Research needs in

## Rural Development



Report of the
Southern Regional
Rural Development Task Porce

# REPORT OF THE 

SOUTHERN REGIONAL
RURAL DEVELOPMENI
TASK FORCE

Prepared by a Joint Task Force of

The Southern Agricultural Experiment Stations The Southern Regional Rural Development Research Council

The Land Grant Colleges of 1890
The Southern Cooperative Extension Services The United States Department of Agriculture
The Southern Rural Development Center Private Industry

## preface

This Rural Development Task Force is described as a basic functional unit for ascertaining research needs in the Southern region and as a primary source of regional planning information. Specifically, the purpose of this Task Force is to:

1. Determine principal rural development research needs in the South. This determination requires: (a) a review of current research, (b) an assessment of inmediate and longterm problems in rural areas of the South, (c) an evaluation of these problems in terms of their potential impact and the ability of research results to assist in their solution, and (d) assignment of priorities to research needs.
2. Suggest research approaches likely to be productive in each priority area.
3. Identify research inputs needed to accomplish the desired results, including SMY's needed by each discipline involved.
4. Recommend any needed reallocations of current research resources.
5. Present the results developed by the Task Force in the form of a written report

The Southern Regional Rural Development Task Force first met on March 5 and 6, 1974. Individual assignments were carried out following this meeting, and the Task Force reconvened on May 21 and 22. At this second meeting the Task Force developed the recommendations presented later in this report.

## TASK FORCE MEMBERS

The Task Force membership represented the state agricultural submission. The report does not explicitly follow the format suggested by the Planning Committee. It was felt that the complexity of linkages and relationships in rural development research problems did not easily lend themselves to "individual problem presentation." However, we feel that the major issues discovered in our research review and in discussions regarding reconmendations are clearly visible in the format employed.

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A PERSPECTIVE ON RURAL DEVELOPMENT PROBLEMS, NEEDED RESEARCH, AND CLIENTELE $1 /$

## Problems

The term rural development has generally been interpreted as encompassing community development, economic resource development, human resource development, and, in certain cases, natural resource development. It may help to define the rural development process more clearly if we consider what it is supposed to do. The President's Task Force on Rural Development defines the purpose of rural development as :
...to create job opportunities, community services, a better quality of living, and an improved social and physical environment in the small cities, towns, villages, and farm communities in rural America. [12]

The degree of commitment to achieving the purpose of rural development is noted in Title IX [Section 901 (a)] of the Agricultural Act of 1970

The Congress commits itself to a sound balance between rural and urban America. The Congress considers this balance so essential to the peace, prosperity, and welfare of all our citizens that the highest priority must be given to the revitalization and development of rural areas.
The USDA Regulations for Programs under Title $V$ of the Rural Development Act of 1972 interpret the overriding purpose of rural

[^0]development as "to encourage and speed economic growth in rural areas, to provide for jobs and income required to support better community facilities and services, to improve the quality of rural life, and to do so on a self-earned, self-sustaining basis."

Realization of these goals will be difficult. To gain some perspective on the complexity of the situation, some of the problems facing rural areas are briefly enumerated. Broad problem categories include jobs, education, health, social institutions, and community facilities. Specific questions (but still too general for action) are: Should people be moved to jobs or should jobs be moved to people? Are skills and education such that gainful employment can be found? What balance should there be between general and vocational education? Where should schools be located? How can education be financed and who should finance it? What are "reasonable" levels for health services? What kinds of welfare programs are needed? How can industrial development be speeded up? How does industrialization relate to the problems of zoning, open space, and environmental pollution? If industry locates in an area, what will be the increased demands for housing, water and sewers, school facilities, health services, churches and other social institutions, police and fire protection, streets and highways, and other community facilities?

The changing structure and organization of conmercial agriculture (declining farm numbers, increasing farm size,
vertical integration, contract farming, conglomerates, etc.) has been one of the catalysts for change in rural areas. The process of agricultural development has been speeded by technological improvements (herbicides, pesticides, larger machines, etc.) which have, in turn, reduced the number of farm operators and laborers needed. Smaller towns and communities have generally suffered as the farm work force has declined. Business volumes and Incomes have declined. Capital gains in farm land values have been offset by capital losses in rural towns and communities. The following statements exemplify this situation:
...in areas without an alternative to agriculture for employment,
a rapid increase in farm size and a reduction in farm numbers
appear to result in stagnation or decline in the local economy
rather than growth. [9]
...An outflow of labor from agriculture has long been a
characteristic of the process of economic development everywhere.
From a narrower economic point of view it is desirable, but does
raise serious social problems if the surplus labor released by
the farm sector moves at the same time from the country to
the city. As long as agriculture is the main source of income
in rural areas the outflow from agriculture may indeed
stimulate further outflows from sectors dependent on agriculture.
[7]
These ideas have been articulated by many persons speaking on policy issues, but they are so central to rural development goals
that they bear repeating. As rural people migrate and economic decay results, there is also decay of a more subtle kind -- the "people left behind" may no longer have access to the kinds of public and private investments necessary for economic growth and social development. [11]

