The Transition of Appalachia and the Transformation of Prosperity in the United States

Anthony Flaccavento, January 2010

I. Overview

Nearly two centuries ago, English economist David Ricardo put forth the "Theory of Comparative Advantage" to guide trade policy between nations. The theory posited that nations should specialize in the production of a small number of goods which they could manufacture efficiently, then sell these to other nations in order to generate income needed to buy the things they did not produce themselves. While many countries were quite capable of producing a broad array of products, Ricardo insisted that all would be better off by concentrating on a small number of exports rather than developing broadly based manufacturing sectors. This notion of "specializing in what you're good at" has underpinned the trade and economic development policies of the United States – and most industrialized nations – ever since.

There is no question that the idea of comparative advantage and the policies of economic globalization that it helped spawn have led to an extraordinary proliferation of material goods around the globe. There is more "stuff" available, in aggregate and per capita, than ever before. But a reliance on exporting a *few* things to generate income to import *many* things has created enormous problems around the globe, particularly in rural, resource-dependent regions like Central Appalachia. In the Appalachian portions of West Virginia, Kentucky, Tennessee, Ohio and Virginia, these problems have included:

- An historic focus on production and export of cheap commodities, particularly energy, wood products and tobacco, as the defining characteristic of both economic and political thinking;

- Economic uncertainty and generally declining opportunities in each of these core sectors, as farmers, workers and businesses are primarily "price takers", unable to compete with less expensive, usually off-shore alternatives;

- Enormous ecological problems as the rich natural resource base is "overused and undervalued" in an effort to compete with low-price alternatives;

- Low levels of community wealth, in spite of the rich natural resource base, owing to some combination of resource and land ownership concentration, a lack of value adding infrastructure, and the political power of the coal industry, often at both local and state levels; and

- A broad decline in self reliance among individuals, households and communities.

Even so-called “alternative economic development strategies” have operated within the same paradigm of global competition and comparative advantage. This has led to an extraordinarily expensive competition for a limited pool of companies, many of which stay less than 10 years. The resource that is being “overused and undervalued” in this strategy is people, whose low cost labor is as attractive as cheap timber, at least for a while.

Is there a viable alternative to the global comparative advantage model for the Appalachian region, one that can grow beyond demonstration projects and niche markets? This paper will explore this question, beginning with a deeper examination of the problems with the prevailing economic model. Emerging initiatives designed to build community wealth while restoring or sustaining the ecosystem will then be discussed, with their potential to expand and multiply given particular consideration. Lastly, a new model for sustainable rural development will be offered as a framework that might generate significantly better outcomes for people, communities and the environment.

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II. **A Bit More about the Problem**

The economic model of globalization and comparative advantage helped propel a low value, extractive economy in Appalachia. During much of the 20th century, relatively diverse and self reliant communities gradually gave way to increased dependence on external resources and greater extremes of high and low, boom and bust. High levels of income inequality and poverty raised concerns, but were understood as glitches along the path towards prosperity. Widespread health and environmental problems, especially related to coal mining, but also including logging, tobacco farming and industrial development, were accepted as unfortunate but unavoidable by-products of modernization.

Appalachia’s coal reserves and rich timber resources certainly provided strong inducements for exploitation by capitalists from outside the region. But broader cultural trends have played a critical role as well, particularly in more recent decades. Three of these stand out. **First, the conflation of *consumerism* with *freedom* fundamentally altered our perspective about the rights and responsibilities of citizenship, and our obligations towards others.** Buying things increasingly has come to be seen as an expression of personal liberty and civic involvement.

Walter Wriston, former President of Citibank put it this way: “Markets are voting machines, global plebiscites.” (Thomas Frank, *One Market Under God*) A growing belief in the immutable wisdom of the market, fueled by political and business elites, both accelerated and justified the centrality of consumption in our national psyche. This has led to what Thomas Frank has called “an ecstatic confusion of markets with democracy, markets with people, markets with empowerment”(ibid).

