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Rebuilding Rural New Mexico through Community Development and Local Economic Pathways

Abstract

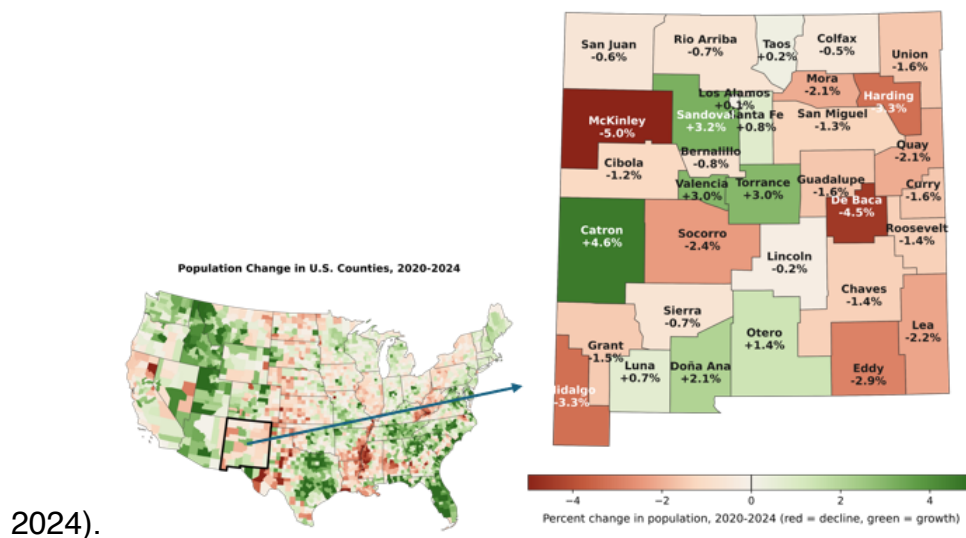
Rural communities face interconnected economic and social challenges that weaken long-term resilience. Drawing on rural development literature and New Mexico case examples, this article presents a framework that places social and economic conditions on equal footing in rural development planning. The article discusses locally grounded pathways including value-added agriculture, agrivoltaics, wind energy, cooperatives, and the role of Cooperative Extension in youth development and community renewal. The framework encourages Extension economists and policymakers to evaluate community well-being alongside traditional economic indicators when developing rural strategies.

Keywords: rural development, human purpose, community resilience

Introduction: Why purpose comes first

Every plan to revive rural New Mexico (NM) faces the same question: What policies enable residents to work, remain, and build a future in these communities? The answer is not only jobs and making household ends meet, but a broader set of incentives that

includes belonging, dignity, and purpose: the human foundations on which lasting growth depends (Deller & Boyce, 2025; MENTOR, 2014; Lynch et al., 2018). Past and on-going efforts have not been successful in preventing the rural NM depopulation and exodus. Between 2020 and 2024, 22 of New Mexico's 28 rural counties experienced net population decline while the state's urban populations increased (Figure 1). The metropolitan counties of Sandoval (+3.2%), Valencia (+3.0%), Doña Ana (+2.1%), and Santa Fe (+0.8%), and Bernalillo (−0.8%) all expanded or minimally contracted (Figure 1). Rural county exodus shed population at several times the metro rate, led by McKinley (−5.0%), De Baca (−4.5%), Harding (−3.3%) and Mora (−2.1%), followed by counties only marginally in decline such as Lincoln (−0.2%) and Colfax (−0.5%). New Mexico's unambiguously rural depopulation is a national trend occupying increased attention in Extension programming (Johnson & Litcher, 2019; U.S. Census Bureau,



2024).

Figure 1. Population change by U.S. county, 2020–2024. New Mexico is outlined in black.

Source: U.S. Census Bureau, Population Estimates Program (PEP), Vintage 2024 county-level estimates (released March 2025). <https://www.census.gov/programs-surveys/popest.html>

Rural decline, however, is not measured only by those who leave, but also by the social losses experienced by those who remain, incentivized to seek better livelihoods elsewhere. NM typically ranks among the most socially distressed states. According to the CDC Social Vulnerability Index (CDC/ATSDR, 2022), New Mexico ranks as the 3rd

most socially vulnerable state in the US, with 24 of its 33 counties (73%) scoring in the top quartile of the national distribution (Figure 2). Only Los Alamos, Sandoval, and Catron counties fall below the national median. Nationally, the highest-vulnerability counties cluster in rural regions, primarily Appalachia, Mississippi Delta, rural Southwest, and tribal lands, rather than in urban centers.

