INFORMATION FOR CONTRIBUTORS

Feature articles highlight research or programs of merit as examples to professionals, researchers, and educators in rural development in the southern region. They should deal with one area or subarea of the four major concerns of rural development outlined by USDA:

Community Services and Facilities
People Building
Economic Improvement
Environment Improvement

Opinion articles examine critical issues confronting Research and Extension practitioners in rural development, emphasizing implications for program planning and research.

Research notes are brief summaries of empirical research projects underway or recently completed.

Program notes are brief summaries of noteworthy rural development educational or assistance programs.

News and notes report events and personalities of interest to the region.

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This regional study was conducted in part under a grant from the National Agricultural Lands Study, United States Department of Agriculture.

Fall 1980 Vol. 4, No. 1
Ten years from now Americans could be as concerned over the loss of the nation's prime and important farmlands as they are today over shortages of oil and gasoline. In the war between the bulldozer and the plow, four square miles of our nation's prime farmlands are lost every day to uses other than agriculture. In addition to the prime farmland loss, we are losing another two million acres of lesser quality agricultural land as highways, houses, airports, and shopping centers seal our soil with asphalt and concrete. The total annual loss is equivalent to losing 300 acres or a half section of farmland per hour.

If America is indeed feeding not only itself but also millions of less fortunate people around the world, then predictions of an additional two billion more people added to the world population within the next 20 years will also be predictions of a world crisis. With American pastures becoming parking lots, the United States may no longer be able to feed other nations and may expect domestic food prices to rise sharply upward. One Washington correspondent writes that "every time a baby is born in the United States, agriculture loses one and one-third acres of cropland . . . . Our population is growing, our available farmland is shrinking, and our per-acre crop yields are leveling off."

Beyond the question of supply and demand, however, Americans face the loss of more than just land and food. If our lands continue to be converted to non-agricultural uses, what will happen to farm family life and the values that spring from living close to the land? What will happen to our inner spirits and the quality of our lives when there are no fields and woods to shield us from eight-lane freeways? The important issue of quality in living looms nearly as large as the problems of feeding a hungry world.

Concern for the future of our farmland is the focus of this report, which is an outgrowth of the National Agricultural Lands Study Initiated June 14, 1979. Under the co-chairmanship of the United States Secretary of Agriculture and the Chairman of the Council on Environmental Quality, eleven Federal agencies are participating in the study as well as state and local governments, individual landholders and public interest groups. The Southern Rural Development Center under the sponsorship of the Mississippi State University Cooperative Extension Service was given the task of coordinating four public workshops throughout the Southeastern United States to examine the extent and causes of land conversion to other uses and the various ways it might be retained for agriculture. In addition to the four workshops, the SRDC prepared six case studies from throughout the Southeast citing the loss of agricultural lands and the circumstances involved.

This publication is the final summary of the four workshops and six case studies completed as a result of the National Agricultural Lands Study. The national study of citizens' viewpoints and the findings of scientists and researchers will be completed January 1, 1981, with a detailed report presented to the president.

"Burn down your cities and leave your farms, and your cities will spring up again; but destroy our farms and the grass will grow in the streets of every city in the country."

William Jennings Bryan

Photos by Barry W. Jones
Agricultural Lands: A Southern Perspective

Dr. Marie C. Prunty, an economic geographer, prepared the base paper for each of the land study workshops. As distinguished professor of geography at the University of Georgia, Dr. Prunty concentrates his research on the dynamics of rural land utilization and raw material production systems in the South.

The South is a "region" only in terms of cultural traits and economic and cultural history. Generalizations about the South as a whole are dangerous. It is a collection of distinctly separate areas in terms of natural environments. The natural environments in the South show a great diversity in land forms, soils and agricultural activities. Of all the environmental elements, climate is the most uniform, yet even it is quite diverse in the South. Growing seasons across the region vary from 180 days in central Kentucky to over 300 days on the Gulf Coast. Precipitation averages 45-50 inches but varies substantially from year to year. Summer droughts are frequent, leading to crop damage in one or more sub-regions out of every five years.

There are enormous differences in the landforms, soils and natural vegetation. The alluvial Mississippi valley has tremendously productive soils, a bottomland hardwood forest complex, and huge farms. The southern high plains in west Texas are flat, short-grass plains with deep, permeable soils and no permanent streams, dotted by irrigation wells. Florida's unique Central Highland Ridge has deep, sandy soils and rolling terrain covered with citrus groves, and the Piedmont of Georgia, the Carolinas and Virginia is also unique. The amount of available farmland in the Southern region has been declining at an average rate of 3,000,000 acres per year for the past 25 years. Oklahoma and Texas, which contain slightly more than half of all farmland in the region, have experienced the smallest declines, while the South Atlantic states and Alabama have experienced the largest proportionate losses. There have been major losses in cropland (not land in farms nor farmland used for pasturage) throughout most of the region—except for the Gulf coastal plain, Florida and the Mississippi alluvial valley, which have experienced significant cropland increases.

Since the 1930s, the South has experienced a dramatic economic renaissance. It is no longer the major agrarian region of the country, having been displaced by the Midwest and Great Plains. Although the South has experienced a large population in-migration (approximately 10.4 percent since 1970), it now has fewer farm residents both in numbers and percent of population. As a result of this economic renaissance, the South has become increasingly urban. Since 1930, population growth in the South has gone from 70 percent rural to 70 percent urban, and of the 30 percent rural residents, approximately five out of six are non-farmers who depend on urban jobs for their jobs and services. Agricultural practices have become much more mechanized. Since 1940, agricultural product values have quadrupled while the number of agricultural producers has declined by five-fifths. Of the region's approximately 60 million people today, less than 1.4 million derive their primary support from farming.

Increasing urbanization is only one of many interrelated factors which have contributed to the losses of agricultural lands in the South. Some of the major ones include:

- The rise in land values caused by the development of residential areas outside metropolitan areas, frequently along highways. This rise frequently makes the option of selling out more lucrative than maintaining land in agricultural use.

- Many land speculators or developers buy land in urban fringe areas and wait for urban expansion to sell the land for a profit. The best cropland is usually also best for development, and the speculator frequently has no interest in whether the land remains productive while he waits to sell it.

- More and more factories are relocating in nonurban settings. These factories frequently buy much more land than their operation requires, and they usually want flat, well-drained land (i.e., the best cropland) because it is much cheaper to build on.

- The "zone-out" process forces many farms out of production because rural zoning regulations do not protect farmland. When residential areas grow up around farmlands, ordinances are sometimes passed declaring certain farm practices to be public nuisances, thereby effectively forcing more farms out of production.

- Highway systems also consume significant amounts of land. One acre of land is consumed for each 220 feet of interstate, and easements of supplant roadways rarely revert to agricultural uses.

- A variety of tax laws is also responsible for some agricultural land loss. Although many people believe the inheritance tax is a major factor in this loss, the author has not found this to be the case. However, a potentially dangerous tax is the "carryover basis rule" enacted in the Tax Reform Act of 1976. Present taxation of forest lands is also a problem.

Ad valorem taxation of rural property based on the "highest and best potential use" of the land is perhaps the most serious threat to the preservation of agricultural land.

Some Federal programs have contributed to agricultural land loss. The best example is probably the Conservation Reserve Program, commonly known as the Soil Bank. A conservative estimate is that between 1957 and 1970, some 9 million acres of Southern ag lands went into the Soil Bank. Although the program ended in 1970, in the eastern South little of the land has returned to productive farmland.

Conflicts among forest needs, agricultural needs and urban needs will worsen unless we face the problem now and begin planning for future needs.

A primary step that needs to be taken is the development of maps that delineate prime agricultural lands on a large scale, such as the county level. The Soil Conservation Service is currently developing such a set of "Prime Agricultural Lands" maps, but information on agricultural quality lands presently under forest cover is not included but needs to be.

After forest lands with potential as prime agricultural lands have been identified, some sort of program is needed to convince landowners to revert such lands to cropland after their forest is harvested. One possibility is Federal tax legislation which would allow farmers to deduct the cost of stump removal on prime lands from their income tax.

Zoning laws which protect prime agricultural lands are also needed. State level legislation seems most ideal to do this.

In addition to guarding against further declines in the amount of agricultural lands, steps must be taken to increase production on the available agricultural lands through such methods as supplemental irrigation, double cropping and utilization of idle lands.

The situation which we all confront in assessing the agricultural land problem is a complex of interwoven forces, pressures, demands and needs that intermesh with one another at the local level, particularly at the level of land ownership. Solving the problem will not be easy, but it is extremely important that we begin working toward a solution now.

*This section is excerpted from Dr. Prunty's paper of the same title prepared as the basic paper for the four Southern region Agricultural Lands Study workshops.
Workshops Reveal Prime Land Conversions As Major Concern

Participants in a small group session of the Burlington, N.C., agricultural lands study workshop were among nearly 400 persons attending four regional workshops designed to analyze significant problems and solutions relevant to land conversion.

Some groups suggested taxing agricultural land on productivity rather than fair market value and adjusting ad valorem taxes to agricultural value of agricultural land.

Use of Prime Farmland for Non-Agricultural Purposes

Of the 38 small groups meeting at the various workshops, 22 groups cited the conversion of prime agricultural land to non-agricultural uses (i.e., urban development, roads, housing, factories) as one of their priority concerns. Although most of the participants were unaware of actions being taken to deter the loss of agricultural lands, some group members questioned the effectiveness of these actions familiar to them. Participants at the Florida workshop mentioned the state’s green belt law as an example of statewide action to give land in agricultural use a low tax valuation. In addition to the green belt law, Florida requires each county to prepare a land use plan. Several groups noted efforts by the Soil Conservation Service to identify prime agricultural lands. Local zoning regulations, the Coastal Plains Act in North Carolina, and national and state forest designations are other actions identified by the conferences.

Most of the solutions for the priority concern of prime land conversion involved zoning, preferential taxation, and county land use planning. Several groups called for national, state, and local legislation to regulate the use of land, specifically through zoning and mandatory land use plans as land management and conservation tools.

Several types of incentives were suggested as solutions to this concern. Some conferences focused on tax incentives for farmers to keep land in agricultural use while requiring high taxation of farmland converted to urban uses. Another suggestion was economic incentives for using non-prime land for non-agricultural uses. This idea suggests that land developers (residential, industrial, etc.) could be encouraged to utilize non-prime lands by such incentives as low-interest loans for development projects.