Secondly, the increasing estrangement of “producers” from “consumers” made it manageable for most people to ignore the often-negative consequences of their daily choices in the marketplace. With food traveling on average 1,750 miles from farm to fork, and with heat and lights available at the flip of a switch, the vast majority of Americans comfortably ignore the devastation of mountain top removal or the stench of confinement hog farms. In fact, they are virtually unfathomable to most people residing outside the impacted regions.

Thirdly, the approach of the “environmental movement”, while helping to mitigate some of the worst abuses, has created its own form of estrangement: **preservation rather than sustainable livelihoods.** Largely urban and suburban environmentalists have focused on protection of the ecosystem from human degradation, often alienating farmers, loggers, fisherman and rural communities for whom “the environment” represents their livelihood, or a substantial part of it. As Wendell Berry has pointed out, this focus on protecting parts of the environment <u>from</u> people instead of developing the means to live <u>within</u> the ecosystem stems from the same hyper-specialized mindset that created many ecological and social problems in the first place.

Fortunately there is a different culture and mindset emerging in Appalachia and the nation, one that seeks to restore connections between farm and table, rural and urban; that recognizes that consumption choices have consequences for which we must begin to take responsibility; that “responsible consumption”, though essential, is inadequate without civic and political engagement; and that diverse, relatively self-reliant regional economies will do much less harm to other places and other people while making our own communities more just, resilient, perhaps even more satisfying in the years ahead.

Appalachia can and must play a pivotal role in this global economic and social transformation, both for the sake of its own people and because of its critical national role in energy and environmental choices. If a region known primarily for coal mining, tobacco farming and clear cut logging can come to exemplify sustainable development, it will be difficult to ignore.

III. Building a Resilient Appalachia on the Ground

Much of the current public debate on Appalachia focuses on the benefits and problems associated with coal mining, even though the industry now accounts for less than 2% of jobs in the region. Concerns about the impact of proposed climate change legislation stir angry debates, yet the reality is that coal mining employment has been declining for decades, primarily due to mechanization.

State resources intended to increase employment and diversify the economy still focus predominantly on recruitment of companies from outside the region. As a 2008 study by the Mountain Association for Community Economic Development (MACED) showed, Kentucky spent 80% of its total economic development dollars on recruitment incentives for outside corporations. And it's not just Kentucky. Economist Michael Shuman documents state and local government expenditures of $50 billion annually on such recruitment and other subsidies for large companies, while public resources devoted to homegrown businesses are minimal by comparison. (Michael Shuman, *The Small Mart Revolution, 2006).* Federal subsidies of large businesses are greater still, with the CATO institute estimating the figure at $87 billion each year (ibid). It is likely that the majority of these federal funds subsidize ecologically extractive or damaging industries, according to a 2003 study by the Green Scissors Coalition (*Green Scissors 2003: Cutting Wasteful and Environmentally Harmful Spending,* Washington, DC).

At the same time, a wide range of enterprises and initiatives have begun to emerge in the Appalachian region, designed to build a more sustainable economy and healthier, more resilient communities. They vary in scale and their stage of development, but generally:

- are more ecologically sustainable, both in terms of their production systems and greatly reduced transport distances to market.
- use "asset-based" strategies, building and adding value to the ecological, cultural and human strengths of the region;
- cultivate self-reliance, for producers and the broader community;
- build cooperative networks that help overcome isolation, estrangement and problems of scale; and
- restore or build community wealth in multiple forms.

As these initiatives have grown in number and scale, elected leaders and local, state and federal agencies have taken notice. The Appalachian Regional Commission, for instance, launched an "Asset Based Development" program several years ago, while the U.S. Department of Agriculture more recently created a Community Facilities loan and grant program to spur local infrastructure development. Both of these programs were in part based upon successful initiatives in Central Appalachia. In some cases state and federal agencies have become active partners with these initiatives, for example the Virginia Department of Housing and Community Development's emphasis on locally based agricultural and cultural enterprises. More broadly, public policy has begun to shift towards greater support for "sustainable development" and locally-led economic strategies, though it remains inconsistent and generally inadequate throughout the region.