As agricultural development proceeds--providing food and fiber needs with fewer and fewer resources--resources are freed to produce other goods and services associated with a higher standard of living. The process requires that other activities be able to effectively use the farm resources thus released. [7] It is obvious that individuals displaced from farming employment by agricultural technology are worse off if they are unqualified by education and skills to gain employment in business or industry. [10]

Thus, the kind of adjustments needed hinge on expanded opportunities for resources in rural areas. These opportunities require investements in education, jobs in local areas, or assistance in finding jobs elsewhere. These are the broad topics of rural deve1opment.

We do not intend to de-emphasize the importance of commercial agriculture to the total economy or the difficulties confronting this sector. The decreasing number of voters thed to conmercial agriculture and diminishing public support for farm programs are significant problems which this basic sector must face. However, more sophisticated delineation and recognition of the problems of rural residents is urgently needed. Justification exists for substantial public expenditures to evaluate the effects of public programs "before the fact"
rather than continuing to adopt programs on the slim chance that they "might" work.

Clearly, a definitive statement as to what constitutes the "problems" of rural America is difficult to come by. That such a situation exists--when we all are aware of many problems-is perplexing. The very fact that there are many problems provides a key to the difficulty of arriving at a concise statement.

The process of finding acceptable answers to questions such as those posed above is further complicated by the elusivness of goals and the interrelatedness of social and economic activity. Given a single objective, we can find answers. However, we are dealing with multiple objectives, where one goal may be attained only at the expense of another. Pragmatically, we must concentrate on what appear to be the major goals-- and attempt to minimize detrimental effects on other objectives.

## Needed Research Effort

Since the inception of the land grant college-agricultural experiment station-extension service system, we have had continous nationwide accumulation of research information concerned specifically With commercial agriculture. As a result, we have been able to delineate problems and focus sharply on many of the needs of this sector. However, we don't have this experience and accumulated research findings for other economic activity in rural areas; we can only discuss and view these problems in a broader sense. Much study and expertise will be required to perceive problems and develop
recommendations for action programs in rural development with anything approaching the sharpness of those for the commercial agriculture sector.

We recognize that managerial and legislative decisions, like time, wait for no man. If the desired objectives of rural development are to be achieved, decision makers must be provided with an idea of the instrumental variables and key relationships that can be influenced to bring about the objectives envisioned by supporters of "rural development" legislation. During the past several decades significant advances have resulted from the development by research, the dissemination by extension, and the adoption by farmers of outputincreasing technologies. These technologies may not have been fully exploited, particularly with respect to the development of the rural economy. If additional efforts are not directed toward more effectively organizing the use of our natural and human resources, the marginal benefits of additional technological developments on specific aspects of food and fiber production may be substantially diminished.

However, efforts to develop new technologies for increasing agricultural productivity should not be reduced. Rather, research and extension efforts must be directed toward problems of a broader scope. Information must be developed, disseminated, and used for decisions that are broader than which variety to plant, how much fertilizer to use, which chemical and how much to use, and other questions that relate to production practices for a particular enterprise.

Any number of published documents purport to describe the characteristics of low-income rural residents. These documents range from research publications, books, census, and other types of statistical reports to profound statements voiced by various individuals based upon a hurried visual scan of a particular low-income area. The information, while fairly describing existing conditions, is grossly inadequate for use in designing and evaluating action programs for alleviating such conditions. In most instances such information was collected to describe conditions rather than to prescribe improvements. Information collected, classiffed, and analyzed for the purpose of designing and evaluating alternative activities and programs must be developed if such an objective is to be successfully completed. Refinement of some of the existing descriptive information to a less aggregative level and the collection of additional information from primary and secondary sources classified by the focus of the developmental effort will be required.

More specifically, detailed descriptions of resources controlled by rural residents are needed. In this case, less attention should be paid to the emotional aspects of the situation and more attention should be devoted to people as resources--and improvement of the human resource is necessary if society's goals are to be realized.

Knowledge of capital resources controlled is necessary in developing realistic programs. An estimate of the value of assets is an essential part of this information. Special attention should
be devoted to availability, sources, and costs of credit when and if available to the rural poor.