A brief review of other solutions includes the following:

- begin efforts to better identify prime farmland
- discontinue government agency programs which finance conversion of prime farmland
- require better planning by developers, highway engineers, city planners, and government agencies in order to recognize impact of proposed facilities and consider alternatives to use of prime land
- pass state laws limiting the authority of cities to extend city limits
- require full utilization of existing urban areas
- restrict development to lower class land (not Class I where feasible)
- encourage local planning agency control (county or smaller, not councils of government or substate regions)
- develop realistic research results on future needs of society
- encourage location of non-agricultural developments on Class 7 lands
- develop means to keep an active agricultural option via intergeneric or intergeneric crop development
- study the effectiveness of the Forestry Incentives Program and the Soil Bank Program
- require impact statements for conversion of large agricultural land tracts to non-agricultural uses
- develop a comparative analysis of agricultural land losses

Participants at each of the four workshops felt that local, state, or national efforts to preserve farmland for agricultural use would depend first on educating American citizens and lawmakers to start considering land as an endangered natural resource, not just a commodity. As a result, many of the groups urged education of the general public as one of the priority solutions.

Tax Problems

Fourteen groups named tax problems as one of the priority concerns. The general sentiment among these groups seemed to be that some present tax structures are not conducive to retaining land in agricultural production, and that these taxes should be amended to encourage agricultural land retention. The participants cited the inheritance tax as the primary type of tax having a negative effect on agricultural land conversion. Other specific taxes mentioned included ad valorem, sales and capital gains taxes. The method of assessment of these taxes was most frequently cited as the real focus of concern.

Participants in the 14 small groups were nearly unanimous in saying that the negative impact of taxes on agricultural lands was a problem that could and should be addressed. Slightly more than half of these participants said that some actions have already been taken in their area to alleviate the tax burden on farmers. The primary beneficial action taken was the implementation of use value taxation on farmland rather than taxation based on market or "best potential use" value. Other local and state actions included the following:

- farm conservation bills specifying a method whereby family farms may incorporate (includes a penalty for violation)
- changes in basic assessment ratio lowering percentage assessment on farmland
- optional sales tax whereby counties can vote an extra sales tax and roll back property taxes equal to the extra amount of sales tax collected
- green belt laws which reduce tax burden on agricultural lands.

One group suggested that taxation policies should be reoriented to discourage land speculation, to encourage more young farmers and to provide old age security for farmers who might otherwise have to sell their farms.

Many of the tax solutions suggested by conferences focused on relief of current inheritance tax laws. The most frequently suggested solution was outright exemption of agricultural lands or family farms from inheritance taxes. Other possible solutions included the following:

- adjustments in estate taxes to keep land in agriculture and lower inheritance taxes on lineal heirs
- raise the ceiling on the value of taxable farmland property and index to remove the impact of inflation or devaluation of dollars to maintain a "real" tax load at one level
- development of a new set of IRS guidelines on real property inheritance tax with specific emphasis on maintenance of the family farm and
farm production for a minimum of five years along with legislative action to
-exempt or upward adjustment of exemptions from sales and agricultural land taxes to reduce the effective rate of the property and capital gains portion of the Federal income tax.

Some conference participants felt that the policy should provide Federal income tax incentives to keep agricultural land in production while simultaneously assessing an impact fee on developers for converting agricultural land to non-agricultural uses. All the groups favored a reform of ad valorem taxation. One solution was an evaluation of farmlands for taxation based on production revenue. Along the same line, some groups suggested taxing agricultural land on productivity rather than market value and adjusting ad valorem taxes to agricultural value of agricultural land. Another suggested solution for a tax-related concern was that the government should require full disclosure of corporate farm ownership.

Groups in three of the four workshops stressed the need for study and evaluation of existing tax and accounting practices. The result of this research would then be disseminated in order to improve accounting for agricultural land, and the legislators concerning the adverse effect of taxation laws on American agriculture.

Low Rate of Return on Agricultural Land

Thirteen of the 38 small groups expressed major concern over the low rate of return for agricultural production as opposed to other forms of investment, on other uses of the land (such as sale to developers). Participants generally felt that because of low productivity, agricultural land in production will become increasingly difficult to maintain if not impossible because of the need for financially rewarding alternative uses for that land. Nearly all the members of the 13 groups agreed that something should and could be done to alleviate the lack of adequate return on investments in agriculture and among these groups seemed to be that if farmers were receiving adequate returns on their investments in agriculture, they would not be nearly so likely to sell their land. The majority of the groups cited solutions involving changes in the tax structure and changes in inflationary government programs and programs.

One group felt that all tax statutes relating to agriculture (including income, property, ad valorem, estate, and income sales taxes) should be revised at all levels (local, state, and Federal) to encourage the retention of prime land in agriculture production. Other groups cited specific reforms in relocation of inheritance taxes on farmland and farm taxes based on the classification of land for agricultural purposes. Other solutions related to taxes included tax incentives (such as investment credits) for keeping land in agricultural production and dissemination of more information on the effects of tax structures (estate, use, etc.) on rising costs.

Suggested solutions involving government policies and controls centered primarily on inflation control and elimination of the Federal deficit. While one group urged continued Federal income maintenance programs, other groups included price and deficiency subsidies, another group's first priority was for the government to eliminate its cheap food policy and allow the market place to determine prices and allocate levels of production. Another solution involved requiring economic appraisals and cost-benefit analyses of all proposed government regulations that apply to agriculture. One group called for increased competition in all aspects of the American economy through methods such as deregulation of all transportation systems.

Two of the proposed solutions involved educational programs. One group said better education of farm producers is needed regarding things such as soil analysis, marketing, diversification of crops and use of herbicides and pesticides. The other educational solutions involved educating the public about the fact that the United States has the lowest food cost in terms of percentage of income spent on food.

Other suggested solutions to the priority concern about the lack of adequate return on investments in agriculture included the following:

- expand local markets and export opportunities
- establish higher prices for farm products (parity)
- restrict competition between farmers and other land users
- minimize competition in agricultural markets
- enhance rail and energy availability
- promote higher prices for agricultural products to make producers more competitive for land resources by lowering marketing (domestic and foreign)
- assess economic impacts of banning certain agricultural chemicals in production

A single group, however, made maximum use of the technical assistance offered by various Federal, state, local and private agencies to improve efficiency and increase rate of return.

- provide special loan preferences for needed capital investments
- provide financial assistance in carrying out government programs for erosion control, population abatement, etc.
- encourage public purchase of development rights so that critically important agricultural lands would be preserved even in the face of low land values.
- use land more efficiently (i.e., multi-family housing, highway rights-of-way, etc.)
- provide incentives to channel development into non-prime agricultural lands

Effects of Land Loss on Food and Fiber Production

Eleven small groups at the four workshops named the effects of agricultural land loss on food and fiber production as one of their three priority concerns. While some participants reported limited statewide action to encourage conservation of farmland which named the effects of agricultural land loss on food production as a priority concern generally felt that is it a future problem rather than a current one.

Nearly all the groups felt that one priority solution involved educating the American public about the value of our land resource and the importance of conserving and protecting prime farmland for future food production in the face of world population growth.

Other priority solutions involved land use planning programs which would apply zoning and growth management techniques to the preservation of agricultural lands. Participants called for local action to designate important agricultural lands and then advocated preservation of this land for optimum use in food and fiber production. Priority solutions included tax incentives to maintain land in agricultural production and incentives for the preservation of lower quality lands for development. Another possible solution involved land development and utilization of all rights-of-way.

Effects of Government Regulations

Five of the 38 small groups cited the impact of government regulations and laws as one of their three priority concerns. Their criticism dealt mainly with constraints on the free enterprise system and the government's traditional cheap food and fiber policy.

One group concerned with government programs and taxation policies which adversely affect agricultural lands, commented particularly on some actions being taken on a statewide level to deal with this concern. These actions included Florida's green belt laws which reduce taxes on farmland and Texas and Louisiana laws which provide for farmland taxation based on agriculture use rather than best potential use.

Some participants felt that the government should provide Federal income tax incentives to keep agricultural land in production while simultaneously assessing an impact fee on developers for converting agricultural land to non-agricultural uses.

While one group urged continued Federal income maintenance programs with target prices and deficiency payments, another group's first priority solution was for the government to eliminate its cheap food policy and allow the market place to determine prices and production.

Some participants felt that the government should provide Federal income tax incentives to keep agricultural land in production while simultaneously assessing an impact fee on developers for converting agricultural land to non-agricultural uses. A complete listing of all individual concerns and solutions, group concerns and solutions, and other pertinent data from the four Southern region workshops can be found in the four workshops proceedings section. A complete listing of all individual concerns and solutions, group concerns and solutions, and other pertinent data from the four Southern region workshops can be found in the four workshops proceedings section.
Local Groups Struggle to Protect Land, Lifestyle

"The rural sections of the county provide potential home sites for people who derive their incomes from outside the rural community... they contribute to the bidding up of land values. This makes expansion of farm operations more difficult on the part of the farmers." 

The sign in the middle of the big, rolling field demonstrates the problem: "For Sale, Gentlemen's Mini-Farms." There have been quite a few of these mini-farms sold in the rural areas of Orange County, North Carolina over the past several years, and the land they consume is rarely maintained in any type of agricultural production. The gentlemen farmers, many of them highly educated, well-paid, white collar workers employed at one of several nearby universities or the Research Triangle Park, are some of the major contributors to the loss of agricultural lands in the county.

Residential and other types of development pressures on agricultural lands could eventually wipe out agricultural production in Orange County, but a group of local officials and concerned citizens is working to ensure that agriculture remains a viable part of Orange County's economy in the future. The efforts of that group, the Orange County Agricultural Task Force, and the problems it confronts are the major focus of this study. However, it also includes a look at another type of agricultural land loss, the possible takeover of land for a public water reservoir in the Cane Creek community, which, though not as large in scope, is a much more volatile issue for some local residents.

Background: Agriculture in Orange County

Orange County is located in the north central Piedmont region. Once a predominantly rural, agrarian region, the county has developed rapidly and continuously over the past few decades. Although the county has little industry, it has experienced tremendous residential development because of its proximity to the cities of Durham and Raleigh and of the presence of the University of North Carolina at Chapel Hill, which is located in Orange County, and North Carolina State University, Wake Forest, and Duke University, which are all nearby. The Research Triangle Park office complex is also close at hand and places additional residential land demands on Orange County.

The rural sections of the county provide potential home sites for people who derive their incomes from outside the rural community," Joe Kost, a planner with the Orange County Planning Department, said. "Many of these individuals have sufficient income to purchase fairly large tracts of land in the rural areas, and as a result of that, they contribute to the/bidding up of land values. This makes expansion of farm operations more difficult on the part of the farmers."

Eber Perrie, Orange County director for the North Carolina Agricultural Extension Service, commented that "when land was cheap, many of these people whom I'm sure were sick of living and small farmers, but more of them are what we call hobby farmers or don't farm at all."

Agriculture is still a very important part of Orange County's economy. According to a report prepared by the Orange County Planning Department for the Agricultural Task Force, farm revenue in the county exceeded $23.5 million in 1978. Dairy products and tobacco are the number one and two agricultural products respectively, while beef cattle, poultry and eggs, and swine are also important, though secondary, commodities. Feed grain production is also important, with many livestock farmers growing food for their herds.