To understand the potential for these initiatives to model and help forge a resilient Appalachia, we will briefly consider examples from three sectors: food and farming; forestry; and green building.

Food and Farming

The landscape of Central Appalachia is a mix of mountains, gentle hills and valleys. Nearly two thirds of this land is forested. The remainder is rolling pasture and small acreages of moderately fertile land for cultivation, often alongside river and stream bottoms. Because the land is not suited to vast acreages of mono-crops, Appalachian farms have always been relatively diverse, including livestock, small orchards and vegetable gardens, and tobacco. With the end of the federal tobacco program in 2005, the decline in tobacco farms and acreage accelerated, down by as much as 50% from 2000 levels in some Appalachian states.

Several years before the federal tobacco program ended, local and regional non-profits launched enterprises intended to improve farm incomes, access better paying and/or larger markets and promote sustainable farming practices. By 2009 there were at least two dozen "healthy local foods" initiatives in the region encompassing a range of crops, products and business models. Three examples of these are described below.

The Appalachian Community Economic Network's, commercial kitchen and "Food We Love" initiatives. ACEnet's commercial kitchen was begun in 1994 and has helped launch or expand more than 250 food businesses that together have generated more than $6.5 million in annual sales. Food preparation, cooking, baking and freezing equipment is included within a 6,500 square foot facility. Extensive training and technical assistance provided by ACEnet staff enable entrepreneurs to source ingredients, develop recipes, test and build markets, and meet food safety and legal requirements.

The ACEnet commercial kitchen enables local food entrepreneurs to add value to local farm products, with nearly 75% of the raw ingredients they use coming from the Appalachian region. Although some successful incubator businesses ship their products nationwide, 60% of the markets are within a 200 mile radius of production.

The "Food We Love" program is a marketing and branding initiative that grew out of the challenges many start-up food companies faced in gaining access to markets. Nearly 50 food businesses now sell their products under this brand, which has secured shelf space in one large supermarket and numerous smaller venues.

Appalachian Harvest, an integrated, "field to table network" of organic farmers in southwest Virginia and northeast Tennessee, organized and managed by Appalachian Sustainable Development (ASD). Formed in 2000, Appalachian Harvest includes 60 farmers, the majority of whom used to raise tobacco, now growing and selling certified organic produce and free-range eggs to nearly <u>600</u> supermarkets. The supermarkets are within a 400 mile range, with the majority of sales within about 250 miles. Colleges, small grocers, restaurants and CSA's are also among Appalachian Harvest's market partners.

ASD provides extensive education, training and support to the growers in the network, most of whom have no prior experience with organic farming, and have little financial capital or reserves. The training includes organic soil building and pest control, farm planning and management, food safety and more. ASD's 15,000 square foot Appalachian Harvest facility, including walk-in coolers, grading lines and three refrigerated delivery trucks, is used to aggregate, grade, label, pack and ship the produce and eggs to buyers. This facility and the Appalachian Harvest system create market access for small, limited-resource farmers, most of whom could not otherwise meet the quality or quantity demands of larger regional buyers.

As an outgrowth of Appalachian Harvest, the “Healthy Families, Family Farms” program buys good quality produce “seconds” from the network’s farmers at a discounted price and then provides them to needy families through the Second Harvest Food Bank. Supported by local churches, businesses and individuals since 2004, Healthy Families has put more than 250,000 pounds of local organic produce on the tables of lower income families in the region.

Other cooperative networks that link farmers and food producers with one another and with buyers and markets, including: the Appalachian Farmers Market Association, which helps launch, expand and promote rural small town farmers markets in east Tennessee and southwest Virginia, benefiting several hundred farm and food entrepreneurs while making healthy food more widely available and affordable; the Appalachian Staple Food Collaborative in southeast Ohio, which supports regional production of healthy, heirloom grains, which it then processes, markets and ships to regional buyers; and the Monroe County Farmers Market in southern West Virginia, which aggregates and distributes produce, meat, eggs and prepared foods from nearly 20 small farmers to customers in Charleston and Beckley, West Virginia using an online “market place”.