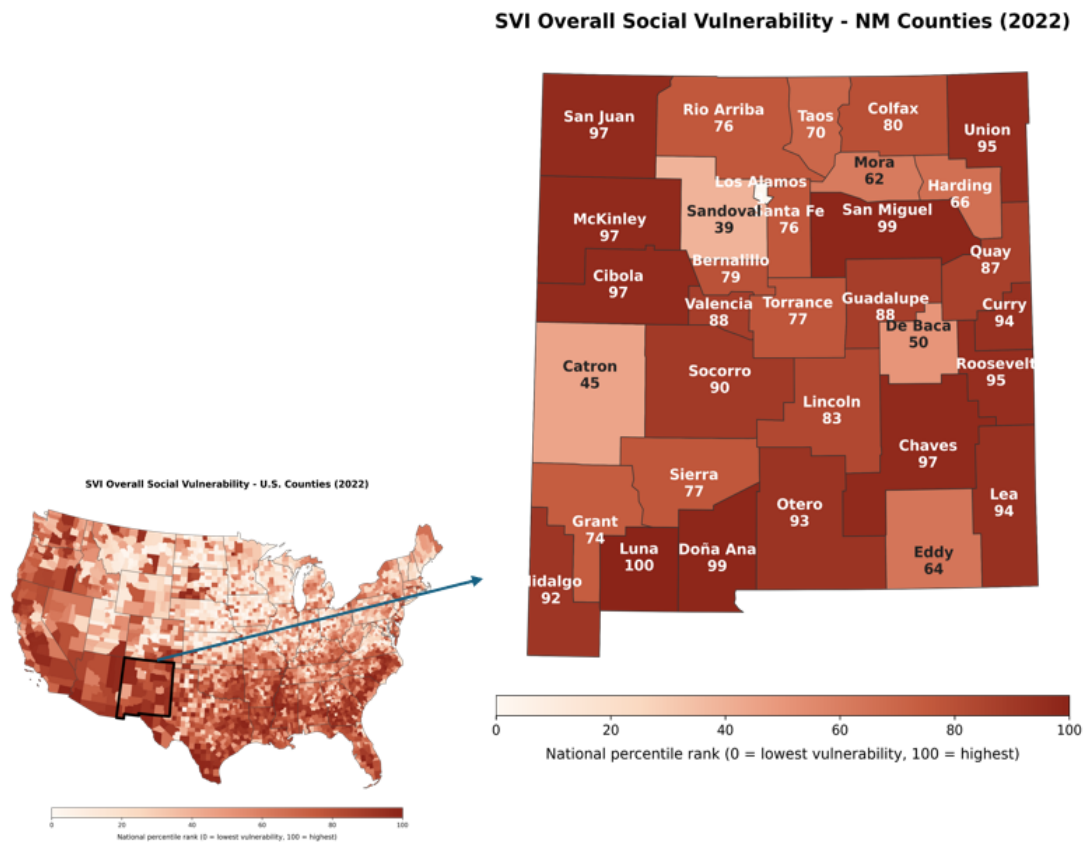


Figure 2 CDC SVI for U.S. Counties and the State of New Mexico

On the household-level social ills not captured by the SVI, including substance abuse, suicide, family fracture, and child poverty, New Mexico's standing is even more dire (Figure 3). New Mexico carries the highest combined deaths-of-despair burden in the United States, with 117.1 alcohol, drug, and suicide deaths per 100,000 people in 2022, nearly double the national rate of 60.1 (Trust for America's Health, 2024). The state ranks worst in the nation for alcohol-induced mortality (42.7 per 100,000), fourth worst

for suicide, and eighth worst for drug overdose deaths. New Mexico is also second worst nationally for children in poverty (Annie E. Casey Foundation, 2025) and ranks among the worst states for high school non-graduation and for divorce (Figure 3).

