Cooperative Extension Service personnel from 13 Southern states attended a conference on rural revitalization, focusing on Extension's role in (1) economic development, (2) human capital, and (3) infrastructure; 17 of the 22 papers presented are divided among those categories. Three of the remaining papers provide respectively, an overview of the South's political and economic history, educational history and trends, and need for new leadership; suggestions for needed changes in the structure and role of the Cooperative Extension System; and an outline of public policy perspectives on rural revitalization. Two other papers briefly discuss Extension's role in enhancing the quality of life and the foundations and challenges of rural America. Presentations in the economic development section discuss Extension education's role in rural economic development and entrepreneurship, major trends shaping the business environment in the 1990s, recent federal legislation related to rural development, paradigms for building community leadership programs, value-added activities, three case studies of rural industrial development, and three case studies of home-based or small business development. Papers in the human capital section discuss education as empowerment; job and labor force trends in the 1990s; a resource development approach to community health issues; a community program to develop decision-making skills in adolescents; and combatting the problems of adult illiteracy and high school dropouts through a partnership of family, school, and community. Papers in the infrastructure section discuss the relationship between infrastructure and economic development, the need for strategic capital improvement planning, local infrastructure needs in the rural South, strategies for improving housing at the community level, wastewater management, and Extension's role in strengthening Georgia's community health infrastructure. (SV)
Revitalizing the RURAL SOUTH

Extension's Role in Enhancing the Quality of Life

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EXTENSION'S ROLE IN ENHANCING THE QUALITY OF LIFE

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It is refreshing to once again realize that the challenges facing people in rural America—and particularly the rural South—are surfacing at the federal, state, and local levels. Those of you in the delightful early years of your career, however, should not be misled into thinking that this is the first time that concerns and major program emphasis for rural areas have surfaced.

A quarter of a century ago, when I was in the early years of my career and a county agent in Ohio, I can remember emphasis being placed on community development and the hiring of area community development specialists to help us develop programs at the county level geared toward economic development in rural areas.

In 1986, ES/USDA and the Extension Committee on Organization and Policy (ECOP) appointed a task force to look at the question of "revitalizing rural America." A report published in November of 1986 looked into the challenges of rural America and delineated some of Extension's responses to the changing scene in rural America.

The report points out, and I quote: "Rural America is home to 63 million Americans and steward of nearly 90 percent of the country's natural resources. It includes the families living in the nation's 14,000 small towns and cities; the commercial farmer who has stabilized the family income with non-farm income sources; the people whose homes are clustered about highway intersections or strung along a county road; the individuals living in villages where fishing, mining or timber are the major source of support; the part-time farmers who derive the major share of their income from off-farm work; and the people who have chosen the lifestyle advantages of living in the country."

The report went further to identify a number of challenges including:

1. Maintaining and enhancing the competitiveness of farms and rural business.
2. Diversifying the rural economic base.
3. Finding alternative uses for rural resources.
4. Easing the transition for farm families and youth.
5. Providing technical and educational assistance to local units of government.
6. Helping communities identify and implement policy options designed to increase jobs and income.
7. Assisting with the conservation and management of natural resources.

The timing of this document coincided with the beginning of the development of our national initiatives. By early 1989, nine national initiatives had been identified as a result of a massive effort on the part of Extension staff around this nation. Many of you participated directly and indirectly in the development of these national initiatives. Revitalizing rural America became one of the nine national initiatives.
In June 1989, a task force appointed by Secretary Yeutter looked carefully at USDA's rural development programs. The recommendations of this task force fall into four major themes:

1. Clarifying USDA's commitment to rural development as a priority mission.
2. Strengthening coordination among USDA's rural programs.
3. Enhancing USDA's capacity for strategic action on rural issues.
4. Improving USDA's ability to implement its rural programs.

More specifically, they recommended a stronger land-grant university role in rural economic development. Specifically, they suggested that the Secretary should encourage the land-grant universities to increase their research and Extension commitment to rural economic development issues including rural community leadership.

About one year ago, the Southern Region Rural Development program specialists developed a proposal and submitted it to the Southern Extension Directors. This proposal, in essence, suggested a program-wide regional conference to address the topic "Revitalizing the Rural South." As a result, a planning committee representing the 13 states including both 1862 and 1890 institutions developed the program which we are now beginning. As a result of some very thorough but efficient discussion, they recommended that three major topics be covered for this conference: economic development, human capital, and infrastructure. This planning committee should be complimented on their many efforts to compile a quality inservice training program and to identify some outstanding speakers for their various sessions.

Each major topic includes a general session to set the stage and then includes workshops and case studies for your learning experiences. The planning committee designed the program to attract Extension personnel from all four program areas: agriculture and natural resources, community development, home economics, and 4-H. They also wanted to encourage participation by staff from all facets of Extension work including administrators, program directors, and specialists, as well as district and county staff.

A special feature includes exhibits and poster sessions which can allow you to broaden your knowledge of what is going on by colleagues in other states within the Southern region.

I hope each of you has an outstanding educational experience, and that you will obtain many good ideas--some of which you will be able to take home and use in your efforts toward revitalizing the rural South. My time is up; thank you for yours.
Because the Civil War ended as it did, most of America did not have to reconstruct. Because they did not have a morbid sense of the past, they could dwell on the future. The South, however, had a past and was acquainted with failure. From the dark recesses of our minds, failure has emerged to shape behavior and outlook. Revitalization gives the South another chance to put aside the past and think about the future. Paradoxically, we cannot think about a revitalized future without relating it to the past.

Our present is tied up with the past, and part of that past is agriculture. Cotton was king. It was not grown everywhere, but its economic and social impact permeated the region, brought wealth and substance, shaped values, dictated style, and left a trail of poverty in the antebellum South. As Billy Sherrell mourned in *The South Is Gonna Rise Again*,

> Mama never had a flower garden; Cotton grew up to our front door.

Cotton in the South dates to 1786, when it was first grown commercially on the sea islands of Georgia. A few years later Eli Whitney's cotton gin led to the commercialization of cotton and left the region largely dependent on one crop, which enriched a few and kept millions in poverty and ignorance. One hundred years later, cotton would play a major role in dragging the South into a wrenching Civil War from which we would suffer for decades.

In 1886, Heary W. Grady, editor of the *Atlanta Constitution*, delivered his famous speech on "The New South." The occasion was a banquet of the New England Society, New York City. In this emotional speech, Grady described the Civil War's end and the Rebel soldier's long walk home. He wrote, "He turned his face southward from Appomattox in April, 1865. Think of him as ragged, half-starved, heavy-hearted, enfeebled by want and wounds, having fought to exhaustion, he surrenders his gun, wrings the hands of the comrades in silence, and lifting his tear-stained and paled face for the last time to the graves that dot Old Virginia hills, pulls his gray cap over his brow and begins the slow and painful journey.

"What does he find when he reaches the home he left so prosperous and beautiful? He finds his home in ruins, his farm devastated, his slaves free, his stock killed, his barns empty, his trade destroyed, his money worthless, his social system feudal in its magnificence swept away, his people without law or legal status, his comrades slain, and the burdens of others heavy on his shoulders. Crushed by defeat, his very traditions are gone. Without money, credit, employment, material or training; and besides all this, confronted with the gravest problem that ever met human intelligence—the establishment of a status for the vast body of his liberated slaves."/p

Grady reflected on the "New South" and said sanguinely, "The old South rested everything on slavery and agriculture, unconscious that these could neither give nor maintain healthy growth.
The "New South" presents a perfect democracy, the oligarchs leading in the popular movement; a social system compact and closely knit, less splendid on the surface, but stronger at the core; a hundred farms for every plantation, fifty homes for every palace; and a diversified industry that meets the complex age.2

Grady's new South was not to emerge in the pristine manner he so eloquently described in his 1886 speech. Sectionalism would arise, and the South would suffer through years of parochialism, fatalism, authoritarianism, ethnocentrism, and categorical resistance to innovation.3

Once again we need to plan for a "New South." But, rural revitalization must enable the rural South to confront the future. As a means of getting each of us into this subject, I address four critical areas: rural life styles, colonial economy, human capital, and leadership. These are not new ideas, nor do they exhaust the sources of our problems. They can, however, contribute to the understanding of our subject.

RURAL LIFE STYLES

Rural life styles have been shaped by four forces: agriculture, family, race, and religion. Time will permit only a discussion of agriculture and family. You will have to fill in the gaps relative to race and religion.

William Faulkner had the genius to weave Southern life styles into biblical parables. In Absalom, Absalom, Faulkner skillfully develops a plot of avarice, greed, and racial pride around the cultural practices of the old South. His story focuses on a landed gentry dependent on cotton and slaves. Faulkner's message is pointed: God presented the Southerner with a kingdom rich and beautiful, but greed for power and wealth led to a callous exploitation of the land and the denigration of its human and natural resources.4

In too many instances, Faulkner's parable has been lived out in the South. Agriculture was central to the rural life style. It produced a stratified society with large land owners, smaller farms and sharecroppers. Overall the South remained weighted down by a backward economic system based on regional commodities such as cotton and tobacco. These were for the most part exported out of the region for processing.

In the reconstruction years, Southern agriculture was controlled by large sharecropper land owners and merchants whose policies of crop-liens and high interest rates contributed directly to the population of a white and black underclass. By 1941 sharecroppers in the South numbered nine million. Their debts bound them to the crops and the land.5 Poverty and disease prevailed through a diet of fat back, corn bread, sorghum molasses, and "taters" in season. A can of sardines or salmon was a delicacy in a sharecropper's cabin.

The hopelessness poverty cast over sharecroppers' lives created a skeptical reverence. Their primitive religious convictions tied them to a cautious belief in God. Yet they sometimes wondered whether they were not now in Hell. Heaven was to them a distant vision. Out of his intuitive wisdom, one poor Southerner said, "Who can ever think he's got God's design figured out but a fool?" A similar view was echoed by a tenant farmer's wife: "You know, don't you, that God has his own purpose. It's a design, like you hear in church, and it's not for us to figure out. But there's one thing I know after all this living, and that's how foolish you are if you start the day, or the year even, waiting for the good Lord to come into the State of Alabama and straighten everything out and make us all to be good to each other. True, later on we are going to be judged, yes sir, we are, but that's not going to take place in Alabama."6

Because the South was not only an agricultural region, but a poor agricultural region, it reflected poverty in its life style with all that implied for a standard of living, quality of education, public health, and general wellness. The South's low self-esteem and weak institutions did not always encourage individual desire for self-advancement. The "significant others" were often either nonexistent or not sufficiently visible in the South's institutions to encourage translation of dreams into human achievement.

Today the picture is different. Sharecropping is largely behind us. We have seen the growth of midsize family farms with relative prosperity. Agriculture is a major economic force in the economy in every state in the region. But we still export more of our resources than we process, and rural areas are still falling behind.

Paradoxically, this modest rise in economic
gain has brought a different poverty to the South's lifestyle. Mechanized agriculture has left many with only seasonal work or no work and has heightened the drift into poverty. "By 1986, one out of every four children in rural America was living in poverty, unemployment in rural areas was 26 percent higher than in urban areas, and the escalating population movement out of small towns and the surrounding hinterlands...was being led by the young and better educated."7

What will agriculture's role be in rural revitalization? We cannot depend on production agriculture as the sole economic base for a revitalized rural South, but the rural South cannot revive without agriculture. As a primary resource it will play a vital role in rural recovery. The Department of Commerce reports there are 1,061 nonmetro counties in the Southeast. Of that number, 235 are listed as farm dependent. However, those data reflect net farm income and do not capture the full impact of agriculture on rural economies.

However, full rural recovery waits on a diversified economy. To achieve a diversified economy, resources must be available, education must improve, relevant job skills must be developed, and leadership must come to the fore with informed objectives.

Other voices are complicating the picture for agriculture. Advocacy groups outside agriculture are organized, well financed, and will have a strong voice in how agriculture functions in the decade to come. Our role in rural revitalization will require us to work with agriculture in addressing the changes demanded by environmentalists and consumers.

Today society demands a standard of measure beyond efficiency. Society demands social responsibility. To be socially responsible, agriculture must be answerable through obligations that are governed by thoughtful, societal value concepts. Value questions are difficult for agriculture. It has been taught to rely on scientific fact. Facts are arduously discovered; they are objective and uninfluenced by opinion or preference. Conversely, values are seen as elusive, variable, and unverifiable. Because of this uncertainty, agriculture tends to look to science to solve problems and in the process often side-steps value questions. Yet, two value questions cannot be side-stepped. They concern people and nature or consumers and environment. The questions we have to answer are: what is the relationship between those involved in agriculture and other people, and what is the relationship between those involved in agriculture and nature? Social responsibility will force the farmer to think about the quality of the product he sells. He must ask, at what levels will pesticides produce various effects? Moreover, the same care must be taken with the soil. Agriculture is essential to the survival of the human race, and the soil is essential to the survival of agriculture. The land is a sacred trust, and agriculture is its keeper and primarily responsible for its fate. It must express that degree of stewardship.

Traditionally agriculture and the family have been revered in the South. Together they have helped to shape the Southern style. Every study I have examined, in recent years, on quality of life in rural areas, shows the rural family as the only positive indicator. Other indicators, such as income and education, fall below urban standards. As fundamental primary social systems, the family and the farm have been among the major circles in which individual personalities were formed and values shaped. David Goldfield wrote perceptively about the Southern family: "Listen to the country songs of domesticity, family pride, and 'mama'...the strength of family ties meant the weakness of the community or collective ethic; kinship patterns determined social standing, and tradition counted more than novelty. Honor, vengeance, and pride...were, above all, family values, and they governed behavior outside the home as well as within it."8

But who in the South has not noticed that family life has changed radically over the past three decades? What we took for granted in the 40s, 50s, and early 60s is under assault. The misery of divorce, drugs, alcoholism, and teenage pregnancies have all come to rest in varying degrees on rural family doorsteps. The traditional American family, one adult man and one adult woman bonding for life and rearing children from birth to emacipation, is not what it was 25 years ago. How many traditional families can you number among your acquaintances? For better, and most assuredly for the worst, the American family and the Southern family have changed.

Today more than half of all mothers work outside the home. Millions of children are
growing up in one-parent homes as the more traditional two-parent households diminish. The rise of illegitimacy in the South has been staggering. Most of these children live in one-parent homes, and many are homeless. Usually the resident parent is the mother. Too often she is cohabiting with several resident males sequentially during the child's formative years. The results are more likely than not to produce confused children. In that situation the developing child is faced with the unenviable task of relating to a series of maladjusted adults while struggling toward maturity. Why are we surprised that they are confused, abused, and troubled?

Social agencies have taken on the role of a wrecker service for the modern family. Daily they are dispatched onto the social highways to bring in battered children or mothers, unwanted children, homeless children, and addicted children. The resulting human junkpile may soon grow beyond society's capacity to cope.

Rural revitalization will need to address two problems facing the family: its dysfunction of the family is not unrelated to the social changes that have gripped the modern family. As a society, we have lost faith in the institutions that have historically bolstered the family. Pronouncements of state, school, and church are no longer believed by many. The cult of me-ism has engulfed the modern man, and joining cults of absurdity has become a popular fad.

The two-career family is not a passing fad. It is here to stay. However, it has not come to us without pain. Its demands are at times wrenching. We have not come to terms with the interpersonal relations resulting from this advent. Women still carry a disproportionate burden in two-career families. Equalitarianism has not yet settled into the male psyche. In the midst of this change and adjustment two family problems cry out for solutions: youth at risk and daycare. Teenage pregnancies, alcoholism, and drugs are threatening the future of society. We are dangerously close to losing a generation of kids to unconsciousness. Their minds are so scrambled by drugs they will remain wards of the state. Youth at risk is a compelling concern, and we cannot pass it off as a ghetto problem for the federal government to worry about. Just how we attack this problem is open to discussion. I am certain in my own mind that a few well written pamphlets will not do.

The drug culture is peer driven with its own values and rewards. Those values and rewards are radically different from our own.

The two-career family has made daycare an issue. Daycare centers are on the national agenda. The only question to be decided is who will pay for them. Advocates of rural revitalization must be involved. Decisions need to be made based on what is best for the preservation of the family and the welfare of children. For each of us, the prevailing question is not how to supplant the family but how to support it. Someone has said, the family is the worst possible social system, except for all alternatives.

COLONIAL ECONOMY

If the South has been dominated by agriculture, it has also been burdened by a regional economy. From the mid-19th century, the national economy has been centered in the Northeast. The South was staked out as a regional supply base for Eastern industries. The South was the producer of basic raw materials and occasionally a minor processor. This left the South economically subservient to the Eastern region for manufactured products, financial services, credit, and accounting. David Goldfield writes, "The regional role of the Southern cities was as collection points and funnels to northern centers and as distribution points for the return flow. This system limited capital accumulation in the region, which limited investment, which reduced the opportunities for the region to develop beyond its colonial economy...The Civil War and the Great Depression were two devastating events that revealed the region as an economic minority and as an American mutation: a region that lost in a nation that knew only victory, a region that was poor in a country of wealth. The South and the Southerner have been different from the rest of the nation, and the colonial economy was the most outward manifestation of that minority status." The South has continued to suffer the fate of minority status and has been viewed often as a region apart.

Leaders in the South knew the region was being exploited, but stating the problem was easier than posing a solution. In 1850, at a meeting of merchants and planters in New Orleans, Albert
Pipe, a transplanted Bostonian, excited his audience with an emotional analysis of the South’s economic problems. "From the rattle with which the nurse tickles the ear of the child born in the South to the shroud which covers the cold form of the dead, everything comes to us from the North. We rise from between sheets made in northern looms, and pillows of northern feathers, to wash in basins made in the north, dry our beards on northern towels; and dress ourselves in garments made in northern looms; we eat from northern plates and dishes; our rooms are swept with northern brooms; our gardens are dug with northern axes, halved with hickory brought from Connecticut or New York; and when we die our bodies are wrapped in shrouds manufactured in New England, put in coffins made in the north. We have our graves filled with Southern soil but it is pulled in by northern spades and shovels." Southern thought the solution to the problem was to develop cities and a system of transportation as the north had done. In this way they felt they could become full members in the national economy. For an extended time their illusion was great, and their reward was disappointment.

The rise of cities and metropolitan centers helped to reverse the colonial economy for much of the South. Industrialization came to many Southern cities. Unfortunately the gains that came to cities rebounded to the disadvantage of many rural communities. Colonialism was pushed one step down. Rural areas were the resource base for urban industries. Those who owned the resources profited; those who labored often enjoyed extended poverty. Moreover, the wealth created by an expanded industrialized South was not shared equitably with rural folks.

Now the South must face an era of international marketing. Nearly every business in America will be competing in some way in the global marketplace. To survive, representatives of business and industry must be fluent in the languages and cultures of countries involved. How well are we prepared to meet this competition? The Ford Foundation predicted that more than half of all new jobs in the next century will be concentrated in 30 metropolitan areas, which are prepared educationally to meet the challenge. Most of these will be outside the South. The challenge at present may be beyond the capacity of most rural business interests to respond. However, it is not beyond their potential to respond. We cannot afford to abandon international marketing to urban centers.

HUMAN CAPITAL

An agricultural South did not put pressure on its educational system to produce educated students. Its technology did not require educated workers. Consequently, the region has been plagued by poverty, an anti-booklearning attitude, and a general disregard for education. For the rural South, education has been more ceremonial than substantive.

Lionel J. Beaulieu, sociologist with the University of Florida, asks how rural communities measure up to the new growth indicators of economic capacity being formulated for high growth industries of the future. His answer is that data show rural Southern communities are highly deficient. He writes, "The fundamental problem that is likely to impede realization of measured improvements in the economic climate of rural Southern communities is the state of the region’s human capital resources." A casual glance at the data tells us that in terms of human capital we are doing miserably. Consequently, rural areas are not only poor, but poorly prepared to meet the demands of the job market today, and certainly not prepared for the demands of the coming decades. The experts say the dividing line in the 90s will not be between the rich and the poor but between those who have learned how to learn and those who have not.

Beaulieu tells us that seven of the 10 states with the highest percentage of high school dropouts are in the Southern region. This fact not only portends economic hardship for the individuals involved, but the experience tends to be perpetuated through their own families. Moreover, Beaulieu points out that high school drop-outs and illiteracy are companion problems. One in four Southerners is illiterate. The effect in the workplace is reflected in low economic returns, low productivity, and high absenteeism. As Beaulieu correctly observes, the solution is a
partnership between family, school, and community.

If these problems are to be solved, rural revitalization must assist rural leaders with three critical educational needs: teacher shortages, restricted curriculum, and limited facilities.

Several factors are involved with the teacher shortage in rural areas. Salaries are often lower than those in urban centers. Rural life styles do not attract the young as readily as do those in urban areas. Consequently, as older teachers retire, it is difficult to find young competent replacements. Moreover, teachers of academic specialty subjects often cannot be hired in rural schools. Trigonometry, calculus, chemistry, physics, foreign language, and computer science teachers are in short supply throughout the nation.

There is also a teacher shortage for many elective courses such as band, orchestra, fine arts appreciation, art, drafting, drama, public speaking, debate, and advanced placement courses, which in some cases are taught on the level of freshman college courses.

Teacher shortages restrict school curriculum. Another factor that limits the curriculum often affects small rural schools. Small numbers of students taking advanced electives make it impossible from a financial standpoint to offer a wide curriculum even if teachers can be hired. In a rural high school with a small student body, it is entirely possible that only five or six students would elect to take physics, calculus, or foreign languages beyond the beginning level. This would limit a given number of teachers for an entire year to a smaller teaching load and strain budgets. Besides, cultural expectations in some rural communities do not value the academic quality needed to allow young people to succeed in our technological world.

As a result of limited tax revenue, restricted expectations and visions, past practices in limited curricula, and scarcity of specialty teachers, rural facilities often are inadequate. Today, all courses, basic and elective, require upgraded facilities. Computers are used from kindergarten through high school as instructional tools in classrooms. Audiovisual equipment is expensive and is often last on the rural school system's spending list. Yet, equipment of this nature is the state of the art in efficient educational systems.

The impact of rural revitalization will be tied not merely to natural resources, as important as they are, but to human capital. Education is the basic prerequisite to the good life. Educated people are less likely to be poor. David Goldfield has coined the phrase the "Brain Belt." This will be the only worthy successor to the "Sun Belt." Education and economic growth will reinforce each other. As former Tennessee Governor Lamar Alexander has said, "If 90 percent of the people have a high school education in Minneapolis and 67 percent in Tennessee, we are not going to be able to keep up, much less catch up." Evidence mounts that education is a word in vogue in the South Every state is talking about educational reform. We must wait, however, to see if the South recognizes the real connection between educational excellence and economic progress.

LEADERSHIP

In James MacGregor Burn's brilliant book on leadership, he writes, "Leadership rarely rises to the full need for it." Rural America has relied on local leaders whose vision was limited to their rural experience. They were schooled in political favors rather than public needs. William Faulkner wrote, "Chicamauga and Franklin, Vicksburg and Corinth and Atlanta--battles lost not alone because of superior numbers and falling ammunition and stores, but because of generals who should not have been generals, who were generals not through training in contemporary methods or aptitude for learning them, but by the absolute caste system." Conferring leadership on the incompetent has been a Southern proclivity. Leadership has been transactional, not transforming.

Transactional leadership is a form of the exchange theory. Transactional leaders exchange gratifications in the marketplace. They are barterers taking advantage of every opportunity to maximize their political and psychic profits. Transactional leadership has been a prime contributor to a malnourished South. The late political analyst V. O. Key described the results of transactional leadership in the South as social disorganization, popular apathy, political
ignorance, and electoral disarray. He documented a state by state pattern of one party domination; political fragmentation; issueless conflicts; statewide county demagogucy; Dixie-style personalism; and first, last, and always, the exclusion from power of the poor.17 Transactional leadership has produced many a spellbinder who said nothing while saying it well. It is the king of leadership that has brought the rural South to this ignominious hour.

“Cliff Davis the Little,” senator from Arkansas, unhappy with his reception in Washington, took on the press in the interest of the folks back home. Listen to this Southern demagogue pander to the past and ignorant in exchange for votes in a speech in 1930 in the U.S. Senate: “Mr. President, insignificant as I am, let them sharpen their blade, for I will be here at the appointed hour and while here on, y Gid can stay my voice in behalf of organized unionized labor and the yeomanry of America...Let scavengers of plutocracy howl! Go! damnable imps of pelf and greed, I defy your torments! Teatl...fragments my political career, if it compact with your execrable will; stifle and distort my every utterance; not satisfied if such be your brutal frenzy, lash my poor form into insensibility; then if it be your further pleasure, gnaw from my stiffening limbs every vestige of quivering flesh; howl in wretched bestiality through my own innocent blood as it drips from your fiendish visages; drag then if you may what remains into the filth and vermin of your foul den and burn it upon the altar of Baal, or scatter it before the friendly winds to your betters, the Carrion Crows of the field. All that they may do and more if there yet be open further depths of infamy to a polluted besotten press.”18

The leadership essential to the revitalization of rural America cannot come from that "good 'ol boy" transactional network. There is an urgent need for leadership that rises to the need for it; that is, for transforming leadership. What would that leadership offer?19 It would have a vision for rural America. That vision would not see snacks without heat, neighborhoods without clean air or running water, towns without sewers, communities and country sides without parks and recreation. Vision means the ability to chart a reasonable, attainable long-range course for the future, the ability to dream. Dreams are an important part of a vision of the future. The leader who never dreams and who never allows his dreams to be tested in the arena of thought, never transforms; he is forever locked into today. Visions are the magnets that pull people out of tradition and indifference. They energize a cause. Effective leadership will be driven by a vision.

It would communicate the vision by allowing followers to become co-creators of the dream. Southern transactional leadership has never been inclusive. Its selfish interest often saw leadership roles as divine rights of a privileged few. At the Epcot Center in Orlando, Florida, there is a sign that reads, "If you can dream it, you can do it." The slogan is inspiring but incomplete. Believing in one's dream is not enough. Success requires that dreams be practical and clearly focused. Leaders capture other people's imaginations by communicating their vision so that it becomes the attainable focused vision of their followers.

It would generate self-respect. Leadership can inspire self-respect in others. Rural Southern self-respect is low, the result of years of living on the margins of life. Charles Horton Cooley was right; there is an interdependence between self and society. The emotional feeling of self is defined and developed by experience. The attitude one takes toward one's own self worth is influenced by the attitudes of others. Cooley called this the looking glass self.20 Others are the mirrors through which we see ourselves. Rural Southerners have been looking into a negative mirror. From the attitudes and behavior of others, rural Southerners have constructed their own low self image. One task of rural revitalization is to alter that image in positive ways. For only as we elevate self image will rural Southerners believe in and demand the right to dignity.

CONCLUSION

It is not clear that rural revitalization is solidly on the national agenda. Intermittent statements of alarm do not constitute compassion for rural decay. But let us assume that compassion is evident at the national level and focus on our own attitude and responsibility. Have we asked ourselves whether we believe rural revitalization is possible? Are we here at this meeting to engage in self delusion? Can the rural
South be revitalized, or is it destined to repeat the experiences of the Old West and clutter the rural countryside with ghost towns? Allow me to explore, by way of conclusion, two possible scenarios for the rural South.

The worst possible scenario: farm numbers will continue to decline, and by the year 2000 will number approximately one million. Small part-time farms will account for approximately 51 percent of all farms. Large and very large farms will account for 15 percent of all farms with 90 percent of net farm income earned by farms with sales over $200,000. The percent of moderate size farms will continue to decline. The fundamental economic and demographic changes resulting will cause rural areas to be composed of large corporate producers and isolated communities of the old and poor. You recognize this as the model presented by the Office of Technology Assessment.

In my judgment that model is not well researched, but it has the ear of influentials in high places. What happens to the rural South in this model? Rural areas traditionally structured around agricultural production will be adversely impacted. Large farms will not likely buy locally. The economic effect on rural towns and villages is likely to be adverse. The census report argues that poverty in rural areas is pervasive now. Without some economic infusion, conditions will likely worsen. Those centers of poverty will become locations for one-parent families, drug abuse, and crime. The result will be two rural cultures glaring at each other—one poor, the other free. Senator Patrick Leahy recently wrote: "We cannot have two America's—one a land of opportunity and a second, left behind."

The best possible scenario: rural revitalization will succeed. The need will grow on the national conscience, and its priority will rise. We will work with agriculture to structure the family farm. We will use our natural resources and develop our human capital to build a diversified rural economy that can sustain communities. For years cheap resources harvested, logged, mined, and extracted by low wages became the means of wealth for others. Much of our natural wealth is gone, and we must ask what we are to do with what remains. Rural revitalization is our best hope, and it deserves our best shot. The rural South's success in agricultural production may explain its failure in the larger economy. Its leadership came from agriculture and was successful and satisfied. The leadership must take on a broader base if we are to succeed. If we fail this time to use all of our resources, natural and human, in the development of a sustainable rural economy, there is a strong possibility that rural America will be abandoned as a failed social experience.

Rural folk are the abandoned people who pass in dim review behind the glittering personalities of the chief architects of urban life and their protecting legislators. The time has come for each of us to commit our interests, talents, and resources to help bring rural folk front and center.

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2. Ibid., p 19.
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LAND-GRANT PERSPECTIVE FOR REVITALIZING THE RURAL SOUTH

Max Lennon, President
Clemson University

"Our condition is wretched in the extreme. Everyone is in trouble, many ruined, and others are quitting the country in despair. There is, in my opinion, no hope for the South short of widespread scientific education."

Sound far-fetched? It should not. That's a quotation from Thomas Green Clemson, the founder of South Carolina's land-grant university and son-in-law of statesman John C. Calhoun. Clemson made the remark over 100 years ago.

Clemson wasn't as negative about our nation as that quotation might lead you to believe. He envisioned a model for scientific research and education in agriculture and the mechanical arts that was remarkably similar to the Cooperative Extension Service and the Agricultural Experiment Station that grew out of the Smith-Lever Act and the Hatch Act, respectively.

SIMILAR PROBLEMS, DIFFERENT ERA

My message today is simple. Yes, agriculture and Extension have problems. "Wisdom comes by disillusionment," George Santayana said. But a quality Extension Service has never been needed more by society. No, we don't need a new model; we just need to modernize the one that Seaman Knapp, Thomas Clemson, Frank Lever, Hoke Smith, and others provided us. That modernization will require bold leadership, fresh perspectives, and creativity.

In his 1886 will, Clemson drew a blueprint for the school that would bear his name and deliver South Carolina's land-grant mission:

An agricultural college which will afford useful information to the farmers and mechanics, therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith. It should combine, if practicable, physical and intellectual education, and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish the course of studies terminating in thorough, theoretic and practical instruction in those sciences and arts which bear directly upon agriculture.

Then, as now, the department structure of a university tends to impede a well-rounded education. Duane Acker of the U.S. Agency for International Development and former president of Kansas State University, echoed Clemson's thoughts in a talk to Extension directors earlier this year in Washington. He told of an Extension colleague, frustrated by the formidable boundaries separating talented faculty members, who observed, "Universities have departments, but farmers have problems."

We must draw an important distinction here. While Clemson and Acker may be saying the same things a century apart, and I would ask you to heed both of them, I am not advocating a traditional approach. The transition of agriculture in the 1980s creates an agenda that is not unlike...
that of the 1880s--the "wretched" mess Clemson observed. That means we need to ask the same questions that were asked then, but we need to seek contemporary solutions.

In the 1983 Seaman Knapp Memorial Lecture, Russ Mawby, Chairman of the Board and Chief Executive Officer of the W. T. Kellogg Foundation, profiled Dr. Knapp as "a pragmatic dreamer...adept at analyzing the constraints or problems, determining the research knowledge appropriate to their solution, and mobilizing the resources necessary to the task."

Let it not be said that Dr. Knapp, the father of the Cooperative Extension concept, did not provide bold leadership. We, the leaders confronting the issues of today, however, deserve mixed reviews for our boldness, as well as our effectiveness and the way we function collaboratively.

In the USDA, for example, we need new boldness in the plant sciences, animal sciences, social sciences, environmental sciences, biotechnology and wood chemistry, to name just a few areas. If we don't move in a bold, deliberate manner, it is likely that new agencies will be formed and further diminish the role of agriculture in the alleviation of problems that are the keys to the future welfare of our society.

A PERFECT MODEL

As national agriculturally related issues emerge, agencies other than USDA are initiating larger and larger roles. Look, for example, at the water quality issue and EPA's response. Extension administrators in Washington and on the land-grant campuses must acknowledge the threat of a diminished role and be aggressive with bold solutions. These issues, which include not only traditional agriculture-related issues but also economic development, emerging technologies, erosion of the family unit, drug abuse, and teen pregnancy, will require all the resources of universities. The perfect model for us to successfully address these problems is our time-tested Cooperative Extension Service and Agricultural Experiment Station. However, it is imperative that all the persons in Extension and the Experiment Station leverage all the resources of the land-grant universities to successfully solve the problems. What a tragedy if other agencies or institutions assume the role Dr. Knapp and his contemporaries envisioned for us and our efficacious model.

Critics say Extension has outlived its usefulness. It's in a tug-of-war. The recessionary years, droughts, and especially the current administration's effort early in 1986 to drastically reduce federal support have left Extension leaders "hearing footsteps."

Naive "education experts" are writing critical reports about us, postulating that Extension agents should be catalysts for quick and far-reaching reforms dictated from Washington, state government, and perhaps even Extension directors. In reality there are political forces at the county, regional, and state levels that these report writers don't understand, but that fact does not make us any less vulnerable. We must meet the people where they are. But change we must!

My colleague Dale Lick, President of the University of Maine, bemoans the endemic Extension mindset of survival rather than potential--management rather than leadership.

A TIME FOR CHANGE

Those of us in the system don't want to change, the evidence shows. But change is indicated at every level. In 1925, Sir Alfred Whitehead wrote, "It is the business of the future to be dangerous."

Let's look at an Extension Utopia, concentrating on just three key players in the giant game: the Secretary of Agriculture, State Extension Director, and County Agent. Extension's potential--Extension's future--lies in their preparation, performance, and attitude.

First is the Secretary of Agriculture. Some say the Secretary should be a farmer. Some say the Secretary should be an educator. Others argue for a business person. Still others suggest the Secretary should have extensive international experience.

A recent study of Fortune 500 about-to-retire CEOs and their heirs-apparent showed that without exception, the emerging leaders had extensive international experience. I agree. It is an essential ingredient.

There's the next Secretary of Agriculture
must be a seasoned veteran in traditional agriculture, social sciences, education, the international marketplace, as well as political science. This is quite a different set of credentials than we might have seen a few years ago.

The Secretary also must have such skills as leadership, the ability to work with a diverse constituency from the world population and the U.S. population to the Cabinet. The Secretary must also have vision. Part of the problem in the recent past is that agricultural policy was shaped more by other Cabinet members than by the Secretary of Agriculture. Thus, the Secretary of Agriculture must bring to the office the credibility and respect the position deserves. Furthermore, the USDA must embrace the issues confronting agriculture.

The next key position is the State Extension Director, in my opinion the most difficult job in Extension or a land-grant university. The Director must work with a traditional constituency: the agriculture faculty and administration, commercial agricultural interests, agricultural organizations, small commodity groups such as beekeepers, and urbanites in 4-H and home gardening. The Director must also interact with other colleges within the land-grant university plus other schools in the state and region, convincing those disciplines not traditionally associated with Extension that they should help solve real world problems that previously have been considered beneath them. And then there's the political system intertwining federal, state, county, and municipal elected and appointed officials, each with a separate agenda.

When we add to that melange the rules and regulations of the university and USDA, the job takes on incredible dimension.

To succeed, the State Extension Director, in addition to juggling all the elements above (and again I'm harmonizing with Duane Acker), must focus on the future. The Director also must motivate the Extension administration and faculty to look forward Alternative crops, value-added processing, and international marketing strategy may be vital elements in Extension of the '80s, but the Extension Director must encourage visions of Extension's role in 2015. The Director must focus on issues and comprehensive educational programs. We must stop talking about vacancies. We must develop programs that address the issues.

The third key position is the County Agent. I view County Agents as faculty members. That gives rise to some interesting issues. If they are faculty members, what are their areas of professionalism and academic excellence? Commercial agriculture might lead us toward having an agent with a doctorate in agronomy for a county with major field crops. Since it's impossible to be all things to all people, the County Agent must rely heavily on expertise from campus and at the same time be viewed as an educator by constituents in the county. Furthermore, the county faculty member must have a program advisory committee that includes the county's 10 most important leaders.

It's one thing for a County Agent to do what he or she does as a routine, even though it's done well. But it's something else for the County Agent to introduce new concepts each year. The county fair can have educational value, but we have to admit in Cooperative Extension that we allowed the science fair to steal our thunder academically. That could have been ours, but we were caught up in tradition.

I can remember a number of years ago when personal computers were just coming into use. Some County 4-H Agents whose budgets couldn't handle computer purchases convinced companies to donate computers and time. If we want to be creative, the list of opportunities is never-ending.

The ultimate goal or measure of success for a County Agent is not the number of meetings held, pamphlets produced, or radio interviews, but rather the substantive changes to which the agent contributed. Faculty members, including County Agents, are motivated to be effective and dynamic in three predominant ways: doing their own scholarship and research to discover new knowledge, consulting to stay abreast of contemporary needs in a discipline, or reading extensively about others' work. The latter option, with very few exceptions, can only keep a faculty member relevant to a degree. Therefore, the first two become extremely important for any professional educator and in particular for someone in Extension.

This may be a radical thought, but we might look at 10-month appointments rather than a 12-month appointment with a vacation. It's not that I'm trying to take benefits away. I'm suggesting
that a month's study leave and a vacation, to enable a county faculty member to be fresh and creative, could be important. Can you imagine the benefits that would accrue if all of our county faculty were rotated through some of our cutting edge research programs, whether the research were in school dropout prevention, teenage pregnancy, or biotechnology? The resources are here, but we're so caught up in our traditions that we're not exploring the possibilities.

The concept of county Extension faculty serving as paid consultants to commercial agriculture raises some interesting questions. I am not saying consultants are bad--I welcome them. But the university cannot be put in direct competition with private consultants, and clearly commercial agriculture cannot be eliminated as an Extension constituency. If Extension offered the same services available through private consultants, Extension's budget support would vanish. And if Extension stopped serving commercial agriculture, Extension would dig its own grave. Thus, it is clear that Extension faculty must stay ahead of the private consultants.

Each county faculty member I know has a program advisory committee. Are the eight or 10 most influential leaders on the committee? They must be if we are to be successful.

So there are some clues to the key characters in Extension Utopia, or at least an Extension equipped to serve in a noble, effective way for a long time to come.

Years ago after my mother died, my father and I were cleaning out an old trunk. We came upon a certificate he had received in the 1930s from Extension. It was part of the balanced farming concept, and my father qualified for the certificate by meeting all the diverse criteria including having a bank account, a savings program, landscaping at home, fences that were in good repair, crop and livestock records, and soil conservation measures. Perhaps the challenge of Extension is as simple as modernizing the concept of balanced farming.

In addition to the crop records then and now, we recognize the importance of emerging issues relating to sustained economic development. Today those issues include erosion of the family, teenage pregnancy, drug abuse, and problems of the single family. What a change from the nonfarming requirements for that 1930s recognition: a bank account, a savings program, and landscaping.

ENCOURAGING PROGRESS

I am impressed with the results thus far in the emerging effort to modernize Extension. In its mission statement, Extension says it "helps people improve their lives through an educational process which uses scientific knowledge focused on issues and needs."

Extension amplifies this mission statement and gives it specificity by describing its essential characteristics:

The Cooperative Extension System:

* is a future-oriented, self-renewing, national educational network providing excellence in programs focused on contemporary issues and needs of people;
* employs an interactive education process with state-of-the-art technology; which is anticipatory and capitalizes on the synergism of coalitions and team effort; and which involves the people in issue identification, priority setting, program delivery, and impact assessment;
* creatively delivers programs that are at the cutting edge of critical issues, reflecting excellence, are interdisciplinary in nature, have a strong disciplinary base, and make a difference in the lives of people;
* includes faculty and staff who are sensitive, creative, flexible, forward looking, risk taking, and professionally competent, serving a diverse clientele who relate to the issues identified; and which appreciates and recognizes the strong contributions of volunteers.

The issues developed by those involved in the Cooperative Extension System National Initiatives Planning Process constitute an impressive, contemporary list: alternative agriculture opportunities, human capital development, competitiveness and profitability of American agriculture, conservation and management of...
natural resources, family and economic wellbeing, nutritional improvement, diet and health, and revitalization categories of issues, but selectivity and focus are essential at the grassroots level to ensure that programs meet the needs of local constituents.

Please do not be deceived. Bold, courageous, persistent leadership will be required if this new Extension is to become a reality. Make no mistake about it: if the land-grant partnership doesn't respond to today's--and especially tomorrow's--needs, someone else will. Seaman Knapp, Thomas Green Clemson, Frank Lever, and Hoke Smith had faith in our ability to keep their work viable. Let's hold our heads high and not disappoint them or ourselves.

Tal DuVall, who retired recently as Cooperative Extension Service Director at the University of Georgia and now is Executive Director of the Georgia Agribusiness Council, champions this opportunity and maintains a strong faith. In the September 1988 issue of Progressive Farmer, he wrote:

The challenge for Extension seems clear. It must remain strongly linked to its traditional agricultural support base. It must remain the statewide conduit for knowledge generated by land-grant universities. At the same time, Extension must adapt to a new role as an educational agency dealing with community issues. And it will have to do all of this with less money.

This is the dilemma Extension faces, but there is no real question about whether it will survive. After all, adapting to change is what the Extension system does best.
POLICY PERSPECTIVE ON RURAL REVITALIZATION

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If no policy is a policy, then the United States has a rural policy advocating no policy. While this statement is a bit of an exaggeration, it also contains several elements of truth. The United States certainly has no comprehensive rural policy. For this reason, rural economic decline has become characteristic of most rural communities. Likewise, rural revitalization has not accompanied urban revitalization nor has rural revitalization accompanied agricultural revitalization.

