



THE NEW NATURAL RESOURCE ECONOMY

BY SUSAN LURIE AND MICHAEL HIBBARD

Introduction

We are in the midst of a significant change in the way Western rural landscapes and natural resources are conceptualized and used. For 150 years or more, traditional forms of natural resource use were the economic mainstay of the rural American West. While the primary sector – agriculture, logging, fishing, mining, and so on – continues to play an important role, over the past twenty-five years uncertainty has arisen about its ability to provide a viable economic base for small towns and rural areas. As a result, many rural Western communities are seeking new economic bases. One important development is the emergence of the New Natural Resource Economy.

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Changing Societal Values and Needs, Changing Rural Economic Opportunities

The U.S. population was 35.8 percent rural in 1950; by 2010, it was 17.7 percent rural (UN, 2007). Rural areas constitute an even smaller fraction of the economy than of the population: In 2010, non-metropolitan regions accounted for 14 percent of total U.S. jobs and production, and 10 percent of total wage income (IHS, 2011). What happened? “Rural restructuring,” changes in the organization and composition of the rural economy.

Over the twentieth century, industrialization of the primary sector transformed the rural economy (Cochrane, 2003; Hirt, 1994). Initially, rural communities provided primary producers with supplies, equipment, business services, transportation, and the like. However, commodity production—the substitution of capital for labor, product specialization, increased scale of operation, and consolidation of ownership—enabled vast increases in output with decreased local inputs. Commodity production takes fewer farmers, loggers, miners, and ranchers to produce more wheat, timber, minerals, and beef.

As well, there have been momentous improvements in transportation and communication. The result is a disconnect between primary producers and the local communities on which they formerly depended.

Not all Western rural areas are in decline, of course. Many amenity-rich communities are

thriving as centers for long distance commuting, tourism, recreation, and retirement, and are experiencing unprecedented growth (Nelson, 2001). However, they are not the norm. Using 2000 Census data, Kilkenny (2010) found that the median household income in rural U.S. counties is less than two-thirds that of urban households and that the median value of a rural home is less than half that of an urban home.

The loss of economic base because of the rise in commodity production has also led to a decline in community resilience. Numerous studies over the last sixty years have found that agricultural communities in which family farming is the economic base have more varied social and civic organizations, higher levels of participation in community decision making, and better socio-economic health than those with an economic base in corporate agriculture (Goldschmidt, 1946; Lobao, 1991; Tolbert et al., 1998).

A strong, locally based economy is associated with strong community resilience, the ability to absorb disturbance while undergoing change, so as to retain or enhance effective function, structure, and identity (Magis, 2010). As rural economies continue to restructure, community resilience becomes an increasingly critical factor.

The effects of rural restructuring have been magnified by a clash of social values. Until the late twentieth century primary producers were

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encouraged to maximize production, in order to supply raw material for industry and affordable goods for consumers. Recently, however, competing expectations have arisen. Primary producers are being asked to prioritize activities that, while they may be critically important for society as a whole, provide no immediate product or return on investment—stewarding rural lands and resources for future generations and protecting a variety of non-market values and cultural amenities.

Having spent generations concentrating on commodity production, rural people are not only impoverished by this “post-productivist” turn, they also feel useless, criticized, and marginalized (Markey et al., 2008). The result is a conflict between those who want to maintain traditional resource uses and those who believe environmental restoration and protection must take priority over all other considerations.

What to Do? NNRE

“Nature” — forests, water, soil, minerals, recreational opportunities, and so on—continues to be the fundamental economic asset of most Western rural communities. Their future depends on how that asset is conceptualized and used. Commodity production conceptualizes nature as an input, for use in the production of goods and services for the global marketplace. An emerging alternative—multifunctionality—conceptualizes rural landscapes as having three functions (Holmes, 2006)—production of

basic commodities for the market; consumption, by providing amenity values that people utilize for recreation and the like; and protection, by providing “ecosystem services” such as air and water purification, biodiversity, and flood and erosion control.

Multifunctionality conceptualizes rural landscapes and their resources as assets to be nurtured for the long term, and healthy ecosystems and healthy rural economies as mutually reinforcing. In this view, ecologically sensitive management of rural landscapes can produce benefits in the market for rural landowners, thereby strengthening rural communities socially and economically (Maida, 2007).