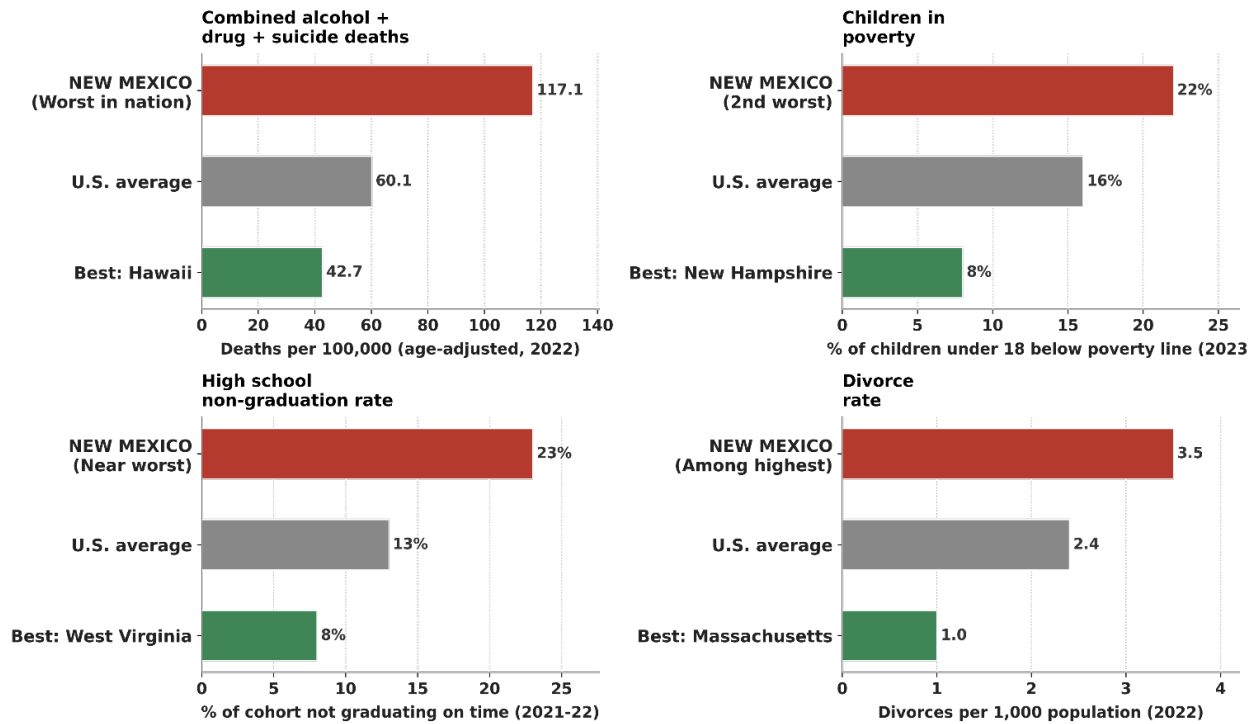


Figure 3 New Mexico's position on key social-loss indicators. Sources: Trust for America's Health, *Pain in the Nation 2024*; Annie E. Casey Foundation, *KIDS COUNT 2025*; NCES EDData; CDC NVSS.

Together, these indicators describe a deep, multidimensional social-loss burden that no rural development policy focused solely on economic growth can adequately address.

Where dollar estimates exist, they confirm the scale of social costs. In New Mexico, the economic cost of alcohol abuse alone exceeds \$2.5 billion annually, much of it from lost productivity (New Mexico Department of Health, 2009). Obtaining cost estimates for social ills is difficult, leaving state-level reporting limited. At the national level, however, available estimates are striking: the annual cost of suicide and nonfatal self-harm averaged \$510 billion in 2015–2020 (Peterson et al., 2024); childhood poverty costs

approximately \$500 billion per year (Holzer et al., 2008); and family fragmentation through divorce and unwed childbearing imposes \$112 billion in additional annual taxpayer costs (Scafidi et al., 2008). Yet social indicators, as uncomfortable as they are to place a dollar sign on, may be weighed alongside conventional economic growth indicators if rural decline is to be addressed honestly. New Mexico's experience reflects broader challenges across rural America whose troubles stem in part from social ills like those described above. Such ills can spread like contagion through these communities, affecting everyone, and the discontent they produce contributes to both out-migration and the broader decline of rural areas.

