

Rural Research Report



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Connecting Community Assets with Market Demand for Lasting Livelihoods: Meeting New Challenges with Innovative Approaches

Like much of the southern U.S., the Delta Region¹ is an area of persistent poverty, ripe for a new way of doing things. The WealthWorks approach, as it has been and continues to be used in the Delta Region and elsewhere, is the focus of this *Rural Research Report*. The WealthWorks approach serves as a bridge between community development (focused on empowering individuals and groups of people) and traditional economic development (focused on creating jobs by attracting businesses through tax breaks and incentives).

WealthWorks builds on the underutilized assets in a region, bringing them into productive market relationships by making linkages between rural supply and urban demand. Relationships are created to make this happen through value chains, which build multiple forms of wealth that are locally owned and controlled. This approach focuses on creating the wealth that remains in rural regions while also generating opportunities for upward mobility in those regions. Lessons learned from WealthWorks experiences can be applied to other areas.

People and Organizations Act from Their Self-Interest to Generate Mutual Benefit

WealthWorks is about engaging partners based on their self-interest through value propositions. A *value proposition* is a statement, supported by evidence, of the value to collaborating partners from engaging with producers in low-wealth rural places. A value proposition answers the question, “What’s in it for me?” The more clearly you can make the case that developing your value chain will produce a variety of wealth benefits, the larger the group of people who may be interested in participating as producers, buyers, investors, and/or supporters.

WealthWorks Approach

The WealthWorks approach, developed over the past several years through the Ford Foundation’s Wealth Creation in Rural Communities – Building Sustainable Livelihoods (www.creatingruralwealth.org) initiative, involves economic development that

- Connects underutilized community assets to higher return market demand in their regions and beyond.
- Weaves together the self-interest of people, places, firms, and organizations in a region for mutual benefit.
- Brings underutilized assets—people, place, property, and know-how—to light and into productivity.
- Builds regional prosperity and self-reliance.
- Increases upward mobility.

- Creates multiple forms of wealth that stick to place and last.
- Builds partnerships that are flexible for new uses.

The WealthWorks approach does this all in the pursuit of lasting livelihoods in places with limited livelihood options.

Demand Driven and Market Based. If traditional supply chains *push* product (here’s our corn, buy it), value chains using the WealthWorks approach organize to address market demand that *pulls* products or services through (make it this way and we’ll buy it). Value chains are effective mechanisms through which rural communities can connect to the demand side, often in urban areas, and produce products or services that are responsive to those needs. Market demand can be a driver for a considerable expansion of jobs and wealth. When it comes to “selling” into a value chain, it can often be a matter of connecting with a market that already wants what is being offered. For example, Whole Foods and other natural food markets are looking for a quality organic product. In some cases, however, it is necessary to grow this demand. For example, low-income households may not realize the benefits of energy efficiency retrofits to their homes. Growing this demand involves increased education and outreach.

Connecting Regionally. WealthWorks is about making rural-urban connections within regions. Those in urban areas often

undervalue their rural neighbors. Yet, according to Pryor and Mitchell (2011) in *Observations on Rural Philanthropy*, “our collective lives depend greatly on rural regions. Our food security, fiber, energy, minerals, water, oxygen, and many other essential materials are embedded in rural environments—as well as many of our world’s most majestic places.”

Value chains provide a way to connect rural and urban areas that benefits both and creates a foundation for stronger livelihoods in both places. Integrating poor rural areas into larger regional economies offers a sustainable path out of poverty. Urban areas benefit from access to goods and services that address basic needs such as food and energy. Urban-based supermarkets, such as Whole Foods Market, can better meet the demand for local and organic products if they have formed relationships with, and invested in, rural small producers to bring a consistent, high-quality product to their markets.

Focus on a Variety of Assets. The WealthWorks approach uses a framework of eight forms of wealth to think about the assets of a community and the impacts this type of work can have on it. This framework helps people in high poverty areas realize that they have underutilized assets beyond monetary assets, including natural resources, infrastructure, skills, and strong social networks.