The attitudes of rural prople concerning why they live in rural areas, why they are poor, their willingness to improve their income status and their aspirations if solutions were found for some of their current problems should be recorded. Most important in the final solution to employment and income problems is the attitude of rural people toward moving to locations where fobs are available. Rural people have shown great willingness to move to areas with more plentiful fobs, and the population residuals in some low income rural regions are largely elderly people who wisely chose not to move. Emphasis on job creation and more out-migration would miss the mark for this large group. It would be more useful to emphasize the discovery of deterrents to income improvement of various strata of rural people within the context of an affluent society.

During the past several decades, medical facilities and personnel have concentrated in larger metropolitan areas. While geographical isolation from medical facilities has created significant problems for many rural residents, the impact has been greatest upon the poor. If small towns and rural areas are to develop into viable and desirable places of residence, then an effective system must be developed for delivering medical services to rural areas. Furthermore, medical delivery systems devised must provide adequate medical services to low-income rural residents at costs substantially below the average cost of these service to the general public. A comprehensive description of the availability and use of medical services by low-
income rural residents will help determine additional services needed. Once needs are established, then alternative systems for medical services delivery must be evaluated based upon the criterion of providing a given level of services at minimum cost.

One of the major problems facing residents of rural areas is education. The Report of the President's Commission on Rural Poverty has stressed the need for improvement in rural schools, and numerous studies have pointed to the ways in which rural schools were inferior to urban schools. Present emphasis on rural development and improved infrastructure in rural areas further supports the importance of this topic. Plausible arguments indicate that the cycle of poverty can best be broken by upgrading the skill levels of people in rural areas through education. The major problems confronting decision makers concerned with provision of educational services in rural areas hinge on questions of (1) measuring the quality of the educational service provided, (2) determining what constitutes an acceptable quality level, and (3) providing this acceptable level of educational service most efficiently. A further item for consideration is the employmentrelated nature of educational alternatives available in the public educational system.

Rural water distribution and waste disposal systems have a direct and immedfate impact on rural community development. They are essential to rural businesses and industries and to acceptable standards of family living.

The absence of water distribution and waste disposal systems in many rural areas has resulted in lagging economic growth and lack of community viability. Communities must be provided with all essential services if the current undesirable economic and social trends are to be reversed.

During the past decade, many small towns and rural communities have taken advantage of the various federal loan and grant programs available for developing and improving water distribution and waste disposal systems. However, few sewer systems have been constructed in the open country, most of them having been developed In conjunction with small-town water systems.

As public programs are formulated and economic development strategies developed at state and local levels, lack of understanding of the complex economic interrelationships within the economy is a major stumbling block. Measures of the direct and indirect changes in the economy are needed to evaluate programs relating to human and natural resource development, poverty, and pollution control. Government agencies which plan to formulate strategic development programs need to know the effects of alternative actions to make the most effective use of all available resources. Planners need to determine whether or not a region has sufficient resources and the necessary locational advantages to accomplish the needed development.

Information on the effect of differing amounts and types of investments associated with alternative proposed programs on per capita income and employment must be determined for use
and consideration in a planning program. From a public policy standpoint, the economic feasibility of each alternative program must be determined along with the most efficient way to achieve specified goals with minimum resource requirements.

Creating additional economic activity may involve capital expenditures beyond the capabilities of local groups. Some measure of the benefits expected from proposed activities will be required if public financing is to be obtained. Also, the long-term impact of various activities may make one more desirable than another.

Restructuring of state and local governments and/or alterations in the functioning of these governments is receiving increased attention. Almost without exception, the reasons behind this interest are to make scarce tax dollars accomplish more by increasing governmental efficiency. Efficient use of tax dollars is especially critical in low-income areas where much of the support for public services comes from ad valorem taxes on rural land. Current heavy tax burdens on farmers and other rural landowners make this topic one of legitimate concern to those interested in economic affairs of agriculture and rural areas.

Efficient use of tax dollars goes beyond how these dollars are used after they have been collected. We ought to ask other questions and search diligently for the answers to such questions as: (1) What public services should be financed by taxes, by what kinds of taxes, and by taxes derived at what level of government? (2) What types
of taxes are available and what are the equity considerations associated with alternative tax plans? (3) What taxes are the most efficient from the standpoint of administration? (4) What new kinds of taxation methods might be found to replace antiquated and inequitable taxes?
(5) What is the potential role of user charges as a substitute
for some types of taxes?
Sucess in rural development will require research to: (1) supply the basic data needed to $1 d e n t i f y$ major problems, (2) outline possible alternatives and solutions, and (3) determine the avallable and needed resources for solution of these problems. Examples of the kinds of rural development problems that are amenable to research are to: 2/

1. Develop information on the requirements for success in various occupational opportumities, including education, experience, and financial resources.
2. Develop programs to provide education, training, and retraining needed by rural youth and adults to take advantage of farm and non-farm employment opportunities.
3. Determine opportunities for operators of low-income farms to improve their situation through adjustments to improve farm income, combining farming with part-time non-farm work, or full-time at a non-farm job or business.
4. Delineate functional socio-economic areas for planning in order to achieve effective economic development in an area.
5. Develop economic indicators for rural areas, including resource bases and the locational advantage and disadvantage of these areas.