Output are considered alongside social well-being, youth retention, health, civic capacity, and cultural heritage. Extension Support frames rural policy evaluation as a broader welfare problem in which employment, income, and output are considered

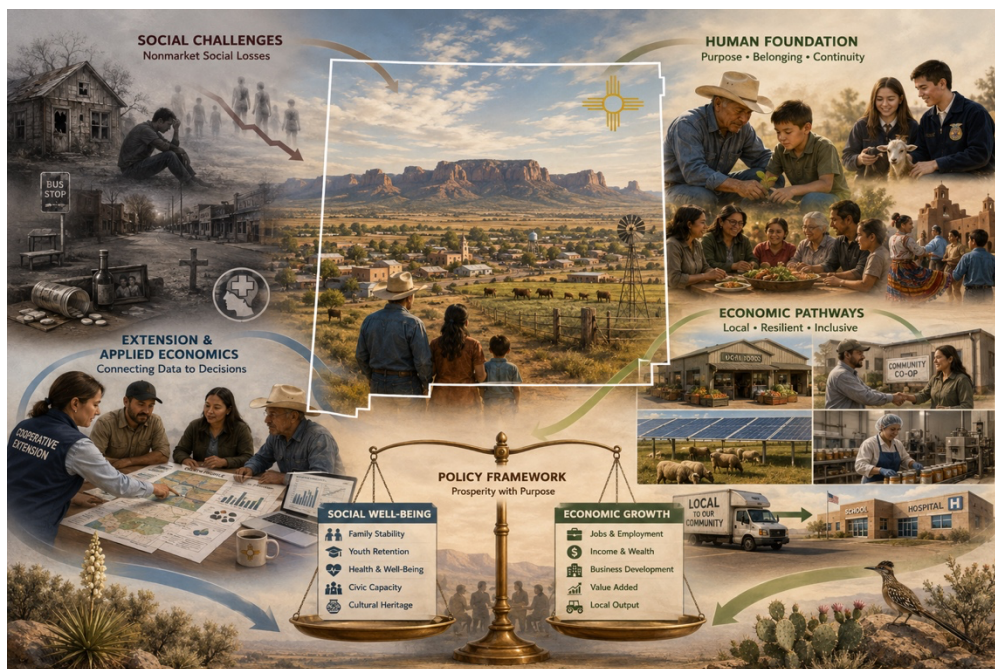


Figure 4 .Framework for Purpose-Driven Rural Community Development. Source: Figure conceptualized by authors and generated with assistance from OpenAI ChatGPT-3.5 based on author-provided prompts and research context.

Discussion

Social losses: why many development efforts fail

This section explains why economic renewal fails when social capital collapses (Rupasingha, Goetz, & Freshwater, 2002). These structural imbalances reveal that strengthening rural prosperity requires more than expanding economic output. Rural empowerment requires restoring the foundational human and cultural systems that make economies thrive. Traditional economic development strategies often over-emphasize infrastructure, workforce training, and business incentives while neglecting the cultural and social foundations of community resilience. Without strengthening families, mentoring youth, and local indigenous identity, rural outmigration continues despite investment. In New Mexico, this has allowed inequality between large and small farms (Deller & Boyce, 2025), where social disintegration and mental health crises persist (Case & Deaton, 2020). For example, about 13.7% of New Mexico youth (ages 12–17) report using illicit drugs in the past month, reflecting environments where social decline undermines opportunity (America's Health Rankings, 2024). Empirical analysis links such substance-use patterns to a substantial share of the decline in U.S. prime-age labor force participation, particularly in rural counties (Krueger, 2017).

Past experience shows how well-intentioned development programs can falter when they overlook these human factors. During the 1990s, several New Mexico counties received federal and state grants to build industrial parks and business incubators under the Rural Renaissance Initiative. These cases illustrate that physical investment, without human renewal, delivers short-lived results. Economic inefficiency arises directly from these social failures (Holzer, Schanzenbach, Duncan, & Ludwig, 2008). When families fracture and young adults leave, local labor markets shrink, service sectors weaken, and civic capacity declines. Quasi-experimental evidence confirms the relationship is bidirectional: economic shocks accelerate deaths from drugs, alcohol, and suicide, which in turn further erode the local economic base (Pierce & Schott, 2020). The result is measurable loss: fewer businesses, lower tax bases, and declining community trust.

Programming fails not only because of a lack of resources, but even when well-intended, they can overlook the human foundation of successful rural development that begins with social cohesion and shared purpose.

