

Land Protection Strategies for Struggling Rural Areas

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When rural areas lose population and land is abandoned, the effects spill over into communities and the land. With fewer people, businesses that depend on local customers often shut their doors as well. This, in turn, forces people to drive long distances for basic goods and services, which increases their incentive to move away as well. When demand for housing decreases, property values can decline as well, leaving the remaining residents poorer than before. Local governments depend on tax revenues to provide basic services such as road repair, police protection, parks, and schools, and as businesses close and property values decrease, so do tax revenues. Finally, the health of the land itself can be affected. Not only are some properties abandoned and left in a degraded state, but overall impoverishment leaves the remaining residents less able to pay for land management or improvements. This is a serious problem worldwide, and so various kinds of solutions have been proposed.

One approach that has gained a lot of interest, especially in the developing world, is ecosystem services marketing. Markets for ecosystem services (MES) and payments for ecosystem services (PES) programs have been advocated by global environmental institutions as a means to ensure that services are provided and maintained, and forestall problems that might occur as a result of land degradation or biodiversity loss. MES and PES schemes transfer economic resources from consumers of ecosystem services (i.e., people, often in urban areas, who benefit from them) to the providers of ecosystem services (i.e., the owners of rural lands). The providers benefit economically while the consumers secure a right to benefit from those services.

The difference between MES and PES is in the word “markets.” Sometimes it is possible to create a market for a service (for example, by promoting tourism, or creating a legal way for ranchers to benefit from allowing hunters on their lands). At other times, if the service is ill-defined or difficult to capture in a market (for example, carbon sequestration in rangeland soils), governments play an intermediary role by rewarding landowners for using practices that are more likely to maintain or increase the flow of services. For instance, in the example just mentioned of sequestering carbon in rangeland soils, a government agency could pay ranchers to reduce stocking rates and avoid creating areas of bare ground in a grassland, thus restricting the ability of aerobic microbes to reduce soil carbon stocks. Corbera et al. (2007) offered some examples of traded ecosystem services and the commodities derived from them (Table 1).

In the U.S., the most commonly used of these mechanisms is conservation easements. For example, in Cache County, Utah, the electric utility PacifiCorp owns 2,000 ac. of former farmland along the Bear River. Thirty years after acquiring the land, the former farms were unmanaged and covered by invasive weed species. PacifiCorp donated a conservation easement on about 500 acres to a new non-profit, the Bear River Land Conservancy. The power company gets a tax writeoff, and the Conservancy uses federal grants and private donations to pay for conservation and restoration activities.

Table 1
Examples of traded ecosystem services and derived commodities

| Ecosystem service | Commodity | Description |
|---------------------------|--------------------------------|---|
| Biodiversity conservation | Bio-prospecting rights | Investors collect and test genetic material from a designated area and compensate property holders for their access |
| | Debt-for-nature swaps | Involves the purchase of discounted debt in developing countries, which is exchanged for financial assistance with conservation |
| | Conservation easements | Landowners are paid (or receive tax breaks) in exchange for managing their land in ways that achieve conservation objectives |
| Watershed conservation | Watershed protection contracts | Watershed landholders and downstream beneficiaries engage in new management practices in exchange for payments |
| | Water quality credits | Credits are generated when water-polluting entities (usually corporations) offset pollution by investing in watershed protection elsewhere |
| Carbon fixation | Voluntary emission reductions | Companies or agencies offset their carbon emissions on a voluntary basis by financing conservation elsewhere (usually forests in the developing world). |

Another form of PES program are the U.S. farm programs. Large-scale government payments to landowners for conservation began with the creation of the Conservation Reserve Program (CRP) in the 1985 Farm Bill. Subsequently there was established a Wetlands (WRP), Forest Legacy Program (FLP), Forest Stewardship Program (FLP), and the Stewardship Incentives Program (SIP) in the 1990 Farm Bill. More have been created since. These programs encourage private landowners to adopt stewardship practices to enhance ecosystem services through improved forest and rangeland management, retention of lands in forest or undeveloped uses, protection of soil and water quality, enhancement and preservation of wetlands, and wildlife habitat improvement.

There also are various rural revitalization programs. These, too, are often government-supported. Revitalization can be achieved through nature conservation, recreation, economic development, or some combination of these.

In rural areas where the agronomic potential and density of population are very low, the main concern of the revitalization policy may be the preservation of nature. The best-known approach may be the creation of national parks. However, this is not easily achieved in many former agricultural areas which may lack the scenic qualities expected of national parks, or in areas where there remain many residents who wish to pursue traditional livelihoods.

In rural areas with a low agronomic potential but slightly higher population densities, recreation incentives may be a viable answer. In Europe, the main role of agriculture and forestry in recreation/tourism areas may be to maintain the landscape and to protect the recreational areas (against avalanche, fire, etc.). There, unlike in the U.S., rural development is strongly integrated into agricultural policies and territorial management, and rural land ownership laws are designed to play an essential role in limiting land price pressures.

In rural areas with normal to high agronomic potential and low population density, it may be possible to create an economic development strategy based on adding value to existing agriculture. The first challenge in such locations is to obtain a political consensus regarding the necessity for a revitalization process based on agricultural and rural development. An economy based solely on agriculture must be rebuilt so that it includes “secondary sectors” such as agro-industry and services such as food processing and marketing or rural tourism. There will be many stakeholders in the revitalization process: farmers, landowners, the tourism industry and tourists, the agro-food industry, local communities, regional authorities and national government, civic society and NGOs. Collaborative processes are needed that can engage all of these stakeholders, many of whom are not used to working together, to find a solution that all stakeholders can support, or at least tolerate.

Different communities choose different approaches that will work best for them. Consulting firms and nonprofit organizations exist which can assist communities in identifying and implementing solutions that are tailored to their needs. One such nonprofit organization is Ogallala Commons, which provides leadership and education to reinvigorate Great Plains communities affected by the drawdown of the Ogallala Aquifer. Ogallala Commons explains that it “helps communities to ‘do together what no one community can do alone.’” The mission has four aspects: (a) creating a collaborative network of diverse partners, (b) building an education outreach with annual conferences and workshops, (c) fostering sense-of-place to inspire stewardship in small towns; and (d) rebuilding resilient communities to sustain people and the land. Programs include a mix of community-level internships, support for local food systems, environmental education, local festivals to champion aspects of the Great Plains environment, and entrepreneurship programs for local youth. For more details and inspiration, you’re encouraged to check out their website at <http://ogallalacommons.org/>.

References

Corbera, E., N. Kosoy and M. Martinez Tuna. 2007. Equity implications of marketing ecosystem services in protected areas and rural communities: case studies from Meso-America. *Global Environmental Change* 17:365-380.