The biggest concentration of dairying operations is found in Bingham Township, in the southwest portion of the county, but dairy farms are also found in Cheeks, Chapel Hill, Little River and Cedar Grove townships. Tobacco farms are found primarily in the northwest section of the county, and poultry and egg operations predominate in the northeast. The various other types of agricultural operations, including managed forest lands, are scattered throughout the county.

From 1974 to 1978, agricultural income in Orange County increased from approximately $17.3 million to over $29.3 million. At the same time, the county's population also experienced tremendous growth. The Planning Department's report estimates that from 1960 to 1980 the population of Orange County has doubled from 42,970 to 85,720. It also predicts that over the next 20 years, the population will double again to 172,586. During the 10-year period from 1964 to 1974, the amount of land in farms in Orange County decreased by 33.3 percent. This compares with a 24.9 percent decrease for six neighboring counties and a 21.8 percent decrease for North Carolina as a whole. Census of Agriculture figures indicate that land in farms in the county decreased by 43,743 acres during this period, from 131,555 acres to 87,812 acres. (These figures include cropland, pasture and timberland.)

Citizens' Attitudes Toward Age Land Preservation

In her thesis, "Farming and Farmland Preservation: A Survey of Rural Landowners in Orange County, North Carolina," Margaret Watkins, a graduate student in the Duke University School of Forestry and Environmental Studies, reported that "63 percent of the rural landowners agree that Orange County should take action to protect farmlands. On the other hand, only 17 percent feel the county should take no action. "Nonfarmers people feel less favorably toward county action to protect farmlands than their farm-oriented counterparts," she continued, noting that non-farmers accounted for almost three-fourths of the negative opinions about preservation efforts. Watkins' findings are supported, with some reservations, by several of the Agricultural Task Force members. One member, Mrs. Evelyn Teer, said she felt that some sort of government action was needed to protect farmland. Teer, the wife of a dairy farmer, said that she and several other farmers she knew were at one time very much opposed to any government regulation of farmland, but they now could see a need for regulations to protect farmland. However, she said that preservation efforts would only...

Gentlemen farmers, many of them highly educated, well-paid, white collar workers employed at one of several nearby universities are some of the major contributors to land loss in this county.

In a 10-year period the amount of farmland in Orange County decreased by 33.3 percent or 43,743 acres.
Standing on the porch of the home site he may lose to the reservoir, Coy Armstrong (right) has joined other Cane Creek residents to form the Cane Creek Conservation Authority (CCCA) in opposition to the reservoir. Mike Teer (left) is the CCCA president and a dairy farmer concerned about the reservoir's impact on area dairy farms, the county's leading agricultural industry.

In May, 1979, the commissioners adopted a charge for the Agricultural Task Force. The Orange County Agricultural Task Force was to "prepare a report to the Commissioners on the state of agriculture in Orange County as supporting information for development of the county's Land Use Plan with objectives listed below:
1) Consider desirability of the county taking measures to preserve prime and/or unique agricultural lands and, if desirable, review techniques through which this might be accomplished. Examples of techniques to be considered may include, but need not be limited to the following: a) differential assessments, b) exclusive agricultural zoning, c) agricultural districts, d) fee simple purchase and lease back, e) transfer of development rights, and f) purchase of development rights.
2) Consider impacts of public projects such as roads, road construction, reservoirs, etc. on farming activities.
3) Consider impacts of farming on environmental quality, e.g., water, air, creation of nuisances.
4) Compile data on agricultural lands in Orange County, such as rate at which farmland is being converted to non-farm use and economic yield as a function of crop and soil type."

The commissioners appointed 26 Orange County citizens representing the seven county townships to serve on the task force. Additionally, Commissioner Barnes was named chair for the task force. Joe Kott and other staff members of the Orange County Planning Department, Ebert Pierce of the North Carolina Agricultural Extension Service, and Bob Tennant of the Soil Conservation Service also are active in the task force's efforts.

All of the task force members are landowners, according to Kott. "We have a majority of professional farmers or professional farm wives, and we have a minority of hobby or part-time farmers," he said. To date, no effort has been made to include developers or representatives of real estate interests in the task force's discussions, Kott said. "I expect that their opinions will be expressed through the mechanism of the advisory councils once, or if, policies are decided on for farmland preservation."

All members of the Agricultural Task Force serve on a voluntary basis. The County Commission provided a small fund for supplies and allocated staff time for members of the Planning Department to assist the task force.

"We have families whose sons are planning to farm, and they are very interested in trying to do something to help protect the farmland."

"It's my land and I don't want anybody to tell me what to do with it whether I farm it, sell it for housing or whatever."
Participation in the task force has been somewhat high; of the 27 members appointed, approximately 10 people have been actively involved, according to Ms. Walters. There has been a contrast between a core of very active and involved people and a number of people who accepted an appointment but fell through on their commitment to attend the meetings," she said. "This is only speculation, but it could be because of a certain level of distrust of government."

"The one thing that many people said when we approached them about this was that 'this is a waste of time'; the commissioners will not pay any attention to us; they won't listen to us," There was a feeling of alienation among many rural farmers about county government."

One of the very active task force members, Ms. Walters, also expressed disappointment about participation in the task force. "We have 26 members, and I know that more than eight won't be at any meeting," she said.

"We have had some citizens who are not on the task force coming in and opposing everything that we had done after it came out in the paper," Walters added. "I don't object to that because I think we need to get a better view of what all the citizens think, and most of us are too busy to get out and talk to everybody. But I am very disappointed in the members of the task force."

Since its inception, the Agricultural Task Force has received a great deal of assistance from the staff of the Orange County Planning Department. Planning Department staff have prepared and/or gathered some material which the task force has relied in carrying out its charge. These include the report, "Orange County Agriculture: Profile and Trends," the task force's draft problem statement and policy- objectives, and Walken's thesis. Planning department staff members have also assisted by securing other resource personnel to aid the task force and by conducting the task force survey.

Other resource personnel have included Ebert Pierce, the Orange County Agricultural Extension chair- man, and Bob Tennant with the Soil Conservation Service. Guests speaking with expertise in the area of land use planning and agricultural land preservation techniques have also made presentations before the task force. Dr. Paul

* "Existing farmland" was viewed as the most important factor in defining "prime farmland," slightly ahead of "existing and past farm land" and "prime soils."

* An 85 percent majority supported farmland preservation; 62 percent of that majority said they favored preservation as a means of maintaining the family farm tradition and 54 percent said they were in favor of "increasing the state's economic importance of agriculture to the county."

The use of Danielson's pamphlet, "Helping in Rural Areas: Policy Alternatives," which contains summary

This grant marker dates back to the death of S. L. Strathem in 1853. Today But Strathem is part of that continuing farming tradition that dates back for generations in this family, but the threat of urban sprawl is moving literally in the Strathem doorstep as the family farming operation faces a new menace to agriculture-city people who don't like the smell of hogs.

descriptions of the various preservation techniques the task force was examin- ing.

During its first meeting, the task force decided to survey all its members to decide on working definitions of farms and prime farmland and to define the problems to be addressed by the task force. The survey was mailed to all task force members, and the results were used in determining the group's plan of action.

Thirteen task force members turned in completed survey questionnaires. Highlights of the survey results were as follows:

* "Oder, the "files," and "farm vehicles" were most commonly mentioned comments against farm operations.

* Members cited "risks," "complaints, nuisance suits," "environmental regulations," "public land acquisition," "change in rural character," and "relocation," in that order, as their most pressing concerns.

At the third meeting, on October 17, 1979, the task force members adopted the following "problem statement" proposed by the county planning staff.

While preserving the land is a central part in the fight to save Cane Creek, area residents are equally concerned about using their farmland. Many residents feel that if the reservoir is built, recreational and residential development will follow and the area will soon lose its rural, agrarian nature.

"The proposed Cane Creek Reservoir will create"

...
Residents fear that if the reservoir is built, recreational and residential development will soon follow and the area will lose its rural, agrarian nature.

"The Cane Creek reservoir site was determined on the basis of careful, accurate engineering analysis. It was the feeling of all the OWASA members that this project represented an acceptable level of intrusion into an agricultural community."

The OWASA director said that in 1976 a task force was formed to discuss some form of local ownership for the water and sewer utilities. The utility task force decided to develop a plan and in February 1977, OWASA became operational.

The group's sales agreement specified that the Cane Creek Reservoir or some other suitable location be developed as a water supply source. Billingsley said he not only take away their land, but also destroy their community.

The parties involved in the controversy surrounding the proposed reservoir dispute the amount of land that will be affected. According to Cane Creek residents, the project will require approximately 2,150 acres of land, including 1,500 acres of wildlife mitigation land. Everett Billingsley, the executive director of OWASA, says the reservoir will require 758 acres, of which 80 percent is wooded and 80 percent of the remainder is unsuitable for agriculture. Billingsley also says that he does not think OWASA will have to provide the "extreme" amount of mitigation land cited by opponents of the reservoir, but he did not cite a figure.

The Cane Creek Reservoir controversy began in earnest in October 1976, although Cane Creek had been considered as a reservoir site several years before that. In 1968, the town of Chapel Hill experienced an extremely severe drought, and a pipeline had to be built to Durham to get water for the town to supplement that from University Lake, Chapel Hill's only source of water. At about the same time, new U.S. Geological Society maps identified the Cane Creek area as a potential reservoir site, according to Billingsley.

At that time, the University of North Carolina at Chapel Hill owned the Cane Creek water utility, Billingsley said. After the 1968 drought, the university commissioned Hays and Sanders Engineers of New York and Raleigh to investigate augmentation of the Chapel Hill water supply. "They chose Cane Creek as the ideal location based on several factors," Billingsley said.

In 1971, the North Carolina legislature ordered UCN-CH to get out of the utility business, and the process of selling the utility took five years, during which time the Cane Creek Reservoir proposal was shelved. The
“Since state law says that agricultural land is exempt from county zoning it doesn't really give us much protection or much to work with.”

OWASA will support zoning the Cape Creek watershed for agricultural use, low-density development and public water supply uses; OWASA will support county tax policies that will encourage maintenance of the agricultural use of lands in the watershed; and

OWASA will permit farmers access, upon reasonable terms, across lands owned by OWASA, where lack of such access may be detrimental to the farmer.

“The sounds fine on paper,” Mike Teer commented, “but who is to say they won't change their minds after they get their land?” He added, “Even if they are sincere, which we have reason to doubt, what would stop them from taking over our farmland?”

The proposed reservoir has already been the subject of some litigation. Since OWASA is an authority and not a governmental body, it had to go before the North Carolina Environmental Management Commission to request that it be granted power of condemnation. A hearing was held before a three-man panel of the EMC, with both sides in the controversy offering testimony. The panel voted 2-1 against granting condemnation powers to OWASA, but in a widely-criticized closed hearing, the full EMC voted to reject the hearing panel’s recommendation and granted OWASA condemnation powers. The Cape Creek Conservation Authority is now appealing that decision in the Wake County District Court.