The lack of a direct, positive, functional relationship among the rural, urban, and agricultural economics is instructional in designing rural development policy. It means that we can depend on neither macroeconomic policy nor farm policy to solve rural problems. This, hopefully, is the origin of contemporary federal initiatives regarding rural policy.

The purpose of this paper is to provide an educational framework for thinking about rural development policy issues. It initially provides a taxonomy of the types of rural development policies that exist and the levels of government at which such policies are implemented. Next, this paper comments on the uniqueness of rural development in the South, discusses rural development policy options and consequences, and draws implications for Extension education programs.

DIMENSIONS OF RURAL DEVELOPMENT POLICY

The current policy debate marks a turning point in the mix of policies considered to be rural development.

Traditional Perspective

Traditionally rural development policy has been viewed as those economic activities directly related to attracting new business into rural areas. Industrial recruiting and infrastructure were the buzzwords of rural development. As a part of the package, workers were trained or retrained for the jobs provided by new industry, and low-interest loans and tax breaks were provided. In other words, rural development was viewed as a turnkey for increased rural employment built around new industry.

Human Capital Perspective

During the 1980s, the concept of rural development policy began to broaden to include a significant new human capital thrust. The basic idea was one of increasing the capacity of rural
other in terms of the level at which it is initiated and/or implemented.

Substantive Options and Consequences

Many different taxonomies can be developed for the substance of rural development policy options. The national workshops utilized six options-income and employment, natural resources, health, education, poverty, and rural services financing (Knutson and Fisher). These workshops were criticized for not explicitly separating out infrastructure, business development (industrial recruiting), and job training, all of which were treated as being part of income and employment. As a result of the workshops and subsequent discussions with policymakers, the significant distinction seems to be between traditional development strategies emphasizing infrastructure and strategies emphasizing the building of human capital. In other words, are programs building bridges (something physical) or minds (human capital)?

Traditional Infrastructure. As indicated previously, the traditional approach to development has been to develop jobs by building infrastructure and attracting new industry. Job training has typically been provided as an additional service to new industry and the related work force. This policy has been implemented through a system of loans and grants. There is considerable debate over the effectiveness of this traditional approach. Hite, for example, is quite critical in that competitive industrial recruiting is wasteful, dependent on subsidies, and, at best, a short-run solution. The resulting industries are often not competitive in the long run because they were built on subsidies and tax breaks.

On the positive side, infrastructure grants and low-interest loans have provided tax relief to local communities and may have resulted in increased expenditures for human capital building enterprises such as education and health.

Human Capital. Investing in health, education, and the elimination of poverty builds the capacity of people to solve their own problems. Such investments can be designed to cover all age levels. For example, perhaps the most pressing need of rural businesses is for improved management capacity. This requires intensive efforts in management training.

The results of investments in human capital are less immediate and visible. Yet, the effects are clearly longer lasting as the labor force is more productive and flexible. Less training is required in moving from one occupation to another.

Over time investments in human capital have become more important to maintaining competitiveness. Technological change requires higher levels of work force skill. For example, computer skills are now essential to efficiently perform secretarial services. As the pace of technological change continues to accelerate, a serious danger exists that Southern youth will fall further behind in competing for high-pay, high-demand jobs.

Implementation Options and Consequences

The choice of initiation and implementation level may be as important in the success of a program as the type of program. Each level of government has a specific optimal role to play in development policy. This is particularly true of rural development policy because, for example, the population is highly mobile. As a result, local and state taxpayers are less likely to realize the benefits of education because rural youth have greater propensity to move to urban cities in search of jobs. This is a logical rationale for federal investment in education as opposed to the more traditional approach of state and local funding. Likewise, it is not just the residents of the local hospital district that benefit from rural hospitals.

Such spillover benefits are a primary reason for state and/or federal involvement in rural development policy. Likewise, as indicated previously, some state or local government units may simply not have the resources to satisfy basic service needs. This is particularly true of rural areas where cost per unit results largely from greater distances and the inability of rural areas to realize economies of size. Yet, our public policies seldom recognize these higher unit costs.
people to be productive and solve problems. For example, the Southern Growth Policies Board identified education as one of the major problems of the rural South. Likewise, development economists began to give greater attention to improving management's capacity to retain and expand existing rural businesses as a potentially more effective strategy than industrial recruiting. Added dimensions of improving human capital involved improving rural health and reducing rural poverty.

FOCAL POINT FOR POLICY IMPLEMENTATION

Much of the government policy that economists deal with is initiated by the federal government. This is true of farm policy, international trade policy, macroeconomic policy, and food policy. In contrast, rural development policy can be initiated and/or implemented by the federal, state, or local government. In fact, there is insufficient attention given to the question of what level of government may more appropriately initiate a particular policy, while the state or local government is responsible for implementation. Each level of government has comparative advantages in performing specific functions. This will be summarized subsequently.

UNIQUENESS OF THE SOUTH

Rural is characterized by diversity, not homogeneity. Each rural area has its own unique characteristics from a development perspective. From a national perspective, substantial differences exist in the priority of rural problems. The rural development policy workshops identified the perceived priority of rural problems for each region of the United States. The priority problems in the South include:

- Education
- Economic opportunities
- Health

As a result of pinpointing these priorities, several facts are unique to the South:

- As one looks to the future, education is an overwhelming concern for the South. The industrial base of the South was built on a plentiful, low-skill, low-cost labor supply.
- When combined with discrimination against minorities, poverty became the rule in many rural areas. The vast majority of persistent poverty counties are located in the rural South.
- The problems of rural education and poverty are not likely to be solved without substantial federal assistance. Since this combination of conditions is unique, there is need for a targeted federal-state-local policy that blankets the South.
- Such an initiative should not overemphasize the importance of agriculture.

There is an unfortunate tendency to equate rural with agriculture. When this is done, the solution to rural economic problems then becomes increased farm subsidies and attraction of farm-related value-added industries. While value-added industries may provide opportunities in the South, they are limited and certainly are not of the magnitude to offer long-run solutions to the region's problems. The Southern states are doing comparatively well in terms of economic growth (Florida, North Carolina, Georgia, Virginia, and Texas) and certainly have not staked their future on agriculture-related industries. For each of these states, passive income and retirement industries hold considerably greater potential than agriculture. The point in these comments is not to undercut or stifle agricultural growth opportunities, but only to encourage balance in representing the relative magnitude of opportunities to solve problems.

OPTIONS AND CONSEQUENCES

Because initiative and implementation opportunities exist in rural development at the federal, state, and local levels, two different cuts at the options and consequences become essential—one in terms of the substance of policy and the
There is an assumption (myth) that because it is rural, it costs less.

New federalism policies shifted greater responsibility for development to the state and local government because it was felt that it was desirable to have decisions made closer to the people. This may be true. However, local control does not mean optimal investments. Spillovers and externalities may still require federal assistance in assuring equity of treatment.

IMPLICATIONS

Extension has a very important role to play in rural development policy education. While policy education frequently is treated as being synonymous with farm policy, this is unfortunate. In addition, policy education regarding local and state decisions is perhaps more important than federal rural development policy education. Much of the work that is done with local government really involves policy decisions. Extension educators and administrators need to recognize this fact in designing programs and allocating resources.

REFERENCES


It's early morning, and the sun is just now beginning to color the eastern sky. This little country road that you and I are riding upon is so beautiful this time of day, with the golden wheat ripe for harvest, the leaves overhead casting a reddish glow on the world, and the green earth unveiling Nature's beauty. There on our left is the Harris farm. Be sure to roll down the window so we can smell Mrs. Harris' fresh homegrown sausage frying and her homemade biscuits in the oven. Did you know that 63 million people live here? No, not on the Harris farm, but in the 14,000 small towns and cities of rural America. Up ahead a few miles is the Smith farm. The Smith children should be up by now. Listen carefully, and we can hear the chickens greedily pecking for the food that the children scattered. The sun is steadily climbing as we reach the intersection and turn onto Main Street. The Post Office is opening, while across the street the bank manager unlocks the front door for another day of business.

WELCOME TO RURAL AMERICA, home of the commercial farmer, small business owner, mining and timber industry, part-time farmer, and millions of individuals who have chosen the advantages of living in the country. This is where the foundations of our nation were laid. Our beautiful American continent depends on the spacious skies and amber waves of grain for our future, our survival, and even our existence. Farming is one of man's oldest and most important activities. For thousands of years he has been supplying himself with food, clothing, and shelter. However, the rewards of over 90 percent of our natural resources seem to have been forgotten, neglected in the great scheme of economic development.

As we look back upon the past years in rural America, we can see the elements of a pending disaster. Encouraged by the worldwide demand for agricultural products in the mid-70s, farmers and manufacturers alike expanded and produced more and more. However, the recession of the early 1980s brought the loss of manufacturing jobs, decline in land values, and instability of total farm income. These created a daily drain on the rural areas, which heavily rely on farming and agricultural manufacturing for economic survival.

Unlike other occupations, one plus one does not equal two. Even hard work and effective management of resources do not guarantee success. With the economic future of many areas looking bleak, people are leaving as fast as their dollars. Then factories and farms are threatened; the service industry diminishes and suffers also.

The decline of rural America is not just a farm problem; it is an American problem. In the early days of horses, wagons, and mule-powered plows, the connection between farming and the economic plight of the nation was simple. Local farmers grew what they could for their families and sold any surplus to the buyer as a raw commodity. However, today this relationship is
not quite so simple. Because most consumers buy their food from the supermarket already processed, it is easy to forget the intricate web of individuals, nearly 13 million, who work in the U.S. farm and food sector. In a recent publication, one lady was asked to voice her solution to the farm crisis. She replied, "The plight of the farmers does not concern me; I buy my corn in a can."

This echoes popular American sentiment. But such naive people fail to realize that one farmer creates 5.2 non-farm jobs and feeds 93 people. They also fail to understand that agriculture and its related agribusinesses comprise the largest industry in Georgia and the nation. There are 24,000 agribusinesses in Georgia alone, but this number is fast fading. We know the problem:

-- Farming, timber, and related industries are on the downslope.

-- The towns and cities which depend on these sectors of the economy are in jeopardy.

-- Each day, human and financial resources leave these areas in search of a brighter future.

-- Rural America is losing the foundations on which our very country is based.

So if we have long known the problem, why are there no answers? Why haven't we all done something?

We are doing something, and that is education. The Cooperative Extension Service, since 1914, has been teaching and guiding the agricultural world to better methods of rural planning and development. The youth of the nation are the future. Without a new generation growing up in rural America, where will we be?

However, education and youth-based programs have had little effect on curbing the exodus out of the many rural areas of Georgia. What else can be done?

Even though natural resources seem to be abundant, only through the careful conservation and management of these can the maximum productivity be reached. Technical assistance can also be used on a large scale so that each farmer can have the benefit of the latest technology available.

In addition, new sources of income must be found to supplement that of the farming, mining, and timber industries that compose the backbone of many small towns. An article in Successful Farming proposes that "personal initiative—the kind you apply every day around the farm—can work in confronting problems of rural communities, too."

There are success stories. In Green, Iowa, talk of economic development started in a small cafe. When one man proposed a paddleboat, everyone laughed, but that same paddleboat has attracted so many tourists that a hotel and other popular main street shops now boost the local economy. Then there were the Chugwater Chili farm families who put together a recipe and have made quite a name for Chugwater, Wyoming, and not to mention, kept the town alive in the process. All it takes is an idea, a spirit of optimism, and enthusiasm about the future of rural communities.

Twenty years from now, what will have become of that little country road? Will the Harris farm still be the cheerful place it once was, full of the sights and smells of farm life? Or will a dilapidated building remind us of what rural America once was? If we pass on by the Smith farm, will we hear Mr. Smith's grandchildren feeding the chickens, or will they have moved to a more stable economic area? Will the post office and bank have any reason for staying in business? What about the rest of the 14,000 small towns and cities? What about America?

We stand on the threshold of a new century, determining ourselves what our future will bring. Most of us say that we are too busy to devote ourselves to this cause. But do we really have a choice in the matter? As Daniel Webster once said, "Let us not forget that the cultivation of the earth is the most important labor of man."

RURAL AMERICA NEEDS YOU.
ECONOMIC DEVELOPMENT
Good morning and welcome to the program segment on economic development, one of three topics selected by your program committee for emphasis at this conference.

In discussions with program committee members it became clear to me that this hasn't been the easiest program in the world to put together, because of the diverse interests among those expected to attend and because of some uncertainty about Extension's role and responsibilities with regard to rural revitalization. It also became clear that the planners of this conference intended it to be action-oriented. To put it in plain words, you are expected to go home and do something—either to get programs going in the field or to accelerate the process if programs are already underway. This conference is designed to offer ideas, innovations, and program strategies. My job is to help you derive maximum benefit from the presentations that follow.

Since the stage-setting assignment given to me by the program committee could be interpreted in any number of different ways, as I began to think about how I would structure my remarks, I asked several of my colleagues for their ideas as to what I should say that would help you get the most out of the more substantive discussions that are to follow. Among those I talked with were Jim App, Bo Beaulieu, and Larry Libby, as well as Karen Behm in Louisiana. All of them contributed useful ideas, and Larry and Bo loaned me a variety of materials which included some of the most significant writings of the past few years on the topic of rural revitalization. I want to thank these colleagues for helping bring me up-to-speed in an area where I was knowledgeable during the years that I was a state leader of community development programs, but where I have not kept up with the literature for the past five years.

As I began to scan the current literature, it seemed to me that a lot of different experts are writing about some of the same ideas concerning rural revitalization, and I'm sure that most of you are familiar with these major ideas and have very likely applied them to your local situations. But it also seemed to me that there are some other potentially useful ideas that aren't being discussed very much or aren't being considered to have a bearing on Extension's approaches to rural economic development.

So I decided that my best contribution to this program might be to stimulate your thinking, maybe to raise your hackles just a bit by making assertions or proposals that you don't agree with, and—please don't groan out loud when I say this—to change your paradigms.

To these ends I'm going to make some observations about rural economic development and how Extension's role might be viewed. Then I want to discuss a few business predictions that you may or may not feel are worth considering in relation to rural economic development approaches. And finally, I want to raise the question of why it matters whether Extension is involved in rural revitalization or not.

A former colleague of mine used to say that rural community development was never going to get anywhere as a public issue because it was
"loved to death." He said every government agency wants a piece of the rural development action, and therefore it's doomed to be fragmented with little bits and pieces tucked into every agency in the books.

This observation was borne out as I examined A Report on Rural America's Revitalization Efforts, compiled by USDA and issued in January 1989. The report summarizes the rural development initiatives of 12 federal government departments, ranging from agriculture to transportation, as well as six independent federal agencies. If I counted correctly, the total number of initiatives named in the report was approximately 143--give or take a couple dozen programs, depending on your classifications. According to the report, the non-defense federal spending in rural America amounted to $2,175 per person in the most recent fiscal year for which figures were available. Given this level of expenditure some supply-side cynics may wonder if it wouldn't be cheaper to shut down rural America completely and move the people to the cities. Seriously, during the 80s we have all heard some ideas that were only slightly less bizarre than this one! The catch is that the corresponding figure for metropolitan spending was $2,181.

Interestingly enough, the report identified three areas in which rural America has a resource base and has needs related to the resource base. These main categories are: a) financial, representing the capital resources and monetary needs; b) physical, representing infrastructure resources; and c) human, which are the people resources. Not coincidentally, these are the same three categories that your program committee has selected for your program today.

One might well ask where is Extension's role in this intense competition to do marvelous and wonderful works for rural communities? I would like to discuss this question in light of some past and present realities that impact upon our organization's ability and commitment to revitalize the rural South through economic development.

Extension's performance in the past has been closely related to the existence of support groups, and its programs have been geared to responsiveness to their demands. Examples of these supporters are commodity groups, 4-H councils, and Extension homemakers. By contrast, community development, rural development, economic development, or whatever we choose to call it, has had no organized support group or at least no unified and vocal group clamoring for it. As a consequence, we have seen a steady dwindling of the level of resources dedicated to rural development across the land-grant system over the past 10 to 15 years. This has obviously impaired our capacity to be a strong and recognizable force in rural economic development in most areas.

Concurrently we have seen a decline in rural sociology as a significant and viable force in colleges of agriculture across the land-grant system. Only a few land-grant universities are sustaining strong instructional and research programs in rural sociology. There is an initiative underway to get new federal funds for rural social science research. Most Experiment Station directors are not very excited about it, not nearly as excited as they are about the prospect of getting half a billion dollars in new money for biotech-related research, which is to be expected. However, we must continue to push hard for strengthening our research base in the social sciences as a foundation for all of our rural revitalization programs.

Another reality that must be faced is the lack of interest in rural revitalization efforts other than in agriculture among most of our state Extension specialist faculty. I don't know about your states, but in Florida we have not exactly had people flocking to march under the banner of rural revitalization.

An analysis of days expended by state specialists on our Revitalization Rural Florida program in FY 88 revealed that half of the total days expended were by home economics specialists. Agricultural economics specialists accounted for a quarter of the days, and the combined 4-H and rural development faculty contributed most of the remainder. If these statistics are any indication, in our state we need a broader array of expertise applied to rural economic development. Maybe your state is doing better along this line.

If we assert that we need to be doing more in rural revitalization and especially in economic development, the next logical question might be "More of what?" Bruce Weber of Oregon State University has identified four major roles for
Extension: (1) to provide perspective by helping communities understand how local trends mesh with national and international changes; (2) to increase the knowledge base by accessing both the university and other knowledge bases outside the university; (3) to teach business management skills as well as provide leadership training; and (4) to help shape the institutional structure of a community, its laws, and organizations that affect economic development.

Another view of appropriate roles for Extension in addressing the issue of viable rural communities is provided by the November 1989 report of the Futuring Panel which was established by ECOP as part of its recent reorganization. The panel concluded that Extension's most promising roles are in the areas of leadership development training and what the panel describes as development of community service, meaning the idea of an organized enlistment of all community members into community service beyond the concept of individual volunteerism. This idea reminded me of the community development clubs organized and maintained by Extension in Kentucky in the 70s and still active in a few counties. Everything that goes around comes around, I suppose.

Another stated objective of this conference is to provide understanding of current trends and their implications for rural revitalization. Statistics regarding demographics, education, and economic change are known to all of you and will be referenced by others in the program segments to follow, so I won't recite them. Instead I would like to look at a different set of trends--a few of the 31 major trends that the Roper organization predicts will shape the American business environment in the 90s. Roper says these are the harbingers of the emerging business and economic landscape in which American business will operate. I've selected five of the 31 that seem to me to have a direct bearing on the economic health of at least some rural communities:

1) Home shopping will grow dramatically. People will seek more control over their time by changing their shopping habits. Beyond in-store ordering, the most promising area of home shopping is television. Local merchants will get into the act, maybe through cooperative arrangements with local TV stations. We may be reaching a turning point with regard to the oversaturation of shopping malls that have dried up small town main street business. Maybe TV merchandising will give us the next generation of Ace Hardware and Western Auto stores.

2) Growing appeal of homework. Up to this time the growth in high tech versions of "cottage industry" has not been spectacular to say the least. But that may change as PC and telecommunication technologies get smaller and more portable, and as traffic gridlock gets worse in an ever-widening ring of urban sprawl around most metropolitan areas. The appeal of a relatively hassle-free rural lifestyle combined with a maturing information economy will provide powerful incentives for people to work at home. And "home" may increasingly be a small Southern town or rural area.

3) Older Americans--the next entrepreneurs. I was surprised to see the Futuring Panel's report say that rural communities are "burdened" with an aging population. In fact, the degree to which elder people are a "burden" to their communities is directly related to the extent to which they are poor and sick, and the current trend is for older people to be healthier and wealthier. Research in Florida has shown that the elderly are net contributors to local economies, even when the extra services they need are taken into account. Roper says that tomorrow's older people will have the motivation, the resources and the energy to start and run their own businesses. Moreover, most rural communities where retirees congregate will continue to derive economic growth and prosperity from their presence.

4) Growth of environmentalism. Roper states flatly that attention to environmental issues has not peaked but is still gaining momentum. Furthermore, Roper asserts that environmental concerns are both broad and deep--and well-developed leadership skills by a broad cross-section of American society. What this suggests to me is that rural counties will have to be well-organized and on guard to keep from being dumped on--literally and figuratively--by metropolitan areas that will try to use them as a quick fix for locating a waste disposal site or adding to a dwindling water supply. They will need state-of-the-art information and well-developed leadership skills in order to know how to demand and negotiate for a fair price for these facilities and resources.

5) The nation's mood: "New Reality." As the
American public comes down from the euphoria and boosterism of the Reagan era, there is a more sober and realistic view of the country's economic prospects and a renewed national determination to make things work. Roper says this mood will restrain the level of consumer confidence, but he sees an encouraging challenge for business to play an aggressive role in attempting to correct the nation's economic problems.

I find this last prediction particularly interesting because it is the only one among Roper's 31 trends that even indirectly alludes to economic problems. Issues such as poverty and disease and lack of education are simply not addressed, even though the quality of the labor force that will be required for the operation of American business depends mightily upon these very issues.

Some experts are saying succinctly that if business can't fill its needs for workers from local populations, it will either import the workers or export the jobs. Both of these scenarios will have adverse consequences for the rural communities that are the major focus of this conference.

For the final portion of my remarks I want to return to the question of "Why does it matter?" Why should we be concerned with the revitalization of rural communities if they aren't economically feasible? We are coming to the end of a decade where the bottom line was the big thing, and some of our Southern counties have not contributed to a positive bottom line for the past 100 years, if they ever did.

This brings me to the first response I would offer to the question of "Why does it matter?" The initial report of the Lower Mississippi Delta Development Commission, released last October, estimated that 47 of the 214 counties in its target area have poverty rates exceeding 30 percent, and many others have rates above 20 percent. Government transfer payments are among the top sources of income in these counties. Another recent report estimates that more than one fifth of the people in the Central Appalachian portions of West Virginia, Kentucky, Virginia, North Carolina, and Tennessee continue to live below federally defined levels of poverty. A 1985 ERS study identified 231 counties that have had a low per capita income since the 1950's. All except 18 of these counties were located in the South. Predictably, these low income counties tended to contain groups that are likely to include the persistent poor: non-whites, disabled, female-headed families, and undereducated. It can be argued that local economic development efforts won't help these people, but I would take the opposing argument that 40 years of transfer payments haven't substantially improved their lot, either. Abandonment of efforts to provide economic opportunity to the persistent poor is simply not an acceptable option.

Beyond the questions of poverty and social costs as they relate to economic development, I would like to briefly address a very different element that I think has an important bearing on rural viability—the element of small farms, which make up 72 percent of all U.S. farms but account for less than 11 percent of the market value of all agricultural products sold. In the Southern states of Texas, Kentucky, Tennessee, Oklahoma, Virginia, and the Carolinas we have numerous counties in which small farms make up 90 percent of all farms. Except for those who are retired, the majority of these small farmers and/or their spouses work full-time or part-time off the farm.

I would assert that a second compelling answer to the question of "Why does rural viability matter?" is in the importance of maintaining the economic and social stability that these small farms and their families provide to their communities. Many of them enjoy a quality of life far higher by some standards than their relatively modest incomes would suggest. These people tend to perpetuate the fundamental values of responsibility and productivity that have made them the mainstay of many rural communities. Their interests should not be overlooked as Extension targets its economic development efforts.

At the risk of straining the limits of your paradigm-changing capacity, I would like to remind you that the way things are today isn't necessarily the way they were yesterday or the way they will be tomorrow. For example, it hasn't been so long ago that Orlando, Florida, was a sleepy mid-size Southern town surrounded by more or less underutilized rural lands. Or look at Gatlinburg, Tennessee, or Helen, Georgia, or, for that matter, Williamsburg, Virginia. Until fairly recently, old farm houses were seen merely as obstacles to be bulldozed out of the way of fenc rover-to-fenc rover plowing. Abandoned one-room schoolhouses were vandalized and left to
decay until their roofs fell in. But we are now in an era where historic aesthetic and cultural values of the rural landscape are increasingly regarded as worth saving. Though less tangible than a specific industry, these values may become increasingly important economic development assets in the future. Let us be mindful of these potential assets as we proceed with our short-term economic development efforts, and try to keep our options open by protecting them as much as possible.

In these stage-setting remarks I have tried to draw your thinking toward some alternative views of Extension's role in rural revitalization, especially the economic development aspects. I have suggested only a few of the less obvious trends that may have an impact on the business environment in rural areas, and I have proposed some answers to the question of why Extension needs to be concerned about rural viability at a time when there is increasingly tough competition for allocation of our diminishing resources. I hope the approach I have taken will help to broaden your background for thinking about the topics of the workshops and case studies that make up the remainder of this session.

In closing I would like to quote a paragraph from the Futuring Panel report that struck me as being extremely applicable to this conference. Here it is:

It was expressed that rural community leadership needs to develop contingency plans for the future. In addition, these communities need to recognize their strength and build on the robustness provided by their traditions. Bob Rodale said, "The best approach is to look for 'islands of success.' In any situation, some people are getting along okay, even in a bad social (and economic) situation. Ask how they are doing it. Then expand the islands of success. It takes less resources to expand the islands of success than to try to contract an island of failure. And if you don't balance an island of failure with success, you aren't going to get anywhere anyway. The universities are full of people who know how to look for failure. You need a new university that knows how to look for success."

Thank you very much.
One week ago, I thought I would tell you that the legislative update for rural development could be summarized in a good news-bad news context. I was going to tell you about the Senate-passed Rural Partnership Act and the ready-for-House-committee-action Rural Economic Development Act (the good news) but then give my opinion that the coalition of support for the bill in the House had broken down and that time had run out due to the need to get on with hearings and debate over the 1990 Farm Bill (the bad news).

But I’m no longer sure that is the proper scenario. In fact, I’m not even sure what is good news and what is bad news. So let me just lay out for you the collection of facts and opinions I have gathered together and let you decide which is good and which is bad.

The Senate has passed S.1036, the Leahy Bill, a somewhat comprehensive, but nevertheless traditional, approach to rural development. Adding some new provisions and modifications to existing program structures, the Rural Partnerships Act can be viewed as proposing changes at the margin. Nevertheless, the legislation contains provisions to: (1) assist in establishing, expanding and improving management of rural businesses (including very small rural businesses); (2) improve infrastructure; (3) provide technical assistance; (4) improve educational opportunity; and (5) expand the information base of rural America. The Senate bill authorizes approximately $1.5 billion in new funds over a five year period to accomplish its objectives.

A rural economic and business development program would be established in Extension to work with individuals, businesses, and community leaders through the employment of state or county specialists. Federal funds would be made available on a 60-40 matching basis (the 1890 schools would be exempt from matching provisions) to pay salaries. The bill authorizes a $5 million appropriation the first year, increasing by $5 million a year to ultimately a $20 million annual level ($20 million in 1992 and thereafter).

The Rural Partnerships Act doesn’t provide a lot of new money, nor does it reallocate existing funds to rural needs or make more than a cursory effort at coordinating the various non-USDA federal agency programs that impact on rural areas. But given the congressional committee structure, concern about the federal budget, and our collective inability to articulate a comprehensive national rural policy that can be supported by a majority of rural interest groups, it may be the most pragmatic and politically sensible approach possible at this time.

Then there is the House bill, the Rural Economic Development Act (H.R. 3581), sponsored by Congressmen English, Coleman, and Gunderson. Since this bill has not yet cleared the House Agriculture Committee, much less passed the House of Representatives, you must understand it is a little risky to talk about its contents. However, it has received Administration endorsement, was unopposed in the subcommittee, and reportedly has strong support from House Agriculture Committee Chairman de la Garza.
 Unlike the Senate bill, H. R. 3581 is definitely not a traditional bill. Rather than the conventional approach of developing new programs and integrating them into existing program structures, the House bill would significantly reorganize rural development activities and, most importantly, proposes a major change in the way federal (at least federal-USDA) funds are allocated.

At the local level, rural communities would have to develop a detailed overall economic plan and have it approved by a state review board. Communities would then submit project proposals to the review board which would rank these proposals and recommend to the Secretary of Agriculture which projects should be funded. Each state would be allocated a block of funds based on appropriations for those programs included in a rural development insurance fund portfolio (basically those current FmHA loan, loan guarantee, and grant programs that relate to rural development). These funds could be allocated to any type of project that meets the criteria spelled out in the legislation.

While the House bill is definitely radical in its reorganization and fund allocation provisions, it is even less comprehensive in terms of scope of rural problems addressed than the Senate bill. This (for both bills) is a function of time and the committee structure of Congress. To fully address the problems of education, poverty, health, and job training/retraining would involve several committees of each house, a virtually impossible job, given the time available for Congress to work on this legislation.

The House bill also took as given that no significant increases in appropriated funds for rural development would occur, either through new appropriations or through allocations from other programs. This means that any change in allocation of funds has to come by redirecting existing programs, and the redirection is substantial. Essentially existing project-specific FmHA programs would be converted to state block grants. The only mention of new monies in the bill is an authorization for rural technology grants of $2.5 million for each of fiscal years 1990, 1991, and 1992.

Extension is specifically required to establish a national training, technical and management assistance program for rural business and leadership. This program also requires each state Extension Service to develop, maintain, and provide to each community a catalog of relevant state, federal, or private programs. No new funds are authorized for these responsibilities.

Although the USDA surprisingly (at least to me) endorsed the reorganization provisions of H. R. 3581, it is not at all clear that the various national rural development interest groups will support the changes, which may be viewed by some of them as a diminution of their power.

If H. R. 3581 fails to pass the House it will in all likelihood mean the end for significant rural development legislation, particularly for this session of Congress. Will it pass? I frankly see it as too close to call. A week ago I was 75 percent certain that it wouldn't. Now I just don't know. What if it does? The House supporters believe H. R. 3581 is highly "conferenceable" with the Senate bill. Certainly there is no conflict between the two bills in either their basic intent or their major provisions. And there are a number of minor provisions which are either identical or very similar.

David Freshwater, Joint Economic Committee staffer, argued at the recent Agricultural Outlook Conference for basically combining the two bills if they get to conference. He pointed out a number of ways in which provisions of one bill would supplement or even strengthen provisions of the other. However, any discussion of what might come out of a conference committee is even more tenuous than discussing a House bill currently residing in a subcommittee.

What if H. R. 3581 doesn't pass? Then we are left with the 1990 Farm Bill. And although these may be bits and pieces called rural development, these are highly likely to be farm legislation masquerading as rural development. Reportedly the Senate supporters of S.1036 have discussed the possibility of inserting its language as a rural development title of the Farm Bill, but historically we have not had much in the way of real rural development legislation in a farm bill. On the other hand, S.1036 did pass the Senate without a dissenting vote, and a very similar bill was introduced in the House with at least 100 cosponsors, so we shouldn't write off this possible outcome.

For the rest of the Farm Bill, the USDA will propose a rural development research and
education subtitle under Title XIV, the Agricultural Research, Extension, and Higher Education title. With all due respect to the Extension Service and NASULGC staff members who have worked on this language, these will largely be a collection of well-intentioned and nice-sounding but largely empty words in the absence of support from ECOP, ESCOP, and the land-grant community. Here, I mean support to the extent of saying funding for rural development research and education is more important than additional increases for such things as biotechnology and traditional commercial agriculture research and Extension programs.

What about other areas of concern to rural areas, for example, rural health? A number of congressional bills addressing rural Medicare reimbursement inequities and rural hospital closings were introduced early last year, but the best bet is that no action will occur. Budget implications are the reason.

Many other national level issues will impact on rural America. The education problem in rural areas always surfaces as a critical problem, but historically this is seen as a state and local issue, not a federal one. But the education problem is most critical in those states and localities which are least able to address it, from a fiscal standpoint. What is the answer?

There is a lot of talk about a so-called peace dividend in connection with detente and a supposed decline in the defense budget. Not only is it not clear that a "peace dividend" will in fact develop, but it is a distinct possibility that such a dividend would adversely affect rural areas if military bases in rural areas are closed.

Rural poverty generally and the increasingly serious problem of children in poverty is not addressed directly by any existing proposal of which I am aware.

Where does all this leave us? Have you decided what of this "news" is good and what is bad? Let me give you one last tidbit to think about. If H. R. 3581 should pass, Extension would have to play a large role in its implementation and effective operation. Not only is Extension assigned a specific new program without added funding, but implicit in the required long range rural development plan for each local area is a vital role for Extension. In fact, the House sponsors see Extension as a key,
RURAL BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP CHALLENGES: IS EXTENSION ABLE AND/OR WILLING?

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INTRODUCTION

In 1985, Dennis Fisher called upon Extension to take better advantage of the "untapped audience" represented by small rural businesses (SRBs). The relationship between Extension and SRBs had many of the elements necessary to be a good one. SRBs had particular educational and information needs; no one else was providing (or was in a particularly good position to provide) the education and information. Extension was an experienced provider of similar programs to farms and agribusinesses, and Extension had an existing delivery infrastructure. Furthermore, Fisher pointed out that such an activity would support "the stability of the local economy, the quality of life in the area, and the availability of off-farm employment for farmers and ranchers."

Five years later, these circumstances are relatively unchanged except that the level of interest in rural development has increased substantially; the economy-wide interest in small business and entrepreneurial support may be at an all time high, and there is some reason to be optimistic that the level of financial support for such programs from federal and, in many cases, state sources is rising. Furthermore, Extension is under growing pressure to become more relevant, address broader societal issues, and become more cost-effective. Certainly, one could argue that Cooperative Extension needs "something like" a small business program, as much as small business needs "something like" a Cooperative Extension Program.

This paper assesses the opportunities, obstacles, and alternative strategies facing Cooperative Extension in this area. It attempts to generalize over the circumstances of (at least) the Southern states, but recognizes that the circumstances often vary substantially.

THE POTENTIAL FOR RURAL DEVELOPMENT THROUGH SMALL BUSINESS DEVELOPMENT

A number of authors have pointed out the need for expanded non-farm employment in rural areas (Brown, et al.; Knutson and Fisher). Others have argued that non-farm employment can be best achieved through the support of small business, especially entrepreneurial business (Johnson; Kraybill and Johnson). Entrepreneurial businesses are defined as fast growth, innovative,
technologically based industries.

David Birch has referred to the emerging national economic environment as the "New Economy" (Inc. 1987a). This term alludes to the growth in economic activity among small, rapidly growing technology or service-based businesses and to the important role played by entrepreneurship, innovation, and franchising.

The New Economy has significant regional implications. Inc magazine refers to America's "two economies" or, more specifically, to its "bicoastal" economy (Inc. 1987b). To a large extent, the two economies coincide with and define rural and urban economies. The important commonality among the "other states" is their greater reliance on agriculture, forestry, mining, and traditional manufacturing--that is, on the typically rural industries.

Why have the economic benefits of this New Economy eluded so much of rural America? To answer this question, it is important that we understand the nature of the growth in those areas that are growing. The basis of much of this growth is small entrepreneurial firms. Birch has pointed out that between 1980 and 1986, Fortune 500 companies laid off a net 2.8 million workers while, overall, almost 10 million jobs were added to the U.S. economy.

Which companies were creating these jobs? Eighty-three percent of new jobs were created by the fastest growing 5 percent of firms. Sixty-four percent of these firms started with an employment of less than 20 employees and 97 percent started with less than 100 employees. Drucker points out that these firms are generally not high-tech firms as often assumed. High-tech employment barely offsets the loss of manufacturing employment in the Fortune 500 firms. A majority of the jobs created have been in sectors broadly defined as services (personal and business services, retail, wholesale, transportation, hotels and restaurants, etc.). In the past, employment growth in the rural South has depended on the location of large goods-producing industries. These firms were locating in response to low labor costs and access to abundant labor. Today, these firms find that their costs are often minimized by locating offshore. Rural areas must join the mainstream of the New Economy by shifting their emphasis to small business (especially services). How likely is this to occur?

From the rural community's perspective, the role of SRBs will be determined by the availability and quality of certain fundamental ingredients including innovation, entrepreneurship, the pool of business skills, leadership, infrastructure, and financing. It will be argued in this paper that Extension can play a role in each of these areas. The focus of this paper, however, is limited to the first three.

Innovation occurs where innovators are, and most of these are attracted to urban areas for a variety of reasons, including the traditional location of innovation-spawning firms and the superior availability of infrastructure and agglomerative services in urban areas. Furthermore, innovation is probably stifled somewhat in rural areas by the lower levels of educational attainment.

Entrepreneurship is difficult to define, and research on the characteristics of entrepreneurs and entrepreneurship is very limited. While entrepreneurship may require certain predispositions, anecdotal evidence suggests that entrepreneurship may be learned by example and developed through experience.

Recent research (Gladwin, et al.) points out the special needs of small businesses, especially rural small businesses. Findings of importance include:

1. Rural businesses must become more integrated into the community than urban businesses to be successful.

2. Rural businesses usually find and fill small niches because total sales in any particular market are usually very small in rural areas.

3. Business growth in rural areas is more likely to come from purchase, or start-up, of unrelated enterprises rather than through increase in market share of the current enterprise.

4. The decision to start a business in a rural area is most often based on the existence of an opportunity, frequently an opportunity that can be influenced through public policy (financial backing, the availability of a building, etc.).
5. Constraints on starting or buying a business (lack of a good idea, lack of capital or credit, lack of management experience, fear of failure) are frequently opportunities for public policy and education.

6. Few small rural entrepreneurs have good objective pictures of the financial condition of their businesses.

7. The managerial sophistication of small, rural businesspersons varies considerably among firms.

8. "There is...a critical need to develop a financial management information system that is relevant to small businesses and useful for training" (Gladwin, et al., p. 16).

The pool of business skills (including management, finance, and marketing) among small rural businesses is clearly expandable through education programs. Furthermore, the incidence and success of entrepreneurial activities could also be influenced through appropriate programs.

WHAT ROLE COULD COOPERATIVE EXTENSION PLAY

To evaluate the potential for an expanded role for Cooperative Extension in small business and entrepreneurship education I must address the following questions:

1. What is the potential demand for this education, and how do we get the attention of small businesses?

2. How much educational material exists, how much must be adapted, and how much must be developed?

3. Is the material in the right form (length, appearance, format, media, cost) to be effective for this audience?

4. Who are potential collaborators and competition in this process?

5. What obstacles must be overcome in order to be effective--institutional rigidity within the university and/or at the local level, resistance from agricultural organizations, turf battles with other institutions?

6. What kind of support will be needed from the teaching and research components of our departments and universities?

7. What resources (human and financial) will be needed and where do we get them--from new sources or from reallocations from existing programs?

8. When reallocating human resources, how do we make any necessary career shifts attractive?

9. What kinds of programs (in-service training, study leaves, etc.) are needed to expedite the transition?

DEMAND

The number of small businesses is large and growing rapidly, and while larger firms have professional managers, small firms are usually managed by the owner who is rarely trained in all aspects of management. Thus a need for this education exists. Whether this is an effective demand for the services of the Extension service is dependent on our ability to get the attention of the SRBs. Fisher distinguishes between three types of business managers--entrepreneurs, managers, and shopkeepers. Entrepreneurs (those who start businesses) are looking for ideas and opportunities. This makes them interested and educable in business matters. However, they are usually busy with competing activities which makes it hard to get and hold their attention. Managers (those who operate businesses for a sustained period of time) are also educable and will examine new ideas more thoroughly than entrepreneurs. It is also easier to get and hold their attention. Shopkeepers (those who simply operate businesses without the intention of increasing sales or returns) are hard to get interested in new ideas.

Extension is familiar with these categories of
clients because they also describe farmers. However, entrepreneurial farmers often get involved in enterprises which lead us to label them as non-farm or part-time businesspersons. Also, like farmers, businesspersons are a diverse lot. Some seek management education but others shun it. Many look only to themselves to solve problems while others consider their problems beyond their control. Neither of these types is easy to work with.

This demand can be captured by Extension only if businesspersons identify Extension as a source of help with their problems. First, our image is likely to discourage some potential clients since it is often assumed that we work only with farms. Second, some potential clients will be discouraged if we do not have relevant programs and materials for them.

EDUCATIONAL MATERIAL

Fisher, in discussing Extension's opportunity to respond to the perceived gap in rural business education, argues that "the subject matter is not new, just the audience." He goes on to discuss the availability and characteristics of good small business education material and programs. In his estimation, the availability of material is not a major problem. The management concepts developed for farms and ranches, nurseries, marine businesses, agribusiness firms, and food distribution businesses can be effectively taught to SRBs.

We must, however, make our material and concepts palatable to this new clientele. As an example, Fisher points out that the title of business education programs can have a large effect on their acceptability to small businesspersons. The programs must be perceived as addressing a need of the businessperson. Also, we must develop our programs so that they recognize the diversity of businesspersons--whether they have entrepreneurs, managers, or shopkeepers, whether they have existing businesses or are potential entrepreneurs, and whether they are looking for a primary source of employment or for a supplementary source of income. Each will require different material and different packaging. The programs must be the appropriate length, they must look professional, and should capitalize on "hot" topics.

Some additional material is undoubtedly needed to satisfy the wide variety of SRBs. However, the applied research necessary to develop the material is often missing. Existing material must be adapted for use in other states and then made available to Extension personnel in other states.

COLLABORATORS AND COMPETITORS

Any venture into new areas increases the chances of new "turf battles" even when there are clear gaps to be filled. These potential competitors will generally make better collaborators. One clear competitor in this arena is the private sector educators who, in the last few years, have developed a large selection of workshops, training programs, and how-to books on small business and entrepreneurship in response to the growing interest in small business development. The entire franchise area is based on selling good ideas, and the training needed to ensure success.

Another source of competition could come from across campus in the business school. Over 250 colleges and universities have added entrepreneurship courses to their offerings (Entrepreneur). A small number of universities have developed programs in entrepreneurship in their business schools, although most still have a big business orientation.

