



Mountain Promis

Vol. 6, No. 4

The Newsletter of the Brushy Fork Institute

Spring, 1996

Measuring economic progress

What defines sustainable development?

by Jeanne Gage, Director
Sustainable Communities Initiative of the
Mountain Association for Community Economic Development

What do tomato paste, cigarettes, dioxin, dog food, computers, and natural disasters have in common? They all contribute to the Gross Domestic Product.

The Gross National Product (now commonly known as the Gross Domestic Product or GDP) is a measure of the nation's production capacity introduced during World War II. It has been used by economists and policy makers as a primary indicator of the nation's economic well-being. However, some public policy-makers have begun to question the use of measures such as the GDP to define economic progress in general, and progress toward sustainable development in particular.

Not only is GDP being questioned as a measure of progress, but other traditional measures of economic success like net jobs and unemployment figures are also being re-examined. Communities that have embraced the goal of sustainable development are looking for new ways of measuring progress that take into consideration the environmental and social aspects of economic decisions.

New methods of measuring progress are the focus of an emerging body of literature, research, and public discussion. This article explores the use of

alternative ways to measure our nation's economic well-being and then looks at how communities can establish sustainable development indicators to measure local economic well-being.

What's wrong with the GDP?

One problem with using the GDP to measure economic progress is that it does not discriminate between productive and destructive economic activities. It treats every monetary transaction equally and assumes that each transaction contributes to the nation's well-being. As a result, crime, divorce, and natural disasters are all considered economic gains.

The GDP also ignores all non-monetary transactions, regardless of their value to society. As a result, household and volunteer activities that contribute to family and community well-being are not counted. Crucial activities like child care, elderly care, and domestic tasks, if performed by family or friends, are not part of the GDP tally because no money changes hands. And yet social problems resulting from the shift of volunteer activities from a non-market economy to the market economy add to the GDP.

Another problem with the GDP is that it ignores a basic accounting principle by counting the deple-

continued on page 2

Topic this issue

Sustainable development

Ginseng: sustainable agriculture for Appalachia
page 9

Sustaining our forests: what does it mean?
page 12

Sustaining health care for WV communities
page 15

Sustainable indicators

continued from page 1

tion of our natural resources as an economic gain rather than as the depreciation of an asset. Similarly, environmental disasters and pollution increase the GDP because we hire people to clean them up. As a matter of fact, pollution gets double-counted in the GDP—once when an activity creates the pollution—and again when we pay to clean it up.

GDP also overlooks societal values such as equity which are essential to creation of sustainable communities. When you ignore distribution of income among the population, a gain in real income by the top five percent of households can look like economic progress even though wages have declined for those on the lower end of the economic ladder. GDP fails to consider who benefits and who is harmed by economic activities. Additionally, GDP increases when we increase our debt to foreign nations, regardless of whether the debt is for consumption or capital investment.

The Genuine Progress Indicator

How can we begin to measure economic activities in a way that accounts for societal values such as ecological integrity and equity? Redefining Progress, a California-based organization has proposed a new measure of economic activities called the Genuine Progress Indicator, or GPI. The group has used the GPI to measure economic progress from 1950 to present and has found that in terms of real progress, our national economy shows a steady decline since the 1970s (see figure 1).

Although the GPI starts with the same personal consumption figures as the GDP, it includes more than twenty different aspects of well-being not covered by the GDP. For instance, it makes adjustments for income distribution and adds a monetary value to household and volunteer work. It also subtracts for destructive activities such as crime and pollution. GDP treats borrowing and depletion of natural resources as current income. In contrast, the GPI treats these as current costs. Long-term environmental degradation such as depletion of the ozone layer, is ignored in the GDP. However, the GPI calculates an additional cost for the pro-

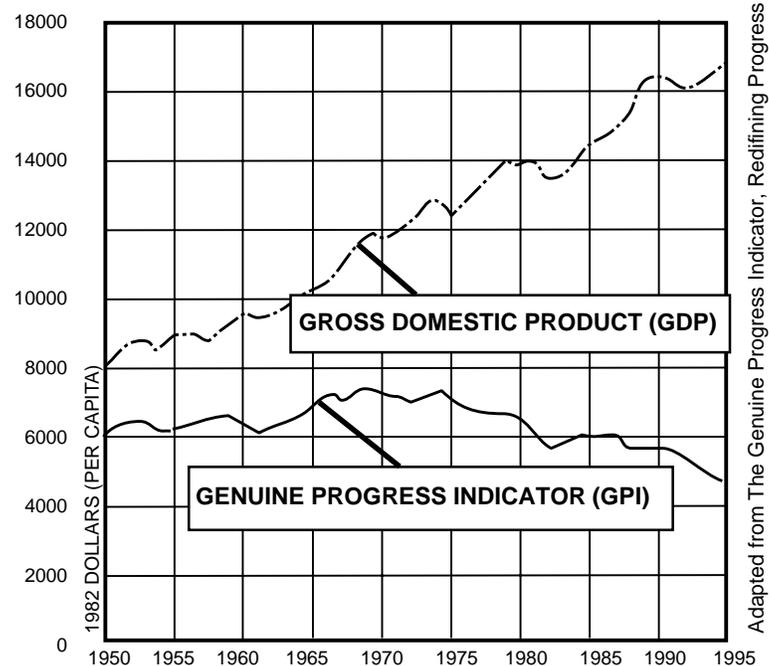
duction and use of ozone-depleting chemicals.

As the economy improves, one might expect people to have more leisure time. Even though the GDP has been rising, the opposite is true. Americans have less and less leisure time. The GPI treats loss of leisure time, as most people would, as a negative. GDP counts expenditures for defensive activities such as medical bills and repair bills from auto accidents as positive economic activities while the GPI considers defensive expenditures made to prevent the erosion of quality of life as a negative.