Human foundation: from purpose to policy

Rural renewal may be strengthened by investing in youth development, as young people carry much of the community's remaining hope and identity. When young people understand why their work and place matter, e.g., seeing farming, energy, and local enterprise as part of something larger than themselves, they gain the purpose needed to stay, learn, and strengthen their hometowns. Research indicates that rural mentoring and youth engagement programs facilitate the development of self-esteem, civic identity, and a stronger sense of belonging among young people when they are connected to meaningful local work and adult role models (Lerner & Lerner, 2011). Extension can help them discover that purpose by linking their work to community meaning through 4-H, Future Farmers of America (FFA), and Extension programs that combine mentorship, service learning, and locally grounded projects. These combined efforts have been shown to strengthen youth agency and social capital in rural communities. The Tufts 4-H Study of Positive Youth Development, drawing on a 10-year national sample of over 7,000 participants in 42 states, found that 4-H participants were four times more likely to contribute to their communities and twice as likely to be civically active than peers in comparable out-of-school programs (Lerner & Lerner, 2011). Strengthening rural New Mexico, therefore, begins not with infrastructure, but with identity cultivated through mentorship, meaningful work, and a sense of community belonging.

Empirical evidence demonstrates that investments in social capital and youth development generate measurable benefits in rural communities. Studies of mentoring and service-learning programs show improved employment prospects, reduced dropout rates, and enhanced productivity among participants (MENTOR, 2014). Rural regions with stronger youth engagement and civic participation also exhibit higher rates of

small-business formation and lower rates of outmigration (USDA ERS, 2023). These findings show that strengthening human purpose and belonging is not only a moral priority, but a sound economic investment. Historically, the Cooperative Extension Service was designed to serve four interconnected functions: agriculture, youth development, family and consumer science, and community economic development. Yet in many regions, including the Southwest, the economic and community development function has become the least defined (Bickell, 2024). Most counties now operate with only agricultural and 4-H agents, while positions focused on local economic or community development are largely absent. As a result, agricultural agents are often expected to respond to business, labor, or community revitalization issues outside their formal training and role. This structural gap, created as many states reduced or eliminated Community Resource and Economic Development (CRED) positions, leaves rural communities without direct Extension support for entrepreneurship, small-business development, or data-driven local planning (Franz & Townson, 2008).

Economic pathways: purposeful ways forward

Rural New Mexico can strengthen prosperity by linking local ownership with strategies that generate measurable economic benefits that are initiated and remain within rural communities. The following pathways illustrate how economic efficiency and community purpose reinforce one another.

Value-Added Agriculture: Local processing and value-added enterprises allow small and mid-sized farms to retain a larger share of the food dollar within rural communities. Activities such as food processing, specialty products, and direct marketing can support small business development, generate local employment opportunities, and strengthen household income stability. Research suggests that value-added agriculture may increase local economic circulation by keeping production, processing, and marketing activities within the region (USDA ERS, 2023).

Agrivoltaics: New Mexico is the second sunniest state in the nation next to Arizona. Currently New Mexico operates 87 utility-scale solar facilities generating approximately

2,601 MW of electricity, ranking it as the 16th state nationally in total installed solar capacity (Figure 5) (Solar Energy Industries Association, 2024; New Mexico Economic Development Department, 2025). Dual-use solar systems generate lease revenue while preserving agricultural output. Lease payments to participating landowners typically range from \$500 to \$2,000 per acre per year, with a 2024 Purdue–CME Group Ag Economy Barometer finding that 58% of farmers discussing solar leases were offered \$1,000 per acre or more (Solar and Storage Industries Institute, 2025; Mintert & Langemeier, 2024). These lease payments can be considered lucrative: several times the typical cash-rent benchmark for Cropland. Modeling by the United States Department of Energy (2024) shows that agrivoltaics installations can create stable jobs and recurring local income, offering a new revenue stream for rural counties. In arid regions such as New Mexico, agrivoltaics may help producers diversify farm income under increasing drought and water uncertainty, with research suggesting that leasing 5–10% of farmland to dual-use solar can substantially improve overall farm profitability (Solar and Storage Industries Institute, 2025). In addition to direct lease payments, these systems stimulate local economic activity through construction, maintenance, and electrical services, and provide counties with a more diversified rural tax base while continuing agricultural production on working lands.