How Is Wealth Typically Defined?

Rather than defining wealth as only monetary assets, the WealthWorks approach includes all assets that can contribute to the well-being of people, places, and economies based on eight forms of capital. Intentionally building greater wealth across multiple forms of capital can generate a more resilient and prosperous community. The challenge is to impact and build multiple forms of capital to reach desired outcomes while doing no harm. The eight forms of wealth include the following:

1. *Intellectual capital* is the stock of knowledge, innovation, and creativity or imagination in a region.
2. *Individual capital* is the stock of skills and physical and mental healthiness of people in a region.

3. *Social capital* is the stock of trust, relationships, and networks that support civil society.
4. *Natural capital* is the stock of unimpaired environmental assets (e.g., air, water, land, flora, fauna, etc.) in a region.
5. *Built capital* is the stock of fully functioning constructed infrastructure.
6. *Political capital* is the stock of power and goodwill held by individuals, groups, and/or organizations that can be held, spent, or shared to achieve desired ends.
7. *Financial capital* is the stock of unencumbered monetary assets invested in other forms of capital or financial instruments.
8. *Cultural capital* is the stock of practices that reflect values and identity rooted in place, class, and/or ethnicity.

Tools for Using the WealthWorks Approach

Two main tools are critical in using the WealthWorks approach: (1) the WealthWorks value chain construct and (2) the wealth matrix (focused on the first seven forms of wealth discussed above).²

A WealthWorks value chain is a tool for thinking about and organizing all parts of the system. It is a network of people, businesses, institutions, and nonprofits that collaborate to meet market demand for specific products or services—

each advancing individual self-interest while together creating greater wealth across the value chain. Mapping a value chain helps to identify missing parts of the system, opportunities in the system, and how to account for the self-interests or value propositions of all value chain players. This is typically done by a value chain coordinator, who is tasked with sustaining the chain, making sure relationships are intact, and thinking about how to fill gaps in the chain.

A WealthWorks value chain starts with demand, specifically at two levels: (1) demand for the product or service and (2) demand for the secondary benefits that are created. A WealthWorks value chain builds relationships around information and self-interest; opportunities for mutual benefit are openly shared. The value chain focuses on building wealth, with an intentional focus on how the chain is built, who benefits, and how impacts are measured. A WealthWorks value chain creates sustainable capacity

because the social and political capital built through this process can be applied to other sectors over time.

The wealth matrix is used as a planning and measurement tool, allowing the value chain coordinator to think about planning interventions that will move the system forward by creating positive, measurable impacts on the different forms of capital. This framework also provides a way to measure impact on the seven forms of capital, assuring no forms of capital are degraded in the process and interventions are moving the forms of capital in the desired direction. WealthWorks recognizes eight forms of wealth; cultural capital is included in the wealth creation approach but not in the wealth matrix because its influence is measured through measures of the other seven forms of wealth. An example of how WealthWorks has been used in rural Arkansas follows.

The WealthWorks Approach in the Arkansas Delta

The estimated poverty rates across the State of Arkansas have increased since 2005—especially in rural areas. Seven counties in the Delta Region have a poverty rate of 25 percent or higher. Arkansas has the second highest poverty rate (18.8%) in the U.S. and nearly one in five Arkansans received food stamps in 2009 (University of Arkansas Division of Agriculture 2011).

The value chain coordinator for the WealthWorks Arkansas biofuels initiative, alt.Consulting (www.altconsulting.org),

is a nonprofit organization with a unique approach to delivering small business services. Since opening their first office in 1998 in the Delta, they have helped thousands of small businesses grow, offer jobs, and create new wealth in their communities. alt.Consulting concentrates their work in rural, urban, and minority communities across the Delta, with locations across the Arkansas Delta, western Tennessee, and Mississippi.