The GDP accounts for durable goods based on the cost of those goods without any consideration of their durability. The GPI on the other hand, calculates adjustments for durability so that products which wear out quickly (including public infrastructure) do not count as more economically valuable than those which last. GPI also calculates a negative value for dependence on foreign assets to finance consumption.

In their analysis of economic progress from 1950 to the present, using the GPI, researchers found that much of our economic growth over the past several

figure 1
**Gross Production vs. Genuine Progress
1950-present**



When social and ecological costs are taken into account, the overall health of the economy shows a steady decline since the 1970s.

Adapted from The Genuine Progress Indicator, Redefining Progress

decades (as measured by the GDP) is actually the result of one of three things: 1) fixing problems that have resulted from past blunders; 2) borrowing resources from the future; and 3) shifting functions from the unpaid realm of community and household to the monetary realm. These findings suggest the need for a new economic strategy which promotes economic well-being or the common good instead of just growth in monetary transactions.

Sustainable Community Indicators Communities like Seattle, Chattanooga, Chicago, Greenville, and Jacksonville have begun to create new methods for measuring economic success which take economy, ecology, and equity into account. According to Maureen Hart, author of the *Guide to Sustainable Community Indicators*, to be effective sustainability indicators must:

- Be relevant to sustainability—Must fit the purpose for measuring.
- Be understandable to the community at large—What is it telling you? If the indicator is too complex, it won't be very useful.
- Be developed and accepted by the people in the community—Each community must choose what measures are most important. The discussion of which measures are most appropriate can be used to inform the community about sustainability.

➤ Link, economy, society, and the environment—For instance, median income is a common economic indicator. But it is a poor indicator of sustainability because it does not tell us anything about the social aspect of income. A better indicator would be the percent of median income needed to meet the basic needs of a person living in the community.

➤ Focus on long-range view—Since sustainable communities are communities that remain prosperous over the long-term, we cannot use short-term indicators to measure progress. For instance, an indicator that measures the number of building permits issued, although a measure of the health of the real estate and construction industry, is not a good measure of sustainability. A better indicator would measure effect or quality of construction and the amount of redevelopment as opposed to new development.

➤ Advance local sustainability, but not at the expense of others—Here again we can use the example of median income. If our goal is to be at 120 percent of the U.S. median income, there must be another community that is at 80 percent. This sets communities against each other.

➤ Be based on reliable and timely information—Survey information and data should be as reliable and current as possible.

continued on page 11

Additional resources on sustainable development indicators:

Indicators of Sustainable Community, Sustainable Seattle, 1995. Individual copies are \$15 postpaid. Contact:

Sustainable Seattle
Metrocenter YMCA
909 Fourth Avenue
Seattle, WA 98104
Phone: 206-382-5013; E-mail: sustsea@halcyon.com

Sustainable Community Indicators, by Elizabeth Kline, Jan. 1995. You can order this for \$12.24 postpaid, or this one plus the larger *Defining Sustainable Communities* (215 pages) for \$21.24 postpaid for both. Contact:

Tufts University—Global Dev. & Environment Inst.
Curtis Hall, 474 Boston Avenue
Medford, MA 02155
Phone: 617-628-5000

Guide to Sustainable Community Indicators by Maureen Hart, QLF/Atlantic Center for the Environment, May 1995. Send requests with \$12.50 to:

QLF/Atlantic Center for the Environment
55 Main Street
Ipswich, MA 01938
Phone: 508-356-0038; FAX: 508-356-7322;
E-mail: ATLANTICTR@IGC.APC.ORG

Genuine Progress Indicator, by Clifford Cobb, Ted Halstead and Jonathan Rowe, *Redefining Progress*, Sept. 1995. \$10 each from:

Redefining Progress
One Kearny Street 4th Floor
San Francisco, CA 94108
Phone: 415 781-1191; FAX: 415 781-1198

1995 Leadership Development Program teams:

Teams that participated in the 1995 cycle of the Brushy Fork Leadership Development Program returned to Berea on March 29-30 to report on their six month projects. They told of what they had accomplished and what they had learned along the way.

Ritchie County, WV: Growing Ritchie Opportunities Within

In Ritchie County, West Virginia, as in many rural areas across the nation, consolidation has led students to attend school at a central location. For 1100 Ritchie County children in grades 6-12, consolidation meant moving classes into a newly built middle school/high school complex. When the building was completed, funding for the complex was de-

pleted before landscaping could be done, leaving a beautiful modern building surrounded by mud and weeds.

For the past six months, the Ritchie County Brushy Fork team has been working to landscape the school complex. Calling

themselves Growing Ritchie Opportunities Within (GROW), the group had the long-term goals of instilling pride into the community, generating greater development in students and establishing a positive connection between children, families and the educational system.

The initial phase of the GROW project, which they hoped to complete in the spring of 1996, was to landscape the front of the school. Another phase of the project was a memorial circle to honor the life of a student who would have graduated with the class of 1995. A courtyard on the school grounds was the focus of the third phase.

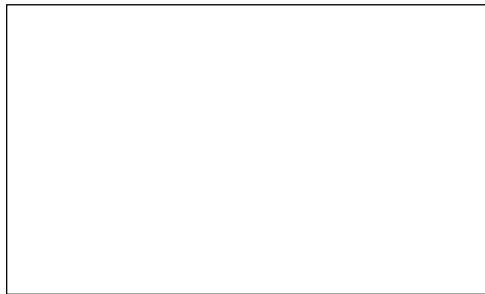
The team attracted community interest in the project by creating a fall harvest-time display in front of the school. Team members worked with the local 4-H club to do a trash pick up after a football game, gaining press attention in addition to raising money. GROW representatives talked to the Chamber of Commerce, the Board of Education and local civic groups.