Most other actors in this area will make very good collaborators if treated appropriately. Banks and their state and national associations, the Small Business Administration, state and local departments of economic development, SCORE, and others should appreciate the assistance given to them by Extension if they are given their due recognition.

OBSTACLES

Support from within the university and Extension itself will be essential to the successful development of programs in this area. Institutional rigidities are an important obstacle to overcome. One approach to the easing of these rigidities is to appeal to the administration's sensitivity to questions of relevance. It is impor-
tant that they are aware of the widespread need for such programs. Another approach is to gain the support of those groups most influential with the administration—agricultural organizations, local Extension boards, state and local governments, and field staff.

Agricultural organizations may see new thrusts in business and entrepreneurship education as an erosion of resources devoted to their clientele. In a sense, this is true, but they must be convinced that this is in their interest since it will strengthen rural economies. Given their great influence with Extension and land-grant administrations, their support may be essential.

In-service training provides an opportunity to develop support from the field staff by creating familiarity with the material and with the specialist. The field staff will, in turn, help generate support from local Extension boards and local governments.

Another general strategy is to create new sources of support. Small businesses represent an ideal type of support for an Extension program such as this—they are numerous, ubiquitous, conspicuous, and influential with state and local governments. Thus, as Extension increases its programs in this area it can also develop its support base.

RESOURCES

The addition of new claims on existing resources forces some tough choices. What programs are to be eliminated or down-sized? This choice assures that not only those who are asked to shift areas but essentially everyone in this system becomes involved in this decision. It is human nature to feel that the areas that you have invested human capital in are important and already under-supported. Thus there is natural opposition to change.

In this case, the reallocation of human resources represents a particularly critical and thorny challenge. What is required in many states is a reorientation of many positions, if not individuals. It is unrealistic, of course, to expect individuals to simply add this area to their already burdensome lists of responsibilities. It will almost always require a change in priorities and for some a change in subject matter, clientele, support, and delivery approach. It is also human nature to avoid unpleasant experiences, and for many, even those who have an interest in small business and entrepreneurship education, a change of this nature may have unpleasant aspects. Some agents—specialists are more likely to make the transition than others. Home economics, 4-H/Youth, community development agents and specialists are generally accustomed to working with a diversity of clients and may find it easier to work with small businesses. However, it is the agricultural agents and specialists—particularly those in management, marketing, and finance—who are familiar with the subject matter areas needed for this audience. Reorientation-by-attrition represents one approach to this dilemma but it is not always possible. Vested interests develop around job descriptions quite independent of the individuals in the positions. This is also a very slow and inefficient way to achieve reorientation.

CONCLUSIONS

The obstacles to development and expansion of small business and entrepreneurial Extension programs seem formidable. There are lots of good reasons for leaving our Extension focus alone. But there are compelling reasons for pressing onward as well.

Extension must maintain or increase its relevance to society if it is to expect continued support. There is growing evidence that members of society are weighing Extension's relevance with more scrutiny. Small business and entrepreneurship programming represents an opportunity to substantially increase our relevance and our support. In the end this may enhance our ability to provide the more traditional programming. If that is our assessment then we must begin to decide how to overcome the obstacles and take full advantage of all opportunities in this area.

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A NICHE FOR EXTENSION
ENTREPRENEURSHIP EDUCATION FOR YOUTH

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INTRODUCTION

As an Extension employee involved with youth education, I am in full agreement with the Johnson/Fisher paper which states that, "Extension is under growing pressure to become more relevant, to address broader societal issues, and to become more cost-effective." I also adhere to the philosophy that this is the age of the entrepreneur, and given the economic climate of rural America, a focused attention on entrepreneurship education would have a definite positive impact on rural America.

At this point, I would begin to emphasize and focus on the "when" and "how" entrepreneurship education should be taught. Frances W. Rushing states, "As the acknowledged importance of entrepreneurship education increased, some educators advocated teaching entrepreneurship in secondary schools since many potential entrepreneurs may not go to college." This is a highly critical point relative to rural America where, even though I can't quote an exact statistic, I would estimate there are high percentages of youth not attending college. Rushing poses other fundamental questions: "Can entrepreneurial talents or attributes be developed, and if so, can this be done in a formal educational environment?" Her answer, "yes," is derived from a literature review which addresses the attributes and predictors of entrepreneurship.

ATTRIBUTES AND PREDICTORS OF ENTREPRENEURIAL BEHAVIOR

Ron Lachman, who studied two groups of managers in Israel, concluded that entrepreneurship can be identified by personality characteristics (high achievement values and motivation) as opposed to functional identification (dependence need); i.e., people are entrepreneurs because they have acted like entrepreneurs throughout their lives.

Michael Palmer writes about the problems with measuring entrepreneurial "potential" which is a necessary condition to providing entrepreneurial "talent" to geographic area, in need of economic development. He concludes that attitudinal and motivational tests provide some measure of an individual's perception of risk and his/her ability to handle that risk which are ex ante factors key in the identification of potential entrepreneurs.

David McClelland believes that there is little point in providing additional entrepreneurial opportunities for those without achievement motivation or a need to seize such opportunities.
Thus, an entrepreneurial program needs to develop the psychological characteristics of individuals before they will utilize the program. His studies from India, in which a doubling of entrepreneurial activities was observed, indicated that motivation can be taught and developed regardless of age.

The master mind, Dr. Marilyn Kourilsky, studied 30 simulated economies in order to isolate those characteristics in children that lead to successful entrepreneurial behavior. She also points out that learning theory suggests that the cognitive element (ability to use information and education) is much more amenable to change than is the motivational element (Okinoura). Her research revealed that persistence, not risk-taking, was the most significant predictor of entrepreneurial success. Further analysis indicated that academic ability and initiative were the next two predictors of successful entrepreneurship for boys, while it was maturity and perception of success for girls. Kourilsky emphasizes that if it is possible to determine the relevant characteristics related to entrepreneurial behavior, then it is possible to make a concerted effort to develop those traits at an early age, thus increasing the entrepreneurial talent pool in our society.

ENTREPRENEURIAL EDUCATION WITHIN ECONOMICS INSTRUCTION

If we accept as an educational objective to increase entrepreneurial activities, which discover and develop entrepreneurial attributes, thereby increasing the pool of entrepreneurial talent, then we must answer how to accomplish the task. I join the forces that advocate for entrepreneurial education to be part of economics education instruction. The justification is that young people need the basic economic concepts that form a cognitive domain in which entrepreneurship can be developed (Rushing).

Rushing suggests a comprehensive curriculum which addresses entrepreneurial education beginning with kindergarten through seventh grade, the formative years in which a child's personality is still very flexible and receptive to new ideas. Perhaps these years are optimal for developing entrepreneurial talent. During grades six through eight, students could study the role of entrepreneurship in the economy and learn about opportunities that exist within their economic and social structures. Grades eight through twelve would continue to address enhancement of entrepreneurial talent and awareness of opportunity but would begin focusing on the skills necessary to plan, form, and manage an entrepreneurial venture. College would entail more formal and in-depth entrepreneurship and economics courses.

Let me emphasize the awareness component of entrepreneurial education that could begin in middle-school. Calvin A. Kent has identified two important criteria for awareness. The first is becoming aware of the role entrepreneurs have played, are playing, and will play in society. He agrees with Murphy that for the high school student, the best method of enabling students to become aware of the entrepreneurial role is an internship which leads to a mentor relationship between student and entrepreneur. The second form of awareness is allowing students to see that entrepreneurship is a distinct career possibility.

Kent has identified six essential economic understandings associated with entrepreneurship which should be part of an economics education curriculum:

1. Entrepreneurship is a separate productive resource (factor of production).
2. Entrepreneurship creates a disequilibrium whereby new demands and supplies are created.
3. Entrepreneurship requires profits in the long run.
4. Entrepreneurship creates technological change.
5. Entrepreneurship generates jobs.

ENTREPRENEURSHIP EDUCATION AND DISADVANTAGED YOUTH

Steve Mariotti, director of the South Bronx Entrepreneurship Education Project in New York, maintains that of over 260 studies to improve our nation's public schools, none have dealt with the issue of entrepreneurship. He enumerates the benefits:
1. Again and again, his lessons on entrepreneurship appeal strongly to those students viewed by other teachers as undisciplined and low achievers.

2. Perhaps the greatest benefit to entrepreneurship education is not an economic one, but the nourishment of self-esteem. This is particularly helpful in areas where the negative self-image of the inhabitants may be derived from unemployment and a belief in the omnipotence of government or other agencies. The economic situation can be improved because economic control (through entrepreneurship training) is brought to the people.

Mariotti attributes his success on courses in entrepreneurship to the special skills and qualities characteristic of inner-city youth. As these are specific, ask yourself about the similarities to rural youth:

Mental/emotional strength, resourcefulness, independence, and resilience. It may be true that every adversity has the seed of equivalent or greater benefit. Children born into poverty generally develop certain compensatory skills as listed above.

Challenging life experience. The pain of poverty forms one emotionally and intellectually. The hope of entrepreneurial education is to assist students in examining their lives for lessons applicable to their future, set short and long-term goals, and to realize their potential.

Natural entrepreneurial ability. Many entrepreneurial attributes--i.e., willingness to take risks, assertiveness, persistence--can be traced to the necessity to be self-reliant at an early age associated with an atmosphere of poverty.

PROBLEMS IN INTRODUCING YOUTH ENTREPRENEURSHIP EDUCATION

Overall educational demands appear to be for more structure, larger numbers of tests, and more of a lock step approach. "However, entrepreneurial education requires the antithesis: individual development, fewer 'right' and 'wrong' answers, and greater tolerance of deviation from norms" (Rushing). Many school administrators and even business educators don't understand the role of entrepreneurship in our society and are intimidated by the new skills required to teach it. Yet, Mariotti contends that this phenomenon is no different than the decision to teach computer skills ten years ago in which schools have since become competent.

A NICHE FOR EXTENSION USING VIRGINIA AS A CASE STUDY

Most of the work and the people thus far quoted are affiliated with the Joint Council on Economic Education (JCEE), which leads the nation in economic education. The JCEE is a privately funded organization whose work is accomplished through 50 state Councils on Economic Education. The mission of the Joint Council is to increase the quantity and enhance the quality of economic education in the nation's schools. The JCEE network develops highly acclaimed motivational materials for teaching economics, and it provides training for instructors who work with youth.

It is my conviction that Extension can provide its existing delivery infrastructure to this economic education network and utilize the network's existing economic education programs/materials, while both organizations benefit tremendously! Virginia is a case study. One of the prerequisites to this successful scenario was a university-based Extension specialist who had the opportunity to work with both the Virginia Council on Economic Education and the Virginia Extension youth program, i.e., 4-H. (In the situation at Virginia Tech, the Center for Economic Education director was also the 4-H specialist for business and economics.) Once understanding the economic education network, 4-H was viewed as a golden opportunity to begin implementing some non-traditional programs like economics. If 4-H would adopt an economics curriculum, not only could it be promoted in the more traditional 4-H community club setting, but 4-H could promote economics in its ever expanding in-school program delivery system.
A core business and economics curriculum for ages five through 19 was adopted for Virginia 4-H and subsequent training provided. The 4-H curriculum is based on general school curriculum, economic concepts appropriate to age levels, and Virginia 4-H life skills which are: understanding self; communicating and relating to others; acquiring, analyzing and using information; problem solving and decisionmaking; managing resources; and working with others. The program has met with resounding success in less than its first year of implementation. Four-H enrollment in economics projects has increased dramatically, to a large degree through in-school programs. At the same time, through the programming of trained 4-H agents and/or volunteer leaders, efforts of the Virginia Council on Economic Education have expanded into parts of Virginia where centers for economic education do not exist. Although a decision was made to limit the 4-H business and economics curriculum in its initial stages of implementation, the first area of expansion will be in entrepreneurship. This expansion should be more easily facilitated with a business and economics curriculum already in place.

CONCLUSION

Evidenced by what has occurred in Virginia, it appears that a prime opportunity does exist for Extension to become involved in youth entrepreneurship education on a national level. Furthermore, the opportunity exists for 4-H to broaden its traditional type programs and provide programming in the much needed areas of economics and entrepreneurship education. Such a decision can also be cost-effective for Extension since research-based materials for youth economics education already exist through the present economics education network.

ENDNOTES

1 Much of Kourilsky’s research is a result of her educational programs called “Mini Society: Experiencing Real-World Economics in the Elementary Classroom” and “Kinder-Economy.” These programs are classified by many economic educators as two of the best in the country for teaching lower grades economics and characteristics of entrepreneurship, yet they are costly. These programs, which enhance reading and math skills, are designed to foster those difficult-to-track attributes of imagination and foresight.


3 Virginia 4-H has adopted a “Cloverbud” program for youth ages five through eight. Of the original Cloverbud lessons, there are four economic lessons. Other projects include “Business In My Town: Everybody’s Business,” for ages nine through eleven; “Stock Market Game,” for ages 12 through 14; and “Commodity Challenge,” for ages 15 through 19. All projects are products of “other” (non-Extension) agencies.

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RURAL BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP CHALLENGES: IS EXTENSION ABLE AND/OR WILLING? A RESPONSE

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(Helpful insights and suggestions were provided by Steve Ford, Rod Clouser, John Holt and Lois Libby.)

In reacting to the above-titled paper by Thomas G. Johnson and Dennis U. Fisher, my charge is to respond from the perspective of Extension farm management and marketing economists. This becomes a formidable task given the diversity among farm management and marketing specialists in the region. Furthermore, most of my colleagues would be concerned if they knew that I was attempting to represent them in this response. My comments will generally be of two types: (1) reactions to and observations on the Johnson-Fisher paper; and (2) comments on rural business development and Extension stimulated by the paper.

REACTIONS AND OBSERVATIONS

Johnson and Fisher have done an excellent job of framing the situation and asking the right questions with respect to the role of Extension in rural business development and entrepreneurship. They begin by noting the "obvious potential" fit between small rural businesses and Extension. However, I am not certain as to the source of their optimism with respect to increased interest in rural business development. The authors again express optimism with respect to increased financial support for small rural business programs. I wish they had provided measures of this increased financial support, as it may not be obvious to the casual observer.

The authors note that expanded non-farm employment can best be achieved through small businesses. But how many of these businesses are there? Is there any way of measuring what the employment growth potential is from small businesses? Gladwin, Long, Babb, et al. in their paper, "Rural Entrepreneurship: One Key to Rural Revitalization," suggest that rural businesses may make only modest contributions to employment, based on their study of rural entrepreneurs.

Johnson and Fisher suggest that the role of small business in rural communities will be determined by innovation, entrepreneurship, pool of business skills, leadership, infrastructure, and financing. Perhaps what are needed are simply a good highway and an educated, well-trained labor force. Although the authors indicate that they will focus on innovation, entrepreneurship, and the pool of business skills, each is dealt with in an abbreviated fashion. The suggestion is made that innovation is primarily an urban function with relatively low levels of entrepreneurship observed in rural areas due to low levels of education. I am not certain that we can teach innovation. The special needs of small business entrepreneurs are well outlined, drawing on the above-noted paper by Gladwin, Long, Babb, et al. Johnson and Fisher believe that the pool of business skills among small rural businesses is clearly expandable through educational programs. I agree.
The very best part of the list is the list of 10 questions which Johnson and Fisher suggest must be addressed in evaluating the potential role for Extension in small business and entrepreneurship education. The questions deal with: demand for educational services; existence of educational materials; potential collaborators and contributors; obstacles; teaching and research support needs; human and financial resource needs; and human resource allocation questions.

The authors do a generally adequate job of expanding upon these questions by identifying the key elements involved in each area. With respect to the authors' discussion of the demand for educational services, it should be noted that there is a big difference between identifying educational needs and creating effective demand for Extension's information and educational services. Sometimes the greatest educational needs produce the smallest audiences.

I am interested in the authors' observation that some people consider their problems beyond their control and thus do not seek management education. I would suggest that some managers also simply wish to avoid the thinking and decisionmaking requirements of management and marketing Extension educational programs. These programs do not tend to provide easy solutions to their problems.

The authors believe that educational materials are available but need to be "packaged" for small rural businesses. They also note that "programs must be the appropriate length, look professional, and should capitalize on hot topics." I agree. However, these are lessons we have not learned very well in providing educational programs for the commercial agriculture sector. Therefore, my optimism in this area is somewhat tempered.

Johnson and Fisher correctly note that there are many competitors in the area of business management, some of which can be converted to collaborators. It should be pointed out that many of these competitors may wish to remain competitors as they may not need to collaborate with Extension in order to be successful.

The discussion of obstacles stimulates several observations. First, the authors correctly identify institutional rigidities as an important obstacle to successful program development. Second, they suggest appealing to "administration's sensitivity to questions of relevance." How does one do this?

Is there an abundance of evidence as to administrative sensitivity to programs not related to commercial agriculture?

In attempting to generate support for rural business programs among farmers and agricultural organizations, Johnson and Fisher correctly identify commercial agriculture's concerns about diminished resources devoted to their problems. Given constant to decreasing real resources, it may be difficult to convince them otherwise. Although community viability (including tax support for education) can be enhanced by rural businesses, as profit maximizers operating in a competitive economic environment, farmers are correct in their concerns about the impact of decreased program support per farmer.

With respect to Extension field staff generating support for small rural business programs, I have serious doubts when it comes to county agricultural agents. I base my concerns on the problems faced by many state farm management and marketing specialists in generating interest and support for economic information and programs among biologically-based county Extension agents. Economists tend to deal with issues in which not only the answers but also the questions are constantly changing. Given the time demands from a myriad of sources faced by the county agricultural Extension agent, economic problems and issues are often ignored. It may be safe to say that if agricultural agents like management and marketing issues, they are going to love small business management issues. I suspect that home economics and community development agents will be much more receptive to small rural business programs and the potential contributions of management and marketing specialists.

Traditionally, most farm management, marketing, and finance economists working in Extension have viewed rural/community development programs as being a little spooky. However, rural business development may well be the bridge which can connect these two groups. Given the seriousness of the rural economic conditions, every effort should be made to address the problems of rural America with various combinations of human capital represented within the land-grant system.

The discussion of "resources" by Johnson and Fisher really hits home. Given the current and expected funding situation, new or expanded programs mean tough choices. What programs
are to be eliminated, reoriented, or downsized? Not mine! What other response would you expect? What incentives are available for individuals to change program focus? Extension and university systems do not tend to be very effective in the use of carrots and sticks. But perhaps a more important issue is the fixed human capital cost already invested in a particular problem area. It is not a simple matter for an individual to retool, reinvest, and disinvest with respect to his current knowledge base. Furthermore, program changes, either forced or voluntary, must be addressed in terms of potential obstacles such as tenure, promotion, and career advancement. What about dollar resource problems and user fees for publications and services? Where is USDA in this process? They tend to be driven by commodity programs, not rural development programs. I agree with Ron Knutson (which is generally regarded as dangerous to one's career) about administrative leadership being essential to success and change with respect to rural development programs.

GENERAL REMARKS

So, from the perspective of farm management and marketing economists, is Extension able and/or willing to become involved in rural business development and entrepreneurship programs? Is Extension able? I believe that many are able to contribute to such programs, particularly farm management and agricultural finance specialists. Those economists with a firm-level orientation may be able to transfer knowledge and skills applied to farms and agribusiness firms to small businesses in both rural and urban settings. Less able, perhaps, are industry-level commodity marketing economists who have developed human capital in addressing industry-wide supply, demand, and policy issues. While not totally incapable of making a contribution to small business programs, considerable reorientation may be required for commodity marketing specialists in order to focus on firm-level marketing problems of small rural/urban businesses. Those marketing economists who currently focus on firm-level marketing programs should be able to contribute to small business programs.

Is Extension willing? This is a more difficult and complex question. Among Extension farm management and marketing economists, I am not convinced that there is widespread willingness to expand applied research and education programs to include non-agricultural rural business development and entrepreneurship. However, this is no more unexpected than a lack of desire on the part of community/rural development specialists to become involved in marketing and farm management issues. Factors affecting this lack of willingness among farm management and marketing specialists include: current full employment; perceived lack of professional payoff; lack of complementarity with existing programs; perceived lack of administrative and client support relative to commercial agriculture; job experience not readily transferred to small non-agricultural businesses; lack of interest in developing such a program; no clear vision of success associated with such programs; current clientele resistance to program expansion and thus dilution. It should be noted that some Extension farm management and marketing economists may be willing to consider involvement in small rural business programs subject to clientele, resource, and administrative support.

For a successful shift or expansion into rural business development and entrepreneurship programs, there must be top-down direction and support from administration. If not, I do not foresee major shifts to or support for rural development (small business management) programs among marketing and farm management personnel. I think this is unfortunate, but understandable. We are not necessarily well-prepared for a major shift towards small rural business development/management programs. Significant changes in faculty skills and job descriptions may be required to serve this clientele. Perhaps the time and cost involved in retrofitting an institution to meet the identified needs (demands?) of potential and existing small business managers and founders are less than we think. Perhaps only one or two business management positions combined with positions in community and rural development, rural sociology, home economics, leadership and 4-H would make all the difference. Maybe with the help of business administration, education, and other social science departments we could make a significant impact. The exhibits of rural business management programs at this conference highlighted the potential for such a shift.
programs. There have been successes across the country. There probably have also been failures. It may be instructive to determine the factors associated with successful programs. How much administrative support have they had?

Agricultural marketing and farm management are based on decision making. The strength of these subjects lies in providing frameworks for decision and developing the best available information for those decisions. This is what Extension farm management and marketing economists do best. It is reasonable to assume that these subjects can offer positive additions to the rural economic development effort. However, if an analogy can be drawn between small businesses and small farms, then it should be noted that small farmers have not always been overwhelmed by what we have to offer. Sometimes we have more information and materials to offer than interested clientele to serve. As noted, county agricultural agents are generally biology/production oriented and not particularly concerned about management and marketing aspects of economics. Given the attitudes of many county agents toward economics, will the responsibility for small rural business programs fall solely on state specialists such as farm management and marketing? I think so. However, community and rural development specialists and other state specialists such as home economists certainly have significant roles to play in developing programs to address labor problems/regulations, business red tape, licenses, permits, and a host of other problems to be confronted by a business. There appears to be more than enough for everyone.

According to Johnson and Fisher, there are plenty of good materials in the country which could be adopted and utilized for small rural business programs. Given the limited resources (dollars and people) available in each state for such programs, perhaps regional or national efforts should be made to assemble and package management information for small rural businesses to be used by all states.

Rural areas and communities are in trouble. Economic viability and quality of life issues for rural America are of critical importance. Rural areas are the bread and butter support for the land-grant system and the Extension function. Therefore, we have problems. Specifically in the area of rural economic development, we seem to have assumed that an educational need exists accompanied by an effective demand for educational programs. This is a convenient assumption given the perceived need to broaden the clientele base of the land-grant system. But the question arises as to whether Extension can become the functioning small business administration/management training provider for rural America. In spite of our survival-motivated search for new clientele, perhaps we need to rephrase the title of the Johnson-Fisher paper to read, "Is Extension Administration Able and/or Willing to Provide the Financial and Human Resources Needed to Adequately Address the Issue of Rural Economic Development?" Resources always seem to be the limiting factor. But beyond doing more with less, can Extension make the choices necessary to enable a significant shift of resources to rural economic development? Is Extension willing to acknowledge such a shift?

Recently, the Urban Development League suggested a well-funded "Marshall Plan" for urban areas. Can Extension and the land-grant system be the vehicle for a possible "Marshall Plan" for rural America? If we had a massive increase in resources, could we make a difference in the economic viability of rural America? If the answer is yes, then we need to figure out how to do it without more resources. If the answer is no, then maybe it is time to be more realistic with respect to our role in rural development.

Rural business development, much like community development, is easier to talk about than to do something about. This is not a criticism but rather an acknowledgement of the complexities and difficulties facing Extension and the land-grant system in attempts to revitalize rural America. But then, I guess that is what this conference is all about. Do you think we can do it?
CAN LEADERSHIP AND ECONOMIC DEVELOPMENT BE COMBINED?

Leadership development focuses not on an issue, not on a social problem, but on individuals. It focuses on human development, not community development or economic development. Community development focuses on a condition that some people want to change. The question is: Can these two types of programs be combined successfully? Should we expect leadership development to result in community and economic development? Although academic literature does not support this causality, such effects are possible. Clemson University's new Palmetto Leadership program is designed to do both. We think it will work, but because it is experimental, we are presenting the design here for critique.

LEADERSHIP PROGRAM EVALUATION LITERATURE

An exhaustive review of the literature on evaluations of leadership development did not produce any evidence that leadership development has an impact on economic development. Measurement and specification problems seem to have precluded isolation of leadership development as an independent variable. In fact, no widely accepted or formally established definition for leadership exists. Thus, no analytical definition exists for the "economic impact" of rural leadership development.

Howell, Wier and Cook in their comparative study reported at the 1980 Leadership Development for Rural America conference, and Williams and Faulkner, in their evaluation of Montana's program, pioneered the path for rural leadership evaluation. Successful programs were those whose participants increased their activity in economic and political organizations and other instrumental groups. Also, program success was judged to have occurred when participants moved to higher power levels. In the ensuing decade, there has been little effort to measure economic development initiated by these organizations as a result of absorbing newly developed leaders.

Earlier academic work to define leadership focused on specifying behavioral characteristics and personality traits of leaders. "Hierarchical positioning," for example, in the community power structure has been suggested as the primary determinant of effective leadership. In this sense information and access to resources are positively related to position in an action network. According to other findings, age, education, occupation and other socioeconomic characteristics are unimportant in determining leadership. Instead, it is voluntary involvement that breeds later political activity—irrespective of socioeconomic status. That is, voluntary associations provide opportunities for development of new relationships as they attract people into public affairs organizations which can nurture leadership skills and develop other personal resources as
Some argue even that gender tends to follow a predictive pattern of leadership behavior, with women belonging to expressive organizations and men belonging to instrumental.

Arguments exist still between those who believe that some men are born great and those who believe that great men are made by great challenges. Does the key to defining leadership then, and its expected economic impact, lie in understanding what traits are necessary to make effective leaders? Or can leadership be thought of more as a relationship than as an individual ability: a relationship one develops with a potential followership? Leadership in this context is defined as first dealing with the responsiveness of the group in gaining specified goals, and second, securing those goals with the greatest possible consideration for the individuals comprising the group.

In other words, the leader who defines leading as action can allow himself to be influenced by others so that followers lead and share in the problem-solving process. Ronald Feliwit, a Harvard professor interviewed recently by inc magazine, asserts that leadership is not authority, not a set of personality characteristics, and not needed for routine problems. He defines leadership as the ability to mobilize resources to deal with difficult problems. But the question persists: What economic changes might we use to trace the effectiveness of leaders in our programs? Most leadership development programs focus on developing the individual, increasing his/her ability to mobilize resources to work on complex problems. Palmetto Leadership appears to be unique in adding expectations for economic development to its mission. The closest facsimile is Family Community Leadership (FCL) which includes an expectation that learners fulfill their citizenship role through work on some issue. Will Palmetto Leadership succeed? No one can be sure; development requires that participants implement the lessons they have learned in ways that bring about development. This is experimental. The literature review gives no support to the argument that leadership development leads to economic development; yet, it doesn’t say it won’t. We are exploring new territory.

Most leadership development programs equip the individual. Use of the new knowledge, skills, and relationships is encouraged but not organized. Palmetto Leadership intentionally organizes for implementation. A most unique aspect of this project is the formation of a new group of residents that has the potential to transcend existing policymaking groups. If it works, some factional disagreements may become internalized; some politics may become inclusive. This may strike you as idealistic, but it is possible.

The flow chart attached shows the logic and flow of Palmetto Leadership. The diamonds show the three phases—teaching, implementation, and emerging leaders. Faculty, both on campus and in the counties, are organized to conduct the program. The project funds .5 fte of a county agent to coordinate the project. Advisors guide policy and monitor progress. Participants are selected in each county. They are chosen to represent all interests—economic, ethnic, professional, etc.—and all parts of the county. The curriculum is taught in the county as a series of seminars: communications skills and group dynamics; information on specific topics; and how public policy is made. The breadth of the
curriculum distinguishes it from leadership programs provided by others. Seminar leaders are professors who travel from the campus to the counties. The bars marked E1, E2, and E3, show pre, interim, and post-evaluations.

Participants "graduate" after the seminar series. In our first year, 243 leaders from four counties received certificates of completion; on May 3, 1990, the number will grow to about 450 leaders in 10 counties. We are now in the process of trying to induce engagement in local concerns or issues.

What do we want to happen? We want our learners to work on task forces on local issues. Each task force is to: (a) define the issue in terms of a problem; (b) set its own schedule; (c) analyze alternative solutions and develop recommendations; and (d) consult the county advisory/steering committee to ensure consistency.

Facilitation is to come from the pool of graduates. The organizational structure attached gives a static picture. Suppose a county has 60 graduates and wants to work on economic development, education, and the other topics listed. One county agent (.5 fte actually) obviously could not facilitate all of these groups. Instead, 15 of the 60 will be trained to be facilitators. The agent is to manage this group of facilitators. He/she 'coaches' the process, ensuring communications among the task forces and with the advisory committee. And the agent helps locate the resources needed to analyze the problem. He/she also must project a constructive image for each aspect of the work. If the small groups function as "vigilantes" they may or may not succeed in hanging a few villains, but they will very surely hang the project.

The structure is a static view. How are we going to make this happen? We can't tell our graduates what to do. They will only work on something important to them. Our job is to make it easy for them to engage. So, we are offering a high quality "Facilitators and Coaches School." This will be done at the beginning of Phase II. This course will teach a group process and the skills to manage a group through its steps. This is the dynamic aspect of our plan.

The process begins when the participants are clustered: so many in the education group, so many in the local government group, etc. Two trained facilitators, one to facilitate and one to be the recorder/reporter, are assigned to each group.

Following is the pattern of an activity that we want to see. The first step is to define the problem. We recommend that the document the situation (what is) and possible futures (what could be) so that the problem simply becomes how to get from what is to what could be. This transforms an issue, which is innately divisive because it is controversial, into a problem for which they can seek solutions.

**GROUP PROCESS**

- Define Problem
- Advisory Review
- Analyze
- Draft Recommendations
- Advisory Review
- Meet with Decisionmakers
- Inform Public

The smaller group is still part of Palmetto Leadership and Clemson University. Therefore, it is necessary that it be responsible to the larger group. We want the Palmetto Leadership Advisory Committee to review the problem before work starts and to review the recommendations before they go public.

The next steps are to identify alternative solutions to the problem and examine the consequences of each solution. They may choose simply to present the alternatives or to recommend one. Before they do either, they are to make their case to the Advisory Committee. When those two bodies come to agreement, the group is to present its report to the appropriate decisionmakers and ask them to join in sponsoring a public forum or some other means to inform the public.

This completes the process. Citizens who want to take the case into the political arena are encouraged to do so, but not under the flag of Palmetto Leadership or Clemson University.

Will it work? This conference comes just as we are beginning facilitator training and issue identification. What are the strengths of this plan? What are the pitfalls? This presentation solicits your advice.
REFERENCES


Flow Chart - Palmetto Leadership

Participants

Advisors

County Faculty

Campus Faculty

Teaching

E1

E2

Implementation

E3

Emerging

Communications

Information

Policy Processes

Issue ID

Facilitators' School

School
Phase II Organizational Structure

- Palmetto Leadership
  - Extension Administration
    - County PL Agent
      - Palmetto Leadership Advisory Committees
        - Palmetto Leadership Participants 60
          - Task Force Facilitators 15
            - Resources
              - Economic Dev
                - Education
                  - Water
                    - Land Use
                      - Housing
                        - Waste Mgmt
                          - At Large
              - SC Dev Board
                - Clemson Univ
                  - Dept of Education
                    - Water Res Comm
                      - Advisory Council on Intergov Rel
                        - DHEC
                          - Other

THREE PARADIGMS FOR BUILDING LEADERSHIP PROGRAMS FOR ECONOMIC DEVELOPMENT

Mark Peterson, State Leader, Community Development Cooperative Extension Service University of Arkansas

INTRODUCTION

I appreciate the opportunity to be here and discuss the vital issues of leadership and economic development. As I don’t assume that our present leadership development programs adequately address economic development, I chose the title of building leadership programs for economic development.

If we asked a group of community leaders what the ingredients are for economic development, we might expect them to generate a list such as this:

- Industrial park
- Organized Chamber of Commerce
- Skilled labor force
- Sewer system
- Good educational system
- Natural gas
- Rail system
- Social amenities
- Supportive city government
- Streets
- Water
- A marketing plan for the community
- An industrial visitation committee

Community spirit
Telephone system
Health system

In this presentation, I am going to present three paradigms or work views of how these ingredients can be organized. The ingredients will be essentially the same, but the way in which these are organized and the underlying premises for their organization will make a tremendous difference in their ultimate result and effect on a given community.

PARADIGMS - THE COLOR OF OUR GLASSES

From Thomas Kuhn’s "The Structure of Scientific Revolutions," we learn that paradigm comes from the Greek word "paradigma" meaning pattern. Thus a paradigm is a way of looking at things, a mindset, a workview, a set of rules about what is relevant in a given situation, and what is not relevant. In effect, it is the color of glasses we are wearing. Perhaps the best characterization of paradigm is the statement: "To the guy with a hammer, everything looks like a nail." Of course this would apply to economists, sociologists, home economists, community developers, and administrators as well.
PARADIGM #1: THE MORE JOBS PARADIGM

Coming out of World War II, the tremendous pent-up demand for goods and services led to the "industrial model"—a particular way in which we organize economic activities. It was based on high volume, standardized production, and the underlying belief that bigger is better. The More Jobs Paradigm is an expression of this industrial model. It is driven by the desire for MORE JOBS, and is based on the premise that if we get more jobs in our community, our community and all of its members will be better off. Everything is thus in service of getting more jobs, including the physical, support, and human infrastructure.

PARADIGM #2: THE DIFFRACTED DEVELOPMENT PARADIGM

The diffracted development paradigm is driven by diverse, diffracted agendas of public, private, and neighborhood/community organizations and institutions. It is marked by the independence of different groups in the community, and in some cases by real barriers to cooperation and collaborative efforts. Thus the industrial development committee or authority may be pushing for industrial development (there may even be diffraction among various industrial development groups within the community).

The mayor and city council may view their role as providing services (physical infrastructure) to the residents of the community, and may not be particularly supportive of the industrial development efforts. The school board, park board, hospital board, and local downtown merchants each have their particular agendas, and each guard those agendas and their respective turf accordingly.

In the diffracted development paradigm, there is an underlying premise that if everyone pays attention to their respective activities and spheres of influence, somehow it all will work out for the best. It is a variation of Adam Smith's "unseen hand" except it is now applied to the entire economic-social-political arena, and not just the economic sector.

PARADIGM #3: THE TOTAL DEVELOPMENT PARADIGM

The Total Development Paradigm is based on the premise that everything is connected in the community—economic base, physical infrastructure, support infrastructure, human infrastructure, and leadership infrastructure. It is driven by the vision that the community has of itself, and where it wants to be in the future. The underlying premise is that a community is not merely a place where work (i.e. jobs) can take place, but that it is first of all a human community, within which we share life functions with other people.

The total development paradigm further includes human, physical, natural, and man made resources as being available for development in service of the community vision. There is not a presumption that the local people will always choose more jobs or more community growth, but an assumption that given the opportunity, people can decide what kind of community they want for themselves and their children.

WEAKNESSES/CHALLENGES

More Jobs Paradigm
- Everyone may not accept this agenda.
- May ignore/not support/threaten existing jobs.
- Doesn't develop the whole community.

Diffracted Development Paradigm
- Often leads to conflict; no mechanism for reconciling differing agendas.
- Progress may be fragmented; efforts may be counterproductive.

Total Development Paradigm
- Takes more skilled leadership.
- Not always possible due to personal agendas of powerful individuals or groups.
SOME OBSERVATIONS ABOUT:

**Economic Development**

- The entire resources of the community are most likely to be tapped through the total development paradigm.
- Economic development is most likely to be consistent with the values, desires, and aspirations of the community in the total development paradigm.
- Is most likely to empower the local community through the total development paradigm.
- Needs to take into consideration a variety of economic development strategies, utilizing a positioning strategy to select the most appropriate strategies.

**Leadership Development**

- Is most likely to bear fruit when it includes:
  - Knowledge and skills of leadership development (personal leadership development skills).
  - Process skills for facilitating a holistic, futuristic, development process.
  - Issue-based knowledge, such as economic development.
  - Planned network opportunities.
  - Representation from all segments of the community.
  - Recognition by the community and by existing power structures.

**Integrating Leadership Development and Economic Development**

- Really support each other and are interdependent out in the communities.
- Are a powerful combination when joined together in an educational effort.

- Can be done through the total development paradigm.
- On a local level, is helpful to include participants/alums from all leadership programs.
- On a state level, there is a real advantage to building a brand coalition of agencies and organizations.
- Share some common subject matter:
  - Community entrepreneurship
  - Major forces and trends
  - Local/national/global.
RESULTS OF LEADERSHIP PARADIGMS

MORE JOBS PARADIGM

<table>
<thead>
<tr>
<th>Industry</th>
</tr>
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<tbody>
<tr>
<td>Physical Infra.</td>
</tr>
<tr>
<td>Support Infra.</td>
</tr>
<tr>
<td>Human Infra.</td>
</tr>
</tbody>
</table>

- Make things happen
- Watch things happen
- Don't know what happened

DIFFRACTED DEVELOPMENT PARADIGM

<table>
<thead>
<tr>
<th>Industry</th>
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</thead>
<tbody>
<tr>
<td>Physical Infra.</td>
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<td>Support Infra.</td>
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<tr>
<td>Human Infra.</td>
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</tbody>
</table>

TOTAL DEVELOPMENT PARADIGM

<table>
<thead>
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<th>Industry</th>
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<tbody>
<tr>
<td>Physical Infra.</td>
</tr>
<tr>
<td>Support Infra.</td>
</tr>
<tr>
<td>Human Infra.</td>
</tr>
</tbody>
</table>

- Act
- Watch
- Don't know
The entire system is driven by the desire for more jobs.
DIFFRACTED DEVELOPMENT PARADIGM

INDUSTRY

Agriculture
Forestry
Tourism
Retirement

Leadership

PHYSICAL INFRA-STRUCTURE

Water
Roads
Streets
Sewer
Industrial Park
Utilities

Leadership

SUPPORT INFRA-STRUCTURE

Education System
Recreation & Parks
Health Care
Retail Sector
Churches

Leadership

HUMAN INFRA-STRUCTURE

Attitudes
Values
Knowledge
Skills
Community Spirit
Vision of Future
Families

Leadership

The driving force is diverse agendas, spread out through various organizations and institutions in the community.
The driving force is a shared vision of the community.
ECONOMIC DEVELOPMENT THROUGH VALUE ADDED

Joe H. McGilberry, Manager
Food and Fiber Center, Mississippi Cooperative Extension Service
Mississippi State University

There are numerous definitions of varying lengths for economic development, but for our purposes a simple concise definition will be used, that being the creation of wealth. In a local or regional economy the creation of wealth should not be confused with the transfer of wealth. If we are transferring dollars within a local market for goods or services, the dollars indeed turn over, and wealth is transferred but not created. We must exchange local or regional goods and services for dollars from outside the region to create wealth within a given region.

Likewise, there have been many discussions of the concepts related to value added. We will describe value added as any activity which increases the value of raw materials. Such activity would include processing or manufacturing, packaging, distribution, marketing, etc. When evaluating value added opportunities, we should not limit our thinking and consideration to only raw materials--natural resources, raw goods, or materials--indigenous to the region. We need to consider every possible value added alternative that will enhance the development picture of a local or regional economy. There are many innovative and creative people--entrepreneurs--all around us with value added ideas. We need to be a support system which helps them mold and structure their ideas into reality.

Therefore, economic development through value added would involve increasing the value of raw materials by some activity or series of activities (processing and manufacturing) and then successfully exchanging this value added product through marketing and distribution channels for dollars from outside the region. This sounds simple, but for it to occur several things must happen. These can best be described within the framework of a concept called "entrepreneurial success" (Figure 1).

![Entrepreneurial Success Diagram](image)

Figure 1
There are at least three necessary ingredients for entrepreneurial success: 1) marketable ideas, including the product, market strategy, and business plan; 2) management skills; ability to manage and control the operation; and 3) capital, access to equity capital, venture capital, working capital, etc. For economic development to occur an environment must be established that supports, encourages, and facilitates entrepreneurial success.

This environment needs to provide business and technical support in developing and refining the product and in structuring the business plan and marketing strategy. Technical and educational assistance is also necessary to develop and improve the needed management skills for the entrepreneur or the management of the operation. And finally, capital formation which is accessible to the entrepreneur must occur.

THE CONCEPT

An example of a program effort which focuses on economic development within the agribusiness sector through value added is the Food and Fiber Center at Mississippi State University. The Food and Fiber Center was established as a part of the Mississippi Cooperative Extension Service in 1974. The goal and mission of the Food and Fiber Center is to increase value added to the state’s economy through expanded and improved processing and marketing of Mississippi's agricultural, marine, aquaculture, and forest products.

The significance of the activities of the Food and Fiber Center and its mission is reflected in a January 1984 report to Congress from the Secretary of Agriculture on the “Needs Assessment for the Food and Agricultural Sciences.” In this report the Secretary stated that:

The importance of processing, marketing, and distribution is evidenced by the fact that two-thirds of the retail cost of food is associated with this segment. It is expected that roughly three-fourths of the retail value of food, fiber, and forestry products will be represented by these activities by the beginning of the 21st Century. The beyond-the-farm-gate sector of the U.S. economy will become increasingly critical to national employment, the inflation rate, and the balance of payments. As we look to the year 2000 and beyond, there are three major areas of concern:

(1) increasing transportation costs,
(2) processing and packaging efficiencies, and
(3) storage and handling issues.

Along with market development and improving the efficiencies of resource utilization, these areas are the primary focus of the Food and Fiber Center.