All of the food and farming initiatives described above are growing rapidly, both in terms of the market demand and supply. All are reducing shipping by 50-90% and reconnecting multiple types of consumers - from individuals to college students to supermarkets shoppers - to the source of their food. All are helping increase farm income and spawn ancillary jobs and businesses in farm supplies, distribution and shipping and related areas. All are providing market-based incentives for sustainable practices that increase biodiversity and rebuild soil health and fertility. And all are creating or expanding community-based, value adding infrastructure, a key component of durable local wealth.

Forestry

The mixed hardwood forests that cover nearly 70% of Central Appalachia are ecologically and economically rich. Unfortunately, these woods exemplify the “overuse and undervaluing” of the region’s natural capital, as when forests are clear cut and the logs then shipped out of the region for sawing, drying and manufacturing. Under these circumstances, typically less than 10% of the economic value of the wood accrues to businesses in the region, while most of the environmental problems stay local.

Of all the region’s resources, forests offer perhaps the greatest potential to simultaneously build economic assets while restoring critically needed ecological functions such as water filtration, migratory bird habitat and carbon sequestration. Properly managed, Appalachian forests will sequester 2-4 tons of carbon dioxide per acre per year, making them an essential part of any climate change strategy. At the same time, the Appalachian forests offer a particularly wide range of economic opportunities, given their diversity and resilience. The examples described below illustrate this potential.

The Forest Opportunities Initiative, or FOI, was launched in 2008 by MACED. The Forest Opportunities Initiative is the first organized program in Central Appalachia designed to pay private landowners for the “ecosystem services” their land provides. Forest landowners who manage their woodlands sustainably receive annual payments for the value of the carbon their forest removes from the atmosphere. This "sequestration" of carbon is maximized when sustainable practices are employed; therefore landowners must have their land certified under either The Forest Stewardship Council or American Tree Farm. Though the FOI program is new, $65,000 has already been paid out to landowners in eastern Kentucky. To date 16,000 acres have been enrolled in the program, and landowners in Appalachian Ohio, Virginia and other states will soon be on board as well.

While the size of the forest holdings varies, many of the participating forest landowners are low to moderate income. MACED uses its resources as a Community Development Finance Institution to loan landowners any funds needed to cover the costs of forest inventories and certification. The loans are then repaid out of the sale of carbon credits each year. In this way, lower income landowners use the ecological capacity of their woodlands as collateral, enabling them to participate in an enterprise that will pay them dividends for many years, long after the small loans are repaid.

Additionally, some participating landowners will harvest modest amounts of timber, while still participating in FOI. Appalachian Sustainable Development's Sustainable Woods enterprise makes this possible, managing small logging operations under rigorous ecological standards, then sawing the logs, kiln drying the boards and manufacturing hardwood flooring and other wood products at its facility in southwest Virginia. Landowners and loggers are paid a substantial premium for their logs - 25 to 40% above other mills - to cover the true cost of sustainable forest management. The finished products are sold to contractors, architects and small retailers in or near the region.

Appalachian forests are also rich in non-timber forest products, or NTFP, such as ginseng, goldenseal and many other forest plants with medicinal properties. Building on the strong demand for ginseng and goldenseal in particular, *Rural Action initiated an NTFP program* 10 years ago. Rural Action provided education to hundreds of forest landowners in southeast Ohio, along with seeds to help participants start or expand their ginseng "crop", using methods known as wild cultivation. The present value of the ginseng crop started through this effort is estimated at nearly $5 million. Compatible with both very low-impact logging practices and enrollment in the FOI carbon credit program, cultivation of non-timber forest products provides another potential income stream for thousands of Appalachian forest landowners.

Green Building

Green building initiatives in Central Appalachia have largely grown out of affordable housing efforts underway for more than 20 years, combined with more recent projects in sustainable development and sustainable forestry. Green building emphasizes energy conservation and efficiency, along with use of regional, sustainably produced wood and other materials, and use of renewable energy sources such as geothermal, solar and wind. More recently the economic development potential of green building and renewable energy products and services has become a focus, as the following examples illustrate.