Keeping the community informed opened the door for a direct mail campaign. With the mail campaign, proceeds from a teen dance and a Seedling Grant from Brushy Fork, the group raised \$4,000.

At the closing workshop, team members noted some of the fundraising lessons they had learned. One lesson was to always be aware of external circumstances and plan fundraising around that. GROW's ambitious fundraising plan had not taken into account the recession in the county. A garment factory had closed and another local business was preparing to close.

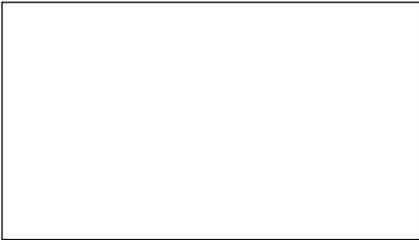
The fact that many people had donated to the high school band, which was raising money for uniforms, affected the direct mail campaign. A group member noted: "As we did our budget we ignored the old adage 'Don't count your chickens before they're hatched.' We had ours counted and we had them producing!"

Although the team's efforts were hindered by the harsh winter of 1996, they returned to Ritchie County enthusiastic and ready to finish the first phase of their project. Their planting will be done this spring and they look forward to seeing their efforts flourish over the summer and in the coming years.



Ritchie County team members Everett Swiger and J. Patrick Hall display landscape plans and before and after photos of the school complex.

successes, challenges and plans for the future



Clay County, KY: Clay Environmental Enhancement and Development

The Clay County team developed a logo which appeared on T-shirts, publications and other project-related materials.

In Kentucky there is a joke about the trash that often hangs in trees on the banks of a river after it floods. It goes, "Next time you see a Pamper hanging up in a tree, salute that thing. It's the new Kentucky state flag." Needless to say, such humor paints an ugly picture of life in eastern Kentucky. The Brushy Fork group from Clay County wanted to change this picture.

The team, Clay Environmental Enhancement and Development (CEED), chose as their community project to clean up along a river bank in the county seat and develop a park with walking trails and bike trails. Not only would this provide a recreational area for Clay Countians, but it would give a better first impression of the county to visitors.

The CEED members came back from Brushy Fork ready to work. The very next day they were on the project site to see what needed to be done. But before the physical work could begin there were the chores of overcoming technical and legal obstacles. The first challenge the team faced was when railroad officials changed their minds about leasing the land. After some persuading the company finally agreed to go with the lease.

Just as the railroad agreed to lease the space the snow came. Finally the weather broke and team members eagerly began planting some 38 trees along an area they had cleaned.

They were interrupted by a man who wanted to know why they were planting trees on his property. The team discovered that he had bought the area along the river two days earlier. So group members

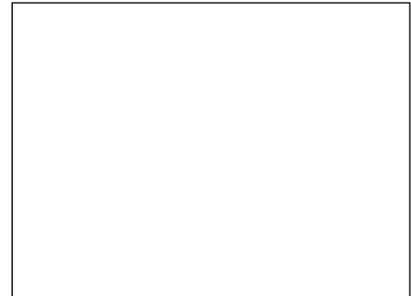
called an emergency meeting that afternoon to decide how to handle the newest hurdle in their path. After some negotiation the new landowner decided to honor the lease.

After the trees and flowers are planted, plans are to turn one of the railroad tracks into a walking trail and the other into a bike trail. Eventually CEED would like to put a dining car and a car for a bed and breakfast on one of the tracks.

Members of the CEED team paid careful attention to how the people in the group were working together. Some members jokingly recall how at most meetings they would share a meal. Some suggested their group name should be FEED.

But the importance of having meals together was clear to one team member, who said, "We found that people get tired, and you may lose them from your group. Each member of this group, at least at one meeting, furnished a meal. . . . We met at five o'clock and we could have supper together. When you break bread with people that has an effect on you. But more importantly, you can still go home after our seven o'clock meeting and go on with your life instead of having to fix a meal. For whatever it's worth, even if it's cold cuts, I highly recommend it."

The CEED team is enthusiastic about the future and they are looking far ahead. The group plans to stay together, meeting on a monthly basis and continually adding members.



The CEED team documented their progress with many photographs. Jerry Emond reported with a pictorial history of the project.

reports continued on page 6

1995 Leadership Program teams report continued from page 5



Morgan County, KY: Help Us Help You

Some HUHYP members and other recyclers pose around the sign that marks the recycling center. The sign was painted by students from Morgan County High School.

Getting rid of the garbage for a county's entire population can be an expensive venture. In Morgan County, Kentucky, there is no currently operating landfill.

Garbage from the county's residents and businesses must be taken outside the county, where a \$26 fee is charged to dump each ton. Garbage pickup is not

mandatory in Morgan County, so some refuse never even makes it to this destination but ends up in backyard dumps or in creeks or by roadsides.

The Morgan County Brushy Fork team, Help Us Help You (HUHY), de-

cidated to educate people about the value of recycling and provide residents with a central location at which they could drop off recyclables.

HUHY wanted to get people who were already interested in recycling involved immediately. The team's initial meetings were spent organizing the first recycling drop-off. The team advertised by including fliers in the previous month's phone bills.

In the Christmas parade, the group entered a float with Santa, a goat, and a Christmas tree decorated with ornaments made from recyclables. The parade took an interesting turn when the goat leaped from the float. Santa jumped down and

chased her but she disappeared into a wooded area. She was found days later, the big red bow still around her neck.