The programs of the Center focus on providing leadership to decisionmakers in firms and industries regarding new and expanded processing plants and markets for Mississippi food, fiber, and forest products, along with identifying resources and raw materials in the state that could be used to stimulate economic development in agribusiness industries.

The Center assists agribusiness industries in the state by providing educational and developmental services and technical support through a multidisciplinary task force. The areas of specialization include management, business analysis, industrial engineering, economics, food technology, wood and wood products processing, marketing, and distribution. Typical services offered are listed below:

- Perform economic analysis of production processes and marketing distribution strategies for existing and new products.
- Identify new market opportunities and assist with domestic and foreign market development.
- Educate managers in the planning and control of business operations including quality control programs, disposal of liquid and solid waste from processing, inventory controls, and management information systems.
- Perform feasibility studies for new or expanding Mississippi agribusiness processing firms.
• Assist with new product development in areas of formulation, processing procedures, taste testing, packaging, labeling, and market potential.

• Perform management audits for agribusiness firms.

• Conduct in-plant analysis to improve productivity and operating efficiency, and develop facility and process line layouts.

• Evaluate economic justification of capital expenditures.

• Provide information about local, state, and federal regulations governing food and wood products processing.

• Review research and technological development for potential application to Mississippi agribusiness processing firms.

• Evaluate economic trends for Mississippi agribusiness processors.

THE OPPORTUNITY

For the crop year 1988, farm value for Mississippi agricultural and forestry commodity production was $3.5 billion with an estimated consumer retail value of $18.1 billion resulting in an added value potential of approximately $14.6 billion. Estimates are that 55 percent of these agricultural and forestry products were exported to other states or countries for processing, resulting in millions of value added dollars being lost to the state. For these products that were processed or to which value was added locally, the economic impact of this activity was significant. Table 1 illustrates the impact of value added processing. The farm value of $3.5 billion when applying total linkage multipliers shows an economic impact of $13.4 billion, a four-fold increase. A closer look at Table 1 shows that for commodities which had value added to them through processing and marketing, higher linkage multipliers were identified. Those commodities that were exported for processing had relatively low linkage multipliers or economic impact on the area or state.

To realize the full opportunities in value added processing and marketing within a state or region, we must continue to develop an industrial base for processing or converting agricultural and forestry commodities into consumer-ready products and distributing these products into the marketplace.

THE PLAN

An agribusiness development action plan has been formulated by the Food and Fiber Center that provides direction for achieving the value added opportunities which can be developed within the state. This plan focuses on identifying opportunities and objectives for continued agribusiness development in the State of Mississippi in: 1) agribusiness planning and development; 2) product development; 3) food and fiber processing; and 4) food and fiber marketing.

Agribusiness Planning and Development

The economy of Mississippi is linked to the agricultural and natural resources in the state. In a study by the Mississippi Research and Development Center, it was stated that, "Food processing, lumber, and mining which are strongly connected to the state's agricultural resources and natural resources have comparative advantages in the state's economic development strategies." The opportunity exists for continued growth and expansion in the agribusiness planning and development which focuses on the value added potential of the state's agricultural and natural resources. The catfish, poultry, and furniture industries are examples of agribusiness industries that have had exceptional growth and impact on Mississippi's economy and are taking advantage of "value added" potential.

The objectives of this effort are to:

1. Provide support information and economic and strategic evaluation in the planning and development of new or expanded agribusiness ventures.
Table 1. 1988 Farm Market Value, Linkage Multipliers for Each Crop, and Resulting Economic Impact, Mississippi.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Farm Marketing (million dollars)</th>
<th>Total Linkage Multipliers</th>
<th>Total Economic Impact (million dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>379</td>
<td>2.62</td>
<td>992.98</td>
</tr>
<tr>
<td>Cotton</td>
<td>721</td>
<td>2.65</td>
<td>1,910.65</td>
</tr>
<tr>
<td>Forestry</td>
<td>624</td>
<td>2.84</td>
<td>1,772.16</td>
</tr>
<tr>
<td>Poultry and Eggs</td>
<td>562</td>
<td>6.29</td>
<td>3,534.98</td>
</tr>
<tr>
<td>Meat Animals (feeders)</td>
<td>297</td>
<td>3.30</td>
<td>980.10</td>
</tr>
<tr>
<td>Feed Crops</td>
<td>141</td>
<td>2.79</td>
<td>393.39</td>
</tr>
<tr>
<td>Dairy (milk)</td>
<td>121</td>
<td>6.25</td>
<td>756.25</td>
</tr>
<tr>
<td>Food Grains</td>
<td>236</td>
<td>2.79</td>
<td>658.44</td>
</tr>
<tr>
<td>Horticulture Crops</td>
<td>82</td>
<td>2.45</td>
<td>200.90</td>
</tr>
<tr>
<td>Catfish</td>
<td>301</td>
<td>7.73</td>
<td>2,326.73</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,464</strong></td>
<td></td>
<td><strong>13,526.58</strong></td>
</tr>
</tbody>
</table>

Source: 1) Mississippi Cooperative Extension Service Agricultural Economics.
2. Educate agribusiness managers concerning the application of new technology in their industry.

3. Encourage cooperative efforts in the public and private sectors to expand the agribusiness base in Mississippi.

Product Development

Value added potential from Mississippi agricultural commodities is not being fully realized in certain food and fiber products. An opportunity exists to increase the value added to agricultural food products by developing a larger number of consumer-ready foods. Retail food industry statistics indicate that over 11,000 new products or line extensions were introduced in 1988. The trends in food consumption provide fertile grounds for new product development. Opportunities for new product development abound in all areas of agribusiness, but especially in catfish, poultry, red meat, underutilized marine species, feed grains, and horticultural crops. Mississippi food and fiber processing and marketing firms need to explore these opportunities for developing new products.

The objectives of this effort are to provide the following:

1. Clientele will be provided assistance with new product ideas and formulations, product improvement, cost analysis of product ingredients, market analysis and distribution channels for new and improved products.

2. Food processors will be taught how to develop new and improved products from agricultural commodities.

3. Processors and marketers will be helped to understand the economic benefits of developing and marketing new products.

4. Management of new ventures, home growth industries, and existing operations will be provided with financial and management control information for new product development.

5. Financial, government, and business leaders will be better informed about the food processing industry and its economic significance to the state.

Food and Fiber Processing

Food and fiber processing may hold the key to Mississippi's economy. Value added potential to agricultural commodities produced in Mississippi in 1988 was estimated at $14.6 billion. The food processing industry and the rapidly expanding furniture and forest products industry in Mississippi have tremendous potential for improving their value added position. Many of these food and fiber processors have organizational structures that do not effectively use and develop their manpower. They often fail to perform comprehensive economic and financial analyses when evaluating new equipment, process alternatives, and building and/or expanding facilities.

The objectives of this effort are to:

1. Educate the state's new and existing food and fiber processors in the application of technologies to improve productivity and increase further processing opportunities.

2. Train agribusiness managers in organizational analysis and manpower planning, development, and training.

3. Assess and evaluate economic processing costs and operating margins so that these food and fiber processors can maintain a competitive status.

4. Assist in improving quality control and assurance programs in agribusiness industries.

Food and Fiber Marketing

In 1988, the value of farm production in Mississippi for all food and fiber commodities was estimated at $3.5 billion. However, the estimated retail value for these commodities was $18.1 billion. As products are further processed, the
role of marketing becomes greater. Better marketing channels are needed to move the products to end users. Innovative marketing techniques are needed to expand existing markets and to identify new markets. A critical evaluation of marketing margins is needed if Mississippi processors/manufacturers are to remain competitive in the market place.

The objectives of this effort are to:

1. Explore and assess new and potential markets for existing and proposed products.
2. Assist processors/manufacturers in establishing overall marketing strategies.
3. Evaluate direct, cooperative, and export marketing opportunities for food and fiber processors/manufacturers.
4. Analyze economic advantages/disadvantages of various marketing and distribution systems for food and fiber processors/manufacturers.

CONCLUSION

The opportunity for economic development through value added is real, and the potential is great. We must remember that economic development is not an event such as a meeting or a ribbon cutting but is a process of supporting, developing, encouraging, and facilitating the entrepreneur in achieving success. The economic development benefits to the community can be significant whether the entrepreneur is local, national, or international.
INDUSTRIAL DEVELOPMENT

Lowell Wagner
Jackson County 4-H Extension Agent
University of Kentucky

In 1986 a plastic-molding plant located in our county which would ultimately employ 500 people. Its location was the result of many factors: a good site, a great economic development package, luck, and a concentrated and united effort on the part of a large group of citizens.

Today I would like to discuss very briefly the last element in that formula—a united effort by a large group of people. To begin with I'd like to economically describe our county, emphasizing those elements which would probably not attract industry. We are located on the edge of the Cumberland Mountains, at least 20 miles from an interstate connection. Of our population, 39.2 percent falls below the federal poverty line. We have the lowest percentage of high school and college graduates in the state. We are somewhat isolated from other counties in the region; one-half to one-third of our land area is in the national forest. We have one of the lowest tax bases in the state. I offer these facts with no apology, no request for sympathy, and particularly no desire to stereotype our population, for we do have many positive strengths in our community—as many or more as the next place.

In the fall of 1984, several citizens approached the Extension staff about starting a Development Association. The main item of interest at that time was a lake for recreation and water supply. The group organized and began working on issues of community importance.

In March of 1985, an official of the local RECC approached officers of the Development Association about an industry that wanted to test the county’s interest in plant location. This marked the beginning of an intense six month period of preparation. Immediately a meeting was called of the Development Association to make plans. Also invited to the meeting were consultants from a gas transmission company, the state commerce cabinet, regional electrical supplier, the ADD Board, and most important—the company officials later stated was the UK Extension Service’s own industrial development specialist. It was decided that a mass meeting or rally needed to be held to introduce the county to the industry and the industry to the county. A rally was planned for mid-April. The plan was to have various segments of the population give their welcome and invitation to the company and what their organization could offer to the plant and its personnel. These representatives included the RECC, phone company, county and city governments, fire department, health services, schools, youth groups, etc. The company in turn would make its presentation and describe what it would offer the community. The rally succeeded beyond our wildest dreams. Over 500 people overflowed the building. Our industrial development specialist arrived late, couldn’t get in, and had to stay in his car.

This is when the real work started. As Charley Pride said, “The easy part’s over, now the hard part begins!” A site committee was formed. Sites were visited, and site owners were negotiated with. Meetings were held with gas company officials. Meetings were held with commerce cabinet officials, architects, and engineers. We were in constant touch with company officials as to what their plant location needed.
In June, we sponsored a luncheon for company officials in which we gave our preliminary proposal, unveiled the architect's drawings, and visited the site we had selected. Officials seemed surprised that we had pulled off what we had. All along we knew that we were competing with other counties for the plant location. Our position was that we wanted the plant location in our county, but if another county in the area got it, it would still benefit us all.

In July, we made our final presentation which included a thick proposal book, some overheads and presentations by various people. The pitch was made to company officials and to three industrial location specialists hired by the company to decide which location was the best. The proposal had taken many people and many hours to put together. This was the culmination of our months of intense work. We were informed about a month later that our county had won the location.

I'd like to make a few points in regard to the success of our efforts. I recently talked to one of the plant officials who had been one of the prime movers and workers in the plant location. I asked what were the best things that were done that stood out in all of our work. Here were some of the answers: There was 100 percent unity in the community and among government officials; information supplied was very good and accurate; public hearings were on excellent ideas; homework was done well; sites offered were excellent, reasonably priced and competitive, proposal was excellent; and wage rates were competitive. What could have been improved was public education as to how fast jobs would come available and how quickly the plant could get into production. A few other observations: A vital and functioning Development Association was already in place and continues to be. Luck and circumstance are important. The proper and early use of consultants and specialists is important. It is vital that all citizens be encouraged to be involved in the decision and selection process as much as possible, and the process should be apolitical and non-partisan. Opposition should be heard and respected. To Extension people especially I say: take credit and give credit as much as possible. In general, I would say be very selective in what businesses you negotiate with. It may be better to have nothing than a plant which leaves quickly or doesn't work out in one way or another. Ask what the company can offer and ask the community what it can offer. What are the trade offs? How many people really are in the available labor force?

Other questions relate to development. What does development mean to the county? What does the community want in terms of development?
CASE STUDY

Logan B. Barbee, Agricultural Agent
Cooperative Extension Service
Calhoun County, Florida

AGRICULTURE ECONOMIC (MARKETING)
DEVELOPMENT AND CRD

Situation:

North Florida has historically relied on agriculture as an economic base. Development of large farms in south Florida resulted in capturing early spring market from north Florida farms for various vegetables and melons. Coupled with the reduction of crop values, small family farms were forced to seek alternative crops. Recent production has focused on soybeans, field corn, peanuts, and various row crops. Competition with large farms, other states, depressed market prices, and rising inflation have increased the difficulty of making the family farm profitable in north Florida. As a result many family farms lie idle or must depend upon supplemental income from outside employment to keep the farm in operation.

Objective:

The family farm has traditionally been considered the backbone of our country. In order to preserve the integrity of the family farm, new directions have to be explored. One direction is to diversify production and not try to compete with the large producers. Growing several different non-traditional crops would result in spreading the farmer's labor and cash flow more evenly throughout the year. But involvement with other than traditional enterprises requires new market developments, educational programs, and a tremendous public relations job. Seeking new markets is the catalyst to partially achieve the preservation of rural traditional farms. With this in view, marketing and off-the-farm employment opportunities have been pursued vigorously in an attempt to make a significant difference in the future of our area with some very positive results.

Methodology:

Programs, activities, advisory committees, and cooperating agencies were organized and developed to accomplish the area development of alternative enterprises and facilities. All initiation, planning, and development of activities mentioned above was handled by the Extension staff. Other agencies contacted and involved with these projects are: Apalachee Regional Planning Council, Florida Department of Commerce, Florida Division of Marketing, Florida Farm Bureau (Marketing Division), Chamber of Commerce in five counties, local civic groups, area finance institutions, state soybean associations, governor's office, Department of Corrections, and Department of Commerce.

Some projects and programs initiated are:

- Aquaculture educational program (area)
- Contract broiler enterprise (area)
- Local agricultural industrial complex (local, area)
- Northwest regional aquaculture facility (regional)
State prison facility

1. Educational Efforts
   a. Total projects initiated from leadership from local Extension office
   b. Two aquaculture area workshops with over two hundred (200) in attendance
   c. Newspaper articles and pamphlets
   d. Field visits, interagency programs
   e. Advisory Board developed and constituted
   f. Television coverage
   g. Proposal for aquaculture facility developed and proposed
      - $206,000 appropriated in 1987
      - planned facility construction completed
      - acreage for facility donated

2. Contract Broiler Enterprise
   a. Total project initiated from local Extension office
   b. Distribution of IFAS poultry tape (nationwide)
   c. Multi-county meetings held in five counties
   d. Multi-agency meetings held with 14 agencies
   e. News articles, 22 newscasts, and eight magazine articles

3. Agricultural Industrial Complex
   a. Total project initiated from local area
   b. Agricultural economic development advisory council
   c. Chamber of Commerce programs
   d. Multi-agency workshops held with six agencies
   e. Agricultural economic action committee
   f. Governor's Task Force Committee initiated
   g. Phase I and Phase II completed with construction beginning in November of 1989

4. State Correctional Facility (to provide off-farm employment)
   a. Total project initiated from local Extension office and leadership provided
   b. Project packet initiated, developed, promoted, distributed, and follow-up performed through the Extension office
   c. Total county political, civic, and ministerial leaders organized and united in a combined project
   d. Organized county public meetings
   e. Endorsements from Ministerial Association, all law enforcement agencies, judicial agencies, Board of County Commissioners, city offices, school offices, Cattleman's Association, and Environmental Protection Agency.
   f. $10.5 million correctional facility constructed in Calhoun County which will employ more than 250 persons.

Impact

As a result of the efforts and time expended on this program, the Board of County Commissioners, Chamber of Commerce, Division of Marketing Personnel, Farm Bureau, Apalachee Regional Planning Council, as well as other public officials and private citizens, have expressed gratitude and appreciation for the enterprising and leading role that Extension is playing in the future of agriculture and economic development of this area.

The Agricultural Complex has the land appropriated. The project is proceeding with wells, utilities, fencing, sewage treatment facilities, etc. A processing plant for catfish is looking to be the first entry into the complex, with construction beginning in November 1989.

Approximately 18 new fish ponds have been installed in the last 12 months with 60 more in the planning process, according to the Soil Conservation Service. There is tremendous interest in fish production since the first aquatic meeting was held. Expectations of more than 500 acres in ponds are reported for the next year or so.

Approximately 90 persons expressed interest in a broiler production operation with nearly 200 houses projected. Excellent survey results have been obtained, and endorsements and responses from all agencies and individuals involved have been expressed.
Approximately 100 local county residents enrolled for Correctional Officer School. One hundred twenty-five local residents have been employed at the local facility.

The opportunities for success are always present; they have only to be pursued.

DEVELOPMENT AND EXPANSION OF AQUACULTURE COOPERATIVE/LEADERSHIP FOR COUNTY AND REGION

Situation

Because of the tremendous popularity of the aquaculture Extension programs and projects implemented by Calhoun County Extension Service, there emerged a need for further programming and development in the area of leadership and organization for this rapidly expanding clientele. There were no organizations for aquaculture for this entire area.

Objective

The cooperative was formed for the purpose of uniting area farmers engaged in agriculture and aquaculture production with a goal to assist food fish farmers in marketing and obtaining services and supplies needed to lower costs and increase individual earnings.

Methodology

Programs, activities, advisory committees, and agency cooperation were organized and developed to accomplish this programmatic effort. All initiation, planning, and development of activities was handled by the Extension staff.

Upon contacting the U.S. Agricultural Cooperative Service (USDA) in Washington, D.C., this case entered into a very complicated endeavor. After months of surveys, meetings, steering committees, workshops, four organizational meetings, etc., the Florida Aquaculture Processors Cooperative, Inc. (FAPC) was formed with the leadership from Florida Extension.

This Extension office also initiated and coordinated the participation of four counties from north Florida in organized Farm Bureau Aquaculture committees. There were only two other Farm Bureau committees in the state (they were not organized by the Extension Service), and there had to be six organized counties before the state Farm Bureau could officially recognize aquaculture as part of their farm programs. There is now a very active and functional state Farm Bureau Aquaculture Commodity Council, a public relations program resulting from Calhoun County Extension work.

Impact

As a result of the efforts of this Extension office, the Florida Aquacultural Processors Cooperative, Inc., is actively engaged in marketing agreements, and construction will begin in November with completion expected in April of the state's newest and most modern fresh water processing facility. The plant is designed to process 35,000 pounds of catfish daily. Future planning includes a feed mill also. The Co-op will serve the north Florida, southwest Georgia, and southeast Alabama areas. The USDA Extension Service representatives stated that the leadership and organization of this project were the best they had witnessed in the United States.

COOPERATIVE EFFORT MAY HATCH AREA POULTRY PRODUCTION PROGRAM

Situation

With farming in the present state of declining distress, alternatives are not going to drop into our laps. The communities are going to have to aggressively seek out new and better enterprises.

Objective

The contract broiler industry is an attractive alternative for this area, and we are pursuing the possibilities aggressively.

The university poultry specialists, area
economists and Extension directors in five counties have put together a plan to lure one of the major poultry operations into this area and have put it in action.

Methodology

A multi-county survey has been developed and distributed. The interest level in the counties is very high for such an operation. Approximately 90 interested growers with a projection of close to 200 houses has been reported.

Endorsements from the following state, area, and local agencies have been received:

State Soybean Association
State Farm Bureau/Local Farm Bureau
Boards of County Commissioners
Chambers of Commerce
Local and area financial institutions
Commissioner of Agriculture
Division of Marketing, State of Florida
Florida Poultry Federation

A videotape was put together in the five county area by the editorial crew from the University of Florida. The film highlighted the area's historical background, railroad, Interstate 10, labor force, rural agriculture, and people.

An all-marketing-agencies meeting has been held including the state Division of Marketing, Farm Bureau Marketing Division, Economists and Area Extension Director. A uniform agreement has been made to pursue the poultry endeavors with all resources. The first cooperative effort of this kind that anyone at the meetings was aware of was thus formed. With all the agencies working together cooperatively to make this project work, there have not been any negative responses from anyone associated with this project since its conception, which is amazing.

NOTE: The cooperative spirit, enthusiasm, and professionalism that the poultry specialists and the area economists exhibited have been truly exceptional, not to mention the dedication and hard work put in by them. This effort is going to be successful even if it does not bring in an industry because of the model that has been set.
Greetings from the Virginia Cooperative Extension Service. I am pleased to be invited to Alabama to provide information from an Extension agent's point of view on industrial development. At this time I would like to show a video 10 minutes in length which describes the characteristics and background of my working environment and its association with industrial development.

Industrial development must be approached programmatically in two different directions--targeting new industry and existing industry. Objectively speaking, industrial development enriches a community by adding tax base and creating jobs. There are other spin-off benefits to industrial growth, but these are the macro benefits to the community.

I would like to describe the characteristics needed by an Extension agent to be successful in the field of industrial development. Degrees do not matter--be it Ph.D. in psychology or agriculture. Industrial prospects as well as existing industrial administrative personnel are a higher-bred or thoroughbred group of individuals--different from our routine Extension clientele. Therefore, we must gear ourselves up for this group of clientele if we plan to be successful.

Two characteristics which are dear and common to every prospect and local plant manager with whom I have become associated over the past eight years in industrial development are:

1. Industries are sensitive to agricultural interest and needs; and

2. Industries are interested in people's needs and want to improve the quality of life for residents within a community.

It is also true they want to make a profit; they want free land, local tax breaks, cheap labor, etc., but for Extension professionals to be successful, we must approach industry in a very positive and professional manner. To engineer an attractive industrial development program, it must be attractive from a local funding perspective as well as an overseas industrial prospect. An Extension agent must through the mandate called education, develop four personal characteristics:

1. **Credibility and trust** within the community. This process will take five-plus years. To local taxpayers credibility means that you know where you are going and you are going there for the good of the community. For example, when a five million dollar bond referendum is put before the voters, and you are educating clientele on the benefits of the industrial development bond issue, you must have credibility to be successful. You must have money to have an industrial development program. Credibility and trust come as natural as the air around you if you are actively involved in the community and doing a good job in your profession as an Extension agent.

2. **Motivator**--To be an educator you must first be a motivator. Motivation to an Extension agent means creating excitement among local
elected government leaders, it means showing interest and enthusiasm when a new industrial prospect shows up on Sunday afternoon to look at your community for location of his new plant.

Extension's role is also important to keep local industrial commissions, authorities, and committees functional and on track since these persons are volunteers and need to feel that what they are doing is important.

3. **Marketer**--An Extension agent must be knowledgeable of the community's resources both with existing industry as well as new prospects. Resources include everything from water resources, treatment plant capacities, land availability for expansion or new location, topography, population characteristics, unemployment rate, existing industry, soils, wage rates of other industries, railroads, highways, natural gas lines, schools, churches, hospitals, fire protection, etc. Grant money for highway access, ELA block grants, etc., are also marketing tools to keep existing industry and to recruit new industry.

People, however, care for other people. This is true at the industrial management level also. Since an Extension agent's job is to work with people, then he should know the people in his community and sell the new industrial prospect on the people's need for the industry first. This must be the priority.

Knowing other existing industries has helped me recruit industries. For instance, recently O'Sullivan, a Tandy Corporation, located in Halifax County rather than "The Triangle" in North Carolina because I informed the prospect that an existing local industry (Georgia Pacific) could supply them with the particle-board which they needed and that the same industry needed their sawdust which was a disposal product and problem for them. Actually, Georgia Pacific now buys the sawdust from O'Sullivan--90 tons per day.

The Extension agent must market resources also to the state economic development office because referrals come from this office.

4. **Manipulator or Facilitator**--This is the most time consuming of all but here is where the Extension agent can get help. Manipulation must occur locally with the community, then to governing bodies to produce operational funding and on to existing industry and new industrial prospects.

Manipulation in my terminology means to make it happen. As an example, I co-authored the first grant proposal to the Private industrial Council to hire an industrial coordinator fifteen years ago. This was the beginning of our industrial development program. We now have an Economic Development Commission--"a think tank"--which meets every Tuesday morning for breakfast, an economic development authority that handles money matters, and a full time economic development coordinator.

I currently serve as chairman of the Economic Development Commission. As an educator-manipulator, I have assisted in recruiting four industries in the last two years, creating over 1,400 jobs. I have traveled on the governor's plane to talk with the board of directors of new industrial prospects in their home towns. The tasks are many, but our new industrial coordinator has decreased my involvement with new prospects.

Existing industry continues to seek Extension's assistance in training programs from management staff, graduate, or special interest courses via satellite or technical assistance. Recently an industry wanted to know if I provided the resources to industry that I provide to farmers. The industry wanted to know why a $40,000 piece of metal was made overseas and took five months to get kept breaking. The Engineering Department at Virginia Tech found the answer.

Yes, I have an outstanding agricultural Extension program in Halifax. Rural communities are financially stronger when balanced between agriculture and industry, and it improves the quality of life of everyone. Remember--credibility, motivation, marketing, and manipulation are collectively key elements in Extension's educational effort of industrial development.

Extension must help with the development of the industrial recruitment infrastructure.

Extension can help communities develop an active industrial development program. If the state has a certification program for industrial development, then help the community become certified. In my county, prospects come from two sources: (1) the state economic development office, and (2) other industries. Therefore, get the state and other local industries involved in the team effort approach. Set up a prospect
committee, sites committee, finance committee, and visitation committee. Competition for industry is tough—you need a strong team. Competition for industry among communities is fierce. As the recent song said, "Welcome to the jungle." If you like challenges and risk, then industrial recruitment is for you.
ENTREPRENEURS IN RURAL AREAS

Georgia Aycock, Extension Resource Management Specialist
Evelyn Brannon, Assistant Professor, Consumer Affairs Department
Cooperative Extension Service, Auburn University

According to forecasters, the 90s will be the decade of the entrepreneur. The fastest growing segment of self-employed people are women who own their own businesses. Why is business start up so attractive to women and to rural women particularly?

Isolated by distance and transportation costs, rural women are faced with many barriers to successful career development. Most must balance home care and family responsibilities with the need to make a living. Some also contribute unpaid services to family farms or businesses. Often traditional employment means working for others at low-paying jobs that are dead-ends for career development, personal and professional growth, and creativity. Even these jobs may be in short supply in rural areas. To make matters worse, few employers recognize the transferability to the workplace of skills learned at home like budgeting, time management, and planning.

Home-based business offers rural women an attractive alternative—the chance to create their own jobs while balancing the demands of earning an income, family responsibilities, and rural living. And, when women create a successful business, the entire family benefits. As one husband put it after joining his wife's business: "Behind every successful woman is a very fortunate man."

"America's new love affair with all things local," as a recent article in Working Woman points out, opens the door for rural entrepreneurs. For the first time in generations it is popular to buy products based on cultural color and regional identity. And, female entrepreneurs have become today's cultural heroines. Their ingenuity is applauded on TV talk shows and in books and magazines.

Examination of these role models illustrates the importance of the commitment of the entrepreneur to the success of the business. Some fit the profile of the classic entrepreneur—innovative, flexible, dynamic, and a creative risk taker. Such a person is likely to start a growth-oriented business in which she builds "sweat equity." Her aim is to create her own company and build that company into a bigger player in the market.

But not all people who start or operate a small business fit the entrepreneurs' profile although they share some characteristics—drive, high energy levels, and technical ability or skills. Some people are instead interested in self-employment—that is they have skills, interests, and abilities that can be channeled directly into the marketplace to create their own jobs. Their focus is on 'ownership' of their work.

One recent study reports four basic patterns of business development among rural women: 1) teaching what they know; 2) learning a craft and selling the product; 3) performing a service; and 4) developing a hobby into a business. The success of each pattern depends on finding a workable business concept. That means being able to identify a target customer's needs, gather resources, and implement actions to satisfy those needs.

PROGRAMMING IN ALABAMA

Beginning in 1980, specialists and county agents in Alabama have provided programming on home-based business including area meetings, county programs, printed materials, newsletters, technical information, marketing help, referrals to other agencies, networking opportunities, and individual consultations. The objective of home-based business programming is to provide...
Programming for Alabama's small home-based business people developed as a response to immediate client need—the need for income producing alternatives to traditional jobs. The programs developed to meet that need were based on the concept that people have valuable skills but need assistance in turning those skills into income producing activities. Extension specialists on the state staff and county agents in all 67 Alabama counties have been involved in providing assistance to home-based business people. Extension's home-based business programming focuses on issues critical to success, including specific technical information and business assistance in the following areas:

**Sew for Pay**

Targeted for people with sewing skills, this program focuses on selection of a specialty, pricing, price-quality interactions, customer relations, and time management.

**CASH: Creative Artisans Succeeding at Home**

Targeted for people with a variety of craft skills, this program focuses on design quality, production efficiency, quality-price interactions, and marketing potential beyond local markets.

**Food for Profit**

Targeted for people interested in catering or quantity food production and sales, this program focuses on complying with strict rules and regulations for food-related businesses, food safety, pricing, production efficiency, and marketing.

**Bed and Breakfast Homes and Small Inns**

Targeted for people interested in opening their homes to paying guests, this program focuses on characteristics of successful operations, selling points, marketing, food, and home safety.

**Day Care Provider**

Targeted for people who want to care for children in their home as a business, the emphasis is on licensing requirements, food safety, childcare, and business planning.

**Home Health Care Companion**

Targeted for people who have elderly people in their homes or who are interested in caring for people outside their homes.

**Freelance Teaching**

Targeted for people who want to translate skills into income by teaching others those skills, the program concentrates on marketing, class plans, classroom management, and preparation of samples and visuals.

**PROGRAM EVALUATION**

Evaluation is meant to assess the merit of a program and provide data for decisionmaking regarding program improvement. Needs assessment and environmental scanning plus follow-up evaluation of program delivery was a part of each home-based business program introduction.

The entire home-based business program in Alabama was slated for evaluation in 1986/87. Evaluability Assessment—a qualitative research technique—was selected as the technique ideally suited to the study. The purpose of Evaluability Assessment is to determine the perceptions and informational needs of the program's stakeholders. Such an approach gives program staff and key stakeholders "ownership" of the evaluation by their involvement in it. Thus, results are likely to make a difference to staff, administrators, and policy makers.

For the study, a task force of evaluation specialists, administrators, subject-matter specialists, and county agents derived program models, designed a set of interview questions, and selected 35 stakeholders to be interviewed. Questions were designed to probe the following issues:

- perception of home-based business as a program area for Extension;
- awareness of and recommendations on current programs;
- expected audiences including likely impacts.
and results;
- recommendations on program delivery including adequacy of resources allocated; and
- comments on future programming and program evaluation.

Analysis of the interviews makes clear that stakeholders are somewhat familiar with the concept of home-based business and with Extension but not as familiar with Extension's home-based business programs. While disappointing given the number of programs delivered and the publicity accompanying those meetings, the finding is not surprising because Extension programs in this area have been pilot projects. Small business development is a continuing focus of Extension planning and programming, but interest in home-based business development is a more recent concern. As one Extension administrator put it, "We've got to do a better job of marketing ourselves. That is the key to all of it."

Still there was consensus between staff and stakeholders on the audience for home-based business programming: business beginners. Specific targeted audiences include women, farmers and residents of rural areas, low income or underemployed people, and retirees.

An appointed state official highlighted the opportunity when she said, "There is a real need out there to support the entrepreneurial spirit that is the foundation of our country."

There was also consensus between the staff and stakeholders that small home-based business programs have impact on individuals in terms of personal development, quality of life, and income; on potential entrepreneurs in terms of informed decisions; on entrepreneurs in terms of more efficient operations and improved business practices; on the community/state in terms of economic growth; and on Extension in terms of expanded audience and influence. An attorney summed it up best when she explained that "there are two effects: for people toying with the idea, it gives them the information they need to make the decision, for fledgling entrepreneurs, it helps them operate more efficiently with better information."

There was also staff and stakeholder consensus on program delivery. Stakeholders' suggestions for topics to be covered in programs paralleled those already being presented in Extension programs--regulatory aspects, legal sessions, basic business practices, and marketing information. Delivery methods suggested paralleled current Extension practices--meetings, conferences with individuals, publications, and newsletters, etc. As one business person said, "You people are in the ballpark ahead of everybody else." Another sees Extension as "the connecting network between home-based business people and other professionals."

Stakeholders and staff see a range of evaluation efforts--needs assessment responses to programs, follow-up studies with participants, and community impacts--as part of programming for audiences interested in small home-based business. As one legislator put it, "Extension could be the lead agency, could really put things together for the home-based industries--that ought to be the future of Extension." All categories of stakeholders called for more visibility for Extension programs in small home-based business and for networking among agencies interested in assisting potential entrepreneurs.

Following the Evaluability Assessment, an impact study was conducted state-wide in 1988. County agents surveyed 342 people in 23 counties who had participated in home-based business programming to: 1) evaluate results; 2) profile the home-based business person, and 3) explore programming needs.

Findings: 65 percent were operating a home-based business, 14 percent were undecided; and 21 percent had decided not to start a business. The reasons most often cited for not starting a business were "not the right time," "need more business background," and "uncertain about the audience/market." Businesses ranged from woodcrafts to contract knitting, from quilting to jewelry making, from sign painting to catering, with many respondents listing more than one product or service. Favored marketing strategies are selling directly from the home, followed by selling at fairs and through shops (on consignment and wholesale). Surprisingly, 30 respondents owned their own shops. Among those in business: 61 percent started businesses after participating in Extension programs, over half reported working part-time, with the other responses split equally between full-time and seasonal. Thirty-seven businesses reported employing others (equally split between family members and non-family members). Over half reported that income from the businesses provided less than 10 percent of the family income but for 5 percent the business provided most of the family income. Respondents rated Extension information as helpful in decision-making and liked Extension information as good
to excellent when compared with information from other sources. Respondents were mostly female and between the ages of 35 and 64. Fifty-five percent described their residence as rural non-farm, 32 percent as urban, and 13 percent as farm. Twelve percent had incomes less than $10,000; 60 percent more than $10,000 but less than $30,000; and 28 percent more than $30,000.

**FUTURE PROGRAMMING**

Generating income through starting businesses in rural areas means providing locally-needed goods and services or producing products that can be marketed beyond the local area.

One manager of a craft marketing cooperative was quoted as saying that it is a myth that people in rural areas are making "lots of neat things" that can be channeled into urban markets. He went on to explain that while local talent makes valuable, labor-intensive products, that work is not the kind that brings economic rejuvenation without professional design and marketing assistance. He suggests learning as much as possible about the traditional giftware business with its forecasts of style trends, trades shows, and sales representatives. But, the giftware business is only one of many specialized marketing pipelines that offer possibilities for a home-based business. Such advice points to the problems of rural entrepreneurs and the challenges for those interested in fostering home-grown businesses. As Peter Drucker puts it: "Entrepreneurship is risky, mainly because so few of the so-called entrepreneurs know what they are doing...Everyone who can face up to decisionmaking can learn to be an entrepreneur and to behave entrepreneurially."

Entrepreneurs in Alabama have had the opportunity to explore firsthand the marketing centers and to attend trade shows for limited production products. Through home-based business marketing tours to New York, Boston, and North Carolina, entrepreneurs visit the shops, shows, galleries, and studios of successful small business people and explore the diverse marketing strategies they use to turn talents and skills into profitable enterprises. The most recent tour in North Carolina focused on the blending of preservation of historic sites, bed and breakfast inns, unique restaurants, and marketing of handmade products to attract tourists to a rural area with great natural beauty.

With the introduction of two new videos—one focused on business basics and one on marketing—and a publication with information paralleling that presented in the videos, the task of providing information for potential entrepreneurs has shifted from specialists to county agents. By networking with small business development centers, the agents can provide potential entrepreneurs and business beginners with information sufficient for decisionmaking and business start-up.

The focus for specialists now shifts to assisting developing businesses with technical and marketing assistance. As part of that shift, the Charles Stewart Mott Foundation has funded Dr. Evelyn L. Brannon of Auburn University to direct a demonstration project to determine the impact on profit of various marketing strategies in the home-based business environment. The marketing concept will provide an organizing principle for home-based business development and planning. Participants will utilize a Marketing Analysis Program for Home-Based Business (MAP-HBB) in developing an individualized marketing plan for their business. MAP-HBB is designed to:

- assist home business people in strategic planning, market research, target audience identification, and developing and implementing marketing strategies for both direct selling and selling to the trade;
- provide a useful recordkeeping system for use in management and marketing activities including cash flow, profit and loss statements, break-even analysis; and
- provide prediction models (costs, earning on assets, and profitability) for the evaluation of products and product lines in given distribution and marketing channels.

Through training sessions, distribution of printed materials, and consultations, participants will be assisted in developing marketing plans and testing marketing strategies in specific production and marketing environments (food products, home decor, fashion and fashion accessories, etc.).

A framework of performance measures for home-based business will be developed to tap into both qualitative (for example: family support, personality factors, etc.) and quantitative (for example: products and product lines, new products in development, number of retail buyer number of wholesale accounts, number of shows/sales attended, sales per year in dollars and units, number of employees, percent of family income from business, etc.) factors.
Both qualitative and quantitative data collected on performance will be analyzed to determine the factors that account for the success or failure of home-based businesses. Special attention will be given to specific marketing strategies employed by home-based businesses and their contribution to profitability and job creation. The data will be used to build an evaluation model of marketing strategies for home-based businesses. By using the data collection scheme and analysis at other sites, a national database on the impact of various marketing strategies on profitability and survival could be developed.

HOME-BASED BUSINESS/RURAL REVITALIZATION

The challenge for communities is to encourage and support fledgling entrepreneurs by:

1) fostering networking among small business people and their advisors (lawyers, accountants, people knowledgeable about marketing and business practices, technical specialists, bankers, and others). Sharing information and experiences eliminates the isolation that leads to poor decisionmaking.

2) encouraging exploration of marketing pipelines beyond the local area. Market research, trend analysis, and style forecasting are readily available to those hooked into information networks associated with specialized markets like giftware, decorative accessories, fashion accessories, and specialty foods.

3) providing ongoing training in entrepreneurship and self-employment. Business start-ups depend on one or two dedicated individuals with the vision to see an opportunity. It is unlikely that those individuals will have all the background and experience they will need to succeed. Seminars and training sessions on every phase of entrepreneurial activity assist those in business and stimulate others to become self-employed.

Norman Reid of USDA’s Economic Research Service cites the payoff for communities when he says: "A strong base of small businesses contributes vitality to the whole industrial ecology of an area and buffers the economy against the decline of mature industries."
The Home Based Business (HBB) component has been a part of the Cooperative Extension program at Alabama A&M University for five years. Since its initiation in 1984, this program has assisted 106 entrepreneurs in initiating and operating businesses in or near their homes. Another 114 entrepreneurs have received training needed to improve their business skills in order to increase their incomes. Entrepreneurs participating in this program have reported income increases of more than $173,000 during the five-year period.

In keeping with tradition, the Cooperative Extension program at Alabama A&M targets much of its efforts toward helping limited resource families improve their quality of life. This target audience was the hardest hit by the economic crisis. County Extension agents identified, through annual surveys of clientele needs, the strong desire for ways to enhance the families' income. The Extension program responded by developing the Home Based Business program (HBB).

The Home Based Business program was developed and coordinated by specialists working in the area of home economics; however, consistent with an issue programming concept, the program was designed to include in an integrated fashion the areas of agriculture and natural resources, community resource development, and 4-H.

The overall objectives for the program are to assist entrepreneurs who are currently operating businesses from their home in developing managerial skills needed to help their businesses grow and succeed, and to give assistance to clientele who are in the process of starting up businesses in their homes.

Specifically the goals for this program are to:

1. assist clientele in becoming aware of what marketable skills they currently possess;
2. teach new skills to clientele who are seeking ways to increase their incomes;
3. orient new entrepreneurs in the process for setting up businesses in their homes;
4. assist clientele who are currently operating a business in improving their managerial skills;
5. help entrepreneurs establish a market for their products; and
6. assist young entrepreneurs in starting and operating a home based business.

Working relationships were developed with other organizations both on and off campus. On the campus of Alabama A&M University, linkages were established with marketing and child care professors in the home economics department. Also, one professor in the school of business agreed to work with the program. These contacts were later instrumental in helping to develop a
series of leaflets on home based businesses written for clientele. The home economics professors also served as workshop consultants.

The Small Business Development Center (SBDC) serves as a major referral agency for the HBB program. The SBDC was initiated at Alabama A&M University in September of 1980 through a consortium of Small Business Administration (SBA) funds. The primary function of the SBDC is to serve as an educational and counseling resource center for the SBA on a local basis to support, aid, and assist small businesses. It also provides one-on-one counseling, conducts business related workshop/seminars, and performs in-depth market research with university assistance.

The Northeast Alabama Regional (NEAR) SBDC formed links with and united into one entity to include the Alabama A&M University SBDC, the UAH SBDC, and the Huntsville/Madison County Chamber of Commerce. The HBB program works with this agency to conduct one-day seminars.

The Department of Human Resources is the newest agency to join forces with the HBB program. This agency cooperates with Extension to conduct one-day seminars on starting and operating family daycare homes.

The Alabama A&M University Cooperative Extension Program (CEP) recognizes it does not possess exclusive expertise in the technical business areas. The CEP's major objectives are to serve as an educational delivery mechanism linkage agent and as a catalyst for the Home Based Business program. As a result, we depend upon the NEAR SBDC and other agencies to provide training in areas such as record keeping, marketing, accounting, procurement, pre-business skills, etc. The CEP and NEAR SBDC identify clientele needs and plan seminars and workshops according to those needs. In addition, the NEAR SBDC offers free seminars in all areas of business in the target counties.

