of agricultural tourism.

In addition to promoting nonfarm proprietorships, opportunities exist for helping farmers move beyond the production of commodities (e.g., Kalomiris 2003). These include the pursuit of value-added activi-

ties in agriculture (e.g., wine production, new cheeses) and forestry, the development of niche markets and specialty crops, agricultural or nature tourism, and direct marketing. Educational and loan programs are helpful in this regard. Examples include the USDA's 2003 Agricultural Internet Marketing Guide

and the Value-Added Agricultural Product Market Development Grants. The federally-funded Growing New Farmers network in the Northeast US helps farmers find new market outlets, for example. Kalomiris provides examples of both agricultural and non-agricultural entrepreneurial development programs implemented by different states.

3. Clusters as a New Development Strategy

Another relatively new phenomenon, alongside proprietor growth, is that of industry clusters. Porter (2000, p. 16) defines cluster as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate." The basic notion here is that it matters not so much what a community or region produces, but *how* it does so. Furthermore, "the importance of clusters suggests new roles for government at [all] levels ...removing obstacles to the growth and upgrading of existing and emerging clusters takes on a priority" (Porter, p.15). "All clusters can be desirable, and all offer

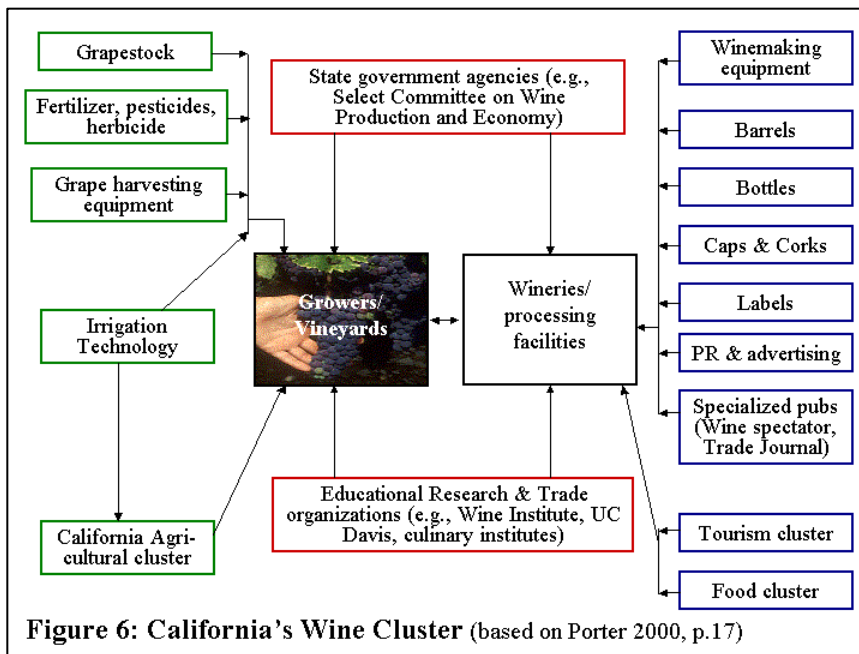
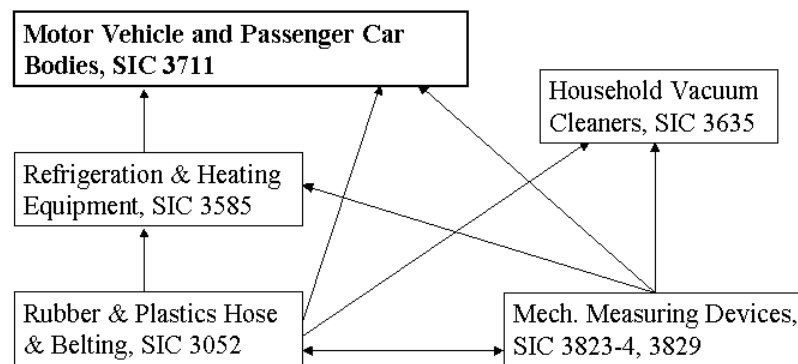


Figure 7:
Motor Vehicle Linkages in North Carolina



Note: Based on E. Bergman, E. Feser, and S. Sweeney, *Targeting North Carolina Manufacturing: Understanding the State's Economy Through Industrial Cluster Analysis*, Institute for Economic Development, University of North Carolina at Chapel Hill, March 1996.
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the potential to contribute to prosperity" (p.16), and "benefits are internal to the cluster, not the individual firm" (p.27). This latter fact is a compelling argument for public sector intervention to enhance local economic development.