Meanwhile, HUHYP's float won first prize. Later in December the team held an auction. The proceeds will be used to educate students about recycling.

To educate the general public, the HUHYP team held a forum at the local hospital. At the meeting city and county officials expressed an interest in assisting with the project. One HUHYP member recalls: "At first, the county was wanting the city to do this, the city wanted the county to do that, but we are pulling together now. Things are working out."

The county judge-executive donated a county barn located at a transfer station just outside West Liberty. Additional support came from the Eastern Kentucky Correctional Complex, which is providing a baler for cardboard and will transport HUHYP's materials and return the profits to the team.

On March 22, members celebrated the grand opening of the HUHYP Recycling Drop-off Center at the county barn. Their goal is to have the barn open 20 hours a week for people to drop off materials.

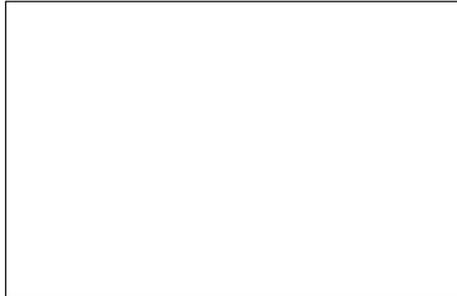
The team has also held a spring cleanup for the county. Residents who participated received educational materials, flower seeds, and a tree seedling. The group will continue education efforts in the elementary and middle schools. HUHYP also wants to beautify Morgan County by planting flowers and trees.



At the grand opening of the recycling center, Morgan County Judge-Executive Sid Stewart presented a certificate of appreciation to the HUHYP team. Linda Rose accepted the certificate on behalf of the group.

Fayette County, WV: Four Rivers Community Partnership

At the closing workshop, Fayette County team members shared a drawing of the signs that they plan to place around the county this spring.



Fayette County, West Virginia, is a paradise for outdoors enthusiasts. The county boasts white water rafting, climbing and bicycling for tourists to enjoy. But the same rugged terrain that lends to the natural beauty of the county serves to physically divide communities and discourage county unity.

The name of the Brushy Fork group from Fayette County, the Four Rivers Community Partnership, is a reflection of the team's long-term goal to foster county wide unity.

The project that the team chose to address this goal was to place welcome signs along the highways at all county entrances. The group felt that erecting the signs was a project they could do for the whole county, not just a concentrated area. Team members also hope the signs will encourage tourists to spend time in the whole county.

The ten signs will read "Welcome to Fayette County, your recreation destination." On the backs of the signs will be the message "Thanks for visiting Fayette County, please come again."

The team designed the signs with stakeholder input, choosing to have a contest in which high school art students could send in ideas. The winning entry would appear on the signs and its designer would win a \$100 savings bond.

As the design was being decided upon, the Four Rivers group was also busy with fundraising. A major industry purchased the materials for the wooden signs. The

team divided into small groups and made personal contacts with people whom they knew. In all, over forty small businesses and individuals donated.

As an incentive to donors, the Four Rivers group offered an appreciation dinner at which they recognized contributors and presented awards. Every fifty dollars that a donor gave held two places at the dinner. Because the donations were collected prior to the dinner, the team didn't depend on attendance to raise the money. The arrangement was fortunate for on the evening of the affair a major snowstorm with bone chilling temperatures hit the area. Only 40 of the 95 donors signed up for the dinner were able to attend.

Getting money and materials for the signs proved to be much easier than getting permission to put them along the highways. That complicated process meant many, many phone calls to the West Virginia State Road Department, meetings with officials, and regulations to follow.

As for the actual production of the signs, the Four Rivers group is working with a local vocational-technical school. An art class at Fayetteville High School will paint the signs and the state road department will install them. The project is scheduled for completion by June or July. After that point the team plans to plant perennial wildflowers around the signs.

McLaughlin receives third annual service award



Mary Ellen McLaughlin, director of the Upward Bound Program at Berea College, is the recipient of the third annual Brushy Fork Service Award. Mary Ellen has been involved with

Norman Parsons presented Mary Ellen McLaughlin with a set of "Brushy" salad forks, carved by local Berea artisan George Oberst.

Brushy Fork from its inception, when she served on the committee that designed the Institute's first programs.

Mary Ellen has been a staff facilitator for county teams in three cycles of the Leadership Development Program, beginning with Jackson County, Kentucky, during the pilot program in 1988.

When Brushy Fork's first director, Carol Lamm, was on

leave for six months in 1991, Mary Ellen served as acting director of the Institute. The staff of Brushy Fork have valued her advice and expertise.

Last year's award recipient, Brushy Fork Associate Norman Parsons of McCreary County, Kentucky, presented Mary Ellen with the award at the closing workshop for the 1995 Leadership Development Program.

Teamwork for Tomorrow III to be offered in 1996-97

Thanks to a \$48,700 grant from the Appalachian Regional Commission through the Office of the Kentucky Governor, Brushy Fork will be able to offer the Teamwork For Tomorrow Program for a third time. The program provides workshops on planning and fundraising for eastern Kentucky community organizations.

Organizations that attend and meet program criteria will be eligible to apply for mini-grants for community projects. During last year's program

over 45 organizations received organizational development training. A total of \$25,000 in mini-grants was distributed among seventeen organizations. (See related article in the winter 1996 issue of *Mountain Promise*.)

The Teamwork for Tomorrow III Program will get underway in the summer of 1996. Look for more information in the next issue of *Mountain Promise*, or call (606) 986-9341 extension 6838.