[^1]7. Determine the potential for further development of agricultural and forest resources in rural areas, including marketing facilities
8. Determine the potential contribution of improved transportation facilities in bringing desirable employment portation facilities in bringing desirable employmen rural communities.
9. Develop criteria for delineating functional socio-economic areas to provide effective and efficient community institutions and services.
10. Determine the adequacy, quality, and cost of education, health, sanitation, and water systems, and other public and private services.
11. Determine the organization and operational efficiency of local government units in meeting the needs of a modern rural society.
What are the needs in rural development research? It is the responsibility of researchers to utilize their limited resources as efficiently as possible, searching out answers to priority problems: Research priorities, assuming our goal is improving the socio-economic well-being of people in rural areas, should be oriented toward providing adequate training and other mohflity aids for the people who wish to move to more urban areas and to providing opportunities and adequate facilities for those who remain In rural areas. [8, p.282]

The challenging task in rural community development is to identify the nature, location, and extent of inequities falling on rural communities and on various population strata in them; then to evaluate and provide alternative means for alleviating or redressing these inequities.
[5, pp. 50-51]

## Clientele-Oriented Research

We should be more circumspect in selection of our research areas, asking: "Who are the decision makers who most need data? What data do they need; and in what contexts': [1,p.135] With regard to clientele: "In dealing with the problems of rural development we can no longer afford to think in terms of our clientele as consisting only (or even primarily) of farmers." [2, p. 3] Four principal categories of clientele of extension workers are defined [3, p. 110] as: (1) citizens groups involved in making and implementing decisions that relate to community improvement and development; (2) key local citizens who influence or make decisions relevant to the community; (3) public officials who are responsible to the citizens for administering public policy and for programs of economic and social progress; and (4) groups such as development authorities, planning commissions, and private firms engaged in planning community development activities. In another example of the hetorogeneity of the research audience, that audience is identified [6, pp. 156-7] at national, state, and community levels in both public and private categories as: national public (Congress and executive branch); national private (national organizations and firms); state public (legislators and government officials); state private (state organizations and firms); community public (local government); and community private (local organizations and firms, individuals, and families).

What data or research results do these clients need? The taxpaying public needs answers to current problems. If jobs and incomes are to be generated in rural areas, then clients need to know what kinds of industry would be most suitable, the fiscal impact of industrialization on the community, and whether to opt for local development or depend on commuting to a "growth center". Prescriptive analyses of the ties between provision of services and interaction with goods-producing sectors, income and employment effects of various industry sectors, income and employment effects of alternative tax policies, etc., will also provide urgently needed information.

Answers to two important questions are essential for planning needed communtty services in rural areas: (1) What is the expected number and spatial distribution of jobs and people in rural areas during future time periods? (2) What is the expected form and quality of community services that will be desired over a planning period? [15, p. 2]. Input to determine "adequate" services will require development of conceptual frameworks for local decision makers to use in deciding what expenditure of limited funds represents the best investment for their conmunity. Although planning in rural areas must deal with the same variables used in SMSA's, the problem is complicated because of sparse population and a multitude of local government bodies. [15, p.3]. Since some combination of counties may be required to muster a population large enough to support certain desired services, research to facilitate coordination and organization for efficiency is required.

Research to establish the needs for and means of providing better education, proper vocational training, adequacy of nutrition and health care, and at least moderate social and cultural activities is obviously called for.

The distressing fact about most discussions of rural development research needs is that the prescription usually is to: (1) put together a core of researchers to work on current problems using research data that are already available, (2) put together interdisciplinary groups or teams to work on intermediate and long run problems, and (3) continue with fundamental disciplineoriented research. In other words, the solution appears to be to get organized for rural development research on the basis of length of run. This ignores the essential question: "What are the problems?"

We have lost some excellent opportunities in the past by our failure to fully utilize research results. Continued dependence on highly general research--without serious attempts to provide specific results--will not satisfy the needs of people in rural areas. Information simply will not be able to filter down to the decision making levels where direction is urgently needed.

One choice for research is to work to increase economic opportunity in rural areas--depending on people to locate in those viable rural areas offering economic opportunity and desired community facilities and services. The best alternative for some residents of rural areas with little potential may be to move.

The most recent investigation of rural development research needs in the Southern region included the following conclusions with respect to research needs for various rural development objectives [16, pp. 4-7]:

Community services -- The sing1e most productive activity would be the pulling together and synthesizing of results of research dealing with increased efficiency in the provision of particular services. Much has been done that needs to be brought together in a consistent fashion and made more usable to the community decision maker, the planner, extension personnel, etc.