The situation at Cape Creek is a bad one because both sides seem sincere and invested in their feelings about what is doing. The landowners feel that their area may lose its rural, agrarian atmosphere if the reservoir is built, and the members of OWASA feel that the Cape Creek Reservoir is the best choice for providing additional water for Chapel Hill. It appears that the matter will only be settled through litigation, and the settlement is not likely to be an amicable one.

OWASA has also had to apply for a 404 permit from the Army Corps of Engineers before they can build a dam on Cape Creek. The Corps is expected to rule sometime this fall on whether or not to grant the permit after holding a public hearing. “I imagine that whichever side loses will appeal to Federal court,” Johnson said, “and then we’ll be involved in more litigation.”

Results of the Work of the Task Force

One of the major results of the Orange County Agricultural Task Force’s efforts to date has been an increased public awareness of the need for agricultural land protection, according to Kott. “I think there has been an increased awareness on the part of the citizens of Orange County,” he said, “We have a number of people on the task force who are concerned about the land, and they have been talking about it with their neighbors and friends. There has also been increased awareness created through newspaper coverage of our meetings and participation at the meetings themselves.”

A local newspaper, The News of Orange County, has published several articles about the work of the task force. When the task force’s definition of a “bona fide” farm and other articles were publised, this caused something of a controversy among local citizens. “We attempted— I’m not sure how wisely - to give the task force the responsibility of defining for the zoning ordinance what a bona fide farm is,” Kott said. “The statutes of North Carolina law allow counties to zone but exempt from that zoning what they call bona fide farms.”

“For whatever reason, the legislators chose not to define what a bona fide farm was,” Kott explained, “so most zoning ordinances in other North Carolina counties have a criteria for determining what sort of farm will be exempt from zoning regulations. The planning director felt it was important that the task force take up this task.”

Asked why the legislature’s new zoning regulations would mean farmers from zoning, Kott said the task force had also questioned earlier if there would be any increases in its size. “There seem to be a number of different things that one is whether the task force could some day get together on a policy package. There has been some division among the task force members. Some of the agricultural policies are somewhat complex. Some are not. But suggestions to the task force, to the commissions this summer. “If we do come up with a policy package,” he added, “the results will still depend on the commissioners’ reception, which will depend on their perception of public opinion, and whether there are any tax monies to be spent for preservation or whether there will be a great deal of voluntary participation.”

The Agricultural Task Force is currently preparing to go out of existence after the final report is presented this summer, but there are ways that it could be used in the future, according to Kott. “It could be used as a sort of permanent advisory committee,” he said, “That would be an option. It could advise on any zoning or subdivision regulation changes, advise on the impacts of the use of eminent domain in certain areas and other development proposals. There could be a lot of value in that.”

Evaluation and Suggestions for Similar Efforts

While no one knows what permanent impacts the task force might have, there is a general feeling that the task force approach to the problem was a good one. “I think this is the correct way to go about dealing with the problems of agricultural land conversion,” Elizabeth Walters said. “But in other areas that might try it would have a little better participation than we did. I definitely think this is the way it needs to be done, with local participation.”

Kott and Pierce both agreed that the task force approach was a good way to address the problem. “The farm community and the rural population are some of the main efforts to preserve agricultural land, and the task force helps them do that,” Pierce said.

“Perhaps the most significant conclusion of this survey is the need for a survey of the members to ask in detail how they feel about this,” Kott said, “We have a lot of people who say that they are interested, but because of their expertise or their status, they are not able to participate.”
Aiken County, South Carolina
Nuclear Energy Plant
Transforms a Rural Community

CASE STUDY

Agriculture was the main source of income in the county before the arrival of the Savannah River Plant, but now industrial income far outweighs agricultural income.

In 1950, Ellenton was a small, rural town in Aiken County, South Carolina. Cotton was the major crop grown around Ellenton, and corn and melons were secondary crops. In 1951, Ellenton no longer existed at its former site. The entire town and several smaller communities within a 200,000-acre tract had been taken over as the site for the largest construction project ever undertaken by the United States Atomic Energy Commission, the Savannah River Plant.

During its construction, the Savannah River Plant had a work force of nearly 40,000 people. Although many of that number were people already living in the area, there was a massive influx of newcomers both for the construction and the operation of the plant.

This study looks at the effects the Savannah River Plant has had and may have in the future on agricultural land in Aiken County, one of three South Carolina counties in which part of the plant site is located. It also looks at other developmental pressures which, along with the Savannah River Plant, have changed Aiken from a largely rural, agricultural county to a predominantly industrial and residential one.

Background

Aiken County is located on the western border of South Carolina halfway between the Atlantic Ocean and the Appalachian Mountains. On the southwest side it is bounded by the Savannah River, which separates it from the state of Georgia.

With a land area of nearly 1,100 square miles, Aiken is the second largest county in South Carolina. However, 67,512 acres in the southwestern portion of the county are located within the Savannah River Plant complex. This is a large portion of the U.S. government property and unavailable for public or private use.

Prior to construction of the Savannah River Plant in the early 1950s, Aiken was a predominantly rural county experiencing only moderate growth. According to the county's draft land use plan, the population in 1950 was 13,377 with 65.6 percent of the population in rural areas and 33.3 percent in urban areas. By 1960, the population had increased to 81,068, with only a slight change in the rural-urban ratio. Over the next 10 years, the population grew by 10,000, and there was a sharp increase in the percentage of people living in urban areas, with the ratio then being 49.9 percent urban and 50.1 percent rural.

Based on projections made by the Aiken County Planning Commission in 1978, the current population is 110,991, and the urban-rural ratio is about 50-50.

Figures from the South Carolina Crop and Livestock Reporting Service show forest products to be the major agricultural commodity, followed by eggs and pork, soybeans, cattle, and calves. According to Aiken Bayles, the Aiken County extension agent, agriculture was the main source of income in the county before the arrival of the Savannah River Plant, and the major agricultural commodity was cotton. However, industrial income now far outweighs agricultural income; the SRF alone has the largest payroll in South Carolina.

Development Pressures in Aiken County

The Savannah River Plant has undoubtedly led to the conversion of a great deal of agricultural land in Aiken County, but primarily through indirect ways such as increasing the demand for residential acreage. Agricultural output has actually increased on the land consumed by the plant site. Gray Swingle, deputy director of Contracts and Services Division at the Savannah River Plant, said approximately 60,000 of the 200,000 acres taken over by the original construction had been tilled, with the rest of the land in open space or forest. According to a report prepared by the U.S. Forest Service, "Forested lands had received little if any professional attention and had been exploitively logged for generations leaving behind poorly stocked, low-valued stands."

Because the nuclear reactors at the SRF are not sealed in as they are at nuclear power plants, a large buffer zone was required, Swingle said, explaining the need for such a large tract. "We didn't want to let all that land lie fallow, so we decided to put it into forest."

Adjustments in the size of the SRF site have reduced its total acreage to 192,000 acres, Swingle said, and of that total, approximately 175,000 acres are now in forest. All of the land which was in crops is now in pine plantations, and in some of the rest. In all, 166,000 acres are in managed timberland, including 48,000 acres of hardwoods. The other 9,000 acres is in unregulated forest.

The U.S. Forest Service has been managing the SRF forest program since 1951. Since that time, over 105 million trees have been planted at the site. Timber is sold to and harvested by individual operators, and in 1977, the book value of the timber was $38 million.

Carroll Warner, chairman of the Aiken County Council, said that the primary demands on agricultural lands in Aiken County are for residential uses. Since 1950, the county's population has more than doubled, and it will increase even more if a proposed expansion of the Savannah River Plant takes place. Warner says that the demands on agricultural land are intensified by the fact that many of the people moving into the county are buying much larger tracts than are needed for homesites.

"The present trend in Aiken County is not to buy two acres of land to live on, but to buy anywhere from 10 to 50 acres," Warner said. "And of course there is only one place for people following this trend to go, and that is into the thinly populated, agricultural areas. People are probably raising a couple of horses or something like that, but the land is quickly being converted from agricultural to residential use."

A large part of the decline in agricultural lands over the last 30 years can be attributed to the presence of the SRF, according to Warner.

"It's really hard to say," he commented, "but I expect that about 50 percent of the land lost was converted to residential uses for SRF employees. You have highly educated, high-salaried people, and they have been buying large tracts of land to build houses. The amount of land they acquired was not in proportion to the number of people employed. Without the Savannah River Plant and the influx of these high-salaried people, I guess Aiken would still be a predominantly agricultural county."

Since the coming of the Savannah River Plant, several other industries have located in Aiken County. Several textile plants are located in an area known as Horse Creek Valley, and numerous other industries are scattered around the county. And the county continues to actively seek-and locate-new industry.

"I'm very concerned about our development patterns," Aiken County Planning Commission Executive Director Eric Thompson said. "We just built a new plant right out in the middle of a tract of prime agricultural land. The plant is in what they call the area of Aiken County, and it's just flat farmland as far as you can see. And now I hear we've got another new 6 million dollar thing coming in, and I don't know where it will be.

A proposed $2.3 billion expansion of the Savannah River Plant may well increase the development pressures on Aiken County in the near future. According to Jim Gaver, a Department of Energy information officer at the SRF, Congress has authorized $3 million for a study of the possibility of building a Defense Waste Processing Facility at the Savannah River site. Gaver said that while Congress has funded most of the preliminary design study, there is no guarantee that the expansion will take place. But if the facility is built, it will require a construction force of 5,000 people and a permanent staff of about 700.

"If we base our projection on history, we will probably get about 70 percent of those people in Aiken County," Warner said. "Therefore, the requirements for land for residential use will probably increase considerably."

"That's an influx of people will mean an increase in demand for additional housing, additional shopping centers, and other types of development," Thompson said.
Van Buren County, Tennessee

Citizen Involvement Prevents Land Destruction

A casual look at a former strip mine site can be deceptive. One of the first things an observer notices is a pit, which might be several hundred yards long, filled with beautiful, deep green water. If the mine site has been "reclaimed," there might be small pine trees growing around the mined area, and closer observation shows that most of the trees, and any other vegetation, are either dead or dying. The beautiful water that collects in these pits is actually highly acidic and deadly to any vegetation it reaches.

Driving around Van Buren County, Tennessee, one sees several of these former strip mine sites. Some of them have been covered with a thin layer of topsoil and replanted with grass and pine seedlings, but most have simply been abandoned to form huge barren scars on the otherwise attractive rural landscape.

Strip mining operations have been going on in Van Buren and neighboring counties for a number of years without much opposition from local people, but recently when the AMAX Corpora-
tion, a huge mining company headquarters in Indiana, announced its plans to strip mine a 4,000-acre site in Van Buren, Sequatchie and Blount Counties, residents decided they had enough. This paper describes the successful efforts of these residents, particularly those in the small community of Piney, to prevent the destruction of their land. However, it also reveals that success may only be temporary.