The Idea – Delta Gold: Building an Economic System from Farm to Fuel

The value chain work begun by alt.Consulting focuses on clean energy in Arkansas, specifically on building a system of locally owned biofuel microrefineries to produce transportation-grade fuels using Camelina, a winter crop grown by farmers in the Mid-South Delta Region, and waste oil (Figure 1). Demand drives this opportunity as municipal and county governments seek an alternative to the fluctuating prices of petro-diesel and a more reliable, sustainable source of fuel.

Regional demand has been secured through the fuel blending operation of Valero in Memphis, which has made a commitment to purchase even small quantities of biofuel. An integral part of building the value chain to scale involved filling gaps in the value chain from farmers to consumers by forming the Arkansas Green Energy Network (AGEN) (www.altconsulting.org/renewable-energy), a network of organizations and individuals working to advance renewable energy and economic development (Table 1).

During the next two years, AGEN seeks to transform five low-wealth Delta Region communities from energy consumers to independent energy producers to provide new livelihood opportunities through new small businesses and new jobs while providing a renewable local fuel source for municipalities, schools, and residents. The long-term goal is to replicate this powerful model in other rural communities across the region by encouraging 25 communities to operate microrefineries.

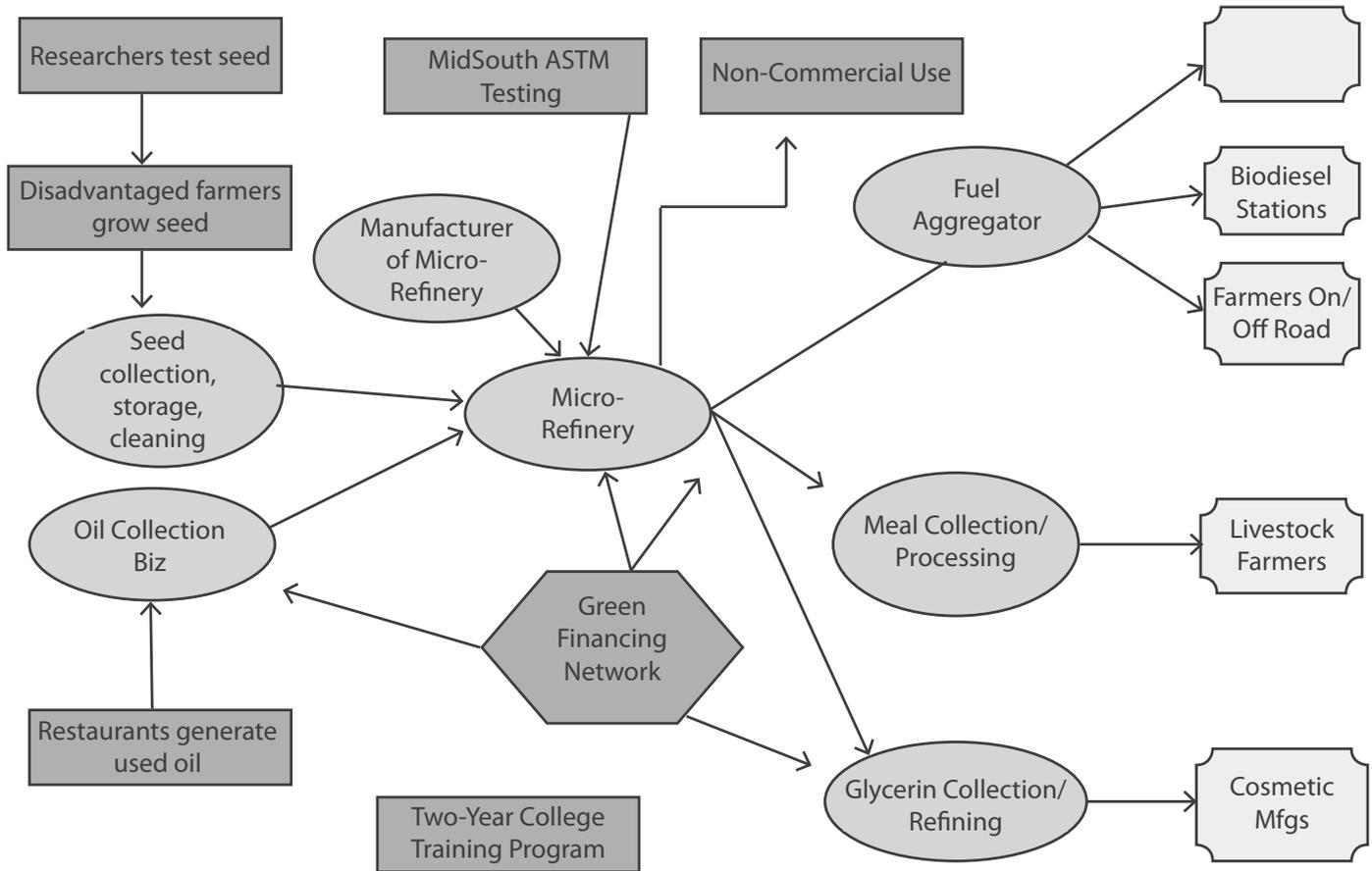
The building blocks include progressive community leadership, Camelina production and processing, waste vegetable oil collection, mini- and micro-level bio-refineries, students from two-year college renewable energy programs and local entrepreneurs, farmers, and fuel distributors. Support in the forms of investment; U.S. Department of Agriculture (USDA) program eligibility; and local, state, and national policy is also essential to building the infrastructure.