Other off-campus linkages have included public accountants and successful operators of home based businesses. These contacts assisted with planning sessions for workshops and also served as workshop consultants.

Numerous methods are used to reach potential clientele for involvement in the program. Announcements for workshops are made in local newspapers, monthly newsletters sent out by county Extension agents, the Chamber of Commerce newsletter and the Campus Intercom. In addition, flyers are sent to county agents to be distributed. County agents also announce upcoming events during weekly radio programs and put up posters in public places. A series of television programs introduced segments of the program to an audience not reached by other methods.

**MAJOR CHALLENGES**

A major challenge in putting the program together involved selling the program's concept to administrators who were apprehensive about specialists' backgrounds and expertise in working in this new subject matter area. Specialists who were not working in home economics also felt apprehensive about working in a multidisciplinary program of this type.

Another challenge for the program was identifying and establishing reciprocity between other organizations with similar goals. The program actively sought to link up with organizations such as SBDC who have access to consultants associated with financial institutions.

Information relative to the amount of income generated is difficult to obtain from clientele. Most new entrepreneurs do not keep good records. Some are reluctant to release details of their new enterprises. Others have indicated that they are unsure about the stability of their businesses and do not feel the income is great enough to report.

The greatest obstacle in getting new businesses started has been in obtaining the capital needed to purchase equipment and supplies to get businesses started. The Small Business Development Center has offered some assistance in this area.

**ACCOMPLISHMENTS**

Yearly accomplishments were reported as follows:

* FY 84: One hundred five persons attended a home based business workshop conducted at
Alabama A&M University. More than 1,200 families received information through bimonthly newsletters and personal contacts with county agents. Mass media programs were conducted on three television and seven radio stations. Announcements and news articles were carried by five local newspapers. County agents conducted 16 special interest meetings and workshops involving 1,160 persons.

That effort resulted in 29 clients participating in the initial steps for setting up a business. Thirty-six entrepreneurs reported that they improved their business practices. Businesses initiated included clothing construction and alteration, quilting, ceramics, doilmaking, upholstery, and a variety of crafts.

* FY 85: Approximately 1,200 clientele received information through bi-monthly newsletters and personal contacts with county agents. Mass media programs were conducted on three television and seven radio stations. Announcements and news articles were carried by five local newspapers. County agents reported conducting 30 special interest meetings involving 221 persons.

Nineteen clients completed initial steps in setting up a business. Thirty-nine entrepreneurs reported improving their current practices. Surveys returned by clientele indicated an income gain of more than $100,000. Types of businesses initiated were expanded to include catering.

* FY 86: During FY 86, 63 home-based businesses were in operation. More than 2,090 families received information through bimonthly newsletters and personal contacts with county agents. More than 15 special interest meetings and workshops were conducted, with 201 persons attending. Mass media programs were presented on three television and seven radio stations and in five local newspapers.

Seventeen low-income clients completed initial steps in setting up a business. Nine clients improved current business management practices. Surveys returned by clients indicated an income gain of more than $12,657. Businesses included clothing construction and alteration, quilting, ceramics, doll making, upholstery, cake decorating, and catering.

* FY 87: During FY 87, 70 home-based businesses were in operation. More than 2,122 families received information through bimonthly newsletters and personal contacts of county agents. More than 15 special interest meetings and workshops were conducted, with 409 persons attending. Mass media programs were presented on three television and seven radio stations and in five local newspapers.

Seven low-income clients completed initial steps in setting up a business. Twelve clients improved current business management practices. Surveys returned by clients indicated an income gain of more than $16,829. Businesses included clothing construction and alteration, quilting, ceramics, doll making, upholstery, cake decorating, catering, and typing.

* FY 88: During 1988, approximately 125 adults and 24 youth were involved in training programs for developing entrepreneurial skills. At least 26 adults and eight youth initiated home based businesses. This represents 20 percent of the 1,132 families projected for the total four year cycle. Net income reported from these new businesses was $43,982.

* FY 89: In 1989, approximately 460 adults and 49 youth were involved in training programs for developing entrepreneurial skills. Twenty-three adults and seven youth initiated home based businesses. This represents 22 percent of the 132 families projected for the total four year cycle. Net income reported from these new businesses was $36,487.

Of the 136 entrepreneurs who have started businesses since the program's initiation, approximately 10 percent have not been successful and discontinued operation. Another 5 percent have discontinued operation for other reasons including moving to another area.

- Cake decorating: 2
- Catering: 3
- Antique sales: 1
- Home sewing: 8
- Blueberry*: 1
- Christmas trees*: 13
- Barbering: 3
- Home day care: 5

Net income reported from these new businesses was $43,982.
Oil paintings 1
Honey producer 1
Yard services 2
Quilting 12
Rabbit producers* 14
Vegetable producers* 15
Catfish producers* 9
Fruits* 8
Cosmetics 1
Mops and brooms 1
Furniture 1
Hay* 1
Firewood 1
Total 103

*Farm enterprises not considered as the major sources of income are defined as home businesses.

FUTURE

Major obstacles that remain in the program are:

1. Entrepreneurs do not keep up-to-date and accurate records of their business accounts.

2. Entrepreneurs do not choose to report their earnings to Extension agents.

3. Many entrepreneurs are not successful in obtaining funds needed to purchase supplies and equipment to get their businesses started.

Future plans for the program include: (1) involving clientele in more "hands on" activities. This may be accomplished through more individual and small group work sessions; (2) developing a working relationship with the Association of Government Accountants. This association offers a free eight week course at Alabama A&M University between January and March. Extension clientele may wish to take advantage of this training; (3) expanding the program to include more training activities for youth; and (4) developing a catalog of area crafts and trades to help clientele market their products and services.

RESOURCE MATERIALS

I. Leaflet Series

CS1 So You Want to Make Money?
CS2 Are You the Business Type?
CS3 Will Your Product Sell?
CS4 Determining the Price of Your Handcrafted Items
CS5 Important Regulations You Should Know About When You Work at Home
CS6 Suggested Guidelines for Operating a Small Home-Based Business
CS7 Spreading the Word
CS8 A Look at the Business
CS9 Business Possibilities
CS10 Custom Sewing and Pricing
CS11 Alterations as a Business
CS12 How to Sell Your Quilts

II. Booklets

HE-125 Home-Based Business
HE-129 Sources of Assistance for Manager of Family Day Care Homes

III. Home-Based Business Resource Notebooks

To Order Contact:

Mrs. Carolyn Reedus
P. O. Box 967
Normal, Alabama 35762

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HOME BASED OR SMALL BUSINESS DEVELOPMENT: 4-H IMPACT

Bill Edwards, Associate State 4-H Leader
Cooperative Extension Service
University of Georgia

Since its inception, 4-H has in many ways been a strong advocate of home based or small business development. It may not have preached small business, but its emphasis on transferring technology through the youth to the parents was a significant avenue to help the small farmer. We have all heard the saying "you can't teach an old dog new tricks" or "seeing is believing." The Extension Service, through its youth component, 4-H, found a way to reach the old dogs.

In Extension's early beginning, the farmers were set in their ways on farming techniques. Although research in farming practices was moving forward rapidly, the farmers could not be persuaded to change their ways. Knowledge that Extension had gained was not being used. Farmers could not accept the risk of trying new measures—-their margin of profit was small. A new way that did not work might put them out of business. A bright 4-H staff suggested that through the youth, we could put to work the old adage—"seeing is believing." Why not let our 4-H'ers put their new technique to work in a small way...and the corn clubs were started. Of course, you know the rest of the story. Parents indulged in their child's play: a 4-H project, or could we say a small business, was promoted where Extension agents helped the 4-H'ers put into practice on a very small scale all the new techniques to produce a greater yield in corn production. The results were significant. Fathers were impressed with the increased yields, and Extension agents had found a way to "teach an old dog new tricks."

Would you believe that concept is still going on today? 4-H continues to find ways that youth can take our message—Extension's message, to the adults. Some of the information applies directly to small business practices. Other knowledge applies to our generation's lifestyle. The Extension mission is to transfer knowledge to the public which will allow them to enjoy a higher lifestyle. Ideas or practices which show people how to make their money go further enhances their financial status. Parents still learn from their kids, and you better believe we continue to play this to the hilt.

A couple of examples of our youth power coming into play can be seen in the areas of energy and water consumption. When the energy crisis hit our nation, what did the youth leaders recognize? Kids can have an impact on their families' economic practices. Many different means were used to convey energy conservation measures through the youth. Contests to see how much energy youth could conserve were promoted. Turn off the lights; turn down the heat; put up energy messages on light switches. The effects were felt in homes throughout the nation. These measures not only had an immediate effect but developed lifelong patterns. The problem of water conservation and water quality will surely have a youth approach. We are actively promoting through 4-H'ers the use of water conservation measures in homes, and it works. Youth will continue to be an important avenue of influence.
This leads into the subject of home based or small business development. I would like to relate some of the examples of what 4-H is doing to encourage small business or home based business opportunities. 4-H is of course noted for the work values it instills in its active participants. Some would even call it a work ethic. To achieve in 4-H, one must commit to an active involvement in several areas. Success is usually the result of determination or an attitude of not giving up. The value of keeping records is stressed, and of course this provides the basis for success in many areas of the business world. Project work is the primary means of teaching 4-H'ers the many skills necessary to mature into productive adults. Although all projects do not lend themselves to business vocational pursuits, many are geared in that direction. Specialists are excited when a young person takes the knowledge learned from a project and turns it into a business. I have a couple of specific examples that are direct spinoffs of project work.

A forestry project in Jefferson County helped produce two national forestry winners and has made a University of Georgia graduate and his sister "independently wealthy." That, of course, is a relative term, but for college students to have the necessary funds to carry them through four years of college and not have to scrimp makes their peers say they are wealthy. These funds are the result of some hard work, good management, and family support, all important ingredients of a 4-H success story. The business I am referring to, an outgrowth of the forestry project, is a Christmas Tree farm. David and Renee Dekle, active 4-H'ers whose dad is a County Extension Director, worked out a plan at an early age to finance their college costs. David was 13 when his father approached him with an exciting idea. Why not make money in your project area? David jumped at the suggestion. He was in the eighth grade and was gathering statistics for his project. He realized you could make a lot of money in Christmas trees. Renee thought it sounded like a lot of work. But dad had a plan and had thought out how this activity would accomplish some specific objectives: 1) something for the kids to do (Jefferson is a rural area); 2) a 4-H club project for the Dekles; and 3) earn money for college.

Based on these objectives and his kids interest, the Dekle Christmas tree business took form. To make it a true business venture, a formal agreement between dad and children was drawn up. It basically stated that dad would acquire or rent the land (20 acres), and the children would own and operate the tree business. The business was started in 1975 with the purchase of 20 acres. The first trees were planted in 1976, 2,000 seedlings (1,000 white pines and 1,000 Virginia pines). There have been a lot of mistakes, but the major one was the planting of white pines. The white pine does not do very well in Georgia. Only about 90 of the 1,000 white pines lived. The early mistakes of planting the wrong trees and some incorrect shearing created some problems, but as in any business, you learn from your mistakes.

The money did not come in for three years. This was sort of difficult for the young people, but it probably helped them understand the hard work involved in starting a business. In the fourth year, they started selling the trees, and it became more fun. The first year sales were around 300, all to retail customers. The business has steadily grown, and they are now selling 1,500 to 2,000 trees a year. They have moved to selling trees wholesale. The Dekle Farm now supplies nine wholesalers in addition to their retail sales. Another interesting fact is that the Dekle business started the Christmas tree industry in Jefferson County. There are now five Christmas tree businesses.

The bottom line tells the story. The Christmas tree farm has met the objectives set out in the beginning. It has produced two national winners in the 4-H Forestry Project, provided the necessary money for four years of college for David and Renee, and definitely has given the Dekle kids something to do. Now that the children are grown, the business will be sold. Dad will get the profit from the land, and the kids will reap the profits from the sale of trees and equipment. Not a bad record for a small rural business.

A second example has many similarities to the Christmas tree business. A young 4-H'er, Johnny Mitchell, in east Georgia, Effingham County, enrolled in the 4-H Wildlife Project. His project brought him in contact with the State Fisheries Specialist, and this changed his and his family's
lives drastically. Johnny became quite interested in the catfish project. At the time, his father was in business installing septic tanks. There was an interest in branching out in other business ventures. With Johnny’s interest and through his association with 4-H and the catfish project, a single fish hatching pond was constructed. This was 1977, and Johnny was in the seventh grade. Similar to the Dekle Christmas tree business, Johnny entered into an agreement with his ad to share in the profits.

From this small beginning, coupled with Johnny’s commitment and the close support of the Extension Service Fisheries Specialist, the business grew. Johnny read every book he could lay his hands on and called on a nearby wildlife biologist for assistance. Today, there are 14 ponds, which Johnny still helps manage. Also, the family has opened a restaurant featuring catfish (but bought from other sources, since the Mitchells are only in the hatching business). Profits from the business for 1977-1983 (Johnny’s 4-H years) were $51,000. All this occurred as a result of 4-H project interest. So you see, the earliest concept of conveying knowledge through the youth to their parents still works.

In addition to these success stories, let me assure you there are thousands of examples throughout the U.S. that support a strong commitment by 4-H to help youth see the value and potential of home based or small business ventures. Rural county agents understand the importance of helping youth see the potential of small business opportunities.
HUMAN CAPITAL
EDUCATION:
THE EMPOWERMENT OF PEOPLE

William F. Winter
Former Governor of Mississippi

This conference has brought together many of us representing different disciplines and different experiences but with a common and compelling interest in the sustaining and revitalization of the rural South.

This is not an academic exercise for me. I am a product of a North Mississippi farm that sustained four generations of my family before I sought in those years of change after World War II what appeared to be greener pastures somewhere else. That "somewhere else" has not, however, removed from my memory or my concern the place of the rural areas in our lives.

Different though it is today, that farm, which I still own and operate by rather remote control, still provides me with a sense of who I am and where I came from. I understand what Alex Haley meant when he was writing about "roots." Without getting maudlin or sentimental, I think this is an element that is missing in the lives of many of our fellow Americans, who really have no sense of place--no identity with the land--no place that they can really call home.

So what I shall try to say to you today is based on this long-standing love affair with the rural South and so many of its people. And it is about the people of the rural South that I primarily want to speak.

My perspective is that of a fellow Southerner who believes that we are all in this together--that what affects some part of our region or the community in which we live affects us all--that we cannot afford for obvious reasons to let a part of our population be relegated to a permanent status of poverty and ignorance.

I have seen in the course of my own lifetime a miraculous transformation in this region. We are a long way down the road from those days when I was growing up in North Mississippi--where our per capita income was less than half that of the rest of the country, and where we were graduating from high school one in five white students and one in 50 blacks.

We have come a long way since the 1950s and 60s when we were so preoccupied with maintaining a racially segregated society that we almost forgot that we were a part of the rest of the country or the rest of the world.

But as far as we have come and as the Report of the Commission on the Future of the South pointed out, we are only halfway home. As the Halfway Home report emphasizes, with the job market having drastically changed in a relatively short period of time, the rural South is confronted with conditions that it has not known before. Now even most of the run-of-the-mill jobs call for skills more advanced than we have been accustomed. That brings us then to the most critical of the issues that must be addressed. That, of course, is the issue of education and training.

Since we know that functional illiterates, even when they can find jobs, earn 44 percent less than high school graduates, we understand the economic urgency behind the raising of educational levels. The highest priority must be extended to the substantial reduction of adult illiteracy, and
at the same time we must make sure that we have produced our last generation of functional illiterates. That means that the present emphasis on secondary and elementary education reform must not leave anybody out. It also means more than improving education per se, for there is involved here a task as challenging as the school reform movement itself. The stark truth is that educational improvement will not automatically come to those who need it most unless at the same time we attack the fundamental problems that result in low educational achievement in the first place.

Our underdeveloped human capital remains our greatest barrier to economic growth and prosperity. The plain fact is that as long as we have so many undereducated people, our region is going to be poorer than the rest of the country. Poorly educated people translate into poor people. Education is the only thing that will unlock the door to economic opportunity for all of our people and parity for our entire region. Why has our region ranked so low in per capita income? It is certainly not because we are lacking in natural resources. By anybody's standards this is a naturally rich area--productive land, abundant energy and minerals, bountiful timber, plenty of water, clean air. It is poor because we have too many underproductive people. Put in plain, hard-headed economic terms, it is not just a zero to our economy to have so many undereducated people. It is a minus. The more undereducated people our region has, the poorer it is.

I learned this lesson very dramatically a few weeks after I was sworn in as Governor of Mississippi in January, 1980. The head of our Department of Economic Development informed me that a major electronics company that would employ 900 high skill workers was coming to our state. This was precisely the kind of industry that we needed to raise our per capita income. Then, a short time later, I was advised that the industry was not coming to Mississippi but instead was going to another state.

The president of the company told me that in the community where they had planned to build their new plant, the supply of skilled labor was lacking and the schools were deficient.

My state lost that significant industry because we were perceived to be noncompetitive in terms of our human resources. I realized, really for the first time, that our future would depend on the development of more of our people. We somehow had to empower them to compete, and we would do it only by raising the level of their educational achievement.

So, I asked myself, how do we do it? It was obvious that our attractive Sunbelt location obviously was not going to be enough. I became convinced the only way we were going to do it was to enhance the productive capacity of the people of the South.

This involves a substantially different approach to the concept of economic development. For a long time in many areas of the South our development strategy was built around three perceived advantages that we had. They were low wages, cheap land, and low taxes. In most cases we got about what such a strategy suggested. We perpetuated a lower standard of living than we should have. Those factors translated into poor schools and poor communities that were not very attractive places to live. And now we are finding that so many of the plants from other areas that were looking for cheap labor are not stopping in the American South but are locating in Mexico, South and Central America, and the Pacific Rim.

Economic development must now involve a much broader range of concerns. The first concern obviously must be, as I have said, a skilled work force or at least a trainable work force. We are not going to be competitive with the rest of the country--much less the rest of the world--until we educate properly more of our people.

Here we are faced with a two-fold problem. The first relates to those millions of functionally illiterate adults in our region who for whatever reason never got a basic education. It is a staggering loss. If I walked down the Main Street of almost any Southern town this afternoon, one adult out of every six I met couldn't pick up a newspaper and read it. In some places it would be one out of five or even one out of four. We...
must go back and try to salvage some of these people. Adult literacy remains one of our largest challenges.

The second problem has to do with keeping the present school generation in school. Our 30 to 40 percent drop-out rate is a national scandal. I was with a delegation of businessmen from South Korea last month. In response to my inquiry, I was told that their high school graduation rate is over 97 percent. That is reason for concern. We are not going to compete very well on that basis.

So many of our student failures are the result of circumstances over which the schools have very little control. We have a massive task in reducing the risks that cause children to fail before they ever get to school. But I can tell you additional resources invested in reducing the risks in people before they drop out of school and out of society must be provided, or we shall wind up paying a lot more down the road. More than that, we shall expose our communities and our nation to the kind of unrest and instability that puts us all at risk.

In the final analysis, though, the difference for most communities will lie in the quality of local leadership. This will be the most influential factor of all. Too often we have permitted the least creative and the least visionary to make the strategic decisions. We have fallen behind in many cases because we have relied on the "good old boys" on the one hand or the "I've got it made" defenders of the status quo on the other. It is my observation that those communities which are doing the best are those which are led by bright, creative, unselfish business and political leaders who understand the realities of the world around them and who are willing to make bold and innovative choices.

At the risk of being presumptuous, I believe there is a special mission the Cooperative Extension Service can perform in this vital process of developing our region. You have, perhaps, the most pervasive network of committed people of any organization in the region. You extend literally into every community. You are in touch with the people and their community leaders. You understand their problems.

Let me suggest, therefore, as a new challenge, that you build on your past successes by helping forge a link with the local educational institutions of the South, specifically including the community colleges, to expand the effectiveness of the various programs designed to make people more productive. There is a crying need for a more intensive approach to enhancing the level of adult literacy. You could render invaluable service in helping structure that effort. This would be a true extension of the educational mission to which you have been long committed.

This region, after more than a century of outside exploitation and inside bungling, has the capacity, and I believe the will, to put it all together. In doing so, we shall serve not only the interests of those of us who live here, but in the final analysis we shall be serving the interests of the nation as well. And most important of all we shall be serving the interests of those who will inherit this land from us—that next generation of Americans that includes my little grandsons who have a right to expect a better place to live than the one which you and I inherited. That is our challenge and opportunity.
I am often asked, "Why is it taking the South so long to become fully at home in the modern global village?" or, "What has delayed the New South's transformation into the Promised Land?" For one thing, many Southerners have not been making the journey. The sunshine on the Sunbelt has proved to be a narrow beam of light brightening futures along the Atlantic Seaboard, and in large cities, but skipping over many small towns and rural areas. The decade's widely publicized new jobs at higher pay have been largely claimed by educated, urban, middle-class Southerners.

While nine million new jobs are projected for the region by 2000, too many workers in obsolete jobs are not being retrained for the next century's technical and service careers. Twenty years ago, when the national unemployment rate was near 4 percent, people with grade school educations could still find jobs. Today, the will to work must be matched with the skill to work.

Facing the 1990s, the South must decide how to rescue those Southerners left behind. They are not strangers. They are not people too lazy to work. Often they are neighbors who did not leave their jobs but whose jobs left them--some moving to Taiwan, Bangladesh, Hong Kong, and Mexico where wages are often less than a dollar an hour. Our need is not so much for greater charity but for greater parity to bring forward all Southerners at once. A region divided cannot stand, much less move ahead.

This region is in the midst of a dramatic economic transition, one that will require action by all Southerners to prepare for the jobs of the future. Meeting this competitiveness challenge requires the participation of an informed public.

During its 15 year history, the Southern Growth Policies Board has been in the business of crafting a better future for the South by focusing on growth management in the boom years of the early seventies; in the late seventies by fighting battles for the South in the federal funding wars; in the early eighties by refocusing on state policy regarding human resource development; and, now during the nineties by trying to integrate a holistic approach to state development policies--in the words of our motto, "creating strategies for economic development."

We create these strategies through research, publications, and meetings. The Board has regular, serial publications dedicated to emerging economic issues, human resource development, international trade, growth and environmental management, intergovernmental relations, and technology. The Board also creates development strategies by energizing networks throughout our 13 states and Puerto Rico. These networks take our products, and adapt them and use them as instruments of policy change at their respective state and local levels.

We are funded and governed by the 14 state and territorial governments, with the governor, a state senator and representative, and two citizen members serving on the Board from each member state. This combination of gubernatorial, legislative, and private sector membership gives us a unique strength, and one critical in today's economy.
Before getting into the principal thrust of my remarks about jobs in the future of the South, let me say a word about our motto, "creating strategies for economic development." It is important, both because we chose it carefully and because it will give you an understanding of the lens through which we look at the future.

First of all, we chose the verb "creating" to imply that our work is cutting edge in nature (and therefore, sometimes risky), that we hope to shed new light on new and old problems, and that our contribution to public policy is intermediate to a long range look at the future. Second, the term "strategies" also implies a long-term and global perspective, as opposed to the often tactical, parochial, and brush-fire work of our state and local political systems. And finally, the term "economic development" is critical particularly as distinguished from "economic growth.

What is the difference between "growth" and "development?" Simply put, it is the difference between spurring economic activity, on the one-hand—which is growth—and developing the long term capacity to generate self-sustaining economic activity, on the other—which is development. Examples might help clarify the distinction:

* an increase in per capita income is growth; an increase in per capita wealth is development.
* an increase in the number of jobs is growth; raising the per capita education and skills levels of the work force is development.

Our goal at the Board, then, is to keep the eyes of our leaders focused, at least in part, on "creating strategies for economic development." And, of course, all of this deals with the future. I will begin, then by delineating eight major trends which will affect the future of economic development in the South.

The first major trend is that the era of the Sunbelt will soon be over—and, in fact, already is over in many parts of the region. By this I mean the media's image of our region as the land of milk and honey, where people are moving and all of the jobs are being created.

The second major trend will be the nature of change itself. Change has always characterized economies in response to technological breakthroughs and political decisions; however, what is different now is the pervasiveness and velocity of these changes. The Commission on the Future of the South proclaims, for example, that we are living in an era of technological renaissance, which means that innovations are ever more frequent and powerful—constantly altering products, the ways in which businesses are organized and financed, and how markets are defined and served.

A third trend is the growing importance of the human resource base in the future economy. Some economists argue that human capital has been the driving force in national economic growth for decades, and this has certainly become true for the South today.

A fourth trend is the continuing globalization of the economy. This development has proceeded at almost exponential speed in the last 20 years and is almost certainly irreversible. For example, for 40 years, from 1929 to 1969, America's dependence on international trade remained small and constant at about 4 percent of GNP. Between 1969 and the present, however, it has soared to over 20 percent of GNP, and now, about 70 percent of our goods compete here and abroad with foreign made goods.

The fifth trend will be toward a more sophisticated understanding of what has been called the post-industrial economy. The percentage of the work force employed in manufacturing will continue its 20 year decline, and most of the job creation will be in the services sector. In the South, for example, the percent of the work force employed in manufacturing will decline by the year 2000. Furthermore, most of the new jobs created will be in the services sector. Much of this relative decline in manufacturing employment will be due to automation which in turn will be a response to international competition and technology.

Closely related to this trend is a sixth one, and that is information. Financial capital, raw materials, and good labor will continue to be essential to this new economy, but information is emerging as the new strategic input into the economy of tomorrow. Ever since the Rothschilds built their financial empire, in part on their pioneering use of carrier pigeons to get information on markets and deals before their
competitors, information has been an essential commodity.

The percentage of the Southern labor force employed in information work has grown from around 5 percent after the Civil War to about 50 percent today. Access to information and the infrastructures to transmit it will be the keys to success.

A seventh trend is that altered development patterns emerging out of a new business climate will have locational impact. In the next 20 years, this spatial impact will likely be the continued metropolitanization of the Southern economy at the expense of many rural and small town areas. This trend began probably a decade ago but was only recently documented by us.

The eighth and final trend which I see as critical in the next 20 years is the growing need to develop sophisticated, collaborative partnerships between the public and private sectors. Our major industrial competitors have been perfecting collaborative models for a long time. The Japanese experience is well known, but the Germans have done likewise. How well positioned is the South to deal with this future? As the report of the Commission on the Future of the South says, we are still only "Halfway Home and a Long Way to Go."

"Halfway Home" lists 10 regional objectives for the South to work on for the next three years. These objectives provide us with a roadmap for addressing that future I described and the problems we face. It poses nothing less than a new model of economic development for the South. It is a model of internal development, rather than external, and one that calls for a new set of strategies aimed at education and training, capacity building, indigenous business creation, and a far more sophisticated role for government.

And, it is here, I would argue, that we find the good news from our region—and that is in our capacity to come together as Southerners, to care about each other, and work on our problems collectively. This is a great regional strength that is found nowhere else in America. People in one Southern state really do care about Southerners in other states. This sense of regional identity is a tremendous asset if we harness it positively and with vision. And, this is what the Commission on the Future of the South is all about—an effort to create a regional agenda for action to address the problems and opportunities we share.

As I read for you the 10 regional objectives, you will envision an action agenda which will address that future I described.

1. Provide a nationally competitive education for all Southern children.
2. Mobilize resources to eliminate adult functional illiteracy.
3. Prepare a flexible, globally competitive work force.
4. Strengthen society as a whole by strengthening at-risk families.
5. Increase the economic development role of higher education.
6. Increase the South's capacity to generate and use technology.
7. Implement new economic development strategies aimed at home-grown industry.
8. Enhance the South's natural and cultural resources.
9. Develop pragmatic leaders with a global vision.
10. Improve the structure and performance of state and local government.

I won't discuss these objectives in detail, but I would urge each of you to read the report. It is available free of charge from the Board; it is only 23 pages long, and can be read in less than an hour. Since we hired novelist Doris Betts to write Halfway Home, you will also find that it is unlike any public policy document you have ever read. It is beautifully written in a Southern style.

Some economists argue that human capital has been the driving force in Southern economic growth for decades, and this is certainly true for the South today. An educated, skilled, flexible workforce will be the key to an economy functioning well in this volatile and uncertain environment. We already know the essential facts about the workforce in the year 2000. About 75 percent of that workforce is already working and all have been born.

Between now and 2000, the prime age workforce (aged 25 to 55) will grow by 12 percent a year. At the same time, the youth workforce will decline by 0.2 percent a year, while the older workforce will grow by 0.2 percent a year. As a result of these different growth rates, prime-age workers will account for 73 percent of the workforce in
2000, up from 67 percent in 1986. Youths will account for only 16 percent, down from 20 percent. Older workers will also decline as a share of the labor force: workers aged 55 and over will account for 1 percent of all workers in 2000, down from 13 percent in 1986.

One thing for certain: the work force is going to be older. The maturing of the baby boom will raise the median age of the labor force from 35.3 years in 1986 to 38.9 years in 2000. This is still below the post-World War II peak of 40.6 years in 1962, but substantially above the record low of 34.6 years in 1980. An aging work force worries many economists concerned about productivity growth, since older workers traditionally have been less willing to retrain or to move for a new job.

The work force is also going to be more female. The Bureau of Labor Statistics (BLS) projects an annual increase in women’s labor force participation of 1 percent--half the 1972 to 1986 rate, but double the rate projected for the labor force as a whole for the rest of the century. Women will continue to account for nearly two-thirds of all new workers and represent fully 47 percent of all workers by 2000.

The third significant shift in the labor force is the increase in minority workers. Hispanics will account for 29 percent of all new workers as the number of Hispanic workers grows by 4 percent a year for the rest of the century. Overall, the number of Hispanic workers will be up by 74 percent, representing 10 percent of all workers by 2000. Presently, Hispanics represent 7 percent of all workers.

The black labor force is expected to grow at an annual rate of 2 percent. Blacks will account for 18 percent of all new workers during the rest of the century, with their share of the labor force rising from 11 to 12 percent. This growth is driven by the increase in the black population, though the BLS assumes that black men will be less likely to join the work force in 2000 than they are today. If that assumption is correct, there will be more Hispanic men than black men in the labor force by then.

These changes point to a new breed of worker, one who is more likely to be black or Hispanic. This is the profile of our current and future labor force upon which our competitiveness will rest.

The Chinese symbol for crisis combines the symbols for danger and opportunity. Businesses of all kinds might want to remember this as they adjust to the new work force. The number of entry-level workers will fall by 8 percent, and virtually all new jobs will be in service industries.

In the fall of 1988, the BLS issued its first projections of labor force growth to the year 2000. The projections are dramatic for two reasons: first, they show sharply slower growth in the labor force, particularly among younger workers; second, they suggest that the people who will be entering the labor force in the years ahead may not have the skills that employers need.

Overall, the labor force will grow only 1 percent a year between 1986 and 2000, down from the average annual 2 percent growth rate from 1972 to 1986. This will be the slowest rate of labor force growth since the 1930s. The slower growth is partly due to slower population growth. But it also results from the maturing of the baby boom. The baby-boom generation is now at work. Until the end of the century, the small baby-bust generation will be supplying the nation’s new workers.

The new projections offer some stunning perspectives, such as the prediction that nearly all new jobs created in the South between now and 2000 will be in the service-producing industries. On the face of it, this seems dramatic, but in reality almost all industries are service industries outside of manufacturing and agriculture which produce goods. These include low-paying retail trade, but also education, health care, government, and finance, all of which offer large numbers of high-paying jobs.

Although some manufacturing industries will offer more jobs, others will cut back, resulting in no change in manufacturing employment between now and 2000. Though the value of manufacturing will grow, increasing productivity will cap the size of the manufacturing work force.

This industrial evolution has led to fears that the region will lose its middle class. If "middle class" means a high-paid factory worker without much of an education, able to maintain a family, these fears are well-founded. The current trends in industrial and occupational growth mean that people's educational levels and their family status will increasingly determine their income levels—and that signals more income inequality among households.
Between now and the year 2000, for the first time in history, a majority of all new jobs will require postsecondary education. The new BLS projections divide occupations into three groups: those in which at least two-thirds of the workers in 1986 had some college education, those in which the median amount of schooling was greater than 12 years, and those in which the proportion of workers with less than a high school diploma exceeded 30 percent. The employment share of the first group will increase, rising from 25 percent of all jobs in 1986 to 27 percent in 2000. The employment share of the second group will drop by less than 1 percentage point to 40 percent, while the employment share of the third group will drop from 34 percent to under 33 percent.

The reason that the share of jobs that require the least education will not suffer a greater drop is that service workers (waiters, cashiers, etc.) are increasing as a proportion of all workers. Many of the jobs that will have the most openings in the decade ahead are service workers. Many of the jobs that will have the most openings in the decade ahead are service jobs that require little education and offer little hope for advancement. At the same time, the number of manufacturing and agricultural jobs that require little education will decline. In contrast, among the jobs that require the most education, all but one occupational group (teachers, librarians, and counselors) will increase as a share of total employment. The biggest increases will be in managers, technicians, and health diagnosis and treatment workers.

Overall, the number of jobs is expected to increase by nearly 20 percent between now and 2000. This is only about half the rate of increase of the previous 14 years. Slower growth means that the coming occupational shifts, though dramatic, will not change the face of employment much in this century.

But there will be problems in matching new workers with jobs. Blacks and Hispanics, in part, because of their relatively low educational levels, are more likely to work in the occupations that are projected to grow slowly or decline than to work in the rapidly growing occupations. Minority workers will need more training if they are to take advantage of job growth in the 1990s.

Women are underrepresented in only two of the fast-growing occupational groups: natural scientists and computer specialists; and engineers, architects, and surveyors. Women are heavily represented in only one occupational cluster that is projected to decline: machine setters and operators. Because there will be few white males entering the labor force, employers who have depended on white males will be forced to open their doors to others. This means more opportunities for qualified women and minorities.

Slower labor force growth could hurt the economy unless productivity improves in the rapidly growing service industries. But labor shortages of skilled and unskilled workers may spur productivity improvements. Businesses that produce labor-saving equipment and processes are likely to see demand growing for their products.

Industries that depend on population growth to drive their markets—such as the food, automobile, and housing industries—will face slower growth because there will be fewer young people demanding these products. But the maturing of the population means more demand for products and services linked to higher incomes, like restaurant meals, travel, personal-care products, and luxury goods.

A maturing work force is a mixed blessing. On the one hand, productivity should increase as the work force becomes more seasoned. On the other hand, older workers are less flexible about changing jobs, changing locations, and changing occupations. At the same time, increasing global competition combined with the rapid pace of technological change puts a premium on flexibility for businesses.

This creates opportunities for businesses that specialize in helping workers become more flexible. Firms that train other firms' workers will be in a strong position because training and retraining will be increasingly important. Firms that aid in job search and placement, including spouse relocation, will proliferate.

The changing labor force is a mixed blessing as well. Areas that are growing will have more flexibility. Regionally, this means that the South will benefit because we have growing industries and populations. If immigration to the U.S. continues at its current pace, the South will receive the lion's share of these workers. This means that it will be easier to start or to expand businesses here than in any other region.
Within our region, there are geographic imbalances between jobs and workers. Flexibility is the key to making the most of opportunities that the changing work force brings. If the work force of tomorrow is going to be older, more female, more black, and more Hispanic, then employers cannot rely on an annual crop of freshly educated young white males to fill jobs. Employee training and retraining will be the key to flexibility. As one economist has concluded, during the rest of this century, the good fortune to be born in or to immigrate to the South will make less difference than the luck or initiative to be well-educated and well-trained.

I see great hope for our region to be globally competitive. But, it will not be easy—and it will not be cheap. Can we afford to make high-priced changes when budgets are tight? Can we afford not to? But, a more difficult cost may have nothing to do with money, but with the historical reluctance of Southerners to change the way we do things.

Two centuries ago, when Benjamin Franklin looked up from signing the Declaration of Independence which was to transform a colony into a nation, he remarked, "We must all hang together, else we shall all hang separately."

It is clear that the 1776 spirit of independence is still alive and well in our rugged individualism. But, something else has become clear—a sense of interdependence—a growing awareness that in today's world the good life of one individual is inextricably linked to the good life of the next. The South is part of a complex independent nation and a shrinking world.

The choice is one of action or inaction, of moving forward from this crossroads on our continuing journey home or of freezing in our tracks with little prospect of completing the journey.

If we fail to address the concerns I've mentioned, we—unlike the signers of the original Declaration—will not literally "hang." We will, instead, simply stand still while a bustling world economy moves into the next century and leaves us behind.

By forging this new Declaration of Interdependence—among all people of the South and us with the world—we will succeed. By taking appropriate action, we can move into the future and build for ourselves and our children a resilient, competitive, and humane society.

If we are to solve this region's overlapping problems...if we are to earn full economic membership in the national and world economy...if we are to see our citizens earn a good living in a society which still preserves the good life...the South must make a full commitment to capitalize its most natural resource of all: 61 million human beings.
Job Trends for the Future

Technical and service jobs will increase the fastest between 1986 and 2000, while private household work and jobs in farming, forestry, and fishing will continue to decline.

(employment by broad occupational group, 1986 and projected to 2000; numbers in thousands)

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COMMUNITY WELLNESS: 
A RESOURCE DEVELOPMENT APPROACH TO 
HEALTH ISSUES

Susan Jenkins, Extension Sociologist - Community Health Programs
Rich Reinheimer, Community Development Specialist
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A recently published report on "Human Capital Needs" (Beaulieu, 1989) notes that the South remains a region of contrasts: the urban areas appear to show marked improvement while the social and economic problems seem to be stifling the growth of rural areas. A similar trend is apparent when considering the overall health of the urban and rural areas. Rural areas continue to report higher rates of chronic illness, infant mortality, and maldistribution of health care services (Van Hook, 1989; DHHS, 1989; Source Book of Health Insurance, 1987). The rural South is plagued with issues which range from closing of rural hospitals to dealing with controversial subjects such as AIDS and teen pregnancy.

In order for the rural South to make both economic and social progress, emphasis must be placed on strengthening the human capital resources. As the "Human Capital Needs" (Beaulieu, 1989) report states, "the task of addressing human capital resources must become a collective interest" (p. 7) of the family, of institutions, and of the community. Collective interest can be enhanced by collaboration and participation among the many sectors that function within the community. (World Health Organization, 1986; Milio, 1988; Jenkins, et al. 1989).

Community Wellness, a program of the University of Georgia Cooperative Extension Service, is designed to strengthen human capital resources by providing communities with an approach to solving local health issues. This is done in two ways, first, by enabling people, as individuals and in organized ways, to improve their health and, secondly, by involving both the health and non-health sector in collaborating activities that address the many facets of community health issues.

Community Wellness is a process-oriented program that provides interested citizens with a framework to assess, identify, and find workable solutions to the issues of their community. County agents and other leaders, through local meetings and networking, serve as catalysts to bring members of the community together. The process encompasses community-based program planning, interventions based on assessment of specific community health needs, encourages empowerment of the community, and develops a community-wide support system.

The Community Wellness program and process consists of a progressive involvement by citizens in community problem-solving issues. The core is based on different resource levels within the community (Figure 1).

The process begins with the Single Resource level. Initially, the county Extension agent provides programs that he/she can plan and implement alone. An example of this type of resource may include a presentation on stress management.
The majority of programs at this level are self-contained. The purpose of this initial programming effort is to introduce the service and demonstrate the county agent's interest in the overall health of the community.

The next stage of the Community Wellness process is that of Multiple Resources (Figure 1). This implementation of programs requires the involvement and cooperation of other health professionals or agencies. In fact, these programs cannot be properly achieved without the involvement of individuals from other organizations. Multiple Resource programs involve pre-planning, organizing, and following up in order to reach their goal.

For example, a cholesterol screening program may be planned for a local factory. Since the purpose is to involve other local resources within the community, the county Extension agent makes arrangements to borrow the cholesterol machine from the health department or local hospital and asks for assistance during the screening. The Extension office provides nutrition education and counseling to the factory employees. The county Extension agent coordinates the planning of the screening program. After the cholesterol screening is finished, the Extension agent, community health nurse, and factory representative discuss the follow-up procedure to be initiated. It is decided that a retest will be done in six months. At that time, the two cholesterol readings will be compared for differences. Finally, a summary report is written highlighting the findings, and each organization takes part of the responsibility for the success of the program.

The third stage of the Community Wellness process is Community-wide Resources. This stage requires additional organizational involvement in the collaboration and coordination of more complex programs. It further involves local meetings and networking in order to expand the organizational structure. A community-wide health fair is a good example of this level of resource. In order to implement a health fair, 15
to 30 organizations may be involved in the coordination process of this one-day event. With each completed community project, members learn more about one another and the organization they represent, and realize that more can be accomplished working as a group than separately. After the different projects are complete, a report is written and shared with all cooperating organizations.

Since a core group has successfully functioned together with a variety of programs, the next step may be to consider some of the larger issues that affect the community. When the time comes that health issues are addressed, there is a core group ready to help the community develop a supportive atmosphere to find solutions to the problems.

This brings us to the final stage of this process, which is called Task Force Resources. The ultimate goal is for members of the community to develop a task force or Community Wellness Council. The councils evolve from a loosely knit group of individuals to one with solidarity and commitment that generates a process of identifying community health needs, and strategies to solve problems and implement solutions.

While the Community Wellness program has many programs associated with it, this will summarize examples from the areas of single resources and multiple resources. The programs are:

1. Stress Workshop
2. RISKO Program
3. Divorce to Recovery
4. Farm Rescue Workshops

STRESS WORKSHOP

Economic pressures, work pressures, family pressures, and life-stage changes affect one's stress level regardless of age, sex, or socioeconomic status. Research indicates that 60 percent of all illness is stress related. Most institutions, such as school work, or church, do not teach crisis or stress management.

For the above reasons, the Extension Service developed five stress workshops that are presented by County Extension agents. They are:

1. Managing Your Stress - Short Version
3. Teachers and Stress
4. Farm Families and Stress
5. Secretaries and Stress

The series of stress workshops has been well utilized. Within a 12 month period, over 3500 Georgians attended an Extension sponsored stress workshop. A large sample of those attending the workshop indicate the audience reaction to the stress workshops was 3.70 on a 4-point scale (Figure II).