Van Buren is a rural county in southeastern Tennessee approximately 40 miles north of Chattanooga and 90 miles west of Knoxville. It is one of 16 eastern Tennessee counties which account for most of the state's coal production.

The influence of a powerful mining lobby brought about legislative action weakening parts of the state surface mining act and making it more difficult to stop huge mining operations in the state.
The companies are still trying to make money with their mine sites, and they've been doing so for a long time. The mining companies have been able to continue operating because they've been able to negotiate with the local communities and pay them for the use of their land. However, the local communities are not happy with the state of affairs. They want the mining companies to be held accountable for their actions.

In recent years, the mining companies have been facing increased scrutiny and opposition from local communities. The companies have been accused of环境污染, social displacement, and economic exploitation. The local communities have been demanding more control over the mining process and more compensation for the damage caused by the mines.

The mining companies have responded by implementing measures to reduce their environmental impact and to improve their social responsibility practices. However, these measures have not been enough to satisfy the local communities, who continue to protest against the mining operations.

The mining companies have also been facing increasing pressure from governments and international organizations to adopt more sustainable and responsible mining practices. The governments have been imposing stricter regulations and requiring the companies to invest in environmental and social mitigation measures.

The mining companies are adapting to these new realities by investing in new technologies and by partnering with local communities to develop more sustainable mining practices. However, the local communities are still demanding more from the mining companies, and the situation remains highly contested.
Tennessee, Mississippi, Alabama

Tennessee-Tombigbee Waterway: Boon or Boondoggle?

CASE

The entire project will require the purchase of 104,725 acres. Of the total acreage acquired so far, 78 percent was obtained through condemnation proceedings.

The Tennessee-Tombigbee Waterway will connect mid-America's 15,000-mile system of inland navigable waterways with ports along the Gulf. At the same time, however, the waterway has consumed more than 100,000 acres of the nation's dwindling agricultural land base.

Like any public project of such an immense scope, the Tennessee-Tombigbee Waterway has aroused quite a bit of controversy. Proponents of the waterway see it as an economic boon to the areas along its banks in Tennessee, Mississippi and Alabama, areas which the waterway's proponents say are badly in need of such an economic boost. On the other hand, waterway opponents see it as more of a boondoggle, wasting billions of taxpayers' dollars and causing irreparable damage to the natural environment of the area.

Regardless of one's views concerning whether the waterway is justified in economic and environmental terms, it is clear that the project has had a large impact on agricultural lands in the three states through which it passes. The purpose of this paper is to look at what that impact on agricultural lands has been in the past and what it may be in the future, and to see how the U.S. Army Corps of Engineers has dealt with the issue of converting agricultural lands to other uses. The paper focuses on both the Tennessee-Tombigbee Waterway itself and on a proposed expansion of the lower Tombigbee section of the Black Warrior-Tombigbee Waterway in south Alabama.

The Tennessee-Tombigbee Waterway was authorized by the Rivers and Harbors Act of 1946. The U.S. Army Corps of Engineers was assigned the task of acquiring the land and directing the construction of the waterway, which when completed will provide a continuous waterway from the Ohio and Upper Mississippi Valleys through Tennessee, Mississippi and Alabama to the Mobile Port on the Gulf of Mexico.

The Mobile District office of the Corps had the responsibility of acquiring needed lands in Mississippi and Alabama, while the Nashville District office was responsible for obtaining those lands required in Tennessee. According to figures provided by the Real Estate Division of the Corps' Mobile District office, the entire project required the purchase of 104,361 acres of land. Of that total, 78,174 acres were to be acquired through fee simple purchase, while easements were to be obtained on the remaining 26,187 acres.

As of February of this year, the Corps had purchased 89,495 acres for the waterway or 87 percent of the total acreage needed, and the remainder of the land purchases are scheduled to be completed by September. Of the total acreage acquired so far, 78 percent was obtained through condemnation proceedings.

The Black Warrior-Tombigbee Waterway runs from the port of Mobile to slightly north of the Birmingham Port, a distance of 453 miles. The original waterway system was built between 1895 and 1915, although the system has been modernized since then. According to Herman Weiss, the assistant chief of the Real Estate Division of the Corps' Mobile District office, the original Black Warrior-Tombigbee Waterway project called for only minimal land acquisition ($600 acres).

The Corps is currently conducting a feasibility study on the possibility of expanding the navigation capability on the Tombigbee River between Demopolis and Mobile to handle the increased large traffic expected when the Tennessee-Tombigbee Waterway is completed. The Corps estimates that by 1991 the combined traffic from the Tennessee-Tombigbee and the Black Warrior-Tombigbee Waterways will exceed the present capacity of the lower Tombigbee.

The lower Tombigbee project is in various stages of planning at present, Corps spokesmen said. The feasibility study, which has been going on for several years, was not funded in 1979, but it was in 1980. Current plans—contingent on funding—are to report the findings to the Congress in 1983, after which the Congress must vote on whether to authorize and fund the expansion. If Congress does authorize the project, it will require the acquisition of approximately 8,000 additional acres of land, according to the Corps officials.

Jack Mallory, an ecologist with the Corps' Environmental Studies and Evaluation Section, said the Corps historically has not always been too concerned with the environmental impacts of its projects. "Years ago, we would have just considered the economic impacts of a project and gone ahead and built it," Mallory said. "That is not the case now."

"On all of our civil works projects, we are required to look at both the economic and the environmental impacts. We have to come up with a plan for each."

While the Corps has conducted a continuous assessment of the Tennessee-Tombigbee Waterway's environmental impact, special consideration was not given to the effects of the waterway on agricultural lands until the mid-70's, when the government implemented regulations designed to protect prime farmland from destruction caused by Federal projects. A Corps document published in 1977 states that "The Federal Government has established a policy of minimizing the impact of any project on highly productive farmlands. Efforts are made to assure that such farmlands are not irreversibly converted to other uses unless other national interests override the importance of preservation of these farmlands or otherwise outweigh the benefits derived from these lands. The benefits of preserving these productive farmlands stem from their capacity to produce relatively more food with less erosion and with lower demands for fertilizer, energy and other resources."

Tommie Pierce, a reality specialist in the Planning and Control Branch of the Mobile District Real Estate Division, said that of the 104,725 acres which will eventually be purchased for the Tennessee-Tombigbee Waterway, roughly 22 percent was previously in open space, either cropland or pasture, while the rest was woodland. The predominant row crop grown on the affected lands was soybeans.

The majority of the land being acquired for the Tennessee-Tombigbee Waterway project is of marginal value for agricultural use according to the Corps spokesmen. "It is rich land," one commented, "but it is also subject to..."
for construction and spoil areas, and much of the other 40,000 will be put into public use as recreational areas.

The impact of the proposed lower Tombigbee project is of definite concern to some landowners and other residents along the lower Tombigbee River. Bill Wright, procurement manager for the Beatrice (AL) Division of the Scotch Plywood Company, said landowners along the river from Demopolis to Mobile were alarmed both by the fact that the Corps of Engineers was considering widening the river channel and by the fact that most of the landowners were not even notified about public hearings the Corps sponsored to discuss the waterway proposal. Wright said that he found out about the public hearings through a brief article in the newspaper and attended the first hearing held in Mobile Oct. 18, 1977.

"The composition of the hearing was primarily representatives of towing companies, the Tenn-Tom authority and coal companies and a few representatives of L & M Railroad, which seems to keep right on top of these things," Wright said. "There were virtually no landowners whatever."

The Corps had a second public hearing scheduled two days later in Demopolis, and Wright called several other landowners and got them to attend the Demopolis meeting. "Of course, we were again in the minority because not enough of the landowners knew about the hearing," Wright said. "The transcript of the hearing shows that very few landowners actually received any notice from the Corps about the hearings."

After learning of the Corps' plans for the lower Tombigbee, several landowners and other interested citizens formed a group called the Southwest Alabama Protective Association to represent their interests. "Actually that wasn't the start of it," Wright commented. "It started back around 1960 when the Corps of Engineers was putting in the lock and dam that finally went in at Coffeeville. They were going to put it in a few miles north of Jackson, and this group of landowners, we called it the Tombigbee River Protective Association, got together to prevent it. They [the Corps] were going to flood a good deal more acreage than they ended up flooding when they finally put it in Coffeeville. So we just changed the name to the Southwest Alabama Protective Association."

Wright said one of the main things concerning the group was the effect the Corps' project would have on wildlife habitats along the river. "This area is some of the best game habitat in the country," he said. "It is being managed constantly by private individuals and by companies, and it is impossible to replace."

"The Corps figures on condemning part of it for their ditch and then more of it for mitigation land. But there is no way to replace what would be lost, because even if they take the adjoining acreage for mitigation, if the area is already carrying its capacity of wildlife, there is a net loss of 50 percent of the available habitat." But the landowners also are concerned about the impact of the project on timberland. Wright, who disputes the claim made by Corps officials that only 8,000 acres would be needed for the lower Tombigbee project, says that the actual amount will be 16,000 acres, 8,000 for their ditch and another 8,000 for mitigation land.

"That would be 16,000 acres out of production as far as timber is concerned," he continued, "and timber is the primary base of the economy around here."

The Southwest Alabama Protective Association pressured the Corps to hold another public hearing at which landowners would have an opportunity to voice their opinions about the lower Tombigbee project for the public record. The Corps agreed, and the third hearing was held in Jackson, Alabama. "We took out ads in the newspapers, ran spots on the radio, and personally contacted the landowners to get them to the meeting," Wright said. "We had the community house in Jackson packed, and it was almost all landowners or interested citizens. It was the only hearing where those landowners really got a chance to voice their opinions because it was the only hearing most of them knew about."

Wright said that most of the landowners were not actually against the waterway; they were against the possible condemnation of their land. "The interest in preventing that was extremely high," he commented.

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About 50,000 acres of timberland will be taken in for construction and spoil areas while another 40,000 will be put into public use as recreational areas.

While the lower Tombigbee project is currently just an idea being studied, Wright said he is sure it will eventually be carried out. "The upper Tombigbee [Tennessee-Tombigbee Water] is a 300-foot channel from Pickwick to Demopolis," he said, "while the channel from Demopolis to Mobile is only a 200-foot channel. If they complete that channel from Demopolis to Pickwick then they are ultimately going to cut a 300-foot channel from Demopolis to Mobile. You don't spend a billion dollars digging a ditch that's got a bottleneck in it."

Wright and the other members of the Southwest Alabama Protective Association do not expect or want to stop the lower Tombigbee project. They would like, however, to see the Corps use easements instead of fee simple purchase to obtain the land needed for the project, because they feel that the timberlands and wildlife habitats along the river would be better managed by private owners.