With the assistance of alt.Consulting, AGEN is pioneering a path through the Delta Region for locally sourced and consumed fuel by creating biofueling infrastructure in small communities throughout eastern Arkansas. *Farmers* are integrally involved in this work as growers of Camelina, an input in the development of

biofuel, providing a winter crop and a new source of income for current farmers, especially minority and low-resource farmers.

Finally, there is a deep culture of entrepreneurship in the region, with *entrepreneurs* interested in developing bio microrefineries.

Figure 1. Bioenergy Value Chain



Source: alt.Consulting 2013

Table 1. Stakeholders and Services Provided

Value Chain Stakeholder	Services Provided Toward Outcome of Value Chain
Rural municipalities (DeWitt, Forrest City)	Function as independent energy producers
Gir Energy, Mid South Community College	Assemble, manufacture microrefineries
Disadvantaged and minority farmers, non-minority farmers	Grow Camelina during the winter season
Federal funders	Provide grant funding and loan guarantees
Angel Impact Investors	Invest in value chain businesses
Private lenders	Provide loans for mini- and microrefinery installations and new entrepreneurs
Training programs	Provide microrefinery operators and service techs, Camelina agronomic service providers, and employees for Camelina processing and microrefinery manufacturing
Research facilities	Research on Camelina varieties
Entrepreneurs	Collect waste vegetable oil, Camelina agronomic services and processing, mini- and microrefinery installation
Public policy groups	Introduce bills and generate grassroots support for renewable energy and biofuel legislation
Byproduct businesses	Animal feed and Glycerin businesses to purchase and utilize meal and glycerol from Camelina processing and biofuel production
alt.Consulting	Oversee the value chain; provide managerial assistance and capital to new entrepreneurs as well as businesses expanding to take advantage of opportunities outlined in this proposal

The Goal – Build Wealth That Sticks

The goal of this initiative is to accelerate commercial deployment in the Arkansas Delta of a locally developed, innovative biofuels microrefinery technology in ways that

provide jobs, create opportunities for local investment, and capture wealth for people, firms, and communities in the region, including small and minority farmers.

Partners and Value Propositions

The value chain coordinator has engaged partners who see their self-interest in being a part of the value chain; each partner has a value proposition that can be satisfied through this chain. For example, municipal/county governments want stable prices and reliable fuel sources, but they also see the value to their communities of creating jobs and supporting farmers. FedEx and Valero represent part of the potential regional and urban demand. FedEx is required to use biofuels in their jet fuel every time they land

in a European Union (EU) country or else they pay a fine. FedEx President Fred Smith has also publicly stated his support for the people of the Delta Region. Valero simply wants a competitive price point. Camelina can fill the growing season niche and bring income to small and minority farmers. This initiative also provides an accessible scale for entry by local entrepreneurs as refiners and transporters. In the long run, these value propositions will drive the relationships between the actors and the value chain as a whole.