Affordable housing and green building initiatives of the Federation of Appalachian Housing Enterprises (FAHE), based in Berea, Kentucky, and People, Incorporated, based in Abingdon, Virginia. Serving low to moderate income families, both of these community action agencies build and renovate hundreds of high quality, affordable homes for rental and for ownership. High standards of construction quality and efficiency have become the standard, reducing maintenance and operations costs for the residents. Training programs have helped prepare scores of people for the more meticulous construction techniques involved and jobs have been secured with local private contractors as well as FAHE and People, Inc. New jobs have also emerged as a result of the green building emphasis, such as energy auditors, well drillers for geothermal systems, and solar panel installers.

In 2007, several groups and businesses from northeast Tennessee and southwest Virginia came together to form the *Holston Valley Green Building Coalition, HVGBC,* to increase the use of green building practices while creating new business opportunities for local companies. The HVGBC has since become a branch of the US Green Building Council and has accelerated awareness and utilization of green building products and services around the region. Local geothermal firms have seen a steady growth in their business while startups in solar and wind installation have emerged. The growth in both LEED (Leadership in Energy and Environmental Design) and Earthcraft as systems to certify green building practices has also helped expand the market for ecological services and materials, including sustainable wood products coming from the region.

IV. Summary and Looking Forward

The specific examples described above represent a sampling of some of the enterprises and initiatives that have begun to create a much more sustainable, resilient and dynamic economy in Central Appalachia. They are a small subset of this emerging new economy. While they have already had substantial impact they appear to have far greater potential to lead Appalachia through a transition to sustainability.

It is essential to understand that the innovation and resourcefulness characteristic of these initiatives has not happened in isolation. To be sure, the leaders of these efforts are creative, entrepreneurial individuals. But much of the impetus for these efforts has come out of the extraordinary *peer networks* that have evolved in the region over the past 15-20 years. These networks have accelerated the learning of key leaders, propelling innovation and helping to disseminate “best practices” more widely and more quickly. The networks have also increased the profile and credibility of community-based sustainable development among policy makers and key institutional leaders. And in some cases, the networks have also served to channel and aggregate funding, maximizing the impacts of the limited dollars available to the region.

Several critical networks have emerged, some at “sub-regional” or more localized levels, others encompassing nearly all of the region. Most of the initiatives described in this paper are part of the *Central Appalachian Network, or CAN,* originally formed in 1994. CAN has grown from a loose association of groups to a more deliberate, though still flexible, network of organizations whose central purpose is to build a sustainable economy in Central Appalachia. CAN organizations are managing several other innovative, sustainable enterprise, including:

- A “Green Business Accelerator” launched by the Center for Economic Options in West Virginia in 2009, following many years of work with small and non-traditional entrepreneurs. The Accelerator is a web-based tool designed to catalyze and strengthen green businesses by linking firms with information, markets and one another;

- Jubilee Project's Farm to School initiative, and its Clinch Powell Community Kitchen in rural east Tennessee, both of which create access to markets for small-scale farmers while helping them test and develop new food products;
- The Natural Capital Investment Fund, also based in West Virginia, which like MACED, provides loans and technical assistance to farming, food, forest product and other green businesses throughout the region; and
- A wide range of public policy initiatives, primarily at the state level, led by these and other CAN groups.

Appalachia in Transition: Bringing Emerging Sustainable Economies to SCALE

Envisioning a healthier and more sustainable Central Appalachian region and a strategy to get there will require an understanding of the problems and of the innovative responses to those problems that are emerging around the region. A viable strategy must also recognize that our national economic priorities and cultural norms – i.e., our definition of "prosperity"- must also change for sustainability to be achieved in the region. I conclude this paper with a brief description of a new vision for the central Appalachian economy and a strategy likely to make that possible.