Human resources -- It would be helpful to know what kinds of skills will be demanded, manpower requirements by industry, and improvements in employment service networks that would be helpful in matching jobs and workers. As in the community services category, a number of studies have been completed which need to be brought together, summarized, and related.

Income and employment -- If the rural development effort is to be effective, it must be based on strengthened economic activity in rural areas. Further information is needed regarding what local communities should do to attract and retain industry in order to gain the greatest economic benefits to the community. Especially needed is
research to explain the effects of rural industrialization on income and employment, on the distribution of costs, and on the increased levels of services required to support new jobs. Studies of the income and employment effects of taxation appear to be especially timely. State legislatures and local governments are under increasing pressure to find news of alternative revenue sources, and they need to be informed of the possible effects of tax policy on economic activity.
Study of rural community resources to determine the alternatives open for economic development and for public policy reconmendations at all levels [13, p. 231] must assume much greater importance, and rural development researchers must be more clearly attuned to needs if the rural development effort is to produce the desired results.

Researchers sould dfrect their attention to developing information which will speed up economic growth in rural areas, providing the jobs and income which are necessary to support people in rural areas. Adequate economic activity will allow rural people to develop better community facilities and services. This provides an objective approach to that otherwise elusive goal of "improving the quality of life in rural areas."

## REVIEW OF CURRENT RESEARCH IN THE SOUTHERN REGION

The Task Force members agreed that a meaningful framework for review of rural development research was provided by the report of the Southern Regional Rural Development Research Council (SRRDRC). The SRRDRC report inventoried rural development research in the experiment stations by: (1) major objective, (2) problem area, and (3) discipline. The four major objectives of the rural development effort used in that report were:
(1) to fimprove the level of community services provided in rural areas,
(2) to improve the quality of human resources in rural areas,
(3) to provide increased opportunity for income and employment in rural areas, and
(4) to maintain and enhance the quality of the environment in rural areas.

From nine to 13 "problem areas" were identified for each of the first three objectives, and the SRRDRC report classified current research by discipline according to this objective-problem area matrix. No attempt was made to account directly for interaction between objectives. Also, that report considered that environmental quality was related to the other objectives, but was not a topic for direct rural development research. The major objectives and problems areas are listed in Table 1.

| Community <br> Services |  | Human Resources |  | Income \& Employment |
| :---: | :---: | :---: | :---: | :---: |
| 1.01 Health | 2.01 | Human development | 3.01 | Holding \& attracting industry |
| 1.02 Education \& training | 2.02 | Welfare | 3.02 | Plant location |
| 1.03 Water systems | 2.03 | Health \& nutrition | 3.03 | Income \& employment effects of |
| 1.04 Waste disposal | 2.04 | Demography |  | rural industrialization |
| 1.05 Recreation | 2.05 | Educational program | 3.04 | Income \& employment effects of |
| 1.06 Law enforcement |  | effectiveness |  | natural resource investments |
| 1.07 Fire protection | 2.06 | Household decisions | 3.05 | Alternative uses of natural |
| 1.08 Transportation \& communication |  | \& management Community decision | 3.06 | resources <br> Rural recreation enterprises |
| 1.09 General community services |  | Level of living \& quality of life | $\begin{aligned} & 3.07 \\ & 3.08 \end{aligned}$ | Technology for small farms Enterprises for small \& part-time |
| 1.10 Planning | 2.09 | Public policy |  | farms |
| 1.11 Housing equipment \& furnishing |  |  | 3.09 | Economic interactions in rural areas |
| 1.12 Legal institutions <br> \& legal services |  |  |  | Income \& employment effects of taxation \& regulation |
| 1.13 Financial services |  |  |  |  |

The Task Force proceeded to complete the classification of current rural development research in the South by adding research conducted by the USDA and the 1890 institutions. Appendix Tables $1,2, \& 3$ present: (1) the SRRDRC classification of 1972-73 rural development research conducted at the experiment stations, (2) a summary of USDA rural development research projects in the South, 1972-73, and (3) an inventory of rural development research at 1890 institutions, 1972-73

Table 2 summarizes the rural development research effort in the South in 1972-73 by these three types of performing organizations. Table 3 summarizes the rural development research effort by discipline. Table 4 shows the percentage distribution of the rural development research effort in the South

These tables show the type of emphasis currently placed on rural development research in the Southern region. In fiscal 1973, 120 SMY's were allocated to rural development research by the combined efforts of experiment stations, 1890 institutions, and the Economic Research Service of USDA. Research effort by performing organization was distributed as follows: experiment station - 59.5 percent; 1890 institutions - 27.1 percent; and USDA - 13.4 percent

Classification by discipline shows that 54.55 SMY's were from agricultural economics, 36.44 SMY's were from rural sociology; 16.76 SMY's were from home econonomics; and 12.25 SMY's were from other disciplines.