NNRE, the New Natural Resource Economy, is the practical outcome of multifunctionality. Governments spend substantial funds in support of protection—restoring and maintaining intact and functioning ecosystems, healthy fish and wildlife populations, clean water, and the like. This has stimulated an emerging “green collar” economy: restoration requires firms, workers, material, and supplies; wildfire mitigation produces biomass with potentially commercial uses; and projects have to be planned, managed, and monitored.

Hibbard et al. (2006) found that every dollar in administrative support received by Oregon’s local watershed councils brought an additional \$5.09 to the local economy. The study also reported that a typical watershed council is responsible for \$268,072 in local economic ac-



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tivity each year. More recently, Nielsen-Pincus et al. (2010) found that each \$1 million invested in forest or watershed restoration generates between 15.7 and 23.8 jobs, and between \$2.1 and \$2.4 million dollars for the local economy. And a study of fuels reduction programs on southwestern national forests (Hjerpe et al., 2008) found that the programs generated five hundred jobs in 2005.

These *protection* activities are evidence of the emergence of an NNRE. However, they depend on public expenditures. For healthy ecosystems and healthy rural economies to truly be mutually reinforcing, producers have to find markets for goods and services produced from a multifunctional landscape, as well as direct consumption of the landscape.

Despite the need for a new economic base and the apparent potential of NNRE, there has been little empirical study of these new uses of the rural landscape. To begin to fill that void we conducted a scoping survey of NNRE activities across rural Oregon. We asked respondents in every county to tell us about new ways local people have found to gain income from local natural resources.

The results summary (Table 1) provide a preliminary snapshot of the range of NNRE businesses in one state. Many respondents mentioned “green collar” activities of the sort discussed above. More important, they reported a wide range of production and consumption activity.

Conclusion

Not all of these business types are new, though many are. What is new is thinking strategically about NNRE as an emerging economic sector in its own right. Viewed strategically, NNRE presents significant possibilities to diversify rural economies and increase local resilience. To help rural communities make the most of NNRE’s potential, it is important to understand the range of businesses it comprises as well as policy and program needs in support of NNRE.

Current approaches to rural economic development aim to move the community away from resource utilization through recruitment of new industries such as light manufacturing and call centers or new populations such as retirees. Our survey results suggest that rather than moving away from natural resource utilization, rural communities are finding new ways of thinking about and utilizing resources.

At base, NNRE entails locally owned small and medium-sized enterprises that utilize local resources to produce goods and services for sale outside the community; for sale locally, replacing imports; and/or for personal consumption. Rather than recruiting new firms or residents, rural communities would benefit more from policies and programs that promote opportunities and loosen constraints affecting rural business startups—tools to facilitate and support rural community NNRE entrepreneurialism. ●



Table 1. NNRE Enterprises Identified by Survey Conducted in Oregon.

PRODUCTION**Farming/ranching**

- Native plant nurseries, raising plants for habitat restoration
- Sustainably produced food products—including meat, milk, cheese, eggs, fruits and vegetables – sold locally and in metropolitan areas, for household, restaurant, and institutional (schools, hospitals, etc.) use
- Wine grapes and wine production
- Herbs and seeds sold by catalog and online
- Suppliers to producers of emerging products (e.g., grape growers and wineries)

Forest products

- Community-owned multiple use forest
- Post and pole manufacturers utilizing “waste” from thinning and wildfire mitigation activities (e.g. small diameter logs and weed species such as juniper)
- Utilization of slash—biomass—both as hog fuel and by processing it into pellet fuel, to generate heat and electricity for schools, hospitals, and homes

Alternative energy

- Utilization of plantation-grown hybrid poplar trees for electricity generation
- Geothermal heat – for state prison, hospitals, and schools, as well as industrial, business, and residential users
 - Numerous bio-mass plants under construction
 - Numerous wind farms

CONSUMPTION**Ecotourism**

- River/paddle trails, including maps, haul-outs
- Kayak Companies
- Mountain bike guides, hunting guides, fishing guides, hiking guides, birding guides, and horseback guides

Harvesting firewood, mushrooms, berries, and other plant life from the forest for personal use

Agritourism—farm and ranch stays

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