Counties selected for 1996 leadership cycle

Counties have been selected for the 1996 cycle of the Leadership Development Program and recruiting is underway. Thanks to funding from the Appalachian Regional Commission, one county from each of the states in Brushy Fork's service area will participate in the program.

The ARC funding also supports the Seedling Grants Program for teams in this cycle.

Staff are currently recruiting participants from Bell County, Kentucky; Smith County, Tennessee; Braxton County, West Virginia and Smyth County, Virginia.

The opening workshop for this cycle will take place in Berea, September 26-28. Brushy Fork Associates or other *Mountain Promise* readers who know residents of these counties should encourage them to apply for the program.

A sustainable agriculture alternative **Wild-simulated ginseng**



By David Cooke

Editor's note: David Cooke, a Boone County Brushy Fork Associate, has been working through the West Virginia University Cooperative Extension Service to promote wild-simulated ginseng as a sustainable crop in the Appalachian region. As a native Appalachian plant, wild ginseng thrives in the natural habitat of the mountain forests. Below, David Cooke examines the history and the value of this medicinal plant.

When the first European explorers entered southern Appalachia over two and a half centuries ago they found forested lands of incredible beauty and value. The virgin timber, without parallel anywhere, and the bountiful wild game made the first impressions.

Very quickly, however, their attention was drawn to the enormous diversity of other plant life. Scattered underneath the great trees were thousands of other species of shrubs, bushes, vines and herbs. Hundreds of these plants had found use in the Native American culture, many of them forming the natural pharmacy that was the basis of their medicine.

Among these woodland botanicals was a close cousin to another medicinal herb that had been used in China for thousands of years. This discovery, *Panax quinquefolium* or American ginseng was found to be a very acceptable substitute to the Chinese version, *Panax ginseng* or Asian ginseng.

The Chinese had depleted their native supplies of ginseng but still had a tremendous desire for the herb, whatever the source. The shrewder pioneers quickly saw the potential for profitable trade with the Orient and many of the first fortunes made on this frontier were made in the ginseng exporting business.

The demand was so great and the profit so substantial that the plant became more rare and difficult to find year by year until now, in the last decade of the 20th century, it is virtually extinct in much of its natural range.

A substantial agricultural industry developed as a result of the gap between supply and demand. Hundreds of acres of Wisconsin, Ontario and British Columbia farmland were converted to the culture of ginseng grown under artificial shade and heavily dependent on expensive machinery and chemical controls. Despite expensive control mechanisms, this

system produces a low-quality root with less than 10% of the market value of wild ginseng.

West Virginia University Cooperative Extension Service agents in Southern West Virginia have been involved for the past five years in a field study to develop the best ways of growing "wild-simulated" ginseng.

Working with cooperators in Boone, Lincoln, Logan, and Mercer Counties, ginseng seeds and roots were planted in over 30 sites to study soil pH, fertility levels, geographical location, time of planting, various natural mulches and other factors affecting growth and quality of the final product.

Several original publications and a training video have been developed that reflect these findings. The country's first 4-H project booklet was among these publications.

The growth of wild-simulated ginseng is especially attractive in southern Appalachia for a number of reasons. The process utilizes steep, rocky, marginal land that has little or no economic value, while doing no damage to that land. This system requires little cash capital investment and relies on the sweat equity of the grower.

The system is totally sustainable and encourages participation by entire families. The organic product that results is in great demand by the world's fastest growing economy—the People's Republic of China—where virtually all quality ginseng is sold.

Wild-simulated ginseng growth can also serve as the keystone in a variety of agro-forestry, timber stand improvement and rural rehabilitation plans. And not least is the fact that a valuable mountain tradition is preserved by the growth of the most valuable of woodland botanicals.

An eastern Kentucky program promoting development by the people
MACED's Sustainable Communities Initiative

The traditional approach to economic development in Appalachia often follows the industrial recruitment model. State and local development resources are spent on recruitment activities or on development of industrial infrastructures like industrial parks, access roads, and buildings. Tax incentives are then used to lure companies to communities, which compete for new business.

Seldom is there meaningful discussion about how and whether the new jobs will improve people's lives and whether they will affect the local environment or health and safety of workers. Average citizens who are not involved in the decision-making process are often left with the feeling that development is being done to them not by them.

Several organizations in Appalachia have begun to express concern about how development is being done and whether current approaches to development are sustainable. In Kentucky, the Mountain Association for Community Economic Development (MACED) has proposed a new approach to development aimed at redirecting development investments to people rather than infrastructure.

MACED believes that a community rich in social capacity, human capital and social capital, and will successfully address the challenges of the present and future.

A community's **social capacity** is the main factor in determining how successfully the community will address the challenge of sustainable development. Social capacity is the ability and willingness of people to come together, drawing on their human and social capital, to solve public problems.

Human capital is what individuals offer their community: skills, education, commitment, and ideas. Developing human capital means helping people reach their fullest potential through entrepreneurship or on-the-job training, mentoring, leadership development, and other programs.

Social capital is created through involvement in community and civic groups where people learn to work together to achieve common goals. It is a network of relationships that develop over time.

MACED's Sustainable Communities Initiative will focus on developing social capacity and applying this capacity to sustainable development work in Kentucky's Letcher and Owsley Counties. The process will be chronicled and made available to other communities in the form of a citizens' guide, a workbook for community groups and a video.

To learn more, contact Jeanne Gage at (606) 986-2373; MACED, 433 Chestnut Street, Berea, KY 40403.

In the next *Mountain Promise*:

What does it mean to be Appalachian in modern America?