Wind Energy: New Mexico's high-plains counties hold among the strongest commercial wind resources in the United States, and existing projects already demonstrate the magnitude of rural economic returns (Figure 5). New Mexico currently has 2,408 operational wind turbines generating approximately 4,400 MW of installed nameplate capacity, ranking the state 10th nationally in wind power capacity (Hoen et al., 2018; U.S. Energy Information Administration, 2025). Pattern Energy's Western Spirit wind complex in Guadalupe, Lincoln, and Torrance counties is projected to generate \$426 million in landowner lease payments over the life of the project (Pattern Energy, 2024). The economic multipliers will provide substantial economic benefits to the community: roughly \$3 million per year in local property and school taxes, increasing those counties' annual budgets by approximately 10%, alongside 50 permanent operations positions

and 1,100 construction-phase jobs (Pattern Energy, 2024). The much larger SunZia project now under construction will produce 3,500 MW of wind generation across six New Mexico counties and is estimated to deliver \$20.5 billion in regional economic benefits, over 2,000 construction jobs, and more than 100 permanent positions, concentrated in counties that have otherwise seen declining tax bases (Pattern Energy, 2024). Statewide, NM wind generation already supports approximately 2,000 local jobs and \$20 million per year in lease payments plus state and local revenue (American Clean Power Association, 2024). Together with agrivoltaics, wind energy offers rural New Mexico a durable revenue stream and direct local employment without displacing agricultural production from working lands.

2,408 wind turbines (4,400 MW) | 87 utility-scale solar facilities (2,601 MW)

Current Wind and Solar Energy Facilities in New Mexico

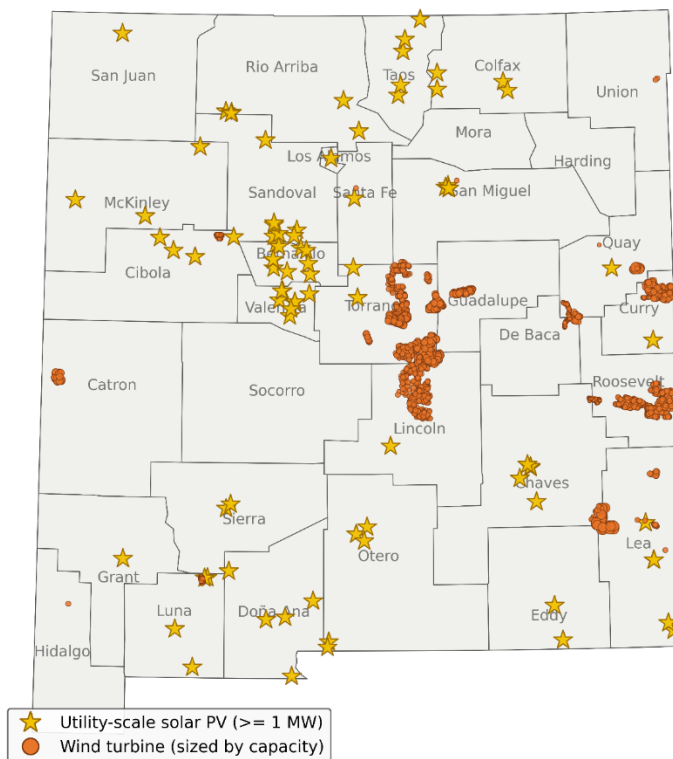


Figure 5. Current wind and solar energy facilities in New Mexico. Wind turbines (orange points, sized by capacity) are concentrated in the eastern high-plains corridor and the Western Spirit / SunZia project areas. Utility-scale solar PV facilities ≥ 1 MW (green

polygons) are dispersed statewide near transmission corridors. *Sources: USGS U.S. Wind Turbine Database, v8.3 (Hoen et al., 2018); USGS U.S. Large-Scale Solar Photovoltaic Database, v3.0 (Fujita et al., 2023).*

Clean Energy Milestones. New Mexico has codified among the most ambitious clean-energy targets in the nation under the 2019 Energy Transition Act (ETA). ETA establishes targets for investor-owned utilities to reach 50% renewable electricity by 2030 and be 100% carbon-free by 2045 (New Mexico Energy, Minerals & Natural Resources Department, 2024). New Mexico seems well positioned to achieve these milestones. As of late 2025, the state had already exceeded its 40% interim target, generating approximately 59% of in-state electricity from renewable sources. Wind alone is supplying 30.1% and surpassing natural gas to become New Mexico's single largest source of generation (U.S. Energy Information Administration, 2025). The New Mexico Renewable Energy Transmission Authority (RETA) projects that ETA compliance alone will drive approximately 4 GW of new renewable capacity by 2030. With new transmission infrastructure that connects New Mexico generation to Western-state export markets, current plans project renewable capacity reach as much as 11.5 GW (RETA, 2024). Since 2019, the clean-energy buildout has attracted more than \$10 billion in private investment, and clean-energy employment has grown at approximately 2.5 times the rate of the rest of the state economy (New Mexico Energy, Minerals & Natural Resources Department, 2024). Renewables hold great promise: investments are concentrated in rural counties that have otherwise experienced steady population decline, providing a counterweight to the depopulation pattern documented earlier in this article.