Because of new federal regulations which require all agencies conducting federally-funded projects to consider the impacts of those projects on prime farmlands, the Corps of Engineers has done so, and its proposal for the lower Tombigbee project, if approved by the Congress, will probably not have a direct negative impact on any such "prime farmlands." But the indirect effect on those lands from such things as increased recreational, industrial and residential development apparently is not weighed as a factor in decisions on which projects should be carried out. Whether the Tennessee-Tombigbee Waterway is a boon or a boondoggle and whether or not the lower Tombigbee project is ever carried out, the fact remains that the waterway has already taken 100,000+ acres out of the country's dwindling agricultural land base, and it is questionable whether the country any longer can afford such huge losses of agricultural land.
Palm Beach County, Florida

Residential Boom Threatens Winter Vegetable Lands

CASE STUDY

While the county has enjoyed the economic benefits of a continuing residential boom, it stands to lose something potentially more valuable, a 100,000-acre tract of agricultural land uniquely suited to winter vegetable production.

"We're number one! Palm Beach County has the highest rate of residential development in the nation," the Palm Beach County (Florida) Land Use Plan boasts in its introduction.

But while Palm Beach County has enjoyed the economic benefits of this continuing residential boom, it stands to lose something potentially even more valuable, a 100,000-acre tract of agricultural land which is uniquely suited to the production of winter vegetables. And while there is a growing concern about the need to protect agricultural lands among some county residents, it is likely that this vital agricultural land will soon be destroyed by development if strict protective measures are not taken soon.

Endangered land in Palm Beach County is the warmest winter vegetable production land left in Florida.

Condominiums have replaced the tomatoes, peppers and other winter vegetables that used to grow on this land. Last year Palm Beach County shipped more than 11,500 carloads of fresh vegetables up the eastern seaboard to winter markets, but this production may be severely limited in the future if houses continue to replace vegetables in the warmest winter vegetable lands left in Florida.

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Pressures on Agricultural Lands in Palm Beach County

Palm Beach County is located on the Atlantic coast in the southern third of Florida. The county has a total land area of 1,178 square miles, and a rapidly growing population of approximately 550,000. A situation statement prepared by the Palm Beach County office of the Florida Cooperative Extension Service describes the tremendous development pressures which threaten a significant portion of the county's agricultural lands.

Agricultural Lands in Palm Beach County Situation Statement - December, 1979

Since the early 1950's Palm Beach County has produced a wide variety of agricultural crops with values of $75 million in 1954-55 to $55 million in 1978-79. Nearly 600,000 acres of land are in agricultural production at the present time. Approximately 500,000 acres of this are the rich muck soils of the Everglades Agricultural Area. Due to the unique characteristics of these soils and their location in the western part of the county, away from the coast, they feel no urban pressures now and none are anticipated in the future.

The remaining 100,000 acres in agricultural production are the sand lands along the eastern portion of the county closest to the Atlantic Ocean. Since the late 1960's urban pressures from the building of homes and construction in general have caused increased pressures on valuable agricultural lands. The population of the county has grown from 348,993 in 1970 to 557,629 in 1977, a 59.8 percent increase. All of this increase has occurred in the coastal area where farm land is receiving the greatest pressure.

Dairies and beef cattle operations have been squeezed out, but these can be replaced somewhere else. The critical concern has to do with the winter vegetables grown in this area. Tomatoes, eggplant, green peppers, sweet corn, green beans, cucumbers and squash are the affected crops. While these crops can be grown almost anywhere in the United States during certain times of the year, during the fall and winter south Florida is the only place temperatures are favorable for growth. These vegetables alone produced 163 million dollars at the farm gate in Palm Beach County in 1978-79. At values totaling 11,500 carloads moved from this county alone up the eastern seaboard providing fresh vegetables to winter markets.

The particular lands endangered in Palm Beach County are unique in that they are the warmest winter vegetable production lands left in Florida. When these disappear other lands in south Florida can replace them, but they will not be as warm. At this point approximately 20,000 acres of this land is in vegetable production.

About 95 percent of the vegetable producers are renting land on a one-year lease. Much of the land is being held for development. The increased construction rate makes even the "tenancy" of a one-year lease uncertain.

A number of younger vegetable farmers would like to stay in the business, but they feel that it will only be a matter of time before they are squeezed out. At this point the county has a reasonable land use plan. It is presently going through its first revision since its development in 1972. County planners have looked favorably at keeping agricultural land in agricultural production, but the pressures from developers and from vegetable producers, seeking to retire and make a profit on their long held lands, are quite stiff at times.

From the agriculturalist's viewpoint, no plan has been developed to compensate him for staying in agricultural production. Therefore, it is easy for some to sell their lands for a substantial profit and retire or do something else.

The aspect that should receive prime consideration is the influence of this one county's vegetable production on the fresh winter vegetable supply for a significant portion of the eastern United States.

Attitudes Toward Ag Land Preservation

Though there is growing concern among Palm Beach County residents (both private citizens and officials) about the continuing conversion of agricultural lands, to date there has not been a great deal of public support for any sort of extensive preservation effort. Most of the county's landowners have mixed feelings about such efforts. While they recognize the need to protect the county's unique agricultural lands, they are wary of any protective measures that might be taken because of their possible effect on the individual's private property rights.

County Extension Director Clayton E. Hutchison thinks that there is significant concern among some area citizens and officials about the loss of the agricultural lands in the eastern part of the county. "Some of the planners are concerned about it," he said. "Then some of the farmers themselves, particularly the young farmers, are concerned. These guys who would like to spend the rest of their lives farming are concerned, because many of them are renting land right now on a year-to-year basis, and they don't know if they are going to have any land to rent next year."

"Then there are others who are only concerned that they get their slice of the development pie before the bubble bursts."

The county's 1972 land use plan seemed to more or less write off the agricultural lands in the eastern part of the county by zoning it into what it called a "residential estate" area, which would allow for low-density residential development on large lots and made the area a sort of buffer zone between the densely populated areas along the coast and the Everglades Agricultural Area to the west.

According to John Caussey, a member of the Land Use Advisory Board which assisted in the develop-
ment of the plan, public sentiment at the time was definitely not in favor of ag land preservation. "I think that at that time everyone involved was more interested in selling their land for development uses than in retaining it in agriculture," Cussey said. "They were looking at it strictly in terms of dollars and cents, in terms of the land bank.

However, Cussey, who is still on the advisory board, believes that "the attitude is changing somewhat. I think there might be more interest now in preserving the land in agriculture. You have a certain amount of people in the south end of the county who are very definitely for limited preservation, limited development, and they're very supportive," he said. "It's interesting to note that since we started working on this, we have had more people come in and ask that their entire area be zoned for agriculture.

Harry King, the principal planner with the Palm Beach County Planning, Engineering and Building Department, said that the original recommendation of the planning staff in 1972 had been to reserve the farmland near the coast, but public opinion forced a change. "I was not here then, but I've heard that the plan that was recommended did reflect a desire to protect the agriculture in that area," King said. "And there was a definite opposition to that from the private property owners in the area. They were organized and they had an attorney representing them... He was able to convince the political decision makers that zoning, or even a guideline recommendation, would be taking away their property rights. The Board of County Commissioners agreed, and the '72 plan was modified.

With no restrictions on its use, the farmland has been decreasing steadily, and a number of large tracts have been sold. Many of these tracts are either already developed or are being held only until the price for development is right.

Several farmers in this area who have sold all or part of their land for development indicated that they did so because of economic necessity. Mike Macheck, who sold his 240-acre farm, said he was forced to by poor market conditions and finance. The land on which he once grew green beans, peppers and gladiosa, is now nearly ideal as far as agriculture is concerned. "Eighty acres of it is now being held for speculative purposes," Macheck said. "Forty acres is being used for cattle and horses, and the other 120 acres is all in homes." Macheck sees little hope for the remaining agricultural lands to stay that way, "I don't know how you could do it," he said. "I mean people get in the same strait I was in financially, and the first thing they do is sell off part of their land to survive. And they get offers that are fantastic and astronomical. It's hard to put a control on something like that," Macheck said his brother Albert had also sold 130 acres which are also now all in homes.

Don Hall is employed by American Foods, Inc., which is in the process of selling an 819-acre farm because of losses brought on by severe weather. Hall said the land has been for sale a year and a half, and it is currently being leased for a horticultural operation on a year-to-year lease. Hall said whatever happened to the land would be at the discretion of whoever buys it, but he predicted that it would not remain in agricultural use. "At the price it will go for, it can only grow horses," he said.

Bill Winchester, a farmer who recently sold about 800 acres of his farm, said he sold the land for a variety of reasons, including economic pressures, the desire to make a profit, and the fact that he was no longer interested in farming. Although he said he would have been if there had been more profitability in farming. Before he sold it, Winchester's land produced mostly winter vegetables and hay, and sometimes gladiosa. He said that the land is still being used to produce vegetables, but he added, "I would not think it would continue to be used in agriculture. When you are losing money every year, and you are borrowing money to farm with, the banks pretty soon say, 'Hey, this is enough of this fun and games. Where is our money?'"

Winchester said he still owned some farmland in eastern Palm Beach County, and he wanted to continue farming it, but he wasn't sure that he and other farmers in the area would be able to keep on. He planned this fact on the U.S. government's policy of allowing Mexico to dump its winter squash on U.S. markets. "Unless that policy is changed," he said, "farming in South Florida is going to be dying out very rapidly. And it is not because there aren't a bunch of farmers who want to stay here farming. They want to farm, but they are losing money.

The county extension director noted that while more people in Palm Beach County now seem to be concerned about the loss of agricultural lands and the need to control it, he knew of no organized efforts to address the problem, except those of the county planning department in developing a new land use plan for the county.

Revisiting the Palm Beach County Land Use Plan

Palm Beach County originally adopted a land use plan in 1972. It states: "The primary purpose of the Land Use Plan is to protect productive agricultural land," but is noted earlier, because of the inane nature of this plan, that people the owners the plan did not put forth any mechanism for protecting ag lands. In 1972, the plan passed a law commonly known as the Local Government Comprehensive Planning Act, which mandated that all local governments develop and adopt comprehensive plans. Harry King said that the land use plan, which is currently being developed, will differ from the 1972 plan in that it will provide for an inventory of ag lands and use controls and it will have the weight of law because the government also mandated that local governments revise their zoning ordinances to ensure that the recommendations of the comprehensive plan are carried out.

King said that the proposed new land use plan, which has been approved but not officially adopted by the Board of County Commissioners, would give some protection to the agricultural lands in Palm Beach County. "That area is recommended for agricultural districting," King said. "Zoning regulations as applied to the land would effectively only allow existing agricultural subdivisions to continue. And active agricultural lands that are in production at this time...would be required to stay in agriculture.

King predicted that it would be difficult to get agricultural districts plans adopted without some sort of plan to compensate the owners of lands within the ag districts. "We're not going to get that passed unless we have something other than regulation to make it politically acceptable," he said. The planning department is considering a variety of techniques to be used along with agricultural districting to protect ag lands, including various forms of payments for development rights and tax incentives for development rights, he noted. The actual plan will hopefully include a combination of regulations and compensation to help keep land in agricultural use.