Measuring Impacts on Seven Forms of Wealth

When measuring impacts on seven forms of wealth, alt.Consulting plans and implements its activities, evaluates whether they are having the desired impact, and adjusts if necessary:

1. *Intellectual Capital.* alt.Consulting and partners have made decisions that intentionally build greater wealth, and they have learned about new ways of doing things (including Camelina cultivation, biofuels production, financing options, and entrepreneurship), which has included visiting North Carolina and Montana to learn about similar programs.
2. *Individual Capital.* The biofuels initiative has built individual capital through training local community members, including students at local colleges, for jobs in local bioenergy and emergent green businesses.
3. *Social Capital.* The initiative has created social capital by building new networks, including unlikely partners, through trust, cooperative decision-making, and problem-solving among AGEN partners. A potential investing collaborative involving Delta churches was another way this initiative has built social capital.
4. *Natural Capital.* This value chain includes a biofuel seed, Camelina, which uses less pesticide and fertilizer,

to replace petrofuel in regional uses. Camelina acts like a cover crop, allowing spring crops to be planted right behind it without tilling the soil, therefore, not releasing carbons from the soil into the atmosphere.

5. *Built Capital.* A microrefinery is being built using a technology at a scale appropriate to local investors and with benefits for local communities. The microrefinery will be manufactured in the Delta, keeping the jobs local to the region.
6. *Political Capital.* AGEN now has a voice at the state policy level, including the support of local legislators. AGEN weaves small-scale biofuels production incentives into new state energy policy. It has built a strong alliance with the Arkansas Advanced Energy Association, an industry group focused on renewable energy. The Arkansas Advanced Energy Association has integrated AGEN's learning into the state's new energy plan, setting the stage for small-scale biofuel incentives.
7. *Financial Capital.* This initiative is creating higher-wage jobs for low-income individuals, higher incomes and savings for farmers who can reap profits from the addition of a winter crop, and increased local investment.

Progress Thus Far

Much progress has already been made, but there is more to be done. The microrefinery has been tested; the first commercial unit is under final construction at Mid South Community College and will be purchased and in use in a matter of months. In the community of DeWitt, a waste oil minirefinery will be in place in 2013 (at a cost of \$27,000 with batch production of 50,000 gallons per year), and the school system and county government have committed to purchasing the fuel for their buses and other equipment.

Pilot farmers are growing Camelina, and others have committed to growing more during the summer months on land currently fallow. The Camelina will be purchased from farmers and refined in the community. African-American farmers are receiving technical assistance to grow Camelina. Research and testing on the Camelina seed, storage, and other aspects is underway with support from the USDA. A business plan is being developed for an enterprise to manufacture the microrefineries at scale, so they can be used throughout the Delta Region and overseas.

Creating Benefits for Persistently Poor People and Places

A WealthWorks approach creates benefits for persistently poor people and places in several different ways. The choice of a specific sector for a value chain is made in light of the opportunities to create benefits in poor communities. In the Delta Region, the choice was alternative energy as a way to provide new market options to low-income farmers. In other areas, the sector of choice could be regional food systems or certified forest products.

made to pursue biofuels over solar, for example. High poverty communities can also benefit by including key actors, such as limited resource farmers and struggling municipalities in the Delta, in their value chains. In other areas, such actors could include small forest landholders and low-wage employees. Finally, the outcomes of this work can benefit low-income people through local training/hiring for jobs and entrepreneurial opportunities in the Delta.

The choice of a product is another way to create benefits for poor communities. In the Delta Region, the choice was

Why Does Local Ownership Matter?