Local Procurement: Public institutions such as schools, hospitals, food hubs, and local government programs can provide stable and predictable markets for regional producers. Previous research suggests that every dollar spent on locally produced food may generate up to \$1.58 in regional income through multiplier effects (Martinez et al., 2010). Strengthening local procurement systems may therefore increase economic resilience by encouraging a larger share of food expenditures to circulate within rural

communities rather than leaving the region through external supply chains. In addition to supporting local farm income, these systems may strengthen regional food networks, create opportunities for small and mid-sized producers, and increase business activity linked to transportation, processing, and retail services.

Cooperatives: Cooperative business models may help retain a larger share of income within rural communities because member ownership and local purchasing can strengthen local economic circulation, local decision-making and community participation (Patrick & Blayney, 2022; USDA RD, 2024).

Policy framework: broader implications for decision makers

The guiding policy goal of rural renewal may be understood as true community welfare, understood as the joint product of social and economic indicators rather than economic indicators alone. A persistent shortcoming of rural development policy has been its over-reliance on growth metrics — jobs, output, tax base, per-capita income — at the expense of the non-market goods emphasized throughout this article: family stability, youth purpose, mental health, civic engagement, and the social capital that holds communities together. Where growth-only policies have dominated, rural counties have often continued to lose population and weaken socially even as their economic indicators improved, because the underlying community fabric continued to erode (Case & Deaton, 2020; Rupasingha et al., 2002). Effective policy may therefore place social and economic outcomes on the same scale, evaluating programs by both monetary and non-monetary returns (Figure 4).

Integrated funding. This balanced approach may benefit from integrating mental health, youth development, and economic programs rather than treating them as separate silos. Funding mechanisms such as USDA's Local Agriculture Market Program (LAMP), Rural Energy for America Program (REAP), and New Mexico Economic Development Department (NM EDD) rural grants may bring stakeholders together representing social, cultural, business, and political entities. This holistic funding approach ensures that revitalization strengthens human capacity, community well-being, and local enterprise.

Local ownership. Policies may encourage local ownership models, such as cooperatives and community renewable-energy projects, to keep value and decision-making power within rural communities (Patrick & Blayney, 2022; USDA RD, 2024). Agricultural value chains continue to shrink horizontally as automation and globalization crowd out smaller-scale local production facilities in rural areas. Policy frameworks may help link communities together in cooperative arrangements to increase scale and competitiveness, including identifying regional specialization and technology spillovers into other locations.

Equal Standing. At the tactical level, this balanced framework imposes specific requirements on the analytical tools Extension economists rely on. The commercial regional-economic modeling packages most widely used in rural policy analysis — IMPLAN, REMI, and shift-share applications — are calibrated to monetized commercial transactions and capture only what flows through markets. They do not endogenously represent the social indicators central to the framework outlined here: rates of substance use, family stability, mental health outcomes, youth civic engagement, and the social-capital measures relevant to rural decline all sit outside the model's structural matrices (Miller & Blair, 2009). The implication is not that these tools may be abandoned, but that their output must be supplemented with parallel non-market analysis conducted outside the model. Where IMPLAN reports a county's projected gains in jobs and output from a proposed investment, the same investment may also be assessed using social-vulnerability indices, child-welfare indicators, and labor-force-participation projections. County-level policy analysts and Extension economists therefore may benefit from explicit institutional support and resources to conduct this dual analysis, because neither the conventional economic modeling alone, nor a purely qualitative social assessment alone, is sufficient to capture true community welfare.

Program Integration. Policy formulation serving aspirational goals of equity requires measurement frameworks that prioritize beyond traditional GDP. Opportunity cost of decision-making may explicitly include trade-offs between economic growth and its impact on social indicators such as youth engagement, civic participation, and family

stability to track community well-being (New Mexico Department of Health, 2025; U.S. Bureau of Economic Analysis, 2024). For county Extension agents, these findings highlight the importance of integrating youth development, agricultural economics, and community partnerships. Extension programs such as 4-H, local food initiatives, and producer cooperatives can help rebuild rural social capital while strengthening local economic activity. These findings highlight the importance of adequate State and federal investment in capacity-building within the Cooperative Extension Service, enabling county agents to mentor purpose, leadership, and community identity alongside technical support.

