

Developing Climatic Capacity in Rural Places

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Arural reckoning is underway, hastened by global climate change. Many rural communities, particularly Southern coastal communities, find themselves at the forefront of the climate battle but often lack the attention and resources given to more-urbanized areas. According to the Center for American Progress, approximately one-fifth of Americans live in rural areas, which make up 97% of America's landmass and account for a large portion of the country's vital natural resources, including crucial sources of water, food, energy and recreation. In addition, 10% of the country's gross domestic product (GDP) is generated in nonmetropolitan counties.¹ Rural America is thus incredibly important to the overall productivity of the nation, and the ability of these communities to remain productive and adaptive is essential. Though rural areas act as an economic breadbasket for a sizable percentage of America's GDP, rural communities are more vulnerable to both economic and natural disasters than more-urbanized areas. Because of this greater vulnerability, rural areas require unique capacity supports to adapt and react to climate change.²

The Cost of Climate Change

Climate change remains a long-term challenge that requires thoughtful reflection and creative approaches to solve, because it creates a multiplicity of socioeconomic and ecological challenges that affect rural and coastal communities. Climate change, particularly rising seas, is too expensive to ignore, and doing so will cost the U.S. dearly. According to a 2019 United Nations report, globally, sea levels rose by about 6 inches during the last century and continue to accelerate, rising twice as fast this century.³ *Yale Climate Connections* estimates that the damage from climate change and rising seas is expected to result in 910 million lost labor hours per year by 2090—costing \$75 billion per year.⁴ The impact is highest in the Southeastern states, where destruction due to lost labor and property is anticipated to exceed \$50 billion annually toward the end of the century.⁵

Climate Change in Rural Communities: Vulnerability

Rural communities, particularly rural coastal regions, face a greater threat from climate change than more-urbanized areas because they often lack the resources, infrastructure and adaptive capacity of city centers. Rural communities are poorly equipped to handle the challenges of climate change because of an already highly stressed social, economic and environmental system.⁶ Rural communities are remote and isolated, and tend to have higher levels of disinvestment, unemployment, persistent poverty and health disparities, rendering them more vulnerable to extreme climatic events. Rural residents must travel long distances to access employment opportunities and critical services, such as health care and other essential services. During and after natural disasters, these long distances become even more problematic, heightening rural areas' vulnerability to climate-related events. Human assets, such as organizational leaders, are also often in short supply and perform many different functions with fewer resources than those in more-urbanized areas. These, often part-time, community leaders, who are already stretched thin, have little bandwidth to expand their activities to encompass resiliency planning or disaster response and recovery without abandoning critical ways they are already serving their communities.

Understanding the degree of vulnerability in a community is important, as vulnerability is correlated with a region's ability to absorb the magnitude, character and rate of extreme climatic activity—otherwise known as a region's adaptive capacity.⁷ The higher a community's adaptive capacity, the lower its vulnerability to climate change.⁸ Rural regions tend to have lower levels of adaptive capacity because they have fewer major employers and workforce opportunities; they are often asset- and opportunity-constrained and thus have more difficulty adapting to the economic challenges caused by extreme climatic activity. If a hurricane hits a remote coastal community, where the industries are predominantly fishing and agriculture, the community will have greater difficulty rebounding than a more-urbanized area because of a lack of workforce options and transferable skills. The workforce in many rural areas (especially those that are highly remote) often does not possess the specialized skill sets that are required to gain employment beyond regional employers, which are often characterized by resource extraction, more-localized health care, social assistance, retail and

food-based manufacturing services. Since many rural communities, particularly those not located adjacent to a more-urbanized metropolitan area, are economically dependent on localized employers and natural resources (such as agriculture and fishing), impacts from climate change (e.g., flooding and drought due to extreme heat) become compounded at both the individual and community levels.⁹

Given the rate at which extreme climatic activity is accelerating, rural communities must hasten efforts to lower their vulnerability and strengthen their adaptive capacity. As governments scramble to implement responses to address climate change, the way in which we approach capacity-building and development at the community level must also evolve to include more resilience-based thinking, including a new approach to the way in which traditional capacity development supports are provided.