RISKO

RISKO (Heart Attack Risk Factors Program) is a microcomputer assisted educational program designed to estimate the participant's chances of suffering a heart attack or stroke based on eight risk factors.

The primary reason for doing this program is that Georgians have a higher rate of heart attacks and strokes than the national average. According to health officials, this higher rate is due to lifestyle factors as much as any other cause.

The RISKO program has been very popular with agents since it was first introduced. Originally, the computer was linked to VPI's computer. More recently, the RISKO program was redesigned for microcomputers. Much of this year was spent helping agents utilize this newer version.

Although the design of the program is to assess the participant's risk of a heart attack or stroke, the major reason for improvements on RISKO is to enable the agent to use the results for programming purposes. Based on the returned RISKO discs, 4620 people participated in the program for 1988. We would estimate that over $115,000 worth of health care and educational information was provided by this program. The results show:

426 or 9 percent had blood pressure greater than 160;
910 or 20 percent did light activity and had sedentary jobs;
2541 or 55 percent either reduced fats a little or ate as they like;
1151 or 25 percent were more than 21 pounds overweight;
849 or 18 percent smoked cigarettes or a pipe;
1393 or 30 percent had moderate risk of having
Audience Reaction to Stress Workshops

A heart attack; and
284 or 6 percent had a dangerous risk of having
a heart attack;
21 or 0 percent had a danger/urgent risk.

Another way of considering these results is to
create a population at-risk profile of those who
participated in the program this past year (Figure
III).

For the at-risks, this at-risk profile suggests
that community programming should include more
nutrition education, particularly on importance of
reducing fats in diet, weight reduction classes, an
exercise or walking club, and continued education
on the hazards of smoking.

A closer look at the data offers some
opportunities for a review of clientele and specific
program needs. Who then participates in the
RISKO program?

Age
20 percent were 30 years of age and under
53 percent were 31 to 60 years of age
27 percent were over 60 years old

Sex
61 percent were females
39 percent were males

Marital Status
69 percent were married
39 percent were single, divorced, separated, or
widowed

Race
86 percent were Caucasian
12 percent were Black
2 percent were Hispanic, American Indian or
Asian

Occupations
The occupations of the participants were
spread out among the various occupational
categories. Twenty-six percent were profes-
sional workers, and another 12 percent were skilled workers. These were the two most prevalent occupational groups.

**Heredity**

Sixty-five percent reported a history of heart attacks or strokes among close relatives. Thirty-five percent reported no close relative having a heart attack or stroke.

It is important to keep in mind who we have reached but more importantly who we might need to be reaching. Although we reached a wide range of people of various ages and occupations, it is important to remember that our audience has been white, married females. While in 1988 we did reach more blacks and males, we still need to continue targeting these groups.

In terms of future program efforts, those factors that an individual can change are reviewed below as a result of the RISKO analysis.

Although high blood pressure is an important factor related to heart attacks and strokes, with this sample, blood pressure did not appear to be a major contributor to high risk among those who participated.

Interestingly, when considering exercise, it was found that 51 percent of those who participated did not exercise enough and had a sitting job. Of the group who lacked exercise, 79 percent recorded a moderate to a dangerous/urgent level of risk.

When looking at an individual's weight as an indicator of one's risk level, it was found that 53 percent of participants were six or more pounds overweight. Of this group, 37 percent had a moderate or above risk of having a heart attack or stroke.

When considering cholesterol, we found that 55 percent could benefit from a foods and nutrition program to help reduce fat in the diet. Approximately 45 percent of those recorded a moderate risk and above.

Eighty-four percent of the participants were non-users of tobacco. It should be noted that 50 percent of those who did use tobacco also had moderate or higher risk levels.

Based upon the above findings, it appears that follow-up educational programs are in order. Programs on exercise, diet, weight control, and nutrition information are ones that would greatly benefit the participants.

**DIVORCE TO RECOVERY**

In many counties throughout Georgia, few resources are available to strengthen the emotional well-being of families—particularly families going through a divorce. Floyd County in North Georgia discovered its divorce rate has been consistently higher than either Georgia's or the U.S. divorce rate.
Due to the local statistics and general interest, the Divorce to Recovery program was initiated by the local Extension office and local hospital. The five session workshops are designed to assist divorced families in understanding the process of divorce and recovery. The program was conducted by the county agent and a local minister. The topics covered were:

A. Reviewing the past marriage
B. Stages of recovery
C. Continuing relationships
D. Children
E. Starting over
F. Support group formation

Even though the formal sessions have been finished, those attending continue to provide support to each other by meeting on a regular basis. In addition, other divorced persons are invited to participate in this newly formed support group.

FARM RESCUE WORKSHOPS

In 1988 the Cooperative Extension Service completed its tenth year of working with Emergency Medical Technicians, rescue personnel, farmers, and farm wives on accident extrication and general rescue procedures. During this period of time, between nine and 14 workshops were held each year, for a total of over 120 programs. Within the last few years these programs have concentrated on providing EMTs and resource personnel with a knowledge of the operation of farm machinery. These programs have also educated rural EMTs about how typical farm accidents occur, as well as the nature of the injuries that can be expected from certain types of farm equipment, pesticides, and other farm chemicals.

There were nine Farm Rescue Workshops held in 1988 (Figure IV), with an attendance of 277 EMTs and farmers. Surprisingly, four of these were from urban counties which have only a few full-time farmers. It is felt that this increase in requests from urban counties is due in part to an increase in the number of accidents involving "sundown farmers" who farm after working full-time at another job. Experts believe that this number will increase in the very near future.

FARM RESCUE WORKSHOPS

1988

9 Workshops
Total Attendance
277

Figure IV
REFERENCES


Many of the dilemmas young people face are a direct result of their inability to make logical, rational decisions. Adolescents are reluctant to heed the advice of adults, but the decisions they make on their own are often not in their best interest.

This is what the Oklahoma Community Youth Effort (OCYE) is all about--training youth in good decisionmaking skills. OCYE provides youth experiential learning opportunities as they deal with "real" community problems.

A COMMUNITY PROGRAM

OCYE is based on the idea that teens learn more about themselves and gain a greater degree of personal maturity and responsibility when they apply newly learned skills and knowledge to real-life situations.

The objectives of OCYE include helping teens to: develop leadership skills; provide service to others and the community; believe in themselves and make the most of their potential; value a healthy mind and body; become self-sufficient, productive members of society; understand the problems facing them and their communities; encourage one another to make positive choices; and develop solutions to problems that affect daily lives.

Regardless of the issues youth choose, the OCYE program encourages them to follow seven basic steps for organizing a project:

1. Determine needs--List the needs and problems in the community. Get community input by asking the opinions of parents, local officials, service and civic club leaders, other youth groups, local media representatives, 4-H leaders, teachers, ministers, and law enforcement officials.

2. Choose a project--Select a project that is interesting and that can be completed in a reasonable amount of time. Try to pick a project that will succeed.

3. Get approval--Before proceeding, check with a 4-H leader or adult advisor to see if any type of permission or permit is needed. Check with city officials and police or other law enforcement people if the project will draw a crowd, involves streets or highways, or involves any unusual activity. If necessary, ask permission of landowners or business people.

4. Check resources--Be aware of what resources are available and how to get support for a project. Make a list of available resources within the club and community.

5. Develop a plan--Set goals and determine a plan of action. Outline the steps to carry out the project, and decide who will do what. Develop a timetable with starting and completion dates for all activities. Determine specific resource needs and costs of the materials. If possible, work with other groups within the community.
6. Implement the plan--Carry out the plan with total group involvement. Remember to let others know about the plan. Keep track of what happens by taking notes and pictures and keeping all records needed to evaluate the team's successes and failures. Stop, look, and listen occasionally to see if changes are needed.

7. Evaluate--Discuss how well goals were reached, what was learned from the activity, and what should be done differently next time. Publicize accomplishments in the local newspaper.

YOUTH MAKE A DIFFERENCE

Teens across Oklahoma have become part of the OCYE program. A group in Tulsa County, for example, surveyed other teens and adults and decided to address the issue of drinking and driving. This team, composed of three members and an adult advisor, receives support from the Tulsa business community.

After hours of library work and contacts with law enforcement agencies, they developed a 15-minute skit, which has been presented at schools, civic organizations, and several 4-H functions.

Extension 4-H staff have incorporated the OCYE materials in a school setting.

The Oklahoma Community Youth Effort is providing youth with an opportunity to learn more about themselves and to assume significant community leadership roles while addressing many youth-at-risk issues. OCYE youth are developing life skills so that they and their peers can be "free to face the future."
BUILDING PARTNERSHIPS FOR PEOPLE: ADDRESSING THE RURAL SOUTH'S HUMAN CAPITAL NEEDS

Lionel J. Beaulieu, Professor
University of Florida

INTRODUCTION

The South remains a region of contrasts—a metropolitan area whose spirited growth and economic expansion have introduced marked improvements in the quality of life of its residents versus a nonmetropolitan South, whose current social and economic woes have threatened to whittle away at the gains experienced by rural Southerners during the 1970s. These distinctive paths of development are the end product of a number of key factors. Most basic of these, as I will argue today, are the human capital shortcomings that characterize the South's nonmetropolitan locales.

My intent is to share with you some of the social and economic shifts that have taken place in the region's metro-nonmetro areas in recent years. Next, I will give attention to two key human capital concerns that I feel are most prevalent in the rural South—high school dropouts and adult illiteracy—issues that serve as major impediments to the realization of economic and social progress in the area. Finally, I will argue that successful enhancement of the human capital resources in the South's rural localities will require collaborative activities among families, schools, and communities. A major stimulus for the creation of this partnership will be visionary leaders at the local level.

CONTEMPORARY ISSUES IN THE RURAL SOUTH

The 1980s are proving to be a time when many areas of the rural South are being forced to recognize the harsh realities of their social and economic status in the region and in the United States. This is difficult in light of the fact that only a few short years ago, rural areas of the South were being lauded as meccas of economic and social progress. This vision of optimism was, in part, a result of the population resurgence which touched a host of the region's rural localities during the 1970s. And why not be optimistic? During the 1960s, population in the South’s nonmetropolitan areas slipped by 21.3 percent, a stark contrast to the 46.4 percent growth experienced by the metro counties of the region. But the 1970-80 period brought signs of hope to rural areas of the South, with nonmetro growth closely paralleling that of the entire region (16.3 percent versus 20 percent), and lagging behind the South's booming metropolitan population increase by a mere 4.9 percent.

However, the 1980-86 period offered evidence that major metro-nonmetro population disparities were once again the standard fare in the South. Yes, nonmetropolitan areas did continue to gain in population, but the 5.4 percentage points increase was two-thirds less than that being enjoyed by its metropolitan counterparts. The key
question is *Why such a dramatic change over the course of only two short decades?* (Figure 1)

The factors are not simple, but the worsening economic conditions that have confronted many of the South's rural communities have made population expansion a difficult task at best. A large segment of the rural South remains heavily dependent on traditional, goods-producing industries (such as manufacturing, agriculture, and mining), the very industries that have suffered appreciable hardship in recent years (Henry et al., 1988; Mulkey and Henry, 1988; Ryan, 1988). As Figure 2 reveals, nearly 32 percent of the region's nonmetropolitan counties draw their principal income from manufacturing activities. Mining and farming serve as the primary economic base of another 20.3 percent of Southern nonmetropolitan counties. All told, five of every ten nonmetro counties in the South have economies that are intimately tied to goods-producing activities (Ross, 1989)--activities that have stilled the economic vitality of many of the South's rural localities during the past decade.

The by-products of this economic downturn have been increasing problems of unemployment and underemployment (Hobbs, 1988; Sullivan and Avery, 1989). If one were to examine the economic performance of the South in recent years, the erroneous conclusion could be reached that unemployment has been held in check. In reality, the strength of the metropolitan economy has masked the difficult times being imposed on many of the region's rural counties. As Figure 3 shows, unemployment has been much higher in the nonmetro South than in metro areas during the entire period of the 1980s. Even as recently as 1987, unemployment stood at 8.4 percent in the nonmetro South--a figure that was 37 percent higher than the rate experienced by the region's metro localities.

An attendant concern has been the issue of underemployment--a condition commonly associated with the inability to secure full-time employment or to garner earnings that are commensurate with one's qualifications. It is true that rural economic expansion during the 1970s played a significant role in trimming the metro/nonmetro underemployment gap to just 4 percentage points in 1980 (an impressive gain given that the metro/nonmetro difference was in excess of 9 percent only five years earlier). But, the economic hardships of the early 1980s effectively stemmed further convergence of the metro/nonmetro underemployment disparities. In just two short years (1980-82), the metro/nonmetro underemployment differential accelerated to 8.4 percentage points (Lichter and Coastanzo, 1986). Recent evidence (i.e., 1985 statistics) suggests that while the gap is receding, it continues to hover above 7 percentage points (Figure 4).

Unfortunately, the economic dislocation that has confronted rural communities in the 1980s has reversed the income gains experienced by many rural residents since the 1960s (Henry et al., 1988). As a region, the South had 16.1 percent of its residents living in poverty in 1986, versus 13.6 percent for the U.S. as a whole. What is alarming, however, is the high proportion of persons in the South's nonmetro counties classified as being in poverty--22.4 percent in 1986. Equally depressing are the statistics for nonmetro families--in 1986, one in five families in the rural South fell below the poverty line. And unlike the metro South, the percent of both individuals and families living in poverty in the rural South has been on a steady increase since the latter part of the seventies (see Figure 5).

The pervasive nature of poverty in the South's nonmetro localities becomes apparent when examined by race and sex. Better than 41 percent of rural black families living in the South in 1986 were poverty stricken. Equally disturbing are the statistics for rural black persons in the South--nearly 44 percent were in poverty in 1986 (U.S. Bureau of the Census, 1988). For black households headed by a female, the proportion falling below the poverty line approached the 56 percent mark. And in cases where children under 18 years of age were present in the households, the percent in poverty grew to a startling 78.1 percent (Figure 6). These figures are not simple aberrations from past trends, but are continuing evidence of the enduring difficulties which these population groupings have experienced over the course of the last several years.

Thus, the de-escalated rate of growth in population, the over-dependence on a stagnating goods-producing economy, the high rates of unemployment and underemployment, and the pervasive conditions of low-income and high rates of poverty, are visible symptoms of monumental
Figure 1
Population Change in the South

(Percent Change)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Overall</th>
<th>Metro</th>
<th>Nonmetro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-70</td>
<td>14.3</td>
<td>46.4</td>
<td>10.1</td>
</tr>
<tr>
<td>1970-80</td>
<td>20</td>
<td>21.2</td>
<td>12.3</td>
</tr>
<tr>
<td>1980-86</td>
<td>16.3</td>
<td>5.4</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Figure 2
Economic Bases of Nonmetro Counties, 1936

<table>
<thead>
<tr>
<th>County Type</th>
<th>Percent</th>
<th>U.S.</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRM.</td>
<td>21.1</td>
<td>13.7</td>
<td></td>
</tr>
<tr>
<td>MFG.</td>
<td>23.6</td>
<td>5.1</td>
<td>6.6</td>
</tr>
<tr>
<td>MIN.</td>
<td>14.7</td>
<td>14.8</td>
<td></td>
</tr>
<tr>
<td>GVT.</td>
<td>21.1</td>
<td>26.9</td>
<td></td>
</tr>
<tr>
<td>RET.</td>
<td>9.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POV.</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3
Unemployment Rates in the South

<table>
<thead>
<tr>
<th>Year</th>
<th>Nonmetro</th>
<th>Overall</th>
<th>Metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>6.86</td>
<td>6.75</td>
<td>6.7</td>
</tr>
<tr>
<td>1979</td>
<td>6.13</td>
<td>5.62</td>
<td>5.4</td>
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<tr>
<td>1980</td>
<td>7.73</td>
<td>6.4</td>
<td>5.84</td>
</tr>
<tr>
<td>1982</td>
<td>11.07</td>
<td>8.95</td>
<td>8.06</td>
</tr>
<tr>
<td>1984</td>
<td>9.34</td>
<td>7.24</td>
<td>6.39</td>
</tr>
<tr>
<td>1986</td>
<td>9.77</td>
<td>7.57</td>
<td>6.72</td>
</tr>
<tr>
<td>1987</td>
<td>8.44</td>
<td>6.8</td>
<td>6.17</td>
</tr>
</tbody>
</table>

Figure 4
Economic Underemployment in the South

<table>
<thead>
<tr>
<th>Year</th>
<th>Metro</th>
<th>Nonmetro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>18.4</td>
<td>27.8</td>
</tr>
<tr>
<td>1980</td>
<td>17.7</td>
<td>21.7</td>
</tr>
<tr>
<td>1982</td>
<td>20.5</td>
<td>28.9</td>
</tr>
<tr>
<td>1985</td>
<td>20.2</td>
<td>27.5</td>
</tr>
</tbody>
</table>
Figure 5
Poverty in the South Among Persons and Families

Percent

<table>
<thead>
<tr>
<th></th>
<th>Families</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmetro</td>
<td>18.4</td>
<td>20.1</td>
</tr>
<tr>
<td>Overall</td>
<td>14.8</td>
<td>16.2</td>
</tr>
<tr>
<td>Metro</td>
<td>11.9</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Figure 6
Family Poverty Among Female Headed Households-Children Under 18

ALL HOUSEHOLDS BLACK HOUSEHOLDS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmetro</td>
<td>62.3</td>
<td>75.9</td>
</tr>
<tr>
<td>Overall</td>
<td>57.9</td>
<td>70.9</td>
</tr>
<tr>
<td>Metro</td>
<td>55</td>
<td>67.7</td>
</tr>
</tbody>
</table>
social and economic problems that confront today's rural communities of the South. What options exist for the region's rural areas? How can communities and their leaders begin to capably address the myriad of problems threatening their long-term well-being? It is some of the questions that provide a context for the forthcoming sections of my presentation.

IS RURAL ECONOMIC DEVELOPMENT THE ANSWER?

There is a belief in some circles that the diversification of the rural economy is key to revitalizing the rural communities of the South. It is suggested that the future of the South's rural areas lies with the growth of small business enterprises, with the stimulation of entrepreneurial activities, and with the recruitment of service-producing and high-tech industries (Extension Service/USDA, 1986; Friedman, 1987; Pulver, 1987). The key issue, however, is whether the bulk of rural communities in the region are positioned to capture these types of industries? Unfortunately, the evidence appears to suggest that they are not.

On the new indicators of economic capacity being formulated for the high growth industries of today and tomorrow, rural Southern communities are judged as highly deficient (Rosenfeld, 1988). By monitoring the current and anticipated needs of the economy, it is easy to understand why this is so. Consider the following:

- Many new jobs at present are knowledge intensive white-collar positions requiring a minimum of some college education (Garland et al., 1988).

- Manufacturing, long considered the mainstay of the rural South's economy, is changing. Low-skilled industries have either closed, moved offshore, or modernized (implying the need for less people, but more highly-skilled workers). New technologically advanced manufacturing firms are sprouting in the urban localities of the South (Sullivan and Avery, 1989). Lost in this structural re-shifting of the manufacturing sector are the unskilled workers located primarily the rural South.5

- By the beginning of the next decade, 3 of every 4 new jobs will require better than a high school education (Ong, 1988; MDC, Inc., 1988). Approximately 90 percent of these jobs will be located in the service sector (National Alliance of Business, 1986).

- Of all new jobs in the year 2000, only one in four will be classified as low-skilled. Today it is two in five (Swain, 1989). In addition, it is estimated that the median level of education required for jobs at the turn of the century will be 13.5 years (Mandel, 1988).

- Jobs that are considered middle-skilled in today's environment will be the least skilled occupations of the future (Swain, 1989).

In surveying the rural South, it is clear that the fundamental problem impeding realization of measured improvements in the economic climate of rural Southern communities is the state of the region's human capital resources. Vibrant economies are unsustainable in a rural South that leads the nation in the rate of high school dropouts, in the proportion of adults suffering from functional illiteracy (Ross and Rosenfeld, 1988), or in an area having the lowest percentage of college-educated adults (Swanson and Butler, 1987). The necessary precursor to the realization of an economic development renaissance in rural communities of the South is a full-fledged commitment to enhancing the human capital resources of these localities—to addressing the serious problem of high school dropouts, and to attacking the issue of adult illiteracy. Only in this way can economic security for the South's rural communities and its citizens be truly enhanced (Deaton and Deaton, 1988).

STATUS OF THE RURAL SOUTH'S HUMAN CAPITAL RESOURCES

The human capital resources problems that plague rural America are clearly most applicable to the South. Why is this so? First, one, the South is home for nearly half of the
nonmetropolitan residents in this country (O'Hare, 1988). Second, factors commonly associated with human capital deficiencies—such as poverty, illiteracy, and low educational achievement—are principally concentrated in the rural localities of the South (O'Hare, 1988; Rosenfeld, 1988; Swansen and Butler, 1988; Winter, 1988). A brief reflection on the prevalence of high school dropouts and adult illiterates offers some notion of the human capital shortcomings in the rural South.

It is somewhat disconcerting that five of the ten U.S. states with the poorest high school graduation rates (in 1987) are located in the South.6 The state of Florida, a state that John Naisbitt (1982) labels the country's bellwether state in his book Megatrends, has the unfortunate distinction of ranking first in the nation in the proportion of its high school-aged youth who do not graduate.7 And data for rural areas of the South are equally depressing—high school completion rates are generally lower in these areas than in urban locales (Ross and Rosenfeld, 1988). More specifically, high school graduation rates in the nonmetropolitan counties of the region are nearly 25 percent below those registered in the South's metro counties (Rosenfeld, 1988).

The educational attainment problems of the rural South are clearly reflected in Figure 7. Nearly 39 percent of nonmetro residents 25 years of age and above lacked a high school education in 1988.8 For metropolitan Southerners, the figure was 24.4 percent (approximately 37 percent below the nonmetro percentage). More alarming are the numbers for black nonmetro adults—approximately 55 percent never completed a high school education (Ross, 1989).

Unfortunately, individuals who leave high school prior to graduation commit themselves to a life of economic hardships. Markey (1988), for example, notes that one in five male dropouts were unemployed in October 1986. For high school graduates, the number was one in ten unemployed. Further, in the face of demands for higher skilled workers, dropouts are having to compete with high school graduates for the dwindling supply of lower-skilled jobs. They simply cannot fit the bill for the up-and-coming industries in the region who are demanding a better educated, more adaptive, flexible, and multi-skilled labor force (Moen, 1989; Redwood, 1988).

Consequently, there is a very real chance that in this new era of technological sophistication the school dropout will become permanently displaced from the mainstream of the economy.

An important companion piece to the issue of school dropouts is that of adult illiteracy. There remains no uniform procedure for measuring illiteracy, but one approach that has gained some acceptance is number of school years completed. It is suggested that persons who have completed eight years of education are functionally illiterate (Ross and Rosenfeld, 1987). These individuals are unable to master the ability to read and write to a point where they can operate sufficiently in society (Levine, 1982).

In comparison to other regions of the country, the South has the highest proportion of functional illiterates (see Figure 8). In 1975, over 27 percent of Southerners had less than a high school education. Recent figures (1987) suggest that the illiteracy numbers have gone down, but still, the South retains its position as highest of any section of the country. Closer examination of the Southern regional figures uncovers significant differences on the basis of race. Regardless of the year under investigation, black Southerners are more likely than whites to be functionally illiterate (Figure 9).

What is important to understand, however, is that illiteracy rates are even more dramatic in the rural South. Estimates suggest that one in four rural Southerners above the age of 25 was functionally illiterate in 1980, and for rural blacks, the number approached 40 percent (Ross and Rosenfeld, 1988; Winter, 1988). The nonmetro South's rate of functional illiteracy was 71 percent higher than that uncovered in the metro area of the region (Rosenfeld, 1988).

Such personal illiteracy has powerful spillover effects on workplace success. Functional illiterates earn 44 percent less than those with a high school education, and are likely to be a less productive force in the local economy (Deaton and Deaton, 1988). The economic vitality of rural areas is directly linked to literacy—the higher the rates of adult illiteracy, the higher the unemployment rate and the slower the economic growth experienced by rural communities (Rosenfeld, 1988).

In today's economic climate, labor market recruiters broadcast a clear message: certain levels of formal schooling are an absolute necessity if one
Figure 7
Non-High School Graduates in the South by Race and Residence, 1988

Percent Persons 26+ Years

White
Black
All

Metro
Nonmet.

Source: Ross, 1986.

Figure 8
Persons With L.T.a H.S. Education (25 Years Old and Above)

<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>1981</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>15.3</td>
<td>12.4</td>
<td>10.2</td>
</tr>
<tr>
<td>Midwest</td>
<td>20.3</td>
<td>15.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Northeast</td>
<td>21.2</td>
<td>16.2</td>
<td>12.2</td>
</tr>
<tr>
<td>South</td>
<td>27.4</td>
<td>20.7</td>
<td>16</td>
</tr>
</tbody>
</table>

U.S. Region

West
Midwest
Northeast
South
wishes to gain access to jobs (Harman, 1987:54). Others note that the future of the rural economy is dependent on the capacity of rural people to work smarter, not just harder (Reid, 1988), or on the mental strengths of its labor force (Johnson, 1988). These are no easy shoes to fill, particularly when the better educated youth—the very people with whom the hope of reinvigorating the rural economy rests—are deciding to leave their rural homesteads (O'Hare, 1988; Tweeten, 1988). In both 1985-86 and 1986-87 (as shown in Figure 10), net outmigration from the South's nonmetropolitan areas was greatest among the better educated persons: 25 years of age and above.

So, in the final analysis, one must ask how competitive can the rural South be when it has the lowest proportion of adults with a high school education, or when its percent of college graduates is 40 percent below the national average (Carlin and Ross, 1987; MDC, Inc., 1986), or when its pool of brightest residents are opting to migrate elsewhere?

PARTNERSHIP: THE KEY STRATEGY

If the rural South is to ever enjoy significant economic and social progress over the long term, then a strengthening of its human capital resources must be given top priority. But in doing so, one must guard against embracing strategies that are too parochial or narrow in their focus. It has been suggested, for example, that the problems of high school dropouts and adult illiteracy are symptomatic of an educational system gone awry, and that a turnaround in these problems must commence with an overhaul of the educational system. Is this strategy sufficient, or even appropriate?

Consider this poignant observation offered by Harman (1987:44-45) in his discussion of illiteracy:

The clustering of illiteracy in certain areas strongly suggests that there are illiterate communities—groups of people living in environments in which literacy plays only a marginal role and where its acquisition is neither encouraged nor supported.

So long as such communities exist, illiteracy rates will continue to soar, no matter national illiteracy campaigns are waged. It is more than a question of teaching people to read—it is a question of reexamining values—community by community.

Harman's comment offers an important clue regarding effective responses to the human resource problems of the region. Placing the burden on the educational system alone is not satisfying. Rather, the task of addressing the area's human capital resources must become of collective interest and concern to the Family, the School, and the Community. Building partnerships among these important elements in the locality is essential, partnerships that send a clear signal to all residents that academic performance and literacy are highly valued goals of the community—and that each partner in this triad has a critical role to perform in helping instill those values within the local setting. Families provide the first inklings of the importance attached to education. In essence, parents set the stage for the cognitive development of the child via the role modeling that they offer within the home environment. As Honig (1985: 163-64) suggests:

The evidence all points in the same direction; the most important way in which parents can contribute to the education of their children is by what they do at home... Specifically, the children who typically perform better in school are the children of parents who read to them when they are young, who supervise their homework by making sure they have a quiet place to study, who talk with them about school and everyday events and express an interest in their progress.

The family also offers a capacity for children to adapt to a changing world during his/her working life. Family membership is the principal motivator of responsible personal behavior and of sustained individual commitments to productivity throughout life.

The school system provides a valuable resource to the community. But, its success is largely determined by the commitment that families and communities have to its educational mission. If families and communities exhibit a hands-off attitude, or show apathy regarding the goings on within the school system, then there is little hope
Figure 9
Education Status of Southerners by Race
(25 Years of Age and Above)

Percent

Year

1975 1981 1987
Less Than H.S. 4 + Years College

1975 1981 1987

Year

Whites Blacks

Figure 10
Net Migration Rates of Nonmetro Southerners by Educational Level

Rate

L.T. High Sch. H.S.Grad. Some College College Grad.

Educational Level


125
that schools will succeed in stemming the tide of high school dropouts and/or illiterates. Designing useful enriching educational experiences for students requires schools, families, and community working in tandem. Shaping the goals of the school system is a community and family obligation, a responsibility that engenders success for students and schools alike when exercised.

Communities offer an important laboratory for enhancing the experiential base of their youth. They represent valuable opportunities for youth to apply knowledge gained in the classroom to real life situations in the community (National Commission on Youth, 1980). Implementation of career exploration activities, for example, where students are placed in jobs in the community’s business, government, or other sectors of the locality, offers a rare opportunity for youth to expand their understanding of the workplace environment. But, the business and governmental sectors of the community must be steadfastly behind this effort if it is to be successful.

The business and government sectors can also play an instrumental role in facilitating parental involvement in the school system. With the increasing prevalence of working parents, few opportunities exist for parents to take an active part in the daytime school-based activities of their children. However, business and government can be a major force in implementing policies allowing parental involvement in schools during work hours (Erhlich, 1988). Such policies could serve to underscore business and governments’ recognition of the crucial role that parents play in the academic success and career aspirations of their children (Gittleman, 1989; Otto, 1986).

So, in the final analysis, the degree to which real progress is made in enhancing the human capital resources of the South’s rural communities will be dependent upon the supportive environment that is fostered within the local arena. If families and communities demand an active role in deciding the educational agenda of the schools, and see academic excellence as an intimate part of their value systems, then substantive improvements in the human capital reserves of the community will indeed evolve over the long term (Harmon, 1987).

COMMUNITY LEADERSHIP: A VITAL INGREDIENT

Enlightened leaders at the local level can plan an instrumental role in fostering a vision of what is possible or achievable with regard to the community’s human capital resources. The term “enlightened” implies a leadership that is cognizant of the frailties associated with a community whose human resources are poorly educated or trained for the economic realities of today and tomorrow.

Unfortunately, this type of progressive, forward-thinking leadership is often not present in rural communities. What appears to be the more common characteristic of leadership in rural localities is one in which issues are addressed by specialized leaders with subject matter expertise in these issue areas. But, the prevalence of special interest leaders can indeed prove problematic (Wilkinson, 1986). As Gardner (1984) notes:

Nothing should be allowed to impair the effectiveness and independence of our specialized leadership groups. But, such fragmented leadership does create problems. One of them is that it isn’t anybody’s business to think about the big questions facing our society. Where are we headed? Where do we want to head? What are the major trends determining our future? Should we do anything about them? Our fragmented leadership fails to deal effectively with these transcendent questions.

So, in a very real sense, as families, schools, and communities dedicate their energies to addressing the issues of school dropouts and adult illiterates, they must append another item to their list of human capital concerns—the need to develop a local leadership that is capable of stirring the community to a higher level of excellence with regard to the social and economic security of its residents. Realization of this strengthened leadership will not be easy, but some strategies are worth exploring. For example, the prevalence of special interest leaders in the community represents a talented pool of individuals having the potential to evolve into generalized leaders. Rare is that generalized leader whose understanding of the broad-based needs of the community were not first rooted in local actions having a more specialized orientation.
Tomorrow's leaders will very likely have begun life as trained specialists, but to mature as leaders, they must sooner or later climb out of the trenches of specialization and rise above the boundaries that separate the various segments of society. Only as generalists can they cope with the diversity of problems and multiple constituencies that contemporary leaders face (Gardner, 1987).

It is essential that opportunities be offered to help these special interest leaders develop the capacity to fulfill these generalizing roles.

A second strategy would involve community affairs. High on the list of potential leaders should be people whose voices rarely have been part of the leadership of the past, namely, women, racial/ethnic minorities, and the disadvantaged. They must be an integral part of the leadership of rural localities (Martin and Wilkinson, 1985).

But, it is clear that the long-term hopes for rural communities will rest with their youth. Rare is the occasion, however, where community leadership opportunities have been part of the learning activities offered to younger residents. It is time that rural areas begin developing an atmosphere that is conducive to the growth of leadership skills among their younger residents. Schools can be a key force in offering a curriculum that imparts to the students the knowledge and skills needed to participate in community improvement activities. That curriculum, however, must include opportunities to move beyond the classroom and into the real life environment of the community. By engaging in concrete community development and community service projects, students are given the chance to envision the future of their community and to work on realizing it (Youth Policy Institute, 1988: 28). These important experiential programs will only be possible, however, if the public and private sectors of the community work in concert with the school system in supporting these activities (Gardner, 1987).

We must not forget the key role of families in this process. Parents who embrace the notion that youth have an important voice in shaping local decisions will likely foster a commitment on the part of their children to community service activities. This type of parental encouragement, coupled with community receptivity to youth involvement, may offer one viable strategy for stemming the departure of talented youth from the rural communities of the South (Israel and Beaulieu, 1989).

CONCLUDING REMARKS

It is clear that the challenges facing rural communities of the South are monumental. In fact, some might argue that the human resources problems in the rural South are far too significant and complex to address in any effective way. It is important for rural communities of the South to repel such pronouncements and to begin the process of aggressively responding to their human resource shortcomings. The commitment, the hard work, and the vision must originate and be carried out at the local level. The creation of family, school, and community partnerships can be instrumental in achieving substantive improvements in the locality's human capital resources.

Surely, the Cooperative Extension Service can be a vital force in this initiative. But, I'm afraid that if we rely on our traditional vehicles for carrying out our educational activities, our efforts will be destined for failure. We can ill afford to work on building the human capital of our rural communities by doing 4-H, Home Economics, CRD, or ANR work in isolation from one another. The partnership model articulated in this report makes clear the need to build the human resources of our rural areas via the use of a holistic, integrated process. Simply put, all of us--be we 4-H, CRD, Home Economics, or Agriculture and Natural Resources--have to be in this together, working side by side on this initiative. Our efforts in helping localities realize partnerships among families, schools, and communities must begin with a meaningful partnership among our own Extension professionals.

And, if we are successful in creating this holistic Extension initiative, let us not forget that we must be in it for the long haul. The human capital shortcomings of the rural South are the end-products of a host of forces which are deeply
rooted in the history of this region. Overcoming these shortfalls will demand much energy and time on our parts. Please, let us not be saddled by a need to comply with a so-called "four-year" plan of work. We must remain ever mindful of the fact that significant enhancements in the human capital stock of the region's rural localities are years away. We cannot, as Extension faculty, permit this fact to lessen our commitment to the rural South's human capital agenda.

There is a need to strengthen another partnership—that between the state Cooperative Extension Service and the university community of which it is a part. The land-grant mission she views as the exclusive responsibility of persons who work in colleges of agriculture. Rather, the broader pool of expertise and resources that resides across university campuses should be called upon to assist in our human capital activities. No force can be more instrumental in facilitating these alliances than can a university administration that fully embraces the vital service function that the total university community must perform in meeting the near and long-term needs of people and communities of the state.

In closing, let me state that this conference represents a significant, positive step in helping focus the energies of our entire Extension family on the serious issues impacting the rural South. We should use it as a forum to digest information, debate points, present philosophies, and offer ideas. But if anything, let's leave here committed to working as partners in improving the lot of those people and places who call the rural South home. Unless we are in this together, I fear that enhancements in the socioeconomic status of the South's rural communities will be a tenuous goal at best.

ENDNOTES

1For the purpose of this report, the terms rural and nonmetro are being used interchangeably, as are those of urban and metro. Metropolitan counties are defined as areas having large population nucleus and which encompass adjacent communities having a high degree of economic and social integration with that nucleus. This includes counties with a central city of 50,000 persons or more, and surrounding counties whose population is substantially dependent on the metropolitan county for work and other important services. All counties which do not meet the criteria of a metro county are classified as nonmetro. Approximately 80 percent of all counties in the South are designated as nonmetro.

2The county classifications provided in Figure 2 are unpublished information contained in a recent paper prepared by Ross (1989). According to Ross, classification of county types were guided by the following definitions: Earning: at least 20 percent of labor and proprietary income from farming, weighted annual average, 1981, 1982, 1984 thru 86; Manufacturing: at least 30 percent of labor and proprietary income from manufacturing, 1986; Mining: at least 20 percent of labor and proprietary income from mining, 1986; Government: at least 25 percent of labor and proprietary income from government, 1986; Retirement: at least 15 percent net immigration rate of people aged 60 and over, 1970-80; Poverty: county with per capita personal income in the bottom quintile in each of the years of 1950, 1960, 1969, and 1979 (Ross, 1989:11).

3For example, between 1983 to 1986, poverty declined by nearly 10 percent among families and 7.5 percent among persons living in metropolitan areas. In the South's nonmetro counties, on the other hand, families and persons in poverty increased by 7.4 percent and 8.2 percent, respectively, over the same period of time.

4Since 1975, poverty among all nonmetro female-headed households has increased by 11.6 percent, but has declined by a near equal proportion in metro Southern households. Similarly, poverty among black female-headed households has accelerated by 4.9 percent in nonmetro areas of the South, but has declined 7.2 percent in the region's metropolitan counties.

5Ross (1989) offers dramatic evidence of the serious blow that non metro workers suffered during the economic distress of the 1980s. She notes that during the 1983-86 period, 45 percent of all nonmetro workers who were displaced from their jobs lived in the South. Further, some 47 percent of displaced manufacturing workers were nonmetro Southerners.

6Graduation rates apply only to public schools since private high school graduation data are not available in all states. The adjusted graduation rates were calculated by dividing the number of public school graduates by the public ninth grade enrollment four years earlier. Ninth grade enrollments include a prorated portion of the secondary school students who were unclassified by grade. Graduation rates were also corrected for interstate population migration. Information on the number of persons of graduating age receiving GED's is not currently available. Data on graduation rates were assembled by the National Center for Education Statistics, U.S. Bureau of the Census. Appreciation is extended to Linda K. Hatageones, Florida Department of Education, who graciously provided the graduation rate information to the Task Force for purposes of this report.

7It is important to point out that the District of Columbia
actually has a higher non-high school graduation rate than Florida (44.5 percent versus 41.4 percent), but since the District of Columbia is not a state, Florida’s graduation rate is the worst of all 50 states.

The nonmetro figure represents a modest improvement over the 1980 percentages. In 1980, over half of all nonmetro adults in the region lacked a high school education (Ross and Rosenfeld, 1988).

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Figure 10: The 1985-86 figures were drawn from the article by Linda L. Swanson and Margaret A. Butler, "Human resource base of rural economies," while the 1986-87 figures were secured from the work of Peggy J. Ross, "Human resources in the South: Directions for rural sociology in the 1990's." See reference section for complete citations on these two works.
INFRASTRUCTURE AND ECONOMIC DEVELOPMENT

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Does America's infrastructure receive a passing grade? The National Council on Public Works Improvement in a recent study graded America's infrastructure. Their grade on an academic scale was a scant C- which is barely adequate to support current demands. Specific services such as highways were given a C+, solid waste a C- and hazardous waste a D. The study concluded: "After two years of study, the National Council on Public Works Improvement has found convincing evidence that the quality of America's infrastructure is barely adequate to fulfill current requirements, and insufficient to meet the demands of future economic growth and development (National Council on Public Works Improvement 1988, p. 1).

The problem in many rural areas, particularly in the South, is compounded by the poor economic conditions and the inability of the local and state economy to support additional infrastructure investment. In addition to the poor economic conditions in many rural areas, the financing of infrastructure has shifted to local areas. Since 1977, local government outlays have continued to rise, while state and federal government outlays have fallen. The result has been an increasing shift in responsibility away from the state and federal level toward the local levels. Local governments now provide half of the money spent on public works. This is up from 38 percent 20 years ago (National League of Cities 1987).

The deterioration of rural infrastructure and the struggle to finance rural infrastructure are the reasons this issue is so critical. Without adequate infrastructure, rural areas may find it difficult to have economic development and growth. On the other hand, without economic development and growth, it may be difficult to finance infrastructure. The problems of inadequate infrastructure and financing are severe enough the planning committee for this conference felt it important enough to devote a session to the issue. The purpose of this paper is to:

1. Provide a brief history of infrastructure funding;
2. Review selected studies which have measured the impact of infrastructure on economic growth; and
3. Discuss how extension can assist with infrastructure issues.

BRIEF HISTORY OF FUNDING OF INFRASTRUCTURE

The problem of funding infrastructure is not an overnight issue. It's been evolving for over 30 years in response to dynamic economic, political, and social changes. The national trends of the last few decades, which include periods of rapid economic growth, economic decline, and shifts in social priorities illustrate this evolution. State and local concerns are illustrated using Oklahoma's current infrastructure situation.
Trends in the 1950's and 1960's

These years are characterized as a period of rapid economic growth. As a result of the post-war baby boom, demand increased for all types of public works. The Interstate and Defense Highway System of 1941 (funded in 1956 by the Highway Trust Fund), enabled efficient travel from coast to coast. This might well mark the beginning of a remarkable age of American commitment to infrastructure. The federal government started providing 90 percent of the construction cost of new highways. The Public Works and Economic Development Act of 1965 increased federal aid for infrastructure construction through local matching grants to state and local governments. These grants provided small governments with financial support for not only highways, but for large blocks of infrastructure categories, including water pollution control, sewers, sidewalks, and other social services (National Council on Public Works Improvement 1988, pp. 87-90; Hulten and Peterson 1984, pp. 166-168; National Council for Urban Economic Development 1976; Walzer and Chicoine 1989, p. 2).

Trends in the 1970's and 1980's

In most parts of the United States, this was a period of economic decline bearing high inflation, high interest rates, and high unemployment (stagflation). Accompanying these problems were shifts in spending priorities. Emphasis was placed on social welfare and defense spending resulting in the reduction and crowding out of capital investment spending.