Mountain Promise, the newsletter of the Brushy Fork Institute, is published quarterly. Our next issue will examine Appalachia in modern America. We encourage readers to submit articles, reports, photos, line art or story suggestions. If you have an article or a story idea, contact:

Mountain Promise, attention Donna Morgan
Brushy Fork Institute
CPO 35, Berea College
Berea, KY 40404

Phone: (606) 986-9341 extension 6838
FAX: (606) 986-5510
e-mail: Donna_Morgan@bera.edu

Sustainability indicators

continued from page 3

Examples of both good and poor indicators of sustainability are shown in figure 2. Hart suggests that a community shouldn't develop indicators based solely on what kind of data is readily available or it may not end up measuring sustainability. On the other hand, a community might decide to use some interim indicators while exploring other sources of data.

As figure 2 demonstrates, good indicators: are at least two-dimensional; measure potential solutions or preventative steps instead of problems; measure

underlying problems that cause other problems; measure quality instead of quantity; measure effectiveness rather than quantity; emphasize development and not growth; and measure diversity.

As communities strive to prosper in a world with limited resources, sustainable indicators will play an increasingly important role in determining successful development strategies. Developers who look to the future with strong sustainable indicators in mind will help insure successful community development over the long-term.

figure 2

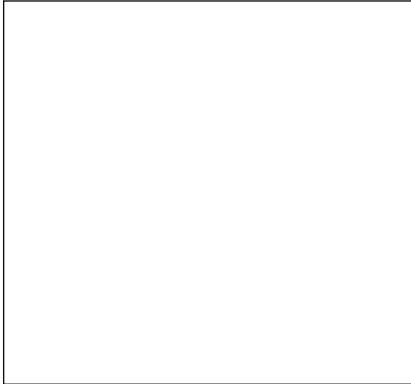
Better Sustainable Community Indicators	
Percent of employer payroll used for education/training	Links economy with education; forward looking
Adult literacy rate	Being able to read is a skill required for employment and for active participation in democracy
CO2 emissions as a percent of 1990 emissions	Long-term trend view
Residents involved in civic activities	Measure of citizen involvement
Percent of population who are physically active	Measures preventative steps taken to improve health, not just a measure of the problem
Percent paying more than 30 percent of income for housing	Two dimensional measure that links the cost of housing with the income of residents
Progress toward goal of 20 percent reduction in use of potable water	Measures a solution to a problem
Percent of streets with adequate pedestrian and bicycle facilities	Measures a solution
Poor Sustainable Community Indicators	
Net job growth	One-dimensional emphasis on growth; no regard for type of growth or type of jobs
Per capita state or local public expenditures for grades K through 12	A monetary measure, not a measure of effectiveness
Bags of highway litter collected per mile	Measures a problem, not a solution
Number of permits for septic tanks	Measure of growth without regard to limits of growth
Number of registered voters	Number gives no indication of whether registered voters are also active participants
Percent of population who smoke	Measure of a problem, not a potential solution
Median value of houses in a community	One-dimensional measure that does not take into account other factors about the community
Amount of hazardous waste generated	Measures a problem, not a solution
Number of people living within 50 miles of daily air passenger service	Not relevant to community sustainability

Adapted from *Guide to Sustainable Community Indicators* by Maureen Hart © QLF/Atlantic Center for the Environment

More than saving trees Sustaining Appalachia's forests

by Eileen McIlvane

Eileen McIlvane is the coordinator for Coalition for Jobs and the Environment, which is working for environmental protection and sustainable livelihoods in southwest Virginia, northeast Tennessee, and neighboring counties in Kentucky and North Carolina.



Words sometimes have limited ability to communicate meaning. Each of us has been misunderstood at some point as our different cultures and life experiences attach different meanings to words.

The term “sustainable” is one of those words which has been assigned different meanings by different groups. As “sustainable” becomes more and more of a buzz word in the development realm—and particularly in forestry—the general public needs to become more aware of its various uses. For example, in the timber industry there is a difference in the interpretation of “sustainable” among conservationists and corporations.

Conservationists and community planners began using the term “sustainable” to describe the preservation of a quality of life for future generations. Meanwhile, the timber industry uses the phrase “sustainable yield forestry” to indicate preservation of quality wood resource production.

In a conservationist’s definition, timber companies are not aiming at **sustainable forests** but at **sustainable timber**. The conservationist maintains that, in the long run, we cannot have sustainable timber without sustainable forests.

So, what is my meaning of sustainable forestry? Simply put, it means interacting with the wild lands of the forest so that a healthy, thriving forest teeming with bio-diversity will exist in the future.

In some cases, where the forest is no longer healthy or has been cut to nonexistence, this means attempting to re-establish forests. In other cases, where humans may want to extract something from the forest, it means doing it in such a way that the

understory, middle story, and upper stories are disturbed as little as possible.

Sustainable forestry means uneven aged management, leaving diverse species of hard and soft woods in the same proportion as they currently exist in virgin or old growth forests. It means leaving a ground cover rich with moss, fungus, microbacteria, salamanders, insects, leaf mulch and twigs. It means not disturbing steep banks or cutting anywhere near streams, whether or not the stream is flowing at the time.

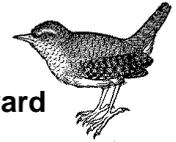
The symbiotic relationship between species in the forest is little understood. How does the forest maintain its richness, its health, its water, air and species?

Everything in a forest is important for its existence. The roots of dead standing trees continue to provide food, hold water and prevent erosion. Fallen trees serve as sites for wildflowers, ferns, fungus and herbs. They provide the perfect seed bed for young trees, and they decompose into rich humus to feed the forest. By creating pits and mounds, they act as reservoirs, storing water in the summer, holding soil in place on slopes, and guiding water into channels beneath the surface.