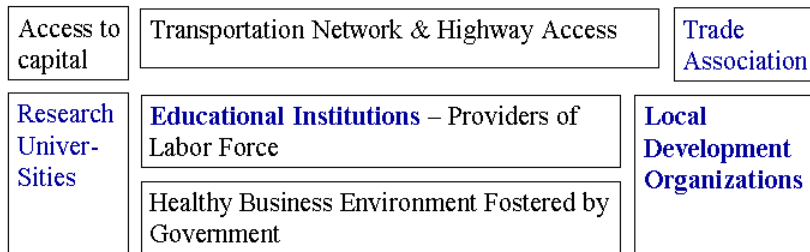
A wine industry cluster in California is shown in Figure 6 as an illustration. Presently, 41 states are seeking to develop clusters in the life sciences (biotechnology). Another example is the cheese cluster that has formed in the Fingerlakes region of New York. Two other examples of clusters are included for illustrative purposes in Figure 7 and 8. The chemicals cluster example in Figure 8 is especially interest-

ing because it highlights the kind of specialized infrastructure that is needed within communities to support a cluster. Other examples of successful rural clusters include houseboats in Kentucky, auto parts suppliers in TN; houseboat manufacturers near Lake Cumberland, KY; helmet manufacturers in Montpelier, ID; hosiery production in Randolph County, NC; metal workers in western MN; and precision manufacturers in northeast Oklahoma (Rosenfeld et al. 2000).

**Figure 8:
Inputs into Chemicals in
Northeast Ohio**



Specialized Community Infrastructure:



Note: Based on Dwayne Keeney and Adina Swirsky, *The Chemicals Cluster in Northeast Ohio: A Briefing Paper*, Urban Center, Levin College of Urban Affairs, Cleveland State University, June 1998

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Clusters provide exciting new opportunities for regional economic development. However, they also require community-level leadership and effective partnerships, and not all communities will be able to implement a cluster strategy without external assistance. Casual observation suggests that success in this context may depend on the presence of one or more key local individuals who emerge as leaders.

The agglomeration forces operating behind clusters include spillover of ideas and innovations; enhanced access to specialized inputs; and improved supply chains or “buy-sell relationships.” More importantly, the notion of clustering benefits suggests that economic strategy in general should follow a targeted effort that involves nonfarm proprietors who engage in so-called import substitution (produce goods locally that have previously been produced elsewhere) and, if necessary, the recruitment or retention and expansion of firms that fit strategically into the local cluster, thereby making the cluster more effective.

The pursuit of clusters within single industries or sectors is not free of peril, however. In the current economic downturn, states such as Utah and Colorado experienced significant job losses in their high-tech clusters while Montana and Wyoming, which continued to rely heavily on natural resource based industries during the high-tech boom of the 1990s, have seen much greater employment stability. In general, more diversified economies tend to have greater stability, but again, the details in terms of the types of economic sectors and how they are affected by the business cycle are important. This suggests that development of clusters in diverse industries, which are affected to varying degrees and at different times by the business cycle will entail greater economic stability over time.

4. Implications: Rural Investment Needs

Current trends and the outlook for the decade are such that the economic well-being of many farm families will continue to depend critically on the strength of and employment opportunities offered by the local economy. The discussion thus far suggests that an economic development approach that focuses both on individual entrepreneurs and their relative roles within industry clusters is sensible. This also means that a number of complementary investments need to be undertaken in local communities if rural areas in general, and farmers in particular, are not to be left behind in the new Century. These investments will be more cost effective if they occur in the context of public/private partnerships and collaboration within and across public agencies, and if they take advantage of synergies across program areas.

In addition, investments are needed to enhance the capacity of community leaders (Reid and Flora 2002).

Expansion of Infrastructure and Public Services to Rural Areas

IT infrastructure is essential if rural areas are not to be left behind, especially as the federal government shifts entirely to electronic means of doing business. The challenge in sparsely settled regions is to aggregate the demand for broadband – local government, non-profits, small businesses, schools, libraries, etc. Penn State Cooperative Extension is gaining insights into how this can be accomplished. However, it is also clear that merely providing the physical infrastructure to do business on the web is not sufficient. The US Department of Commerce reports that “the factor most likely to accelerate broadband demand is the creation and deployment of easily understood, value-adding business and consumer applications at prices that meet the needs of the market.” Training resources are needed to help rural businesses (both for profit and non-profits) and individuals take advantage of the enormous opportunities offered by the Internet.



In this context, initiatives such as the USDA’s Rural Business Investment Program and the new \$1.4bn Rural Broadband Loan and Loan Guarantee Program (Section 6103 of the 2002 Farm Bill) are critical, as they provide start-up and equity capital for rural businesses and encourage the deployment of telecommunications infrastructure. However, it is also crucial not to lose sight of the need to invest in assets that are already available locally, including the human capital of rural people.

Human Capital Development of the Local Labor Force

Communities, states or regions that have greater shares of individuals with more years of formal education fare better on a variety of indicators, including higher income levels or lower unemployment rates. Providing job training to help workers participate in the “New Economy” is thus critical (Beaulieu 2002), but these investments also have to make sense. For example, if a rural worker pursues a college degree but is unable to find a job locally that requires a college education, that worker will likely leave the area to find work elsewhere that is commensurate with the new skills. In fact, a fundamental conundrum facing many rural areas is that workers do not have advanced skills because jobs requiring these skills are not available locally, and firms avoid rural areas because they do not have highly-skilled workers.