The distribution of research effort among the four objectives deffined was community services - 22.2 percent; human resources - 50.1 percent income and employment - 26.4 percent; and erivironmental quality - 1.3 percent.

A topic that came up for discussion several times during the research review was the number of projects for which only fractional SMY's were indicated. We are inclined to believe that the professionals in rural development research are so few that they give extra effort just to touch base with many research topics. Whether this situation is preferable to one where fewer projects receive greater shares of research time is arguable. In many cases, projects with a low commitment of time tend not to be very productive. Further, rural development projects may require larger blocks of time because of the interrelatedness of social and economic problems, especially in rural areas.

On the other hand, some members of the task force felt that administrative reaction to our recommendations for reallocating research resources might jeopardize much of the "extra" effort being expended by rural development researchers. In view of these differing opintons, we recommend that an effort be made to shift the research effort so that each research project has a "meaningful" commitment (certainly more than 11 or . 2 SMY's), but that the transition be gradual and that the researcher be afforded the maximum amount of flexibility in redefining his research area.

Table 2. Rural Development Research Classified by Major Objective, Problem Area, and Performing Organization, Southern Region, FY 1973.

| Objective/ <br> Problem Area 1/ | Organization |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Experiment Stations | $\begin{gathered} 1890 \\ \text { Institutions } \\ \hline \end{gathered}$ | USDA |  |
|  |  | -S |  |  |
| Community Services |  |  |  |  |
| 1.01 | 1.70 | 0 | 1.0 | 2.70 |
| 1.02 | . 70 | 0 | 0 | . 70 |
| 1.03 | 1.30 | 0 | 0 | 1.30 |
| 1.04 | . 85 | 0 | 0 | . 85 |
| 1.05 | . 75 | 2.3 | 0 | 3.00 |
| 1.06 | 0 | 0 | 0 | 0 |
| 1.07 | 0 | 0 | 0 | 0 |
| 1.08 | 0 | . 2 | 0 | . 2 |
| 1.09 | 5.80 | 0 | 1.7 | 7.50 |
| 1.10 | 2.25 | 0 | . 3 | 2.55 |
| 1.11 | 4.80 | 1.0 | 1.0 | 6.80 |
| 1.12 | . 10 | 0 | 0 | . 10 |
| 1.13 | . 90 | 0 | 0 | . 90 |
| Subtotal | 19.10 | 3.5 | 4.0 | 26.60 |
| Human Resources |  |  |  |  |
| 2.10 | 9.47 | 2.4 | 3.7 | 15.57 |
| 2.02 | 1.30 | 1.1 | 0 | 2.40 |
| 2.03 | 1.21 | 14.6 | 0 | 15.81 |
| 2.04 | 3.38 | 1.3 | 0 | 4.68 |
| 2.05 | 4.35 | 1.5 | 0 | 5.85 |
| 2.06 | 2.46 | . 6 | 0 | 3.06 |
| 2.07 | . 25 | . 2 | . 6 | 1.05 |
| 2.08 | 8.54 | 1.3 | . 8 | 10.64 |
| 2.09 | . 5 | 0 | . 6 | 1.10 |
| Subtotal | 31.46 | 23.0 | 5.7 | 60.16 |
| Income \& Employment |  |  |  |  |
| 3.01 | . 70 | 0 | 0 | . 70 |
| 3.00 | 0 | 0 | 0 | 0 |
| 3.03 | . 75 | 0 | 1.3 | 2.05 |
| 3.04 | 2.60 | 0 | 0 | 2.60 |
| 3.05 | 1.62 | 0 | 0 | 1.62 |
| 3.06 | . 80 | 0 | 0 | . 80 |
| 3.07 | 4.10 | . 8 | 0 | 4.90 |
| 3.08 | 1.36 | 2.3 | - | 3.66 |

Table 2. Rural Development Research Classified by Major Objective, Problem Area, and Performing Organization, Southern Region,

$1 /$ The problem areas are defined in Table 1.