Incentives for infrastructure were concentrated on construction rather than the "4-Rs": repair, resurfacing, restoration, and reconstruction (Dunlop 1986). A deliberate strategy of "deferred maintenance" was the norm (Hulten and Peterson 1984). The period coincided with the life cycles of public works facilities, population shifts toward the "sunbelt," and a growing taxpayer revolt (Cuciti 1986). Over this time period, an immense needs gap estimated as high as $33.1 billion annually (1988-2000), evolved. Over half of this amount was in highway and bridges. Between 1965 and 1977, infrastructure investment fell from 4.1 percent to 1.3 percent of Gross National Product. Even after excluding highway figures the drop was from 2.75 percent to 1.9 percent of GNP (O'Day and Newman 1984, as related by Gakenheimer 1989, p. 16).

The Present

The present period of federal budget constraints bares the caption of the "New Federalism," which pushes the responsibilities back to state and local governments even more than the 1970's and 1980's. It brought a loss of federal Revenue Sharing and a dramatic slowdown in federal grants for infrastructure. With the Tax Reform Act of 1986 came harsh restrictions on state and local fund raising alternatives (Apogee 1987; Ledbur et al. 1986). As a result of recent exploits and assuming public works depreciate at an average of three percent a year, investment in state and local facilities nears zero in the 1980's (Hulten and Peterson 1984, p. 167).

State and Local Concerns

As federal programs have been or are being cut back, state and local governments will have to bear more of the burden of providing infrastructure. Oklahoma is used to illustrate the current needs and concerns regarding selected infrastructure items. The Oklahoma Department of Transportation has recently substantiated a need to improve at least 274 miles of state highways each year until the year 2006 to provide an adequate system of state highways (Oklahoma Department of Transportation 1989). Oklahoma has 15,323 bridges within its city-county system. Shockingly, 53 percent are classified structurally deficient and 19 percent functionally obsolete. Oklahoma municipalities control 33,179 lane miles of streets. A massive percentage of these are "critically inadequate" (State of Oklahoma 1986, 11. 28-46, 53, 61).

User fees are the primary source of revenues for Oklahoma water systems (78 percent). Unfortunately, most facilities don't generate enough revenues to cover all costs. The rates usually consider only operation and maintenance,
not replacement costs. Most water problems are in distribution facilities (i.e., leaks, deterioration, undersized lines, etc.), and inadequate storage. This is reflected in that very few communities have attempted to upgrade their distribution and storage facilities. Major problems with wastewater systems include a lack of decent storm sewers. In fact, many smaller communities have no storm sewer systems at all. Reports of flooded sanitary sewers are all too common. Solid waste collection and disposal systems are accepted by all as important factors in maintaining quality of life. Improper disposal leads to ground water contamination and lack of sufficient disposal sites wreaks havoc. Many communities report problems in meeting regulatory standards (State of Oklahoma 1986).

In summary, the state study (State of Oklahoma, 1986) shows that 25 percent of the water treatment system and 50 percent of the waste water systems are near capacity and that industrial expansion is limited. Thus, if you add problems of other services such as roads, bridges, and solid waste, more than half of Oklahoma's cities have severely impaired their potential for economic development and growth. Oklahoma's infrastructure problems parallels most other states. Maintaining the status quo is difficult. Satisfying increasing federal EPA standards is presently improbable. Progression of infrastructure seems impossible. Even so, economic growth is remarkably coupled with infrastructure.

**REVIEW OF SELECTED INFRASTRUCTURE STUDIES**

Many studies have attempted to document the linkages between infrastructure and economic growth. Research exhibits a high positive correlation, but causality hasn't been firmly established due to statistical and empirical problems. Nevertheless, these studies lead to the logical conclusion that infrastructure attracts private investment and thus promotes economic growth.

Selected research studies will be reviewed to illustrate what researchers have found concerning the relationship between infrastructure and economic growth. In general, research concludes that the task of infrastructure is to generate a "minimum critical size of urbanization" that will act as a core for development (Hansen 1965; Hirschman 1958; as related by Eberts 1986, pp. 18-19). Once growth is underway, regions may need periodic injections of infrastructure to proliferate the expansion; otherwise, they may remain in a "low-level equilibrium trap" (Richardson 1973, in Eberts 1986, pp. 16-17). Firms are attracted to regions where the cost of production are lower and infrastructure is provided at a reasonable price (Helms 1985, in McGuire 1986, p. 10). Property tax rates and industrial sites don't seem to matter so long as other services are available. Factors attracting firms are excess sewer, sanitation and water capacity, as well as well-developed transportation and educational facilities (Kuehn et al. 1979).

**Sewerage and Sanitation**

Garcia-Mila and McGuire (1986) propose that sewerage and sanitation have a positive relation to Gross State Product (GSP), and have higher marginal products that private investments. Using GSP as the dependent variable and annual state infrastructure expenditure for all states including the District of Columbia (1965-1983), as independent variables, their hypothesis was confirmed. However, they cautioned that testing for causality was lacking, thus the results were preliminary and would be retested at a later time (McGuire 1986, pp. 11-12, 14). The availability of sewer services are extremely important to developers; hence, they're a powerful mechanism in economic development planning. Nelson and Knapp (1987) tested the effects of a centralized sewer service on land development in Portland, Oregon. They used a double log regression of extraneous socio-economic variables, such as distances to the city center, densities of multi-family and corporate parcels, income within census tracts, tax rates, and locations of sewer interceptors on the market price of land sold to developers during 1980. With an $R^2$ of .595 and over 764 observations, they found that developers were willing to pay more for land within a region having a centralized sewer system than for land having separate sewer agencies (Nelson and Knapp 1987, p. 479). Kuehn, Braschier, and Shonkwiler
(1979) contrived an econometric study based on a sample of 115 rural Missouri communities to determine factors that contributed to new plant locations between 1972-1974. The regression showed a positive excess water capacity coefficient (+.01), and positive and significant excess sewer capacity (+.23). The regression produced an R² of .435, so other factors not included such as preferences and salesmanship also had influence on plant location decisions. So, an ample supply of fresh water is essential in accommodating economic expansion. Most problems in supplying drinking water are in the distribution and treatment facilities. As communities struggle to meet increasing federal and state requirements, funding and technical assistance becomes increasingly important. Chemical run-off from agricultural activities, poorly completed oil and gas wells, and neglected land-fills can permanently contaminate an otherwise perpetual source of clean water. Fortunately, federal, state, and local decision-makers are becoming aware of these problems and are increasingly providing technical assistance.

Transportation

Transportation infrastructure greatly effects economic growth (Mera 1973; Antic 1983; as related by Eberts 1986, pp. 14-15). Carlin and Mills (1987) used a simultaneous, general equilibrium model to study the effects of economic, demographic, and climatic variables on population and employment. They collected data from 3,000 counties over a cross-section of the United States during the 1970's and estimated equations by two-stage least-squares. Results showed that if interstate highway density was doubled, total manufacturing employment would increase six percent over a ten year period. Similarly, it would lead to a 2.8 percent increase in population density. Thus, interstate highways have a significant effect on employment and population growth. In a study of small Missouri towns, highways and barge docks, among other things, contributed to income growth (CONSAD Research Corporation, 1969; in Eberts 1986, p. 21). Dorf and Emerson (1978) tested manufacturing plant location (1960-1970) differences between 147 randomly sampled nonmetropolitan communities. The sample was stratified by community population and states in the West North Central region of the United States. Results inferred that multiple regression on 136 variables implied that distances to large urban areas, access to interstate highway or water transportation systems are not necessary for attracting small and average sized firms. But they may be quite important for luring large manufacturing plants.

Education

Enterprises crave skilled and educated work forces, in addition to readily accessible research facilities. Schools are acknowledged contributors to the ability to attract jobs; therefore, expenditures on education are positive factors in economic growth. Firms responding to questionnaires considered amenities such as schools as important factors in plant location decisions, even though they ranked eighth out of twelve general factors (Binkman 1975; in Dorf and Emerson 1978, p. 110). Wasylenko and McGuire (1985) used regression analysis on 48 states in an attempt to find which factors explained differences in state's employment growth rates (1975-1980). They found that expenditures in education were positive factors for employment growth (in McGuire 1986, pp. 9-10, 14).

Although no study to date is absolutely conclusive, infrastructure is regarded as the economic foundation of a nation. The provision of basic amenities can result in economic growth by enticing private investment toward comparatively advantageous regions. Growth absorbing infrastructure provides many advantages to firms willing to indulge themselves.

GENERAL

A comprehensive review of the literature of the research studies that looked at the relationship between infrastructure and economic development by McGuire concluded:

"The most striking aspect of this report is the paucity of empirical evidence specifically investigating the linkage
between economic development and infrastructure investment. Several well-designed, informative empirical studies with varying degrees of relevance to the linkage were examined. Except for the study by Keeler (1986) on the trucking industry and the regional analysis by Hulten and Schwab (1984), the evidence appears to be that there is a positive and perhaps strong relationship between infrastructure investment and economic development. The studies supporting this hypothesis are by Helms (1985), and Garcia-Mila and McGuire (1986). The studies are neither detailed enough nor designed to answer questions such as: which type of infrastructure is most productive? what is the optimal level of infrastructure investment? which industries are more dependent on traditional infrastructure?" (McGuire 1986, pp. 24-25).

In fashioning economic strategy, policymakers should be aware that voters migrate to areas best meeting needs and preferences (Tiebout 1956). Bergstrom and Goodman (1973) concluded that communities with high employment–residential ratios tended to have more economic activity. To support additional growth more public services would need to be provided. And "State fiscal policies can and do influence relative state per capital income levels" (Canto and Webb 1987, p. 201).

In attempting to investigate whether public investment (i.e. infrastructure) causes private investment or the reverse, Eberts and Fogarty (1986) constructed a production function with inputs of private capital, labor, and public capital. Results showed that both public and private capital may be endogenous in generating personal growth. To this point, each of these inputs may simultaneously cause the other (in McGuire 1986, p. 11). An important requirement for economic stimulation is that public capital must complement private investment. If they are complements, infrastructure would provide a base for the expansion of private capital.

In summary, businesses locate where they can receive increased productivity. Infrastructure provides the necessary, though not sufficient, complementary inputs for increasing production. If public services provide a cost-savings resources are freed and firms may purchase other inputs–leading to increased output and an increased derived demand for more inputs. Over the long-run, increases in returns to capital and labor should attract other investments. The causal linkages are not clearly understood. But, taken together, these studies lead to the conclusion that there is a positive linkage between infrastructure investment and economic growth (Garn and Ledbur 1986; McGuire 1986, p. 18).

POSSIBLE ROLE FOR EXTENSION

The above discussion has demonstrated the crucial relationship between economic development and infrastructure. The Cooperative Extension Service has identified revitalizing rural America as one of its initiatives. Thus, extension professionals have been charged with assisting rural leaders with infrastructure development. The question arises as to what can be extension professionals contribute in this area. Programs which may be possible will be divided into three categories which include leadership training, providing information or alternative programs, and providing technical assistance with infrastructure planning. In no way, are the three categories or the list of activities intended to be all inclusive.

Leadership Training

Leadership is key in all aspects of extension work. It takes top-notch leadership to conduct and carry out local infrastructure programs. Rural decision makers, who participate in infrastructure planning, must think long term and evaluate between competing issues. Thus, leadership development programs are a must and should be continued and strengthened.

Information Distribution

Extension through its great distribution system should be the agency to disseminate information relative to rural infrastructure programs. This
would mean that a specialist would have to be knowledgeable in all aspects of infrastructure planning, financing, and delivery. Extension material would have to be prepared for distribution and presentations made concerning infrastructure programs. In addition, the professional would become an expert on financing rural infrastructure and should be knowledgeable enough to discuss all financing schemes to state elected officials. For instance the governor or state legislators may wish to be informed of infrastructure financing schemes used by other states.

Technical Assistance

A recent in-depth study (Mec, 1989) of infrastructure issues was completed in Oklahoma. As part of that study, the investigator visited with experts involved with rural capital improvements planning. What actually occurs is crisis planning. Community leaders do not plan capital items until a crisis occurs. This may occur because capital items no longer can be repaired and new items have to be purchased or some federal or state regulation forces changes. When the crisis occurs, then a capital investment is made.

What is needed is capital improvement planning. Extension with leadership and a training information base should be in an excellent position to provide technical assistance to rural community leaders for capital improvement planning. The process could be aided with the development of a guide for rural capital improvement planning. This guide would be written to illustrate why a plan is needed, how to undertake a plan, and elements in a plan. It should be written so that it would be easily understood.

Development planning can take on a number of forms. Even so, each method has common elements. Four basic requirements in cultivating successful economic development programs have been suggested by Wolf (1986) as formal organizations, resource assessment programs, target industry programs, and strategies.

Formal organizations work to identify problem areas, find useful financing mechanisms, and educate and coordinate all parties. Resource assessment consist of a program to critically inventory all available resources. The includes condition analysis of all infrastructure, assessment of the availability of financing and technical assistance, and assessment of human resources. Targeting industries help communities zero-in on the most probable firms that might be willing to locate in their area. A target industry analysis helps identify any additional infrastructure needs that must be in place to attract a particular type of firm. Formulation of strategies to improve quality of life is the action part of the former steps. After a formal development organization has assessed its available resources and identified its target industry market, strategies are developed to carry out stated goals and objectives.

Strategic Capital Improvement Planning

Capital Improvement Programs (CIPs), are the heartblood of local economic development. Most localities will claim to have CIPs, but in fact do not. Traditional planning has been ineffective; as a result, the most progressive governmental units are adopting strategic planning techniques. The disappointment of traditional comprehensive planning methods is that it often lacks economic reality. Many times it neglects meaningful implementation strategies and doesn't specify the organizational arrangements needed. Often underlying these problems is a general non-commitment to the planning process (Lshurg 1980; Cuciti 1985, p. 1).

Strategic Planning is a popular management technique. It can help governments and public agencies deal with changes by overlapping and complementing comprehensive planning. Comprehensive planning tends to simply sum the functional parts of a system. In this way, comprehensive planning is typically not "comprehensive" (Bryson and Einsweiler 1987; Bryson and Roering 1987). Bryson and Roering (1987) present an outline of a public sector strategic planning process, which involves:

1. Initial Agreement. "A plan for planning" among key decision makers. It is imperative that support and commitment exist.

2. Identification of Mandates. These are the things that must be done. Mandate come
about through socio-economic pressures.

3. Statement of Mission and Values. The mission is influenced by the "wants" of various stakeholders. Stakeholders have a legitimate interest in policy formulation; therefore, stakeholder interest shouldn't be ignored.

4. Identification of the External Environment. External scanning is an in-depth, comprehensive, environmental policy analysis of anything impacting the jurisdiction. This involves, but is not limited to, a review of relevant legislative, regional, national, and international issues.

5. Identification of the Internal Environment. Analysis of strengths, weaknesses, and resource limitations. Cucciti (1985) spells out the major tasks in conducting a comprehensive assessment of infrastructure needs as:
   (a) determining the scope and structure of the analysis;
   (b) inventorying the infrastructure;
   (c) assessing the condition and performance of facilities;
   (d) identifying trends in conditions, service, and spending;
   (e) forecasting development patterns and investment needs;
   (f) identifying likely revenue levels; and
   (g) considering ways to obtain additional revenue.

   In other words, a review and analysis of all issues and problems should be conducted.

6. Identification of Strategic Issues. These are the policy questions that will affect the mandates, mission, financing, and stakeholders.

7. Identification of Alternative Strategies. Action plans and implementation strategies for handling strategic issues and achieving the goals and objectives.


9. Implementation Actions. Selected plans are put into play.

10. Evaluation of Results. Strategic planning is an iterative process of monitoring, feedback, and rethinking.

On the whole, the difference between strategic planning and traditional public planning is that strategic planning is oriented more toward actions, results, and implementation. It promotes participation in the planning process, puts greater emphasis on the external environment, and assesses a community's strengths and weaknesses given its opportunities and threats. If a community is unusually active in traditional planning, then strategic planning may not make much difference; otherwise, it can revitalize and excite planning efforts (Kaufman and Jacobs 1987, p. 25, 29).

SUMMARY

Infrastructure creation and deterioration is a cyclical process. The cycle is on its first downturn at a time of federal financial disengagement. State and local governments are having enough trouble providing basic services, much less satisfying perpetually increasing (though laudable), federal standards. Research tends to support the concept of positive linkages between infrastructure and economic growth.

Even so, state governments can ill afford to wait on Washington. State legislatures and governors must take the initiative in their constituencies on the path to economic development. There must be a strengthening of regional comprehensive coordination of public works. Systems must be invented at the state and local level for planning, prioritizing, funding, and staging production of "strategically important" public works. What is needed is "infrastructure for infrastructure" (Hanson 1986, p. 22, 85).

State and local government should use all appropriate financing mechanisms to help facilitate the construction, operation, and maintenance of public infrastructure. To this end, restrictive debt caps might be reviewed, along with considering "creative" financing mechanisms such as bond banks, revolving funds, bond insurance, tax increment financing, interest rate subsidies, and local debt guarantees to name a few.
cannot depend on the federal government to provide the services essential to economic growth and prosperity. States must take the initiatives to help local communities willing to help themselves.

The Cooperative Extension Service should be ready to assist rural areas in infrastructure planning. The three areas where Extension can shine include leadership training, information dissemination and technical assistance. Many states have excellent leadership training programs. Top-notch rural leadership is required in infrastructure planning that is going to occur. Extension with its already established distribution systems is prime to handle the information dissemination aspect of infrastructure issues. Finally, technical assistance to rural communities conducting capital improvement planning can be completed by experienced extension personnel. The Cooperative Extension Service has an excellent opportunity and challenge to assist rural leaders in infrastructure planning and thus promote economic development and diversification.

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WHAT ARE THE LOCAL INFRASTRUCTURE NEEDS IN THE RURAL SOUTH?

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DEFINITIONS

Most local officials consider the public infrastructure to include roads, streets, bridges, curbs, gutters, sidewalks, storm sewers, and water and sewer lines. But many now realize that it is more. The term in a broader sense also includes public buildings, such as city halls, courthouses and jails, public parks and playgrounds, school buildings, and publicly-owned industrial parks. In the broad sense, public infrastructure includes all buildings, facilities, and other structures built or constructed to serve the public for long periods and involving relatively large sums of money.

What is "rural infrastructure"? In the public setting, it is most likely that which is located in the unincorporated areas and perhaps even in sparsely populated cities and towns. The concentration of infrastructure in such areas is, of course, less than in heavily populated municipalities and urbanized areas.

It should be kept in mind that rural infrastructure is not in place just to serve those citizens who reside outside incorporated municipalities. The rural infrastructure is there to serve the economic and personal interests of all citizens. For example, it is over rural roads and bridges that much of our agricultural products and industrial raw materials must travel in order to reach markets and industries. The economy of any region of our country and especially the South, with its dependence on agricultural, forest, and mineral industries, is highly dependent on the rural infrastructure.

SCOPE OF THE PROBLEM

In Alabama, as in most other Southern states, counties are responsible for most of the rural infrastructure. Alabama counties are responsible for the maintenance of 57,426 miles of paved and unpaved roads and 9,076 bridges. A recent study has revealed that almost one-half (47.1 percent) of all county paved roads need resurfacing and that more than one-half (60.2 percent) of all bridges in the county system are structurally deficient or functionally obsolete. The study also revealed that it would cost more than $600 million to correct these deficiencies. Alabama counties collectively receive only about $185 million per year in revenues for road and bridge purposes, and much of this amount is used for routine maintenance. It would take every penny that all 67 Alabama counties have available for road and bridge purposes from now until 1993 just to address the current road and bridge maintenance needs. It is easy to see that Alabama's counties are fighting a losing battle in their efforts to maintain this vital part of our rural infrastructure.

Counties in other Southern states are facing similar problems. Counties in Florida are responsible for 60,082 miles of roads and 4,401 bridges. More than 30 percent of those bridges are classified as substandard. Georgia counties are responsible for 75,835 miles of roads and 8,335 bridges. It has been determined that more than 45 percent of those bridges are classified as substandard. Georgia counties are responsible for 75,835 miles of roads and 8,335 bridges. It has been determined that more than 45 percent of those bridges are classified as substandard. In Mississippi, counties maintain 53,130 miles of roads and 12,366 bridges, over 64
percent of which have been determined to be substandard. Counties in Tennessee are responsible for 53,955 miles of roads and 11,557 bridges. More than 46 percent of those bridges have been classified as substandard.

Counties in Alabama are also responsible for maintaining infrastructure in many rural subdivisions. Aside from streets in such areas, counties have to maintain other facilities like curbs, gutters, storm sewers, and waste facilities. Tax receipts generated by the benefited property or person are generally not sufficient to pay the cost thereof. Revenue generated through user fees is also generally not sufficient. The result is that infrastructure in many such areas is in deplorable condition.

Many of the public buildings, courthouses, jails, youth facilities, public health facilities, etc., in Alabama are in need of replacement or renovation. Revenues available to counties are barely sufficient to fund the daily operations, much less replacement or renovation costs.

Small municipalities in rural areas often find themselves in similar situations. Much of the infrastructure for which they are responsible is in poor condition. Revenues available to such municipalities are simply not sufficient to fund routine operations and make infrastructure improvements.

The basic and paramount reason counties and many municipalities can not keep up with infrastructure needs is clearly insufficient revenues. County governing bodies in Alabama have very little taxing authority. Much of the revenue available to counties for infrastructure needs comes in the form of tax proceeds shared with the state. Revenues generated locally are from sources which tend to be stagnant and low in yield.

At the center of the local tax issue is the property tax. Alabama holds the distinction of having the lowest ad valorem taxes in the United States. Alabama constitutional and statutory provisions make it almost impossible to increase ad valorem taxes to fund infrastructure needs or for any other purposes. The ad valorem tax is unquestionably the most under utilized local tax revenue source in the state of Alabama.

SOLUTIONS

There are a number of steps that can be taken to address the needs of our rural infrastructure. At the heart of all solutions or approaches is money. Local governments simply must have more money to invest in our aging and expanding infrastructure system. Certainly better financial management practices can be implemented and advanced technologies utilized, but the impact of such efforts on revenues would be minimal. With regard to highways, roads, and bridges, there is a need to rethink our national highway program. For the last several decades the federal government has poured billions of dollars into our interstate system. Now that the interstate system is about complete, the United States Congress must decide how it will spend the hundreds of millions of dollars in the federal Highway Trust Fund. There is currently about $9.9 billion surplus revenue in the trust fund. It is our position that Congress should reduce the amounts authorized for the interstate system and increase funds available to the other federal aid systems and "off-systems" in proportion to needs. If "needs" is the basic criteria in distributing federal highway funds in the future, rural highways, roads, and bridges will receive substantial additional revenue.

There has been considerable discussion and debate lately about just how the federal government should spend the vast surpluses in the Highway Trust Fund. Some have suggested a portion of it be used to balance the federal budget deficit. Citizens who want to maintain an adequate transportation system in our country should oppose such suggestions with all the vigor they can muster. Revenue in the trust fund is generated through highway user fees. Highway user fees should never be used for anything except highways, roads, and bridges.

Rural citizens should also oppose efforts to allocate substantial portions of the Highway Trust Fund for urban mass transportation programs. Such programs would suck millions and millions of dollars out of the rural areas of our nation, the South in particular.
Recent history has taught local government officials a very important lesson: you cannot depend on the federal government as a permanent source of funding. Local officials must plan infrastructure funding with a balanced approach. There must be a proper mix of federal, state, and local funding. In order to achieve this balanced approach, county government bodies must be given additional authority to raise revenue locally. The taxing authority of counties must be increased.

It was pointed out earlier that counties in Alabama are finding it difficult to meet funding needs of infrastructure in rural subdivisions. As a result, many Alabamians are living in less than desirable conditions. Streets in many rural subdivisions are in need of resurfacing. In many instances curbs and gutters do not exist. Flooding is often a serious problem, and in many such areas sanitary sewage facilities do not exist. The cost of providing and maintaining such basic infrastructure in rural subdivisions is prohibitive and simply out of the question for most counties in Alabama. The Association of County Commissions of Alabama, during the last several sessions of the Alabama Legislature, has supported legislation which would grant county commissions the authority to make infrastructure improvements and assess all or a portion of costs against property owners who benefit from improvements. The legislation provides that a majority of the affected property owners must approve the assessments before they could be levied. Unfortunately the legislation has not been passed. The Association plans to continue its support for such legislation.

Finally, if counties and small municipalities in rural areas in Alabama are going to make significant progress in funding infrastructure needs, there must be some restructuring of our state’s ad valorem tax laws. As stated earlier, Alabama’s ad valorem taxes are the lowest in the nation. It is appropriate that the property which benefits from infrastructures be the basis for funding a reasonable portion of its costs.

CONCLUSION

The South, and in particular Alabama, cannot exist without an adequate rural infrastructure. It is as important to the economic well-being of our region and state as interstate highways and water and sewer lines in our most populous municipalities. In order to expand and maintain this important resource, our counties and rural municipalities must have sufficient revenues. Sufficient funding can be achieved by working toward a realistic federal funding policy and by ensuring that local governments have adequate revenue-raising authority.
STRATEGIES FOR IMPROVING HOUSING AT THE COMMUNITY LEVEL: RESULTS OF A SEVEN-STATE RESEARCH PROJECT*

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Margaret Weber, Interim Assistant Director of Home Economics
Oklahoma State University

*The results in this paper are based on analyses of data obtained from Regional Research Project S-194, "Barriers and Incentives to Affordable Housing," funded by USDA Agricultural Experiment Station regional research funds under the Hatch and Evans-Allen Acts. The content of this paper is the sole responsibility of the authors.

During the past ten years, the Southern Regional Housing Reser. Technical Committee has been concerned with housing for low- and moderate-income households.

Of particular concern is the current trend in federal policy away from direct programming for or expanded assistance to housing as evidenced by substantial reductions in both the growth of federal aid and absolute levels of aid for housing assistance. As a result, states and communities are having to take a more proactive attitude toward meeting the housing needs of their citizens.

Another dimension of the problem of providing adequate and affordable housing across non-metropolitan America is a growing shortage of resources, i.e., buildable land, fossil fuels, and traditional construction materials. Since many of these resources are nonrenewable, the style, size, and/or density of available housing will have to be adjusted if it is to remain affordable for all households. Evidences of a growing affordability crisis abound.

Between 1970 and 1985 median monthly rental costs escalated from $108 to $350, while the median selling price rose from $23,000 to $80,000 (Pifer, 1987). More recently the National Association of Home Builders (1988) reported that the median costs of new and existing homes at the end of 1987 were $105,000 and $85,000, respectively.

These dramatic increases in shelter costs have been coupled with rising home maintenance and utility costs and with increasing home mortgage expenses associated with fluctuating interest rates. Some would argue that these conditions have occurred across America and that housing in the rural South has not been any more adversely affected than other regions of the country. However, the magnitude of change in any region must be viewed in the context of the general economic climate in which change occurs as well as in relationship to its influence on the lifestyle of inhabitants of the region.

Demographic changes impacting housing supply and conditions in the rural South include a regional shift from the Frost Belt to the Sunbelt, and a shift from suburban to non-metropolitan areas, both creating a demand for increased housing in many rural areas across the South. According to Lerman (1986), as new households with higher incomes move to small town America, shifts in the local housing market often result in greater use of lower quality units because of increases in housing costs throughout the
market area. In addition, changes in household composition and changes in social values and lifestyles (i.e., greater participation of women in the labor force) have important implications for housing needs in the rural South. Specifically, the traditional single-family unit on a private lot may no longer support the lifestyle or affordability needs of inhabitants of the region. According to Robert Lesser (1982), the housing shortage of today is really a shortage of affordable housing—the kind that the average person can secure for 25 to 30 percent of his income. This affordability crisis is indeed critical in the rural south where incomes and job opportunities have traditionally lagged behind those of other regions. While housing affordability is a complex issue, there are indications that housing may be less affordable in communities if limited options in housing design, structural types, financing mechanisms, and programs exist.

ROLE OF THE COMMUNITY IN THE HOUSING PROCESS

Much of the past and current success in the delivery of adequate housing in non-metropolitan (rural) areas rests with the actions of the local community through its elected and appointed governing bodies (boards, councils, and commissions). However, attitudes of housing intermediaries (lenders, regulators, and builders) and consumers are also influential in the delivery of adequate housing. The actions and attitudes of these groups take any form, including:

1. the willingness to seek and accept available programs that build or rehabilitate units for rural and low-income households;

2. establishing programs or subsidies through tax breaks that encourage energy efficient construction; and

3. allowing the introduction of new technology in the form of building code reforms and/or modular or double-wide construction techniques.

Conversely, the failure to provide adequate housing in other communities may be linked to the actions/inactions of these same bodies when they fail to embrace and allow these opportunities. Recognizing the possibility that housing intermediaries, community leaders, and community residents may be influential in determining the quantity and affordability of a community's housing stock, and accepting the premise that greater diversity in a community's housing stock results in a wider range of lifestyle and cost options for community residents, a study was undertaken to determine the influence of community related attitudes on the level of housing diversity in small rural communities in the South.

ANTICIPATED RESULTS

The results obtained should be useful to many people involved in housing. The primary beneficiaries will be rural communities that wish to improve the acceptance of affordable housing in their local areas for all income groups. By understanding the interaction of the various barriers and incentives affecting levels of housing diversity, communities can implement policies that will encourage rather than discourage housing alternatives. Builders, contractors, realtors, and lenders will also be able to identify and apply policies that they might use to encourage the adoption of alternative housing forms and programs, and educational programs that facilitate consumer and intermediary acceptance of alternatives may be developed by Cooperative Extension personnel and members of the housing industry.

DEFINITION OF TERMS

Housing Practices—the combination of housing actions and resources that exist within the community related to housing design, financing, regulations and programs.

Housing Diversity—a measure of variance in housing practices at the community level.

Housing Design Options—the total array of alternative density, structural, and energy related housing types in a community. These options include mobile/manufactured, earth sheltered, passive and/or active solar, adaptive reuse, and various forms of high-density units.

Housing Finance Options—adjustable and variable rate mortgages, builder assisted loans,
state and/or municipal bond financing, self-help housing programs, and alternative ownership forms such as condominiums and cooperatives.

Housing Regulations—the presence and use of zoning and other local codes and ordinances that control the availability of various alternative housing types.

Housing Programs—the presence of federal and local housing programs that assist residents in acquiring and/or maintaining housing.

OBJECTIVES

1. To measure the degree of housing diversity in small rural communities in a seven-state area;

2. To assess institutional and infrastructural barriers and incentives to community acceptance of innovations in housing design, construction, and financing that ultimately impact housing diversity at the community level; and

3. To develop a conceptual model which delineates the interrelationships and interactions of the various barriers and incentives.

RESEARCH METHODS

SELECTION OF STUDY COMMUNITIES

All incorporated areas in seven Southern states (AL, AR, GA, OK, NC, TN, and VA) with a population between 1,500 and 10,000 (1980 Census of Population) were identified. Communities located within Metropolitan Statistical Areas (MSA) counties were eliminated in order to maintain the rural focus of the study.

Remaining communities were then evaluated to determine if the selection process captured both geographic and cultural variations typical of each state and the Southern region. Results indicated that some sections of all states were omitted because they did not include communities with population of 2,500 or more. The number of communities from each state is presented in Figure 1.

S-194 Study Area

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>56</td>
</tr>
<tr>
<td>Arkansas</td>
<td>68</td>
</tr>
<tr>
<td>Georgia</td>
<td>103</td>
</tr>
<tr>
<td>North Carolina</td>
<td>71</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>59</td>
</tr>
<tr>
<td>Tennessee</td>
<td>51</td>
</tr>
<tr>
<td>Virginia</td>
<td>57</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>465</strong></td>
</tr>
</tbody>
</table>

Figure 1.

DATE COLLECTION

A multi-phase data collection process was used in obtaining the quantitative and qualitative data necessary to accomplish the states' objectives. Phase I included a review of census data for each eligible community and the development and administration of a Housing Practices Survey in all communities across the seven states. Phase II included the selection of four communities in each state to solicit household, intermediary, and leader responses. Additional data were collected from these 28 communities using a case study format.

Phase I—Development of housing diversity measure. For each eligible community, 1970 and 1980 census data were collected for the following variables: population; number of families; total number of housing units including number of single, mobile, and multi-family units; number of owner and renter occupied units; median income; and median house value. Percent change between 1970 and 1980 was calculated for each variable. These data provided a quantitative profile of each community and noted communities that had experienced changes in housing, family, and income variables.
The next step in developing the diversity measure was to obtain information regarding housing practices in each community. A housing practices survey containing 48 questions that assessed the availability of alternative financing practices, housing programs, local regulations, and housing types in each community was administered by mail questionnaire procedures outlined by Dillman (1978). Survey forms were mailed to local representatives from various agencies, housing related professionals, and local officials for each eligible community. These included county Cooperative Extension supervisors, Farmers Home Administration county supervisors, regional planners, a representative realtor and lender in each community, and the mayor or city manager. A total of 1,583 respondents (AL = 252, AR = 213, GA = 351, NC = 179, OK = 237, TN = 158, and VA = 193) completed the survey. The survey form included specific items on variable rate mortgages, community development block grants, building codes, zoning ordinances, multifamily housing, and mobile homes. The items were assigned one point for each yes response to arrive at an adjusted mean score for each subscale. A mean score for each community was developed from the number of respondents per community for the development of a final Housing Diversity Index.

Subscales of the Diversity Index were analyzed for internal consistency. Overall, internal consistency for each of the four dimensions ranged from 0.55 to 0.73. The regulations subscale had the highest consistency among respondents, while the housing area had the lowest consistency among respondents. Nonetheless, the internal consistency of all subscales was sufficiently high to yield an acceptable reliability rating.

Phase II--Four communities in each state were selected from which to conduct in depth analyses of barriers and incentives to affordable housing (Figure 2). Rankings of diversity scores were used to plot eligible communities along a continuum from high diversity to low diversity. Median diversity scores and 1980 population medians for each state were then calculated in order to assign communities to appropriate quadrants of a four cell matrix. Scatter diagrams were plotted, and communities with extreme scores in each quadrant were identified as a potential study community. Effort was undertaken to match smaller and larger communities on location, industrial base, and transportation variables. If the communities did not match on these factors, the next most extreme community was examined. The process was followed until suitable matches were identified.

Two survey instruments were developed (a Housing Intermediary Questionnaire and a Household Questionnaire). Both surveys addressed the identification of barriers and incentives, knowledge level of respondents regarding innovations in housing, acceptability of alternative housing, general attitude toward innovativeness, and perceived future demand for various housing types.

**SAMPLING STRATEGIES**

Households included in the study were randomly selected from the 1987-1988 telephone directories for each community. A mail questionnaire was sent to each household drawn for the sample. Two follow-up mailings were sent to non-responding households in an effort to maximize the response rate. Completed questionnaires from all households who said they lived in the community were included in the data base.

All persons identified as housing intermediaries and/or community leaders were sent the Intermediary Questionnaire. Intermediaries included lenders, regulators, builders, government officials and others involved in the production and distribution of housing. Community leaders included all persons identified three or more times as a community leader by city and county officials, housing intermediaries or other community leaders. A total of 5,341 household and 786
intermediary and/or leader respondents returned useable questionnaires for a regional response rate of 38.2 percent on the household survey and 36 percent on the intermediary/leader survey.

ANALYSIS OF DATA

Numerous statistical procedures (factor analysis, Pearson correlation, and multiple regression) were employed in both identifying barriers and incentives to affordable housing, and assessing interrelationships and interactions among and between various barriers and incentives. Factor analysis was used primarily in developing scales from various categories of items included in the household and intermediary/leader questionnaires. A causal model (Figure 3) depicting possible interactions among the variables being studied was developed from theoretical and practical explanations of relationships.

The proposed model included seven major categories of independent variables, with Housing Stock as the major dependent variable. Housing Stock was then subdivided into three components (Housing Diversity, Housing Affordability and Housing Quality), resulting in three dependent variables for analysis.

Appropriate variables were then created from data obtained during various phases of project activity (census, housing practices, community case studies, and household and intermediary surveys) and assigned to specific model components. Pearson correlation coefficients were calculated pairing each variable with all other variables. In order to reduce problems of multi-collinearity, one of the following two strategies was employed if a pair of variables in a single component correlated at .80 or above: (1) a substitute variable was used if the substitute variable was highly correlated with the variable being deleted and not correlated with the variable being retained; and (2) if no substitute variable was found, both variables were included separately in subsequent analyses, and the most important variable was retained. The substitution procedure was followed when an independent variable was found; the independent variable was deleted.

Figure 3. Causal Model Depicting Expected Relationships
The following variable sets were retained for preliminary regression analyses:

**Independent Variables**

**Demographics 1** - (1)
- Number of families
- Median family income
- Median age
- Percent white
- Number of families below poverty

**Demographics 2** - (1)
- Number of people
- Median age
- Percent white
- Per capita income
- Number of people below poverty

**Economic Base 1**
- Percent unemployed (1)
- Percentile range of school children below poverty (2)
- District expenditure per student (2)
- Total market value of real estate (3)

**Economic Base 2**
- Percent change in unemployment 1970 (4)-1980 (1)
- Percentile range of school children below poverty (2)
- District expenditure per student (2)
- Total market value of real estate (3)

**Economic Base 3**
- Percent change in unemployment 1970 (4)-1980 (1)
- Sales tax 87 (3)
- Percentile range of school children below poverty (2)
- District expenditure per student (2)

**Economic Base 4**
- Percent unemployed (1)
- Sales tax 87 (3)
- Percentile range of school children below poverty (2)
- District expenditure per student (2)

**Household Perceptions of Barriers and Incentives** - (5)
- Building regulations
- Housing affordability
- Lender attitudes
- Land-use regulations

**Housing production**
- Acceptance of housing alternatives

**Household Disposition Toward Innovativeness** - (5)
- General innovativeness
- Innovativeness in work
- Innovativeness toward improvement

**Household Ranking of Housing Values** - (5)
- Family, personal, economy, social
- Family, economy, personal, social
- Other

**Household Attitudes Regarding Level of Adequacy** - (5)
- Lender attitudes
- Affordable housing
- Concern for housing
- Housing programs
- Personal concern
- Community services

**Household Perception of Future Demand** - (5)
- Single family
- Mobile homes
- Apartments

**Intermediary Perceptions of Barriers and Incentives** - (6)
- Building regulations
- Finance
- Production
- Housing affordability
- Acceptance of housing types
- Natural environment
- Mobile homes

**Intermediary Disposition Toward Innovativeness** - (6)
- General innovativeness
- Innovativeness in work
- Innovativeness toward improvements

**Intermediary Attitude Regarding Level of Adequacy** - (6)
- Rental units
- Loans
- Community services
- Homes
- Budget
- Zoning
Intermediary Perception of Future Demand - (6)  
Single family  
Mobile homes  
Apartments  

Intermediary Perception of Discrimination - (6)  
Against elderly, handicapped, single parent, etc.  
Against racial and ethnic groups  

Diversity in Housing Practices  
Community finance score (7)  
Community regulations score (7)  
Community program score (7)  
Community service score (5)  
Number of community regulations (3)  

Dependent Variables  
Housing Quality - (1)  
Percent of units with plumbing and crowding deficiencies  
Percent of units built before 1959  
Percent of units built before 1939  

Affordability/Own - (1)  
Percent of families with sufficient income to purchase median cost housing  

Diversity  
Percent of mobile and apartment units (1)  
Housing type diversity score (7)  

Date Sources  
(1) 1980 Census  
(2) 1986-87 Curriculum Information Center, Market Data Retrieval  
(3) Community case studies  
(4) 1970 Census  
(5) Household questionnaire  
(6) Intermediary questionnaire  
(7) Housing practices survey  

The various groups of independent variables (model components) were used to develop a series of multi-variate sub-models for each dependent variable under consideration. Significant variables from all component sub-models were then combined into an overall model for each dependent variable. A step-wise regression procedure was used in developing overall models for the various dependent variables.  

Finally, path analysis that combined significant variables from each sub-model was conducted in developing separate paths toward each of the three major dependent variables.  

FINDINGS  

Findings are presented in two parts. The first part presents results of the component sub-model development, and part two describes results from the overall model and the path analysis. Descriptive and bi-variate analyses are not presented because of time and space limitations imposed by the number of variables under study.  

Part I  
Component Sub-models. Seventeen separate regression models were developed from the various categories of independent variables. Two demographic and four economic base models were initially created (following the bi-variate analyses) in an effort to identify the most important variable sets for use in subsequent analyses. The demographics 1 variable set included statistics on family characteristics, and the demographics 2 set included statistics on individual characteristics of the population. The demographics 2 variable set was retained because subsequent analyses revealed that individual characteristics of the population explained more variance in the dependent variables. The four economic base variable sets were developed to compare differences in sub-models resulting from substituting values from two sets of highly correlated variables (percent unemployed 1980 vs. percent change in unemployment 1970-1980; and total market value of real estate vs. sales tax revenue 1987). The model that included percent change in unemployment and sales tax revenue 1987 explained more variance in the dependent variable and was therefore used in developing the sub-models.  

Following these preliminary procedures, linear regression models for housing quality, housing affordability, and housing diversity were developed using the resulting 13 independent variable sets. Table 1 presents
regression results of the three housing quality models. The demographic variables (Model 1) explained 49, 32, and 73 percent of the variation in units built before 1939, units built before 1959, and percent of units crowded and lacking complete plumbing, respectively. The F Value of the models ranged from 3.2 to 13.9, and all three models were significant (P < .05). Median age and per capita income were the most important variables in explaining age of units, while percent white was the only significant variable in explaining percent of units crowded and lacking complete plumbing. Median age was positively associated with the dependent variable, while per capita income was negatively associated with age of stock variables, while percent white and per capita income had a significant variable in the model, and both were negatively associated with the dependent variable.