In terms of New Economy jobs, it is also important to be realistic about the possibilities. Kusmin 2002 reports that the wage premium earned by computer users in non-metro areas is 6%, compared with 10-11% in metro areas. We have found that high-tech clusters are less likely to form in rural areas, basically because these places do not offer sufficient economies of scale in labor markets (Goetz and Rupasingha 2002). Instead, rural areas will have to play up their natural amenities and higher quality of life in general if they are to attract these firms, but they face a fundamental chicken-and-egg problem in this regard.

Summary and Conclusion

There is growing and compelling evidence that vibrant communities are created not by attracting external investments but by instead looking inside the communities and by building upon assets that are already present locally. Developing rural economies to their full potential requires a strategic combination of investments in physical infrastructure and in people (human capital). No area illustrates this more clearly than that of IT, where providing access to hardware and fiber optic cables alone does not guarantee that the technology will be used fully. There are general lessons here about the value of public/private partnerships and collaboration among and within public agencies. In this context, those communities are fortunate that have so-called public sector entrepreneurs who can bring together private and public resources to the benefit of the entire community.

In terms of a focused economic development strategy, the concept of cluster development provides an important road map for leaders seeking to move their rural communities ahead in the next decade. At the same time, these rural leaders cannot ignore the rapidly growing numbers of nonfarm proprietors within their communities. They must identify the resources that both farm and nonfarm proprietors need to become more productive, and also determine how these proprietors fit into a cluster development strategy.

References

- Barkley, D.L., M.S. Henry and M. Warner, "The Community-Level Impacts of Economic Development: The Role of Local Labor Market Adjustments," SRDC 21st Century, No. 24, October 2002, 8pp.
- Beaulieu, L.J., *Creating Vibrant Communities and Economies in Rural America*, Southern Rural Development Center, Starkville, MS, August 2002, 12pp.
- Bollman, R., personal communication, 2002.
- Center for Rural Affairs, "Rural Economic Development Depends on Small Entrepreneurship," Newsletter, January 2003, pp 4-5.
- Goetz, S.J. "Proprietor Employment-Dependent Counties," presented at the USDA Rural Indicators Workshop, November 2002, RDP No. 15, University Park, PA, 13pp.
- Goetz, S.J. and D.L. Debertin, "Why Farmers Quit: A County-Level Analysis," *American Journal of Agricultural Economics*, 83(4) Nov. 2001:1010-23.
- Goetz, S.J. and D. Freshwater, "State-Level Determinants of Entrepreneurship and a Preliminary Measure of Entrepreneurial Climate," *Economic Development Quarterly*, 15, 1, February 2001, 58-70.
- Goetz, S.J. and A. Rupasingha, "High-Tech Industry Clustering: Implications for Rural Areas," *American Journal of Agricultural Economics*, 84, 5 (December) 2002, 1229-36.
- Kalomiris, P. "Innovative State Policy Options to Promote Rural Economic Development," NGA Center for Best Practices, Issue Brief, Feb. 2003.

Kusmin, L.D. "Wage Premiums for On-the-Job Computer Use: A Metro and Nonmetro Analysis," Washington, DC, ERS, USDA, RD Research Report No. 95, Dec. 2002.

Mishra, A.K. et al. "Income, Wealth and the Economic Well-Being of Farm Households, USDA ERS AER No. 812, Washington, DC, July 2002.

National Commission on Entrepreneurship, "American Formula For Growth: Federal Policy and the Entrepreneurial Economy, 1958-1998," Washington, DC, October 2002.
http://www.ncoe.org/research/4367_NCOE_AMERFORM.pdf

Pages, E.R. and K. Poole, "Understanding Entrepreneurship Promotion as an Economic Development Strategy: A Three-State Survey," National Commission on Entrepreneurship and Center for Regional Economic Competitiveness, January 2003, 25 pp.

Porter, M. "Location, Competition, and Economic Development: Local Clusters in a Global Economy," *Economic Development Quarterly*, 14,1, February 2000, 15-34.

Reid, J.N. and C.B. Flora, "Advancing Knowledge and Capacity for Community-Led Development," Agricultural Outlook Forum, Washington, DC, February 2002,

Rosenfeld, S.A., C.D. Liston, M.E. Kingslow, and E.R. Forman, "Clusters in Rural Areas: Auto Supply Chains in Tennessee and Houseboat Manufacturers in Kentucky," TVA Rural Studies, Contractor Paper 00-11, 43pp. <http://www.rural.org/publications/Rosenfeld00-11.pdf>

US Department of Agriculture, "How To Direct Market Farm Products on the Internet," Washington, DC, 2003. www.ams.usda.gov/tmd/MSB/msb.htm

US Department of Commerce, *Understanding Broadband Demand*, Office of Technology Policy, Sept. 2002, 25pp.
Avail. at http://www.ta.doc.gov/reports/TechPolicy/Broadband_020921.pdf