Table 3. Rural Development Research Classified by Major Objective Rroblem Area, and Discipline, Southern Region, FY 1973.

|  | Discipline |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Objective/ <br> Problem Area 1/ | Agricultural <br> Rural <br> Economics | Home <br> Sociology | Economics | Other | Total |

Community Services

| Community Services |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.01 | 2.70 | 0 | 0 | 0 | 2.70 |
| 1.02 | . 70 | 0 | 0 | 0 | . 70 |
| 1.03 | 1.10 | 0 | 0 | . 20 | 1.30 |
| 1.04 | . 85 | 0 | 0 | 0 | . 85 |
| 1.05 | . 70 | 2.30 | 0 | 0 | 3.00 |
| 1.06 | 0 | 0 | 0 | 0 | 0 |
| 1.07 | 0 | 0 | 0 | 0 | 0 |
| 1.08 | 0 | . 20 | 0 | 0 | . 20 |
| 1.09 | 5.90 | 1.60 | 0 | 0 | 7.50 |
| 1.10 | 2.55 | 0 | 0 | 0 | 2.55 |
| 1.11 | 2.10 | 0 | 2.10 | 2.60 | 6.80 |
| 1.12 | . 10 | 0 | 0 | 0 | . 10 |
| 1.13 | . 90 | 0 | 0 | 0 | . 90 |
| Subtotal | 17.60 | 4.10 | 2.10 | 2.80 | 26.60 |
| Human Resources |  |  |  |  |  |
| 2.01 | 5.50 | 8.67 | 1.40 | 0 | 15.57 |
| 2.02 | 1.10 | 1.30 | 0 | 0 | 2.40 |
| 2.03 | 0 | 3.71 | 8.90 | 3.20 | 15.80 |
| 2.04 | . 20 | 4.48 | 0 | 0 | 4.68 |
| 2.05 | . 20 | 2.50 | 1.40 | 1.75 | 5.85 |
| 2.06 | . 30 | 0 | 1.86 | . 90 | 3.06 |
| 2.07 | . 60 | . 45 | 0 | 0 | 1.05 |
| 2.08 | . 33 | 9.21 | 1.10 | 0 | 10.64 |
| 2.09 | 1.10 | 0 | 0 | 0 | 1.10 |
| Subtotal | 9.33 | 30.32 | 14.66 | 5.85 | 60.16 |
| Income \& Employment |  |  |  |  |  |
| 3.01 | . 70 | 0 | 0 | 0 | . 70 |
| 3.02 | 0 | 0 | 0 | 0 | 0 |
| 3.03 | 2.05 | 0 | 0 | 0 | 2.05 |
| 3.04 | 2.60 | 0 | 0 | 0 | 0 |
| 3.05 | 1.30 | . 32 | 0 | 0 | 1.62 |
| 3.06 | . 80 | 0 | 0 | 0 | . 80 |
| 3.07 | 3.30 | . 80 | 0 | . 80 | 4.90 |
| 3.08 | 1.86 | . 50 | 0 | 1.30 | 3.66 |

Table 3. Rural Development Research Classified by Major Objective, Problem Area, and Discipline, Southern Region, FY 1973 continued.

| Objective/ <br> Problem Area 1/ | Discipline |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agricultural Economics | Rural Sociology | Home Economics | Other |  |
|  | ----------- | --------SM | MY's---- |  |  |
| 3.09 | 14.36 | . 40 | 0 | 0 | 14.76 |
| 3.10 | . 65 | 0 | 0 | 0 | . 65 |
| Sub total | 27.62 | 2.02 | 0 | 2.10 | 31.74 |
| Environmental Quality | 0 | 0 | 0 | 1.5 | 1.5 |
| Total | 54.55 | 36.44 | 16.76 | 12.25 | 120.00 |

$\underline{1 /}$ The problem areas are defined in Table 1.
Table 4. Distribution of Rural Development Research by Major Objective, Discipline, and
Performing Organization, Southern Region, FY 1973.

| Major Objective and Performing Organization | Discipline |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agricultural Economics | Rural Sociology | Home Economics | Other |  |
| 1.00 Community Services | (14.7) | (3.4) | (1.7) | (2.3) | (22.2) |
| Experiment Station | 11.3 | 1.3 | 0.9 | 2.3 | 15.9 |
| 1890 Institutions | 0 | 2.1 | 0.8 | 0 | 2.9 |
| USDA | 3.3 | 0 | 0 | 0 | 3.3 |
| 2.00 Human Resources | (7.8) | (25.3) | (12.2) | (4.9) | (50.1) |
| Experiment Station | 4.7 | 15.2 | 5.4 | 1.0 | 26.2 |
| 1890 Institutions | 0.2 | 8.2 | 6.8 | 3.9 | 19.2 |
| USDA | 2.8 | 1.9 | 0 | 0 | 4.8 |
| 3.00 Income \& Employment | (23.0) | (1.7) | (0) | (1.8) | (26.4) |
| Experiment Station | 15.9 | 0.7 | 0 | 0.8 | 17.4 |
| 1890 Institutions | 1.8 | 1.0 | 0 | 1.0 | 3.8 |
| USDA | 5.3 | 0 | 0 | 0 | 5.3 |
| 4.00 Environmental Quality | (0) | (0) | (0) | (1.3) | (1.3) |
|  |  |  |  |  | (100.0) |
| Total | 45.5 | 30.4 | 14.0 | 10.2 | 100.1 |

## IDENTIFICATION OF PRIORITY AREAS

The process of assigning priorities to problem areas for rural development is a subjective one at best. The effort of the Task Force in accomplishing this job was greatly abetted by a survey taken by the Southern Rural Development Center (SRDC). A description of the survey, categories of respondents, and results follows.