There is some support for such a plan among the county commissioners, King said. "Two members of the commission are actively supporting this kind of a concept," he said. "They apparently want to have provided within the comprehensive plan a means by which agricultural uses can be maintained in that area but do not offend or destroy the individual property owner's rights. In short, in the words, we have been given direction to come up with some kind of a technique that will compensate the property owners.

"The only way agriculture can actually be preserved is to have the plan on this carrot and stick routine of having both the regulatory mechanism through zoning to assure that agricultural use is preserved in some areas and get that to be politically acceptable through some other mechanism. So the property owners do not feel that their property has been taken by the government. It will have to be political in its conception of that, because we can do legally, based on development regulations within the state of Florida and other cases that have been decided, may not necessarily be what can be accomplished politically."

Although he feels that Palm Beach County's land use plan will offer some sort of protection for the unique agricultural lands in this eastern part of the county, King sees the plan, and any other sort of government efforts to preserve agricultural lands, as only stop-gap measures. "If we can still off conversion of agricultural lands for a long enough period of time, I believe the economics of agriculture are going to catch up to the economics of development. In other words, the value of the land as agricultural land will be seen as something more than just some kind of nebulous planner's perspective of 'we've got to maintain the agricultural land or we are not going to have a food base.'

There are a great many 'if's' involved in discussing any agricultural land preservation plan in Palm Beach County. If the planning department can come up with a plan that is being supported by the local people, that plan meets the approval of the board of commissioners, and if public opinion is in favor of it, then possibly the important and unique agricultural lands in the county can be preserved. However, however, even though it appears that public support for such efforts is growing, the massive strong opposition to such efforts which must be overcome. One thing that is certain is that unless actions are taken soon, there will be nothing left to preserve because these valuable lands will have been planted with their last crop - houses.

"Farming in South Florida is going to be dying out very rapidly. It is not because there arent a bunch of farmers who want to stay here farming. They do want to farm, but they are losing money."
DeSoto County, Mississippi
Selling the Family Farm for Profit

CASE STUDY

For 44 years W. R. Wooten farmed and operated a small dairy on 160 acres of farmland in the northwest corner of Mississippi.

Then Memphis spilled its budging population over the state line and snowballed into rural DeSoto County, Mississippi, "the Fastest growing county in the Mid-South."

Engulfed in the development of houses and subdivisions for thousands of workers commuting to Memphis, Wooten joined his neighbors and sold 158 acres "for prices I had never heard of."

Wooten's small acreage combined with his neighbors to give First Mississippi Corporation of Jackson a 2,600-acre tract of farmland for housing development. It was only the beginning.

Hills of new homes and fields of asphalt began to dot the countryside between Memphis and the county seat of Hernando as literally thousands of workers discovered they could live in rural Mississippi and work in Tennessee.

The number of farms in DeSoto County went from 999 in 1969 to 743 in 1979. Although the average farm size did increase, some land was lost forever to agriculture as sewer lines stretched across the hills and pavement sealed the pasture land. In that same time period, however, the value of agricultural products sold in the county skyrocketed from $10 million to nearly $27 million, the value of which agriculture easily retained its position as the leading industry and revenue producer in the county.

Bordered on the north by the state line and on the west by the Mississippi River, DeSoto County is split by Interstate 55 which carries northern visitors to New Orleans. The county is named for the famed Spanish explorer Hernando DeSoto, who in the 1540's became the first European to see the area.

Although one-seventh of its 478 square miles is in the fertile Mississippi Delta, most of the county is composed of brown loam, wind-blowd snow with low natural fertility. Much of the land is highly erosive with steep slopes suited to pasture and timberland.

Soybeans have replaced cotton as king in DeSoto County with only 13,500 acres of cotton planted this year as compared to 72,000 acres of soybeans. The dairy herds of the 1940's and 50's have given way to beef cattle as one of the leading income producers, and only 27 Grade A dairy operations are left to remind farmers of the time when there were 15 or 20 dairies just in a five or six mile radius.

With a population of 22,900 in 1880, DeSoto County's census count never fluctuated more than 4,000 persons for the next 80 years. Then the 1970 census revealed a population of 35,885. In the next five years that figure grew by 37 percent to 49,119. The 1980 census is expected to unveil another dramatic increase to about 63,800.

"People from Memphis moved down here because the taxes are cheaper, we had good schools and we didn't have the integration problems that Memphis had," explained Wini Brown, an insurance salesman who once farmed and operated several small dairies. Like his neighbor Wooten, Brown sold his 160-acre farm to the Jackson development corporation.

The Southern development and the Horn Lake development were built primarily just for housing the people who worked in Memphis," Brown said. "Land that sold back in the mid 50's for $400 and $500 an acre now sells for $4,000 and $5,000 an acre. And if you're farming, that means that you can make a profit in one year (by selling) that would require 10 years otherwise."

DeSoto County has always been a rural area comprised primarily of small farming communities. Although the 1970 census showed 70 percent of the population living in rural areas, the number of housing units built in the county since then has increased from 10,205 to 14,334. Now the DeSoto County Economic Council estimates the county to be only 50 percent rural as areas that were once farming communities have gradually become bedroom communities for Memphis commuters.

Neither Brown nor Wooten, however, seem to think of themselves as small farmers forced off the land by urban sprawl. Perhaps "enclaved" off the land is a better word.

"My wife didn't want to sell at all. She just stood me down to the last, but they (development corporation) were paying prices I had never heard of for land here, so I did sell," Wooten admitted. "She just stood me down to the last, but they (development corporation) were paying prices I had never heard of for land here, so I did sell."

"First Mississippi Corporation had a high pressured salesman up here and he bought Mr. Hurt's land first and then he came here and my place kinda hinged on whether my neighbors got to sell or not, so we all sold together at the same time. Of course my intention was to go on and buy more land, which I did."

With the money he made from the land sale, Wooten bought 320 acres in another county. He later sold that land and bought 240 acres 15 miles from home. Wooten leases the farmland to other farmers and receives one-fourth of the profits.

Even though money was a motivating factor in selling the land, Wooten found the sale to be a welcome alternative to the problems of advancing age and farm labor.

"I was just too old to drive those tractors like I did when I was young," Wooten said. "The doctors ordered me to get off those tractors, so I did."

When Wooten first started farming, he farmed with mules and had six families helping him work in the dairies and in the fields. Eventually the help dwindled to one fellow and a large family.

"The old man had been with me so long, more than 30 years. He had some boys, but they didn't want to continue in dairying," Wooten said. "They wanted to go to Memphis and work."

With the death of his longtime helper, Wooten decided to give up farming. "I just wasn't making enough profit to hire labor," he said.

Wooten's own sons finished college but never returned to farming. One became a school principal while another son went to work for a chemical plant.

"I would have loved it if my boys had stayed on the farm with me," he said. "If they had, we would still have a big dairy somewhere and they would be out here running the dairy and farming. When they came along, I worked so hard and so many hours that they could see if they could just get a job doing something else, it would be so much easier than farming."

We're farming land now that shouldn't ever be row cropped . . . Agricultural land that has been used for housing developments has been replaced with land not previously farmed, land just now being cleared."

Land that sold back in the mid 50's for $400 and $300 an acre now sells for $4,000 and $5,000 an acre. When you're farming, that means that you can make a profit in one year that would require 10 years otherwise."
Wayne Anderson, on the other hand, is a DeSoto County farmer who has chosen to work the family farm—even if it means losing a little land along the way.

When Anderson's father died several years ago, land values and the resulting inheritance taxes on 1,500 acres were so exorbitant that Anderson had to borrow money to pay the taxes. In order to repay the loan, Anderson took 147 acres of "clear land without mortgages or anything like that" and developed it for a housing subdivision.

The land was used primarily for beef cattle pasture land before Anderson put in a blacktop road, water lines, underground utilities and telephone cables. Although land in his area sells for $1,500 to $2,500 an acre as farmland, an acre in Anderson's subdivision brings about $5,000 with a neighboring land developer selling lots for $12,000 an acre.

Anderson shares the family farming operation with his son and his sister. Just as they did each morning before his father died, the three of them meet after breakfast at the old family home where the sister still lives. They review the activities of the day and settle any business matters relating to the farm.

"I would have loved to have held on to the land," Anderson said. "I love cattle. It's one of my main things. But when you get a pretty good inheritance and a tax is put on you, then you've got to do something. We didn't want to just sell.

"You know, it's bad when a man has children and they grow up and they work the farm, too, just like I have. Then they have to pay inheritance on land that they have worked for all their lives.

"I'm 58 years old and I've always lived here. Then suddenly I have to turn around and almost pay as much inheritance as we paid for the original land."

Like Anderson, real estate broker Barry Bridgeforth also inherited farmland, but unlike many farm families, the Bridgeforths avoided burdensome tax problems through family estate planning.

"We are a very unusual family in that the oldest brother is an attorney and has spent half his life researching to keep the family from losing money or land due to taxes," Bridgeforth said.

"I'd say that a large portion of my listings that I secure in my real estate company, especially on farmland, have something to do with paying for estate taxes," he explained. "I think that estate tax is one of the reasons that the American farm is getting smaller and smaller because the estate tax people are taking more than they should be getting."

Although Bridgeforth is a successful young businessman in DeSoto County, his heart is on the farm where he grew up milking 175 dairy cows on 1,200 acres.

"I'd much rather be farming than running a real estate office—even making less money," Bridgeforth said. "If the farm had been big enough, I would never have left in the first place, but it wasn't big enough for my father, myself and my brother to make a living.

"I thought it was a pretty good sized farm at the time, but you start looking at the economics of it and there was no way to expand at that time in our location. When you have 1,200 acres divided among three families, you are getting awfully small." In 1969 Bridgeforth's father sold two tracts of land for housing developments. One 500-acre lot development included a 70 and a 50-acre lake. Another 300-lot development was placed on land previously used for dairy operations. He also leased 95 acres to Memphis Stone and Gravel Co. Bridgeforth is now in the process of being reclaimed.

"When you go into productivity on farmland, you have three categories—number one being good farmland, number two being somewhat good farmland and possibly rolling pasture and number three being hill land," Bridgeforth explained. "This property my father sold was about one-fourth number one land, one-fourth number two land and probably 50 percent hilly pasture land not very productive for farm use."

"That was probably one of the considerations for Daddy selling it in the first place since it had less productively for farming than he could sell it for."

Bridgeforth said the major consideration in selling was to help his father become financially independent and debt free in order "to enjoy himself the rest of his life."

The land sells brought a drastic change to their farming community. "We were a very close knit community away from everywhere," Bridgeforth said. "We were in the center of DeSoto County about 10 to 12 miles south of Memphis. The change has been a large influx of people."