Developing Rural Climatic Resilience: Adaptability

Accelerating climatic activity (storm intensity) and extreme weather events (hurricanes and droughts) result in major economic hardships for rural residents that often linger and compound over the long term. Because of this, rural communities have little choice but to become more resilient. Rural communities must develop new skills to better adjust to evolving climatic realities. An essential skill that must be honed is economic/community visioning—the ability to reimagine a future in light of the changing climate, and to reposition and pivot to take advantage of emerging opportunities that this new future may present.¹⁰ Some rural communities are better at reinvention than others are and thus possess greater levels of adaptive capacity. Adaptive capacity is characterized by a wide range of factors, including: the condition and investment of public infrastructure within a community; the local jurisdiction's fiscal means and administrative capacity; and the community's ability to design, plan, implement, execute and manage tangible adaptation investments, including new policies and programs.¹¹

Climatic adaptation at the community level requires the development and transfer of new skills related to disaster relief and response, including developing fiscal management supports to oversee and administer both public disaster funds and relief dollars from private sources. As such, rural organizations, including nonprofits and municipalities, will have to hone their

abilities to think long term, develop complex project management expertise, develop and execute community-based economic recovery plans, and become more knowledgeable about federal recovery funds, federal policies (such as the Stafford Act) and the corresponding regulatory and compliance environment. Small businesses and rural governments alike also need to consider developing longer-term resilience plans that incorporate the development of new skills and training targeted toward creating a more resilient workforce and infrastructure. Resilience planning will require additional capacity supports and technical assistance to nonprofits and public agencies to develop public-private partnerships that can quickly deploy upskilling and workforce training outside traditional employment sectors.

When disaster strikes, rural populations need to be able to take advantage of employment opportunities outside a region. This requires investing in climatic capacity-building supports (such as comprehensive planning) that aid communities in strengthening their economic and corresponding workforce development vision, particularly identifying and growing opportunities in nontraditional investment sectors (e.g., beyond resource extraction). Such an approach will allow rural communities that often depend on climate-sensitive livelihoods to become less vulnerable to climate change events and thus become more adaptive.¹²

Capacity-Building in the Age of Climate Change

Rural communities are unique and diverse, and as such, climate-based capacity-building efforts must be flexible and structured in a way that best meets the needs of the community. Adaptive capacity requires new skills-based support systems that focus on and solve both micro and macro community challenges. Traditional capacity-building in rural communities usually tackles ways in which technical assistance providers can better provision an organization to address such things as coordinating internal organizational management, developing and implementing programs, leveraging an external network and identifying resources. Though all of these internal capacity tools are important, more work is needed to help organizations identify and respond to evolving, external individual and community realities resulting from climate activity, such as lost jobs and wages from employment shutdowns caused by regional flooding.

Adaptation to climate change is enhanced when individuals have more economic assets and empowerment within localized decision-making. If a community has rising income levels, solid job opportunities and equitable homeownership rates, then community residents will be better prepared for economic stress caused by climate change.¹³ Climate response in rural areas requires a two-pronged (micro and macro) approach. A macro (community-wide) approach at the organizational/governmental level encourages broader re-visioning of knowledge systems, fiscal management and governance structures. Capacity support at the micro (individual) level is needed to address and strengthen the socioeconomic condition (wealth generation) of individuals. Though there is much dialogue on resilience planning, current public policies, programs and funding streams do not adequately address or invest in the economic asset and capacity supports needed to empower an individual to pivot in response to climate change.

As funders consider climate-based capacity-building responses, they should prioritize strengthening economic empowerment by solving for both unique individual and community-wide wealth-creation opportunities. Individual capacity supports—for instance, financial stability and skills-based training, offered through entities such as the Financial Opportunity Centers (FOCs) of the Local Initiatives Support Corporation (LISC)—are critical. These supports can include activities such as providing financial literacy training; helping workers upskill and connect to career pathways in emerging sectors or within existing, regional employers; and growing and strengthening investment in entrepreneurship.¹⁴ Particular focus on upskilling and providing workforce opportunities—especially for mature adults, seniors, veterans, and Blacks, Indigenous peoples and people of color (BIPOC)—is needed, because these individuals constitute a large population base in rural communities but are often overlooked in employment-based programming. Whatever the pathway, capacity supports for individual wealth creation and re-skilling are required to help rural communities transition from resource-dependent economies to more-diverse economic sectors that can sustain the impacts of a changing climate.