Even small mammals such as mice, moles, chipmunks and squirrels play a vital role in the forest. The process is quite complex and interdependent. The fungus growing on tree roots provides food for the small animals. In turn, the mammals’ digestive and intestinal tract adds nutrients to the fungus. The animals’ droppings contain the ingredients necessary to both inoculate roots for the formation of more fungus and to provide critical nutrients which are absorbed thoroughly by the trees themselves.

Sustainable forestry. . . means interacting with the wild lands of the forest so that a healthy, thriving forest teeming with bio-diversity will exist in the future.





American and European forestry institutions are still training “foresters” to manage forests for production of timber. They teach a rotational theory of timbering which assumes trees will continue to grow at the same rate, despite the fact that the soil fertility is grossly depleted and the air quality is degraded. The rotational theory also ignores the fact that disease and insect damage are more prevalent because of current timbering methods such as using equipment that damages soil and water and promoting mono culture seeding.

By using sustainable timber methods rather than thinking of sustainable forestry, companies create a place which cannot support the mammals, insects, and fauna that play a role in the health of the forest.

We are all responsible for the future health of our forests. Our forests provide us with our sustenance. They are the primal source of all our water, air, soil and food.

So what can you do? Get involved. The US Forest Service is gearing up to rewrite forestry management plans. You can help in planning for how our forests will be used for the next ten to fifteen years.

The Coalition for Jobs and the Environment (CJE) is working with the Southern Appalachian Forest Coalition to educate the public about participation in the the US Forest Service Management Plans. They are planning a fall training event on how people can protect private forests.

CJE also issues a bi-monthly newsletter that contains important regional information on sustainable environmental efforts. For more information on the forestry workshops or to become a member or supporter of CJE, contact us at PO Box 645, Abingdon, VA 24210; or call (540) 628-8996.



In your own backyard

The entire Central Appalachian region used to be forested, but most of our backyards don't look much like a forest. What can we do to promote healthy, sustainable forests? Plant native trees and shrubs and let native wildflowers return. Leave hedgerows where little creatures can be protected. Stop using herbicides, don't rake the leaves and don't pick up wood litter. Look forward to the day when you can lie in a hammock listening to frogs, owls and woodpeckers, while the noisy, gas guzzling lawnmower rusts. While you're waiting for that day, pack up the family and a lunch and take a day-long hike in our beautiful forests.

Appalachian Sustainable Forest Center

providing forestry information to the region

Sharing information on threatened public and private forestlands is at the heart of the mission of the Appalachian Sustainable Forest Center. The Center is a project of Appalachia-Science in the Public Interest (ASPI), which is located in Livingston, Kentucky.

The Forest Center takes in 32 acres of the Daniel Boone National Forest and contains over 80 varieties of hardwood and softwood trees. Among the resources at the Center are a nature trail, primitive camping and examples of low-cost buildings, demonstrations and products made from recycled wood. In addition to outdoor resources, the Center offers a 7,000 volume appropriate technology library.

The organization serves as a clearinghouse for Eastern Old Growth Forest information. Using the APPALFOR electronic network at the University of

Kentucky, the Center disseminates sound forest management practices to those requesting information.

In addition to forestry information, Appalachia-Science in the Public Interest offers technical papers, workshops and other materials for Appalachians who desire a more wholesome environment. The group also assists those who want to transform their properties into self-sustaining centers.

For more information on the Forest Program, contact Appalachia-Science in the Public Interest, PO Box 298, Livingston, KY 40445; (606) 453-2105; e-mail: kyfor@ukcc.uky.edu.

For information on ASPI publications or resource assessment services, contact them at 50 Lair Street, Mount Vernon, KY 40456; (606) 256-0077.

Where We Live: A citizen's guide to conducting a community environmental inventory

By Donald F. Harker and
Elizabeth Ungar Natter

Reviewed by Melissa Tuckey

Practicing sustainable development includes making decisions based on the environmental impact of development strategies. Is the development in your community environmentally sustainable? Here's a resource to help you answer this and other environmental questions.

What kind of waste is being dumped at your local landfill? What kind of chemicals are being used by local industries? Are these chemicals being dumped in the air, land, and water? What are the health effects of those chemicals?

Are local industries being carefully monitored by state agencies, or are they monitoring themselves? Are local public lands being properly managed and protected? Is local drinking water safe? Are local streams safe to swim and fish in? Is wildlife protected?

When it comes to environmental protection, what we don't know can hurt us. *Where We Live: A Citizen's Guide to Conducting a Community Environment Inventory* by Donald F. Harker and Elizabeth Ungar Natter is a step by step guide on how to conduct environmental surveys in your community.

Environmental protection depends on all of us. As community members we have a right to know what chemicals are being dumped into our air, land, and water. We have a right to know how our public resources, lands, waters, air, and wildlife are being protected.

We have a right to demand that our industrial neighbors follow environmental regulations and strive to reduce the amount of waste they are dumping. We have a right to decide what kind of industry and jobs our community can sustain.

The public has access to most of this information. But first, you need to know what to look for. Once you know, getting the information can be intimidating and frustrating if you don't know where to look. And once you get the information, you need to know how to use it, and what it all means.

Where We Live contains helpful fact sheets, sample questionnaires and letters, and a step-by-step guide to environmental fact-finding in your community. Whether you are interested in mapping out all of the environmental hazards and natural resources in your community, or trying to find information on a specific landfill or industry, this book will show you how to do it.

A state-by-state directory in the back of the book lists government agencies and environmental organizations to contact for more information or support.