"I'd say about 200 homes have been built on the property Daddy sold and that was on Pleasant Hill at the time was probably 150 people. You take 200 homes with an average family of three and a half people and that's over 700 people living there. That is a lot of people and they all came from outside.

"After 10 years of being gone from the daily routine of farming, Bridgeforth has used money he earned from his real estate business to purchase land and farm 400 acres.

"I cut 240 acres of wheat and grossed out or probably lost $5,000 on it," he said. "I did a poor job of it, had no labor, used a school kid and tried to do some of the work myself. Luckily I had a good year in my real estate business."

Bridgeforth admits that he bought the land partly as a tax write-off, but he is also quick to point out that farming "is in my blood."

"I wanted to give my sons an opportunity to grow up on a farm," he said, "I think it's good, it's wholesome. If nothing else, they'll have an agricultural background that will help them in anything they do if they know where their food is coming from, if they see the crops go into the ground and come out of the ground, and if they see how it's done and work hard."

While his heart may be in farming, Bridgeforth believes he can never make a comfortable living on only 400 acres of farmland. The small farmer, he says, is something of the past.

"He [the small farmer] can't make his $30,000 or $35,000 a year it takes to live on a small 600-acre farm," Bridgeforth said. "He has got to have 600 to 1,000 acres and there is just not enough available lease land in DeSoto County. Now I can't say for the Delta or other areas, I'm just looking at DeSoto County.

"It's a bid war here. Every year the farmers are fighting for more land in DeSoto County, especially soybean farmers. Most of the cotton land has been taken up. The family son farms all of it. People move in and everybody tries to lease up land. It is quite a bid war every year."

As the bid wars drives up the value of farmland and housing developments reduce the availability of farmland, DeSoto County farmers have begun to use land they never would have farmed 20 years ago.

"We're farming land now that shouldn't be up row crops," Bridgeforth said. According to John Blake, Mississippi Cooperative Extension Service county agent for DeSoto County, "Agricultural land that has been used for housing developments has been re-

placed with land not previously farmed, land just now being cleared. Groosen agreed with Blake and pointed out "that swamps and hills that couldn't have been worked before are being worked now."

"My people came from Oxford, Mississippi," he said. "I remember when I was a child, we would go back to Oxford and all of those fields were growing up in bushes and things. Now they have made the finest pasture land out of it that you have ever seen—out of old hills—just wonderful cattle farms. They are working the hollows that they didn't use to work."

"But you see, when they take in all of this land and then there is no more to take in, what are they going to do? They are going to have a problem," Blake believes the problems of high land values and a possible land shortage are already beginning about a change that is just beginning in DeSoto County.

"When the land values go up, agriculture doesn't just go out," Blake said. "It changes. We're going to higher yield crops, fruits and vegetables. I just finished a plan for 60 acres of strictly horticulture crops complete with irrigation."

Horticulture crops will be a new twist for Mississippi farmers that were enroute of the vast southern plantation system in which cotton was king.
"For most farmers, selling their land is like selling one of the children."

Memphis residents who discovered they could live in rural Mississippi and work in Tennessee have brought a dramatic increase in population to DeSoto County and converted the rural county into an endless succession of subdivisions and realty signs.

With the gradual passing of cotton from the DeSoto County agricultural scene, the small farmer with just a few hundred acres also may predictably pass as he sells out to larger farmers or ambitious development corporations.

"For most farmers, selling their land is like selling one of their children," explained DeSoto County real estate agent Sue Gustafson. "If there were ever a group of people that did not want to go out of business, it is the farmers. It is in their blood. When the trees begin to put out leaves in the spring, they are going to begin to break ground. But every now and then it just becomes an impossibility."

Like everyone else, the farmer stays in business as long as the cash returns and the credit keep him afloat. High interest rates and soaring land values have made that task increasingly difficult.

"The capital investment in land and machinery that the American farmer has today and the governmental controls on food and fiber are keeping prices down so low that the farmer can't make a decent living," said Richard Brown, who has been farming in DeSoto County for over 20 years. "We can't go out here and make it 100 percent productive, so what the Government is doing is that they are controlling his (the farmer's) prices so that he can't make a living... Let the American farmer get 100 percent productivity and he can feed the world—but make the world pay for it."

Winn Brown noted that farming efficiently requires good business practices and yet "I don't know of any other business that you have to take what the buyers want to give you rather than what you want for it."

"Take your gas companies and your automobile people—if they figure it costs them $100 to make the thing, they're going to sell it for $50. If their cost goes up $10, they're going up on you $10 or $20. If it costs a farmer $10 and the market is tight, he makes a little. If the market is low, he may not come out."

While farming may be "in the blood" for some people, the buying and selling of farmland still hinges on the old economic principle of making a profit to make a living.

"It might have been the best thing for us to have gotten out of farming," said Brown, who has been summing it up for many farmers who eventually sell all or part of their land. "I think all we were doing was spinning our wheels and doing a lot of work and spending a lot of money and buying a lot of equipment. When we get through, there wasn't a lot of cash flow in it. It was just too tight."

I would have loved it if my boys had stayed on the farm with me. If they had, we would still have a big dairy somewhere and they would be out here running the dairy and farming.

When the land values go up, agriculture doesn't just go out. It changes.

Conclusions

Researchers will not have to travel far or talk to many farmers and ranchers before noticing the truth of an old axiom: Money motivates. As the SRDC staff compiled this regional report, our studies revealed that for most farmers who have sold their little corner of the nation's prime and important farmland, it was simply a matter of economics. They could make more money selling an acre than farming it or grazing it.

While some farmers never miss the financial uncertainty and long hours of labor attached to farming, many admit being bothered by feelings of guilt and nostalgia—guilt for having sold the family land and nostalgia for the value systems of farm family life.

Yet sentimental attachments to the land or occasional concern over a predicted land crisis are somehow overcome by money over matter—if offered enough money, then it doesn't matter.

A Mississippi farmer who might have gotten $500 an acre 20 years ago found $5,000 an acre today too irresistible to turn down as metropolitan America began to sprawl across his 140-acre farm. It was money in the bank without having to worry about floods, droughts, plant diseases, high interest rates and the price of fertilizer.

During the past decade, prices for farm real estate rose 211 percent in the United States with prices for farmland and buildings in the 48 conterminous states reaching an average value of $609 per acre.

Over the past several years, the Southeastern states seemed to be vying for leadership in the race toward higher prices. In the early 1970's, Alabama and Georgia values increased at a faster rate than those in other surrounding states or in other parts of the United States. Today Mississippi and Tennessee are ahead.

Credit financing has become a critical factor for farmers forced to pay "gold" prices for the precious commodity of land. Ninety percent of the farmland transfers in the United States in 1979 involved credit financing compared to 80 percent in 1970 and 67 percent in 1960. The availability of credit and the terms involved are crucial to both new and existing farmers.

If a farmer purchased land for $800 an acre, for example, a simple interest charge of 15 percent would require $120 for the first year before any payment in principal would be made. Few crops can support such payments.

Faced with these problems and the uncertainty of Mother Nature's impact on farm yields, farmers and ranchers throughout the nation often find it easier to let go than to hang on.

A few years ago we began to hear the early warnings of an oil and gasoline shortage, but most of us didn't believe it. Now we are hearing the beginning murmurings of an agricultural lands shortage—and even worse, a world food crisis. Again we either haven't believed it or haven't heard it.

If the primary reason for loss of our agricultural lands truly is money over matter, then our experiences with oil and gas may indicate that very little progress will be made until food matters more than money... or costs more than we can afford.
Film Depicts Potential Rural Land Use Conflicts

A 26-minute film entitled "Land, with Love and Respect" is available for rental ($12) or purchase ($200) and deals with social and economic issues resulting from conflicting needs of farmers and non-farm residents. Presented by the New York State Cooperative Extension Service, the film attempts to help people understand potential conflicts over land use and searches for realistic solutions to these conflicts.

The film presents the considerations involved in judging the best use of a land site - farming, housing development, environmental preservation. "Land, with Love and Respect" provides knowledge of appropriate maps, surveys, and photos and discusses how to develop land use map overlays.

The film suggests effective methods of allocating land and money for public investments (e.g., roads, sewers, water), and at the same time preserve major, irreplaceable tracts of land to produce food.

For further information write the Audio-Visual Resource Center, Box 47, Roberts Hall, Cornell University, Ithaca, NY 14853, or call 607-255-2090.

Motor Vehicle Population Rivals Humans for Land Use

Concern for protection of prime farmland has often centered on coping with an increasing population and therefore a greater need for land. The following set of statistics, however, may suggest a more ominous source of growth.

Average Annual Increase in the U.S. (Millions)

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<th>Decade</th>
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<th>Motor Vehicles</th>
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<td>1950's</td>
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<td>2.5</td>
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<td>1960's</td>
<td>2.3</td>
<td>3.0</td>
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<tr>
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<td>4.4</td>
</tr>
</tbody>
</table>

During 1979 the population increased by about 2.0 million while motor vehicles increased by about 5.6 million. Although America now has about one vehicle for each person age 16 or older, 52 percent of rural households own only a single automobile while 15 percent of rural households, 57 percent of the rural poor, and 45 percent of the rural elderly do not own an automobile at all.

Oregon Extension Develops Land Use Simulation Game

A land use simulation game for 9 to 19 players has been developed by the Oregon State University Extension Service. Tested and refined over a three-year period, the game can last a few hours or a few days as players learn how difficult it is to make land use decisions that result in an "ideal" community or region.

Further information about "Trade-Off," the land use planning game, can be obtained from Charlotte T. Harter, author for Economic Education, Millam Hall 127, Oregon State University, Corvallis, OR 97331.

Publications Review

Farmland, Food and the Future, edited by Max Schnepf. The general subject of this book is agricultural land retention. Three questions are addressed: 1) What are the important facts and trends? 2) What are the issues and how important are they? 3) What are people doing about these issues?

Copies are available from the Soil Conservation Society of America, 7515 NE Ankeny Road, Ankeny, Iowa 50021. The cost per copy is $6 for members and $8 for non-members.

Agrisales Exchange is a newsletter issued by the National Association of Counties (NACo) Research Foundation. The Foundation has an agricultural lands project devoted to alerting the public to the farmland conservation problem and to finding ways of protecting the country's prime farmland. It is working to develop closer relationships between farmland owners and county officials.

Copies of the newsletter can be obtained by writing to NACo Research Foundation, 1735 New York Avenue, NW, Washington, DC 20006.

Land Ownership in the United States, by James Lewis. This report is based on a 1978 resource economics survey of landowners in the United States. The survey was conducted by the Economics, Statistics and Cooperatives Service of the USDA and portrays a broad picture of landowner characteristics. Forthcoming publications will provide more detailed data in particular regions of the country.

Copies of this April 1980 report (AIB No. 435) can be obtained by writing the Economics, Statistics and Cooperatives Service, USDA, Washington, D.C., 20250.