Household perceptions of barriers and incentives to affordable housing (Model 3) explained 50 percent of the variance in units with crowded and lacking complete plumbing. Household perceptions of regulations, lender attitudes, and taxes for housing production were associated with the model. Perceptions of building regulations and lender

### Table 1. Regression of Housing Quality on Household and Intermediate/Lender Characteristics and/or Perceptions

<table>
<thead>
<tr>
<th>Model Components</th>
<th>Measures of Housing Quality</th>
<th>Percent Built Before 1939</th>
<th>Percent Built Before 1959</th>
<th>Percent with 1-3 or More Yrs</th>
<th>R²</th>
<th>F Value</th>
<th>Prob&gt;F</th>
<th>Adj. R²</th>
<th>F Value</th>
<th>Prob&gt;F</th>
<th>Adj. R²</th>
<th>F Value</th>
<th>Prob&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>R²</td>
<td>0.51</td>
<td>0.49</td>
<td>0.69</td>
<td>0.06</td>
<td>2.886</td>
<td>0.08</td>
<td>2.886</td>
<td>0.08</td>
<td>2.886</td>
<td>0.08</td>
<td>2.886</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>R²</td>
<td>-0.38</td>
<td>-0.38</td>
<td>-0.38</td>
<td>0.02</td>
<td>1.74</td>
<td>0.06</td>
<td>1.74</td>
<td>0.06</td>
<td>1.74</td>
<td>0.06</td>
<td>1.74</td>
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</tr>
<tr>
<td>Median Age</td>
<td>R²</td>
<td>-0.36</td>
<td>-0.36</td>
<td>-0.36</td>
<td>0.03</td>
<td>0.13</td>
<td>0.01</td>
<td>0.13</td>
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<td>0.13</td>
<td>0.01</td>
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<tr>
<td>Percent White</td>
<td>R²</td>
<td>-0.12</td>
<td>-0.12</td>
<td>-0.12</td>
<td>0.07</td>
<td>0.15</td>
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<tr>
<td>Per Capita Income</td>
<td>R²</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.005</td>
<td>0.00</td>
<td>-0.01</td>
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<td>-0.01</td>
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</tr>
<tr>
<td>Number People in Poverty</td>
<td>R²</td>
<td>-0.009</td>
<td>-0.009</td>
<td>-0.009</td>
<td>0.00</td>
<td>-0.01</td>
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<td>-0.01</td>
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<td></td>
</tr>
</tbody>
</table>

### Table of Incomes

- **Per Capita Income**: 0.21
- **Age of Housing Stock**: 0.17
- **Housing Stock**: 0.19
- **Completion**: 0.18
- **Plumbers**: 0.16
- **Carpenters**: 0.15
- **Electricians**: 0.13
- **Lumber Suppliers**: 0.12
- **Painters**: 0.11
- **Roofers**: 0.10
- **Plumbers**: 0.09
- **Carpenters**: 0.08
- **Electricians**: 0.07
- **Lumber Suppliers**: 0.06
- **Painters**: 0.05
- **Roofers**: 0.04
- **Plumbers**: 0.03
- **Carpenters**: 0.02
- **Electricians**: 0.01
- **Lumber Suppliers**: 0.00
- **Painters**: 0.00
- **Roofers**: 0.00

### Table of Population

<table>
<thead>
<tr>
<th>District Expenditures/Student</th>
<th>Poverty Level</th>
<th>Median Age</th>
<th>Percent Built Before 1939</th>
<th>Percent Built Before 1959</th>
<th>Percent with 1-3 or More Yrs</th>
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</thead>
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<tr>
<td>12.78</td>
<td>-0.38</td>
<td>-0.36</td>
<td>-0.12</td>
<td>-0.005</td>
<td>-0.009</td>
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<tr>
<td>6.27</td>
<td>0.002</td>
<td>0.003</td>
<td>0.001</td>
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</table>

### Table of Age of Housing Stock

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</thead>
<tbody>
<tr>
<td>0.51</td>
<td>2.886</td>
<td>0.08</td>
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<tr>
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<tr>
<td>0.69</td>
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</table>
### Measures of Housing Quality

<table>
<thead>
<tr>
<th>Model Components</th>
<th>Percent Built During 1979</th>
<th>Percent Built During 1989</th>
<th>Percent with 1,000 or More VHUs and U.S. Census Complete Housing</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
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### Model 1: Family Values
- Intercept: 152.1
- Family Values: 30.9
- Economy Values: -21.1
- Personal Values: -71.4
- Social Values: -63.8

### Model 2: Attitudes/Household
- Intercept: 129.5
- Attitude Foundation: 18.6
- Attitude Concerns: -10.6
- Attitude Program: -0.3
- Acceptance: -4.0

### Model 3: Demand Household
- Intercept: -80.6
- House Demand: 24.2
- Mobile Demand: 16.8
- Apartment Demand: 3.5

### Model 4: Barriers Intermediate
- Intercept: 61.2
- Barrier Regulation: 3.8
- Barrier Finance: -15.2
- Barrier Acceptance: -3.2
- Barrier Mobility: 2.0

### Model 5: Innovate/Intermediate
- Intercept: -31.7
- Innovative Concepts: 17.6
- Innovative Work: 48.5
- Innovative Improvement: 15.1

### Model 6: Attitude/Intermediate
- Intercept: 51.7
- Rent: -5.5
- Loan: 12.8
- Service Use: 0.6
- Budget: 10.3
- Timing: 1.3

### Model 7: Demand/Intermediate
- Intercept: 46.2
- Demand House: -8.1
- Demand Mobile: -3.1
- Demand Apartment: 3.6

### Model 8: Dissemination
- Intercept: 28.7
- Discriminate Old, Poor, Handicapped: -0.1
- Discriminate Race: -1.6

### Adjusted R^2: F Value Prob > F
- Model 1: 0.123
- Model 2: 0.57
- Model 3: 0.68
- Model 4: 0.89
- Model 5: 0.78
- Model 6: 0.82
- Model 7: 0.84
- Model 8: 0.86
Measures of Housing Quality

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<th>Percent with 1.01 or More Rooms and 1KG Complete Plumbing</th>
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Table 2 presents the results of the regression of housing affordability and housing diversity on the 13 independent variable sets. The demographic variables (Model 1), household perceptions of barriers and incentives (Model 3), household perceptions of housing type demand (Model 7), and intermediary perceptions of barriers and incentives (Model 8) produced models with significant F values for both housing affordability and housing diversity. The combination of demographic variables explained 35 and 28 percent of the variance in housing affordability and housing diversity, respectively. The number of people in poverty was the only significant variable in the affordability model, and per capita income was the single significant variable in the diversity model. Both variables were positive suggesting that housing affordability, as a ratio of mean house value to median income, increases concomitantly with the number of people in poverty; and that housing diversity increases as per capita income increases.

Household perceptions of barriers and incentives (Model 3) explained 57 and 33 percent of the variance in housing affordability and housing diversity, respectively. No single variable was significant in the diversity model, while household perceptions of lender attitudes was the only significant variable in the affordability model. The statistic (-3.24) indicates that lender attitudes are viewed less frequently as a barrier to affordable housing in communities where housing affordability is greatest. Household perceptions of the future demand for single-family, mobile, and multi-
family units explained 35 and 44 percent of the variance in housing affordability and diversity, respectively. Perceptions of the demand for apartment units was the single significant variable in each model. The P statistic was 3.15 in the affordability model and 3.43 in the diversity model. These positive and negative values indicate that households in communities with greater diversity in housing types perceive higher demands for apartment units in the future, and that this perceived future demand is also greatest in communities where affordability ratios are lowest.

Significant affordability and diversity models resulted from the regression of these dependent variables on intermediary perceptions of barriers and incentives. The combination of perceived barriers explained 47 percent of the variance in the affordability model and 34 percent of the variance in the diversity model. The perception of finance as a barrier was significant in both models. The P statistics (-4.37 for affordability and 2.59 for diversity) reveal that higher perceptions of financing as a barrier is associated with lower community affordability ratio; and that housing diversity is higher in communities where financing is perceived to be more available.

Housing values of households (Model 5) and intermediary perceptions of discrimination (Model 12) were the only other combinations of variables that produced significant housing affordability models. The housing values rankings explained 34 percent of the variance in housing affordability, and intermediary perceptions of discrimination explained 25 percent of the variance. A strong housing value orientation toward family was associated with a higher ratio of median house values to median income. As noted in Model 12, discrimination against racial and ethnic groups was the most important variable in the discrimination model and was negatively associated with housing affordability. Intermediary perceptions of discrimination against the elderly, poor, and handicapped were also negatively associated with housing affordability but to a lesser degree (P statistics were -0.03 vs. -2.54).

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<td>34.5</td>
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<tr>
<td><strong>Adjusted R²</strong></td>
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<td>0.0053</td>
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<tr>
<td>F Value</td>
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<td>0.5034</td>
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<td>Prob &gt; F</td>
<td>0.991</td>
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<tr>
<td><strong>Model 10 Attitude/Intermediate</strong></td>
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<tr>
<td>Intercept</td>
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<td>111.0</td>
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<td>Rent</td>
<td>-1.59</td>
<td>21.6</td>
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<td>Loans</td>
<td>3.34</td>
<td>28.4</td>
<td></td>
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<tr>
<td>Adequacy of Service</td>
<td>-9.21</td>
<td>11.6</td>
<td></td>
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<tr>
<td>Homes</td>
<td>-6.29</td>
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<td>Budget</td>
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<td>0.45</td>
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<tr>
<td>Prob &gt; F</td>
<td>0.211</td>
<td>0.502</td>
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<tr>
<td><strong>Model 11 Demand/Intermediate</strong></td>
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<tr>
<td>Intercept</td>
<td>151.3</td>
<td>147.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand House</td>
<td>-3.1</td>
<td>16.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand Mobile</td>
<td>23.4</td>
<td>19.0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Demand Apartment</td>
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<td></td>
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<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.106</td>
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<td>F Value</td>
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<tr>
<td>Prob &gt; F</td>
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<td>0.502</td>
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</tr>
<tr>
<td><strong>Model 12 Discrimination</strong></td>
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<tr>
<td>Intercept</td>
<td>173.12</td>
<td>147.3</td>
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<tr>
<td>Discriminate Old, Poor, Handicapped</td>
<td>0.06</td>
<td>19.3</td>
<td></td>
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<tr>
<td>Discriminate Race</td>
<td>44.30</td>
<td>21.2</td>
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<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.219</td>
<td>5.48</td>
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<tr>
<td>F Value</td>
<td>5.48</td>
<td>0.0106</td>
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</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.219</td>
<td>0.502</td>
<td></td>
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</table>
The combination of housing practices and services resulted in a significant model for housing diversity, but no single variable was significant. Observation of the $P$ statistics, however, indicates that the two regulation variables were more important in explaining variation than were finance, service or program scores.

**Part II.**

**Overall Model.** Following the development of sub-models for each set of independent variables, significant variables from each of the sub-models were used in developing overall models for housing affordability, housing quality, and housing diversity. As noted earlier, only two variables (per capita income and median age) were significant in explaining variance in percent of units built before 1939 and percent of units built before 1959. Therefore, overall models were not developed for those ages of stock housing quality measures. Table 3 presents results of the stepwise regression used in developing the three overall models.

**Housing Affordability.** The overall housing affordability model includes variables that were significant in the housing affordability sub-models. Measures of housing quality and diversity were included as well. This model was significant at the .0001 probability level. Together, variables presented in the table explained 89.6 percent of the variance in housing affordability, and all estimates were significant except households' perception of lender attitudes.

Housing affordability, as measured by ratio of mean house dollar value to median income, decreased as (1) the housing value orientation toward family needs increased; (2) households expected a greater demand for apartments in the future; (3) households expressed more disposition toward innovative concepts; (4) intermediaries and leaders were less tolerant of racial differences; and (5) as the percentage of houses built before 1939 increased.

The variables which contributed to the availability of affordable housing were a higher percentage of people, poverty, higher percentage of houses built before 1959, and greater diversity in housing types available in the community.

**Housing Quality.** The variables in the overall housing quality model explained 92.6 percent of the variance in housing quality. The model was significant at the .0001 level of probability, and all of the estimates were significant. As in the preceding model, only the significant variables in the housing quality sub-models were considered. These variables include household perceptions of lender attitudes, building regulations, and housing production; intermediary perceptions of the availability of affordable housing; percent of housing units built before 1939; poverty level indicator; percent white; and household perception of the future demand for mobile homes. The variables positively related to housing quality were lender attitudes, percent of houses built before 1939, intermediary perceptions of affordability, and future demand for mobile homes. The variables negatively related to housing quality were housing regulations, household perception of housing production as a barrier, poverty level indicator, and percent white. The negative $P$ statistics indicate that increases in these variables caused decreases in housing quality.
Table 3. Overall Regression of Housing Affordability, Quality, and Diversity on Community, Household and Intermediary/Leader Characteristics and/or Perceptions

<table>
<thead>
<tr>
<th>Variables</th>
<th>Housing Affordability</th>
<th>Housing Quality</th>
<th>Housing Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>F</td>
</tr>
<tr>
<td>Intercept</td>
<td>736.89</td>
<td>93.204</td>
<td>1.54</td>
</tr>
<tr>
<td>Family Size</td>
<td>-19.18**</td>
<td>24.269</td>
<td>-3.33</td>
</tr>
<tr>
<td>Apartment Demand Household</td>
<td>-49.51***</td>
<td>10.655</td>
<td>-4.70</td>
</tr>
<tr>
<td>Number People/PerCap</td>
<td>0.01***</td>
<td>0.002</td>
<td>4.5</td>
</tr>
<tr>
<td>Innovative Concepts Household</td>
<td>-98.80**</td>
<td>25.005</td>
<td>-3.9</td>
</tr>
<tr>
<td>Barrier Leader Attitude Household</td>
<td>-13.86</td>
<td>5.533</td>
<td>-2.41</td>
</tr>
<tr>
<td>Discriminate Race</td>
<td>-17.69</td>
<td>6.533</td>
<td>-2.7</td>
</tr>
<tr>
<td>% Before 1959</td>
<td>0.77**</td>
<td>0.257</td>
<td>3.0</td>
</tr>
<tr>
<td>% Before 1939</td>
<td>-0.70**</td>
<td>0.233</td>
<td>-3.0</td>
</tr>
<tr>
<td>Housing Type Score</td>
<td>5.44**</td>
<td>3.999</td>
<td>3.4</td>
</tr>
</tbody>
</table>

| Adj. R² F Value Prob>F            | .925     | 23.03    | .0001   |           | .926     | 23.07    | .0001   |           |
| Barrier Building Regulation House  |          |          |         |           | -0.73*   | 0.314    | -2.3    | .027      |
| Barrier Housing Production House   |          |          |         |           | -0.60*   | 0.238    | -2.6    | .011      |
| Poverty Level                      |          |          |         |           | -0.35*   | 0.122    | -2.8    | .005      |
| Percent White                      | -0.02*** | 0.003    | -6.1    | .000      | 0.02     | 0.006    | 1.4     | .234      |
| Per Capita Income                  |          |          |         |           | 0.16**   | 0.101    | 1.6     | .234      |
| Innovative Concepts Intermediary   |          |          |         |           |          |          |         |           |

| Adj. R² F Value Prob>F            | .926     | 23.07    | .0001   |           | .926     | 23.07    | .0001   |           |
| Per Capita Income                  | 0.0003   | 0.0003   | 2.2     |           | 1.99     | 1.99     | 1.0     |           |
| Innovative Concepts Intermediary   |          |          |         |           |          |          |         |           |

| Adj. R² F Value Prob>F            | .926     | 23.07    | .0001   |           | .926     | 23.07    | .0001   |           |

**< .05
***< .01
****< .001

Housing Diversity. Only four variables from the housing diversity sub-models were included in the overall model. The model was significant and explained 45.9 percent of the variance in housing diversity. The variables included in the model were households’ perception of the future demands for apartment units, percent of houses built before 1959, per capita income, and intermediary disposition toward innovative concepts. Two of these variables, apartment demand and percent built before 1959, were significant also in the overall housing affordability model. Per capita income was the only variable significant in the housing diversity model and was positively related to the dependent variable. This means that greater housing diversity, as measured by higher numbers of alternative structural, energy, and ownership alternatives, is found in communities where per capita income is higher.

Path Analysis. Several significant relationships were found among the variables used in creating path models. The same dependent variables used in developing the component sub-models and the overall regression models (housing affordability, housing diversity, and housing quality) were also used as dependent variables in developing path models. Separate paths toward each dependent variable were created. Independent variables included only the significant variables from the overall regression models. The resulting Path Model (Figure 4) helps clarify relationships among the independent and dependent variables as well as explain cause and effect relationships among and between the dependent variables.

In terms of relationships between dependent variables, housing diversity was significantly related to housing affordability and contributed to the explanation of 93 percent of the variance in the affordability variable. There were no other significant relationships among the dependent variables and only one independent variable (median age) was significantly related to diversity ($R^2 = .553$).

Seven variables contributed to the explanation of 93.6 percent of the variance in affordability and included: age of house, percent of units built before 1939, and percent of units built before 1959, the demand for apartments, a family value orientation, number of people in poverty, household disposition to innovative concepts, and intermediary/leader perceptions of racial/ethnic discrimination. Likewise, several variables explained 95.76 percent of the variance in quality. Some of these variables were the same as those
CONCLUSIONS AND IMPLICATIONS

The causal model depicted in Figure 3 illustrates proposed relationships that were developed from an intensive review. Statistical analysis indicates that of the major independent variables in the proposed model, demographics and attitudes and values exert major influences on the housing stock of the community. In the final path model, one aspect of a community's economic base (percentile range of school children below poverty) contributed to explaining differences in housing cost and condition at the community level. However, it appears that the other intervening variables (finance, service, regulations, and programs) contributed little to explaining differences in housing stock in the 28 communities under study.

Although some demographic variables (age of household head, poverty status, and racial composition of the community) were important, it is apparent that the values and attitudes of households and intermediaries/leaders were major factors in influencing the cost and quality of housing available in the community. Particularly relevant to an understanding of values and attitudes is the respondents' reported personal perceptions of the influence of varying factors and conditions on the availability of housing in the community. One example of the accuracy of these perceptions is evident via observation of intermediary/leader responses to the question of discrimination in their communities. In those communities where intermediaries and leaders perceived that racial/ethnic discrimination was a barrier to affordable housing, fewer households had sufficient incomes to obtain median price housing in the area. Other relationships between values and attitudes of respondents and qualitative measures of housing stock in the communities were also shown.

In comparing the influence of the three major dependent variables descriptive of the community's housing stock (i.e., housing affordability, housing quality, and housing diversity) results indicate that the number and types of housing units available is positively related to the affordability of housing in the community. The overall quality of the housing stock was not found to be related to either diversity or affordability, suggesting that other factors (i.e., demographics) influence housing quality.

In conclusion, it is imperative that intermediaries and households understand the importance of values and attitudes in improving the housing stock at the community level. An important role for Extension is to assist community leaders and intermediaries in recognizing that housing affordability is a complex issue that is associated not only with
complex issue that is associated not only with specific characteristics of households, but that housing affordability as well as housing diversity are also dependent upon community leaders and housing intermediaries whose personal values, attitudes, and dispositions toward innovativeness function as barriers and/or incentives in the housing process.

LITERATURE CITED


WASTEWATER MANAGEMENT AND LOCAL INFRASTRUCTURE NEEDS

F. J. Humenik, Biological and Agricultural Engineer
M. P. Levi, Associate State Leader, NR/CRD
North Carolina Agricultural Extension Service

SITUATION

A coastal North Carolina county and a resort community within this county on Bogue Banks have had difficulty in providing adequate wastewater treatment for many years. Rapid population growth and increased tourism have caused the county's current wastewater disposal systems to become inadequate and jeopardize the high water quality and natural resource base so important to the area. Problems such as meeting peak summer water demands and deteriorating water quality resulting in shellfish area closures continue. About one-third of North Carolina's fin fish and shellfish come from this county.

BACKGROUND

Over the past 18 years more than ten studies have been conducted concerning wastewater management in the county. However, these studies have not led to an agreement on the problem or solution for the county's wastewater management problem. In 1987 a bond referendum was proposed to raise monies for a county-wide water and sewer project. The bond referendum was soundly defeated. In spite of all of the studies, evaluations, and resources invested, the problem of wastewater management for the total county and individual municipalities remains.

The county currently employs three major types of treatment facilities:

1) septic tanks for individual homes, especially in rural or coastal areas;
2) small package treatment plants for new developments such as condominiums in coastal areas; and
3) publicly owned treatment facilities for larger municipalities.

PAST STUDIES

A survey was conducted in 1988 by a group from the Duke University Marine Lab. The survey results are reported as a qualitative review of a select group of residents perceived by their peers as knowledgeable on the current issues. The initial list of respondents was comprised of elected and appointed officials and several civil servants from various areas throughout the county. The final list of respondents also included retail merchants, professionals, fishermen, scientists, developers, realtors, and retirees.

Sixty-eight percent of the respondents said they perceived major population growth occurring in the county, and the majority of the respondents also indicated that the county was not adequately prepared for this growth. The two most cited reasons were lack of land use planning, including zoning, and inadequate water and sewer facilities. However, respondents were more optimistic about
their local waste disposal system than systems outside of their immediate communities. Sixty-six percent of the respondents believed their local area's wastewater disposal to be adequate, but 94 percent stated that other areas in the county had inadequate disposal capabilities. This suggests that the people will be less likely to actively pursue a county-wide wastewater management program. This is supported by the failure of the 1987 bond referendum. The frequently cited reasons for the bond failure were:

1) misinformation and lack of education concerning the nature of the problem and the purpose of the referendum;

2) fear of expense of a county-wide disposal system; and

3) belief that construction of such a system would lead to additional growth.

The most commonly cited alternatives were ocean outfall and land application. Many respondents could not cite specific advantages or disadvantages for either system.

In summarizing the survey, the project team noted that residents of the county realized a wastewater management problem existed but not in their immediate area. Perhaps a means to help resolve this is through better community education. An element of this education must address cooperation and communication among communities. The surveyors did not feel that comprehensive wastewater disposal planning was understood because this type of planning coupled with land use planning can result in dual benefits: effective wastewater disposal and preservation of the quality of life desired by people in the county. The surveyors felt that the reluctance to accept zoning and long range planning are the most significant obstacles to regional wastewater disposal. Finally they noted that despite the numerous studies undertaken regarding wastewater disposal alternatives in the county, little action has been taken, and county residents must decide for themselves what disposal alternatives should be developed.

Upon reviewing a wastewater project proposal for a resort community on Bogue Banks in this county, the North Carolina Division of Environmental Management concluded that, "A comprehensive, county-wide environmental impact statement should be prepared to evaluate all options available for short and long range wastewater disposal...It was decided that the only way to achieve proper long range planning was through a cooperative effort of all affected local governments." Subsequent to this determination, the North Carolina Division of Environmental Management announced that "no permits for new or expanded discharges of wastewater would be approved until adequate wastewater disposal planning was done for the county." A preliminary draft of this environmental impact statement was released in 1988 by an engineering firm that had conducted previous studies for the total county and municipalities within the county. The process involved with this environmental impact statement is currently ongoing.

EXTENSION INVOLVEMENT

The North Carolina Agricultural Extension Service was invited to provide educational and technical assistance for wastewater management in both the resort community and total county because of recognized achievements in land application of agricultural and municipal waste, water management for high water table soils, and public participation/educational programming. It was requested that Extension provide assistance in evaluating wastewater treatment alternatives and then conduct an educational program to better inform everyone of the advantages and the disadvantages of feasible alternatives.

Extension administration evaluated the appropriateness of committing to such an extensive program in just one county. This concentrated effort was approved as a pilot effort with the understanding that techniques and methods would be developed that could be adapted for other water and waste management issues that were becoming increasingly important across the state.

It was stressed that a public opinion survey would be absolutely essential to conduct a meaningful education program. Confusion existed as to whether land application was opposed because of an influential minority or because of widespread concern based on technically sound
reasons. Uncertainty also existed as to public feeling and knowledge of the other options being considered, i.e. inland water discharge and ocean discharge. Recognizing that public education programs are most effective when based on adequate understanding of existing public attitudes and knowledge and that a telephone survey is the most effective means for obtaining systematic information from a representative sample of the population, a contract was developed between Extension and the county board of commissioners for a telephone survey. Another contract was developed between researchers and the county board of commissioners to study the hydrologic impacts of land treatment of municipal wastewater in the county. Results of these two projects were reported to a group of elected officials and interested individuals as selected by the county commissioners under the direction of the county water and sewer board in August 1989. Everyone was very complimentary of the thorough analysis of the hydrologic impacts of land treatment of municipal wastewater on different agricultural and forestry sites and the information derived from the telephone survey.

TELEPHONE SURVEY

Telephone interviews were conducted with 301 county citizens during April of 1989. Telephone numbers were selected at random using a computerized technique known as "Random Digit Dialing." This insured that every resident of the county with a telephone had an equal opportunity of being interviewed. Detailed results of the survey procedure, questions asked, and results will be available soon.

The telephone survey emphasized that the public desires and expects to be a full partner in future wastewater management decisions. An important educational need is to help people understand and accept their own responsibility for causing and correcting water quality problems. Most people do not recognize or admit to the severity of the water quality problems caused by improperly installed or malfunctioning septic tanks. These systems tend to be widely accepted as safe. People may believe that individual systems may not have a great impact, even though the combined impacts may be significant. Lack of knowledge about septic tanks and their impacts on drinking water quality presents a major educational challenge. The fact that so many people saw county wastewater problems as more serious than problems in their own community is another indication of people's unwillingness to take responsibility for water quality problems.

The public expressed a clear preference for one wastewater management alternative, land application. Survey respondents were not, however, able to select one site as particularly suitable for land application. People would prefer to locate such a site on government forest land where presumably it would be farthest removed from people and the water. They are clearly opposed to continuing inland water discharge or discharge to streams or estuaries. Respondents showed a moderate level of support for ocean outfalls.

Attitudes toward growth and development are related to attitudes toward wastewater management. The survey results clearly indicate the public's concern about the impacts of rapid growth on water quality and the overall quality of life. Given the tradeoffs between economic development and water quality, almost everyone supports improved water quality.

CURRENT ACTIVITY

Results of the hydrologic impact study and telephone survey are being incorporated into an educational slide tape on water quality and wastewater management alternatives for the county. An intensive county-wide education program will be conducted with this slide tape by the county Extension Homemakers Club. The county water and sewer task force will also use this slide tape as part of the education and information retrieval process required under the environmental impact assessment currently being conducted. These educational activities are pursuant to a county wide public meeting to further information and answer questions arising from the slide tape or overall evaluation and education program. Extension specialists from the departments of Biological and Agricultural Engineering, Soil Science, Sociology, Forestry, Economics and Business, and Wildlife
who have participated in this project will attend this meeting as resource individuals.

SUMMARY

Results of this pilot Extension program have already provided a basis for a more complete and knowledgeable evaluation of alternatives available for addressing the county and individual municipalities' wastewater management needs. As with an environmental impact statement, this project is not designed or conducted to decide the best wastewater management program for county or municipality citizens. Local leaders and the involved public need the best information possible to evaluate alternatives and reach a decision that will be technically sound and acceptable to most of the citizens.

Extension can play a key role in helping the state to develop a technically sound basis for public participation, education, and public policy determination. The basic goal of the education program being conducted by the county Extension office under the direction of the state staff is to help people become more knowledgeable concerning the actual facts related to the alternative wastewater disposal techniques being considered.

We have learned that it is very important to eliminate unjustified emotional or technical barriers, regardless of the origin or extent of any such inhibitions to an openminded and unbiased process. The advantages and disadvantages of each disposal method must be considered and blended within an overall county plan for both short term and long term needs. In order to be of value the plan must be flexible, consider economic needs and issues, and be supported by the general public. Thereafter, county leaders and elected officials are responsible for implementing the choice judged to be the most technically sound and cost effective for treating wastewater and preserving the valuable natural resources and water quality.
EXTENSION'S ROLE IN STRENGTHENING THE COMMUNITY HEALTH INFRASTRUCTURE

Susan Jenkins, Extension Sociologist - Community Health Programs
Rich Reinheimer - Community Development Specialist
Lonnie Varnedoe, Community Development Specialist
University of Georgia

During the past decade, a decentralization of government has occurred from the federal to the state and local levels. Currently, states are focusing attention on preparing local governments to be more responsible for their economic and social concerns. This is due to decreasing funding sources from the federal and state levels, as well as the apparent belief that social and economic issues should be resolved locally.

One of the major consequences of a decentralized government structure is that local communities are confronted with addressing complicated issues ranging from improving the economic climate to solving complex health concerns. An emerging concern is the question of how a community will pay for the rising cost of health services, such as subsidizing public hospitals, and supporting ambulance service and public health clinics. Increased health care costs occur from the use of high technology systems for both diagnosis and treatment, escalating premiums for liability and health insurance, and additional outlays for indigent care (Source Book of Health Insurance Data, 1986-1987). As the health care financing shifts from the federal and state governments to local sources, communities are beginning to make concerted efforts to control the spiraling health costs.

Aside from becoming cognizant of health care service cost controls, some communities are encouraging citizens to adopt better health practices. The heightened interest in community health promotion is a consequence of the decreasing impact that traditional, microbe, and infestation-oriented preventive programs have on the contemporary profile of chronic and degenerative illness and violent deaths (DHEW, 1979). Current causes of illness and death are influenced by the industrialized society and its accompanying style of living. Research indicates that many of the major health problems of today are directly linked to unhealthy lifestyles. During the past decade, individual awareness has increased, and many have made purposeful changes in their lifestyles. Between 1970 and 1986, age adjusted death rates declined by 31 percent for heart disease, the leading cause of death, and by 53 percent for stroke (DHHS, 1989).

With local governments struggling with more financial responsibility for health concerns and the latest research indicating individual changes in lifestyles can lower health costs, it seems reasonable that communities would urge citizens to practice better health behaviors. While the method of utilizing strategies for health promotion is not new, the practice of the total community encouraging health promotion is not widely employed. Experts such as Earl Hipp (1984), Robert Alles (1981), Nancy Millo (1976), and Halbert Dunn (1959) suggest that communities become places that promote lifestyle changes.

Not only can communities encourage healthier lifestyle behaviors, but communities can also provide the infrastructure that creates a supportive environment so good habits can be practiced. The World Health Organization (WHO, 1986) suggests
that one purpose of communities is to create readily available alternatives for citizens willing to practice better health habits. Additionally, Milio (1988) notes that the range of options available to citizens and the ease with which a person may choose certain ones over others is typically set by communities and organizations, public and private, formal and informal. For example, if a local effort is being made to provide more knowledge about healthful diets but this is not accompanied by a combination of healthful and readily available food, then changes in eating patterns are not likely to occur. Likewise, if a community encourages citizens to exercise but neglects to organize a supportive medium such as a recreation program for that purpose, then long-term benefits are unlikely to be met. The necessity for readily available healthy food and a recreation program requires an effort beyond the individual and extends to the community organizational structure. This community organization structure can be enhanced by private and public cooperation and collaboration, particularly if long-term benefits are expected.

From the above discussion, it is apparent that communities should be taking a more active role in encouraging health promotion, as well as providing the supportive environment that allows citizens health enhancing options. The Cooperative Extension Service in Georgia is playing an important role in this effort. An example of this role is the Community Wellness program which is designed to strengthen the community health infrastructure. This is done in two ways, first, by enabling people, as individuals and in organized ways, to improve their health, and secondly, by involving both the health and non-health sectors in collaborating activities that address the many faceted nature of community health issues. Community Wellness is a process-oriented program which encompasses community-based program planning, intervenes based on assessment of specific community health needs, encourages empowerment of the community, and develops a community-wide support system. County agents and other leaders, through local meetings and networking, serve as catalysts to bring members of the community together. This process is based on different resource levels within the community. The program provides single, multiple, community-wide, and task force level resources that address community needs (Figure 1).

Figure 1
While the Community Wellness program has many programs associated with it, this will summarize examples from the areas of community-wide resources and task force resources. The programs are:

1. Physician Recruitment Program/Medical Fair
2. Nurse Placement Fair
3. Community Wellness Councils

**Physician Recruitment Program/Medical Fair**

Inadequate primary health care is a major problem in many rural communities throughout Georgia. One of the main contributors to inadequate primary health care is either a shortage of physicians or complete void of physicians. No rural community can compete in economic development unless there is adequate medical care. While an adequate number of physicians is being graduated from medical institutions in Georgia and other contiguous states, there is a maldistribution problem. The urban areas of the state have an overabundance of physicians, and the small rural communities have only a limited number. Although the State Medical Board is fulfilling its mandate to restore parity by placing young doctors (who have been educated at public expense) in rural areas, many rural communities have had little success in recruiting doctors to their areas. The unfortunate result has been an inequality in health care. The solution to the problem seems to lie in the organization and education of rural community leaders in physician recruitment retention. Since the Georgia Cooperative Extension Service has an office in every county in the state and an interest in community health, it was an obvious decision for the Extension Service to be a major sponsor of the physician recruitment effort (the Medical Fair).

The Medical Fair is sponsored by the State Medical Education Board, University of Georgia Cooperative Extension Service, Medical College of Georgia, Joint Board of Family Practice, Medical Association of Georgia, Georgia Academy of Family Physicians, Georgia Hospital Association, and eight other organizations.

The Extension role in the Medical Fair, at the local level, is one of organizing and orienting the community toward its goal of improving health care resources and developing a physician recruitment strategy. Extension agents work with hospital administrators, local doctors, Chamber of Commerce personnel, and community leaders to encourage doctors to locate in towns of 15,000 population or less that have an existing hospital facility (communities without a hospital may also participate, but must coordinate with a community that does have a hospital). The Medical Fair offers community representatives a chance to meet a large number of prospective medical personnel, and conversely, it offers doctors an occasion to review 40 practice opportunities in rural Georgia communities.

In the ten years the program has been in existence, 156 physicians have located in rural Georgia as a direct result of the Medical Fair. In 1987, 29 doctors were placed in rural areas through this program. Since over half of the 156 physicians placed through the Fair have been placed within the past four years, it appears that the Fair is becoming more efficient in its recruiting.

The economic impact of this program has been tremendous. Conservatively speaking, it is estimated that each physician adds $250,000 per year to the local economy. Using the $250,000 figure for each of the 29 doctors, it is estimated that $7 million have been added to the economy of the state in rural areas. Although the fiscal impact of the program is quite substantial, the important fact is that rural Georgia residents have worked together to improve their health care problems.

**Nurse Placement Fair**

The first ever Nurse Placement Fair was held on April 5, 1989, in Tifton at the Rural Development Center. After months of coordinating, planning, and preparing, the day ended with a total of 143 student nurses and 18 rural communities participating.

The Nurse Placement Fair committee, which included the Georgia Hospital Association,
Georgia Nurses Association, Georgia Department of Human Resources, Georgia Rural Health Association, State Medical Education Board, University System of Georgia (Board of Regents) and University of Georgia Cooperative Extension Service, came together in 1987 to begin their planning after much attention had been given to the nursing shortage in Georgia. Early in the planning process the committee focused its attention on the needs of rural communities (under 15,000) and decided to pilot a program in the southern half of the state (area code 912).

In November 1988 a community orientation session was held for interested communities. The meeting informed the communities about the logistics of the fair and the information needed to assist in recruiting nurses. Eleven communities participated in the orientation.

Throughout the planning process college nursing program directors and/or deans were kept abreast of developments and encouraged to participate in the fair in April. The following college with nursing programs participated: South Georgia, Albany State, Valdosta State, and Georgia Southern.

Each student nurse who attended the fair completed a survey regarding qualifications and desires. This information was shared with the communities prior to the fair and during the fair. Nurses also received information about each community before the fair and during the fair to help prepare for discussions with communities.

The fair was a success in many ways. One community was pleased to have doubled the contacts they had expected to make during the fair. One participating nurse said that she had not thought much about practicing in a rural community until now.

In the final analysis five nurses were recruited by rural communities as a result of the fair. Although it may be a small number, rural communities had an opportunity to discuss with student nurses the attributes of rural health job opportunities and rural communities.

In April of 1990, three such fairs will be conducted which will cover the state. The fairs will be conducted in the following locations: April 3, Statesboro; April 5, Tifton; April 19, Kennesaw. Colleges with nursing programs throughout the state will be invited to attend the fair that is closest to them. In Statesboro and Tifton the fair site can accommodate 20 communities, while in Kennesaw the site will only accommodate 15 communities.

COMMUNITY WELLNESS COUNCILS

The purpose of any community development process is to encourage groups to form and begin addressing common interests of the group. The aim of the Community Wellness process is for community members to work collaboratively with local resources to find workable solutions to the health issues.

Treutlen County

Treutlen County is located in the rural area of southeast Georgia. The county does not have a hospital, but for the past several years local health and health related organizations and civic organizations have combined forces to sponsor a county-wide seat belt campaign and an area health fair, and to consider health services for the county.

As a part of Treutlen County's 2000 Project (County Strategic Planning Project) a committee was appointed to identify the services available to the elderly population. After the services were identified, a meeting was formed to acquaint local government officials with the services. Representatives from the following organizations made brief presentations describing their services:

- Georgia Legal Services
- Americare Home Health Services
- Community Care
- Heart of Georgia Community Action Council
- Heart of Georgia Council on Aging
- Treutlen Senior Center
- Treutlen County Extension Service
- Treutlen County Health Department

As an outgrowth of the 2000 project, members identified the need for a local walking trail. A committee unanimously agreed that a walking trail would be a "healthy" asset to the community and began identifying prospective locations.

A committee member briefed members regarding the legalities of liability for recreational facilities. The committee asked representatives to
talk with the property owner about the possibility of using the track at the old football field as a walking trail. The purpose of the trail would be to encourage fitness and to provide a safe place for Treutlen citizens to walk.

The property owner gave permission to use the track, and a five-year lease was drawn up. The county commissioners provided a "not responsible" sign. The city and county road crews filled in washed out areas and leveled parts of the track. They also removed the remaining foundations of some bleachers that were once used at the site, and cut back the overgrown shrubs. A group of 4-H'ers picked up trash and debris.

On November 11, the trail officially opened. An article and pictures were featured in the Soperton News. The committee has been very pleased with the response from citizens. Many retired people use the trail during the day, but they have discovered that people are really using the walking trail after work (5:00-6:00 P.M.). The county and city are discussing alternatives for lighting the area. The Million Pines Arts and Crafts Festival Committee has also expressed an interest in helping finance lighting for the walking trail.

The Treutlen County organizers are very proud of what they have been able to do. First, they have made the leaders and citizens aware of the services for the elderly, and secondly, have provided the city of Soperton with a walking trail that will be utilized for many years.

Lowndes County

Lowndes County is located in the southernmost part of the state. This county has an active health community, regional hospital, four-year college, and Air Force Base. The Lowndes County Wellness Council was originally formed because there was a need to know what other organizations were doing in the areas of health services and health education.

The Council has over 100 members representing 40 different local organizations. The Council holds quarterly meetings and sends out a quarterly newsletter.

This past year has been a very productive year. The Safety Committee completed an educational program in the county and schools on seat belt usage. Over 800 children were reached with this program. One component of the program was to develop a poster on the theme of "Be a Good Passenger." Sixty-five students had their posters displayed at the mall. The winner of this contest received free tickets to an Atlanta Braves Game and free lodging while in Atlanta.

The major project the Council undertook was the creation, development, and printing of the Lowndes County Resource Guide. This Resource Guide highlights over 80 different organizations and services that are available to the citizens of the county. Each organization was sent a form asking about its hours of service, phone number, contact person, eligibility, fees, and a brief summary of its services. This list is maintained on computer by graduate students in the Department of Health at Valdosta State College.

Funding for the Resource Guide was a major hurdle since the Community Wellness Council has no funding source. A representative from the Council asked the Lowndes County Board of Commissioners to fund the Guide. They voted to pay $1,100 for printing and supply costs. The county manager is urging that area businesses with over ten members or a personnel office have a Resource Guide for referral purposes. The Chamber of Commerce and Industrial Authority plan to show the Guide to prospective businesses as a measure of the "quality-of-life" in the area.

The most ambitious project of the year has been the planning for the spring Health Seminar. The theme is "Don't Worry-Be Healthy (A Healthy Living Conference)" and will be held at the local college. Over 200 healthcare personnel, business and civic leaders, and interested citizens are expected to attend this conference on health awareness, disease prevention, and health resources. Presently, there are approximately 20 sponsors. A well known keynote speaker will highlight how attitude affects one's health. This will be followed by concurrent workshop sessions and an exhibit area for those attending.

From the spring conference, the Lowndes County Community Wellness Council hopes to find a health issue to address for an 18 month period through media, education, and a seminar.
Talbot County

Talbot County is located in the west central part of Georgia. This rural county does not have a good economic base; therefore, the services to the county are very sparse. The county has an access to health care problems as there are no medical services available. Because there are so few services, the county Extension Director organized local community representatives from the health department, school system, churches, and government agencies. The purpose was to identify local health issues and to try, as a group, to address some of these issues. These identified issues were access to health care problems and the isolation of the elderly.

In the 18 months since its inception, the Talbot County Community Wellness Council has supported two major efforts. The first addressed the health care problem. A student Health Fair brought medical students from across the state in for a two week period. During this time, over 500 local residents were given complete physicals. Over 50 volunteers were used, and 15 local homes were opened for lodging of the medical students. Over 12 churches and civic clubs provided food for the students and volunteers. It is estimated that close to $75,000 worth of free medical services were provided by this special health fair.

The second project considered the problem of isolation of the elderly. Several meetings of the Wellness Council were devoted to trying to solve the problem. After much work, several applications were made for a van to help transport elderly people to doctors, medical facilities, grocery stores, and drug stores. The community has just received its third van in order to help ease the isolation of the elderly.

REFERENCES


Hipp, Earl, "Is the wellness movement dying?" Health Values Achieving High Level Wellness, 1984; Vol. 5: 10-12.


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