The WealthWorks approach focuses on keeping wealth local, through structures and mechanisms for local ownership since locally owned wealth is true wealth. Ownership means you capture and control the flow of benefits from assets over

time. The benefits, which may include income, know-how, or better technology, that flow from local ownership of wealth recirculate locally, enriching many residents. Preserving local ownership can increase the chances of preserving local jobs.

Ownership Models

The AGEN value chain is exploring **four ownership structures** (Wyckoff 2013) for the microrefineries it wants to develop across the region:

1. **A municipality owns a refinery and leases it to an entrepreneur**, generating a new stream of income while also having access to fuel at stable prices. (Being tested by DeWitt, Arkansas)
2. **The entrepreneur owns the refinery**. In this structure, the output is sold to blenders in Memphis and local governments. (Being tested by Forrest City, Arkansas)
3. **The farmer owns the refinery** and processes the Camelina he or she grows, providing contracted refining services for other farmers.
4. **The farm co-op owns the refinery**. In this structure, the farm co-op purchases Camelina from member farmers and sells fuel back to farmers. (The Arkansas County Co-op is currently evaluating the purchase of a microrefinery to produce its own biofuel to meet the demand of seven or eight farmers.)

Conclusion

The WealthWorks approach produces and sustains robust results. It brings underutilized community assets—people, place, property, and know-how—into participation and production. It creates wealth that is owned, controlled, and reinvested locally. It increases the upward mobility of low-income people, firms, and places while building a more self-reliant and robust local and regional economy. It forges valued partnerships within a network of people and resources so that they can more ably and flexibly connect again and again to fuel increasingly resilient regions. However, none of these outcomes is possible without an effective value chain coordinator with the ability to develop partnerships and make connections.

The WealthWorks approach has been used and tested in three regions:

1. *Central Appalachia (Kentucky, Ohio, Tennessee, Virginia, and West Virginia)*. Grantees in Central Appalachia are the Central Appalachian Network (CAN), Rural Action, Mountain Association for Community Economic Development (MACED), and Federation of Appalachian Housing Enterprises (FAHE).
2. *Deep South (Alabama, Arkansas, and Mississippi)*. Grantees in the Deep South include the National Wildlife Federation, Emerging ChangeMakers, alt.Consulting, and the Deep South Wealth Creation Network.
3. *Lower Rio Grande Valley of Texas*. Grantees in the Lower Rio Grande Valley include Community Resource Group and the Community Development Corporation of Brownsville.

There are important lessons to be learned from value chain coordinators who have been using this approach:

- **The role of the value chain coordinator is crucial.** Value chain coordinators provide analysis, help identify value chains and gaps, frame opportunities for investment, manage expectations, and build relationships around value propositions and self-interests.
- **No one creates and maintains a wealth creation value chain alone.** It requires deep collaboration among participants who come to learn how to pursue their own self-interests in ways that benefit others. Accountability to other stakeholders leads to stronger relationships, which creates greater opportunities and bigger markets and often broadens the scope of the work and increases the scale.
- **Adopting the wealth creation approach can fundamentally change the mindset and practice of nonprofit value chain coordinators.** Organizations that are proving successful as value chain coordinators have been willing to change the way they do business. They relinquish a degree of control by establishing new and genuinely collaborative relationships, learn how to move quickly in response to market demand, and accept a higher level of risk in proportion to the scale of reward they seek.

A WealthWorks approach to community and economic development can work just about anywhere. The most important factor in the success of this approach is a strong value chain coordinating organization that is willing to try something new and engage with a wide variety of potential partners.

For more information on WealthWorks, visit www.ruralwealth.org, www.yellowwood.org/wealthcreation.aspx, and www.wealthworks.org.

Endnotes

- ¹ The Delta Region contains 252 counties and parishes in eight states: Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. See www.dra.gov.
- ² WealthWorks recognizes eight forms of wealth; cultural capital is included in the wealth creation approach but not in the wealth matrix because its influence is measured through measures of the other seven forms of wealth.

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