Key Climatic-Adaptive Capacity-Building Tenets

- Capacity-building needs to be dynamic and responsive to the adaptive needs of a region, which include the social, economic and environmental context of a rural community.
- Capacity development must be cognizant of rural community vulnerabilities and be focused on solving for specific outcomes/objectives that drive resilience-thinking and that foster individual and communal adaptability.
- Capacity-building must adjust and solve for a specific community context at the micro (individual) and macro (community) levels. This will require investment, collaboration and knowledge transfer across sectors and partner organizations, especially among scientists, community residents and political leaders.
- Capacity-building must focus on advocacy, wealth creation and empowerment of local voices through employment-based skills, entrepreneurship and financial literacy training. Stronger socioeconomic conditions and enhanced knowledge alter the status quo and inform better public policy, resilience-thinking and adaptation.
- Funders, interested in fostering more-resilient communities, must expand and prioritize capacity-building investments in rural areas.

Impact of Climate Change on Southeastern States

The Southeast region of the United States is highly vulnerable to climate change-related events (e.g., sea level rise, heat waves, hurricanes and drought) because of its high levels of poverty and rurality. According to the 2010 U.S. Census, nine of the 10 states with the highest rural and small-town poverty rates are located in the Southeast.¹⁵

The vulnerability of the Southeast is reflected in recent work from Solomon Hsiang, a climate economist at the University of California, Berkeley. Hsiang estimates that the cost of climate change-related damages could soon equal more than a third of the Southeast region's gross domestic product.¹⁶ Rural, climatic disparity is perhaps most pronounced in the state of Louisiana. According to the Pontchartrain Conservancy, Louisiana loses 29 square miles of land annually to sea level rise. In fact, Louisiana is disappearing at a rate of one American football field every 100 minutes—the

equivalent of 14.4 football fields per day.¹⁷ This land loss directly impacts the livelihood of the most vulnerable populations, including tribal communities, anglers, farmers, and many others whose incomes and culture have traditionally been derived from the health of the coast.

Given this high rate of vulnerability and the accelerating rate at which the country is losing both land and culture, a new “climatic” lens needs to be applied to how we think about delivering capacity supports in rural communities. The severity of climate change on rural communities means that capacity development must become a higher-level priority, especially within corporate philanthropy. Funders must view investments that strengthen economic position and prosperity (through various capacity supports) as part of a larger call to action to help solve for ongoing environmental justice challenges in rural and BIPOC communities.

Conclusion

Rural adaptation faces many challenges, many of which require more intentional intervention in the form of wealth-generating capacity supports that drive community adaptation. Vulnerable populations and communities require ongoing, targeted investment in the form of technical assistance, skills development and economic investment that strengthen individual livelihoods. Capacity-building has an important role to play in battling climate change; the status quo is simply not enough. U.S. rural and coastal communities deserve more protection and investment from rising seas and a changing climate. The solution is to augment the way we have traditionally provided technical assistance; supports should more fully focus on investments in socioeconomic programming, innovation, knowledge-sharing and policy tweaks that strengthen investment in rural areas. Philanthropies, U.S. policymakers and various public and private organizations now have an opportunity to consider changes to traditional outreach supports, so that more rural regions can benefit from adaptive and income- and wealth-producing solutions that will protect rural and coastal communities from the ravages of climate change for generations to come.

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Endnotes

- ¹ See Ajilore and Willingham.
- ² See Mueller et al.
- ³ If emissions and temperatures continue to rise at their current rates, seas are estimated to rise 2 to 3.6 feet by 2100, impacting many coastal cities. (See Schlanger.)
- ⁴ See Nuccitelli.
- ⁵ Ibid.
- ⁶ See Murphy et al.
- ⁷ See Hales et al.
- ⁸ See Alig.
- ⁹ Ibid.
- ¹⁰ See Ambrosio and Kim.
- ¹¹ Ibid.
- ¹² See Alig.
- ¹³ See Murphy et al.
- ¹⁴ Financial Opportunity Centers are transformative capacity supports for rural communities. FOCs provide employment and career counseling, one-on-one financial coaching and education, and low-cost financial products that help build credit, savings and assets. They also connect clients with income supports such as food stamps, utilities assistance and affordable health insurance. The cornerstone of the FOC model is providing these services in an integrated way—rather than as stand-alone services. (See Local Initiatives Support Corporation.)
- ¹⁵ See Gutierrez and LePrevost.
- ¹⁶ See Lustgarten.
- ¹⁷ See Pontchartrain Conservancy.