A Sustainable Appalachia

Sustainable communities and economies are adapted to their particular places and will therefore look different in various parts of the world, even within the Central Appalachian region. Nevertheless, from my experience and that of colleagues in the region, I'd suggest the following **principles of sustainable economies** as a framework for the Appalachian transition: (These principles are adapted from earlier frameworks I developed, in concert with the Central Appalachian Network.)

1. **Sustainable economies are locally rooted,** intimately adapted to the assets and challenges of their particular place. This "adaptation to place" should imply dynamism and resilience in economic design, as places evolve ecologically and demographically.

2. **Sustainable economies fit within the ecosystem.** This includes not only the ecosystem where the community is located, but larger ecological systems as well: water and nutrient cycles, energy, the air and atmosphere. Fitting within the ecosystem requires a thorough understanding of both limits and assets, regionally and globally.

3. **Sustainable economies are more self reliant and resilient.** This does not suggest total self-sufficiency or isolation from other communities or economies, but much reduced *dependency* on external resources, companies and markets. Self reliant communities of necessity make the most of what they have and live within their means. Resilience comes in large part from this greater self reliance/reduced dependency, along with the knowledge, skills and technologies needed to increase efficiency, reduce and conserve energy and adapt to a changing environment.

4. **Sustainable economies are more just, with “wealth” much more broadly owned or shared.** Substantial disparities in income or wealth lead to myriad expensive problems: poor health, alienation from civic and political life, economic dependence, etc. More widely dispersed wealth, in the form of small farms and woodlots, windmills and other energy resources, local owned businesses and facilities, engender participation and greater personal investment in the welfare of the community.

5. **Sustainable economies have infrastructure that increases the value and marketability of their products**. Depending on the natural resource base and cultural heritage of each place, this may include dry kilns and wood manufacturing facilities, aggregation and distribution centers for food, “waste to energy” facilities, venues that highlight historical, cultural and artistic sites and much more. The common denominator of these types of infrastructure is that they enable local people and communities to retain a much higher proportion of the end value of their products, while also creating market access for smaller, limited resource entrepreneurs.

6. **Sustainable economies are engaging and empowering, overcoming alienation and estrangement**, between “producers” and “consumers”, between political and business elites and ordinary people. While this will undoubtedly take time, many of the initiatives described earlier have already begun to cultivate increased engagement among a broad segment of the community, and resulting improvements in public and institutional policies.

The enterprises and initiatives described in this paper have informed the development of these six principles for sustainability. Along with others of this type, they also provide a rich foundation on which to build healthier communities and a more sustainable economy in Central Appalachia. Work to link them deliberately and strategically is underway, primarily through the Central Appalachian Network, the Appalachian Alliance and the Ford Foundation’s Wealth Building initiative in the region.

As this work progresses, new insights and partners will be gained and funders and investors will be sought. Given the extraordinary economic and ecological urgency of this work, I’d suggest a conceptual umbrella for these initiatives, a unifying strategic framework: All of our work must seek to reach SCALE – Sequestering Carbon, Accelerating Local Economies. While not quite a litmus test, we might think of scale as an essential, unifying goal. It points us toward three outcomes in all we do:

1) **Sequestering carbon-** To what degree does our strategy, policy, technology or enterprise sustain or restore the ecosystem’s capacity to sequester carbon?
2) **Accelerating local economies-** How effectively do our strategies and policies accelerate the development of diverse, resilient, wealth building local economies, economies that expand rather than diminish carbon sequestration capacity?

3) **Achieving meaningful scale-** Are private investment, philanthropy and public policy sufficient to enable rapid movement to a scale large enough to be transformative, while still adhering to the principles of sustainability?

The enterprises and initiatives described in this paper give hope that SCALE can be reached, perhaps within the next 20-30 years. But it will require a deep commitment to the principles outlined above, dramatically more investment in the emerging sustainable economy, and a new way of thinking about prosperity and economic health. The transformation of regions like central Appalachia, which have historically fueled growth and affluence in other places, will be essential to achieving this new, more authentic prosperity, locally, nationally and globally.