Extension support: role of agricultural economists in CRED

CRED. The decline of Community Resource and Economic Development (CRED) positions in many Extension systems has reduced local capacity for coordinated rural development planning, entrepreneurship support, and community-based economic initiatives. New Mexico is among the few states to have maintained this CRED capacity continuously since 2007, through the Community Resource and Economic Development Specialist position at New Mexico State University Cooperative Extension (a position held by one of this article's authors). The role spans three integrated program thrusts: building economically viable communities through business retention and expansion, regional economy collaboration, and asset-based development; renewing civic engagement through community organization-building, public deliberation, and engagement of new populations in community action; and enhancing community decision-making and governance through facilitated planning and change management (Patrick, 2024). This kind of sustained CRED capacity is an exception rather than the rule nationally. Where CRED positions have been eliminated, agricultural agents and Extension economists are increasingly expected to address broader social and economic challenges that extend beyond traditional production agriculture. Strengthening interdisciplinary collaboration among agricultural agents, youth development professionals, economists, and community development specialists is

therefore important to help rural communities connect human capital development with locally grounded economic opportunities.

Analytic role. Agricultural Extension economists occupy a unique position at the intersection of data and human development. Their work does not end with describing rural hardship; rather, it quantifies it, models its causes, and simulates the policy trade-offs that determine whether communities thrive or decline. Extension economists have demonstrated how input–output and shift–share models can track the movement of dollars through rural economies and identify sectors with the highest employment multipliers (Miller & Blair, 2009). Even modest strategies — supporting small business retention or developing value-added agriculture — can increase county-level income and job creation. These analyses enable local leaders to prioritize and select programs yielding the greatest returns on limited public resources versus lower-opportunity-cost alternatives prone to circulate funds without enhancing local capacity (Patrick & Blayney, 2022).

Empirical evidence. At a broader scale, Lynch et al. (2018) illustrate how broader economic outcomes can be assessed by explicitly including social systems within empirical modeling frameworks. Their study of small farms in Arizona and New Mexico quantifies the impact of mentoring, technical assistance, and cooperative marketing on farm profitability and regional retention rates. This evidence demonstrates that investments in social capital and youth engagement are not only moral imperatives, but also measurable economic strategies that enhance productivity and resilience. In practice, agricultural economists can forecast the fiscal impacts of community initiatives, simulate regional labor market shifts, and evaluate alternative policy scenarios from mentoring programs to renewable-energy cooperatives. By embedding these analytical tools within Cooperative Extension, economists transform moral insight into actionable evidence, ensuring that data-driven policy also strengthens the human foundations of rural life.

Moving forward. Cooperative Extension programs can play a catalyst role in translating these concepts into applied rural development initiatives. Potential efforts could include youth mentorship programs connected to agriculture and entrepreneurship, support for producer cooperatives and local food systems, community-based economic planning, and Extension-led educational programs focused on rural workforce and leadership development. Pilot initiatives and locally adapted partnerships may help rural communities evaluate which approaches are most effective under different regional conditions. The framework presented here is conceptual and may vary in applicability depending on local institutional capacity, demographic structure, and regional economic conditions.

Conclusion

This article examined why many rural development efforts in New Mexico struggle to reverse long-term population decline and social distress despite continued investment in infrastructure and economic development programs. The paper argues that rural decline is linked not only to employment and income challenges, but also to weakened social cohesion, youth disconnection, family instability, and declining civic capacity. As a result, rural renewal may require greater attention to the human foundations of development alongside traditional economic growth strategies.

The framework presented in this article identified several economic pathways that may strengthen both local economies and community resilience. Value-added agriculture, local procurement systems, cooperatives, agrivoltaics, and wind energy development each provide opportunities to expand local income, strengthen local ownership, diversify rural economies, and retain economic activity within rural communities. The article also highlighted the importance of Cooperative Extension and Community Resource and Economic Development programs in connecting these opportunities with youth mentorship, leadership development, and community-based planning.

Overall, the article suggests that rural development policy may benefit from integrating social well-being and economic analysis more directly when evaluating long-term community resilience in New Mexico and other rural regions.

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