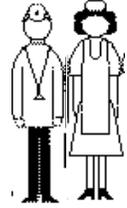
I would recommend this book to anyone who cares about environmental protection in his or her community. Too often government agencies look the other way when environmental laws are broken or ignored by polluters. It is critical that we as community members have the necessary information to ensure that we can participate in local decision-making about environmental protection.

This book will save hours of headaches for local citizens who are trying to get information about environmental hazards in their communities.

Where We Live is available from Island Press, 1718 Connecticut Avenue, NW, Suite 300, Washington, DC 20009; (202) 232-7933. The cost is \$18.95.

Melissa Tuckey is the Development Director and an organizer for the Kentucky Environmental Foundation in Berea.

WV creates opportunities for rural communities Sustaining health care



by Susan Mann

Editor's note: A crucial but sometimes ignored element of rural development is health care. Without adequate health care communities cannot provide for the needs of their population. Many times health care is not connected to economic development and rural communities miss out on an opportunity to promote a sustainable, home-based industry. Below, Susan Mann, a health care activist from Madison, WV, explains some of that state's strategies for meeting sustainable health care challenges.

Several years ago, I had a conversation with a physician at a mental health site where I was employed. We had just taken a group of patients fishing and we were enjoying the view from the mountain. I was pleased to hear her state, "It just feels so right here, Susan, like I belong."

She had carefully selected our mental health site over several others, but within two years we had lost her. Having re-located to West Virginia from the northern mid-west, this gifted provider had a service obligation to fulfill as a result of student loan benefits. When the required period was up, she left West Virginia for an urban area.

Just a year ago, my primary care provider also left West Virginia for an urban area. She had practiced in "The Gateway to the Coal Fields" community for over 13 years. She had even waited out the last coal strike which had lasted 6 months. But her patient load was steadily declining. Her patients had been satisfied with her practice. The problem was that the coal companies' hiring and firing practices left families continually facing new, sizable insurance deductibles which they could not meet. Therefore, they received no health care.

When the doctor's children needed college funds and she was offered an opportunity to assume a well-established practice, she made the difficult decision to leave West Virginia.

These two scenarios are modern illustrations of Appalachia's long history of health care being provided by traveling, non-community-based physicians. In *Miners and Medicine*, Claude A. Frazier, M.D., and Frank Brown note how coal companies deemed individual camps too small to hire full-time physicians. Outside providers traveled among the various camps seeing 150-200 families or about a thousand patients a month.

This pattern of unsustainable, non-community-based health care has carried into the present day. Outside providers come and go in the mountains for many reasons from better wages to urban conveniences to cultural differences. So what can rural Appalachian communities do to change the historical and current trends of health care in the region?

In West Virginia, some exciting strategies are being successfully implemented. In part, this is a result of health care officials developing models which heavily rely upon local-level expertise.

As one project, a regionally-based network of Rural Health Education and Training sites has been formed, with funding from the Kellogg Foundation. Through the Networks, professionals participate in an interdisciplinary training model. The goal is to prepare them as comprehensive providers in underserved areas of the state. Field rotations as well as other cultural exploration opportunities occur on a regular basis. The program focuses on physicians, dentists, pharmacists, and nurses.

A grant has also been received by the WVU Office of Rural Health for the training of medical technology, physical therapy, and social work students, as well as field professors.

AmeriCorps workers are implementing Project H.E.A.L.T.H. (Health Education Associates Learning to Teach Health), which is sponsored by the WVU Robert C. Byrd Sciences Center. Program participants receive training in CPR, conflict resolution, problem solving, leadership, communication, and ability to organize community and health promotion groups.

In addition, six Health Science Technology Academy Regions have been organized. These public school-based activities provide ongoing information and support toward the goal of increasing awareness,

continued on back page

Sustaining health care

continued from page 15

and ultimately training level participation, in the health professions. Physicians who grow up in a rural area find more reason to stay in that area.

In 1991, MDC, Inc., a North Carolina community development group, noted that business and workforce development, and physical and social

infrastructure are equally critical in rural development. As we work to develop our communities, we cannot afford to ignore sustainable, community-based health care as an important facet of social and physical infrastructure.

from the calendar

A Sustainable Future: Kentucky and the World

June 15, 1996

Sponsored by the National Wildlife Federation and Zero Population Growth, this conference will focus on national and international population and development policies, and visions, plans and projects for creating sustainable communities. Workshop topics include environmental justice, grassroots advocacy, organizing youth and electronic organizing. For more information, contact Leanne Kitrell at (606) 225-8357.

Appalachian Writers Workshop

July 28-August 2, 1996

Hindman Settlement School is once again offering the Appalachian Writers Workshop, which is in its nineteenth year. The workshop focuses on writers and writings from the Appalachian region. Staff members include James Still, Jim Wayne Miller, Anne Shelby, and Lee Smith, among others. Sessions will be offered on short story, novel, poetry, non-fiction, children's writings, Appalachian literature and screenwriting. The cost of the workshop is \$350. For more information, contact the Settlement School at (606) 785-5475.

West Virginia State Conference

August 1-3, 1996

The 1996 West Virginia State Conference, "Putting the Pieces Together," will be held at the Days Inn in Flatwoods. Focusing on community service, volunteerism and service-learning, the conference will include workshops on needs assessment, risk management, strategic planning, evaluation, and building collaboration. Preconference sessions will cover fundraising, visioning and supervising volunteers. For more information, contact the WV Commission for National and Community Service at (304) 340-3627 or (800) WV-HELPS.

**Brushy Fork Institute
Berea College CPO 35
Berea, KY 40404
606 986-9341 ext. 6838**

**NonprofitOrg.
ThirdClass
U.S. Postage
PAID
Berea, KY 40403
Permit #19**



Printed on recycled paper