There is a state-level Rural Development Committee in each state. Membership includes representatives from the Forest Service, Soil Conservation Service, Farmers Home Administration, Rural Electification Administration, Agricultural Stabilization and Conservation Service, and the State Cooperative Extension Service. In many states, membership has been expanded to include representatives of various State Departments and Agencies, including the Office of the Governor. The State Committee establishes liaison with the executive officers of the state government and other appropriate organizations. The committees are designed to work closely with state and local people in support of comprehensive planning and development. In view of this assigned role, the members of this committee are In a position to observe, hear, and be concerned with problems which need research answers. This survey was designed to obtain responses from them in regard to the areas which need priority research attention.

Members of the State Rural Development Conmittees were asked to respond with questions of both immediate and long-range concern in the area of Rural Development. Ranked in priority of immediate concern as judged from the number of questions submitted are the following areas:

Community Services \& Facilities
Economic Development........................................................ 58
Environmental Improvement............................................... 42
People Building.
General
Total.
Within the Community Services and Facilities area most questions (19) were raised in the area of Waste Disposal. Water systems had 9 questions and General Community Services 11, which included joint questions about water and waste facilities. Overall, 39 of 111 questions were concerned with water and/or waste disposal systems. The next largest number of questions (17) in the CS\&F area concerned education and training--both education for the general public and education of professionals and officials about rural development. Housing (14 questions) was the next largest category, followed by planning (8 questions) and health and transportation and communication (8 questions).

In the Economic Development category nearly one-third of the 58 questions dealt with holding and attracting industry. Income and Employment Effects of Rural Industry accounted for 14 questions while 9 were concerned with Technology for Small Farms. There were 7 questions about Economic Interactions in Rural Areas.

Land Use and Zoning (19 questions) was the major area of interest in the Environmental Improvement area, followed by questions concerned with Conservation (11) and Forests and Wild1ife (10).

The fourth-ranked area was People Building, with 28 questions overall. Community Decision Making (9 questions) and Human Development (9 questions) were the top two categories. Public Policy, with 6 questions, was the third category of concern.

Twelve questions were placed in a General or Unclassified category. These dealt with rural development programs, citizen participation, research synthesis, and services desired by rural people.

Ranked in priority of long-term concern as judged from the number of questions submitted were the following areas:

| Area | Number of Questions |
| :---: | :---: |
| Community Service and Facilities. | . 66 |
| Envi ronmental Improvement. | 46 |
| Economic Development. | 37 |
| People Building. | 30 |
| General. | 2 |

Within the Community Services and Facilities area, planning (15 questions), education and training (12 questions), general community services ( 7 questions) ranked as priority areas of concern. Again, considering the classification scheme used (i.e., when both water and sewer were mentioned in one question, it was classified as general community service), the questions show a major emphasis on water and/or sewer systems.

Land Use and Zoning with 21 questions was the major concern in the Environmental Improvement area. Economic Interactions in Rural Areas, with 14 questions, was the major interest in the Economic Development category.

Under the People Building category, educational program effectiveness and demography, with 6 questions each, were the two major areas of concern.

Certain limitations of this survey should be noted. First, the respondents were all members of a predominately agriculturallyoriented State Rural Development Committee. Second, the process of classification was difficult and somewhat arbitrary. The matrix developed by the Southern Regional Rural Development Research Council was used for consistency, but it was still necessary to force some questions into categories where they didn't quite fit. Third, responses reflect the personal opinions of the Rural Development committee members. Fourth, the response represented only slightly over 30 percent of the State Rural Development Committee members.

Responses solicited by the industry representative on the Task Force from rural development specialists of power companies presented a slightly different picture. Of 31 responses obtained, 61 percent dealt with the need to improve community services, 26 percent were concerned with human resource development, 10 percent viewed income and employment needs high, and three percent mentioned environmental improvement as a pressing need.

Again, these views are not focused on research needs specifically, but do serve to give indications of problem areas. These views, as well as the current distribution of research effort, are summarized in Table 5.


## RECOMMENDED ALLOCATION OF SMY's

After determining the current SMY allocation, the Task Force assignment was to: (1) determine a desired reallocation of present research resources, (2) determine an allocation assuming a 10 percent increase in research resources, and (3) recommend a level and distribution of research resources commensurate with rural development needs.

Based on the judgment of the Task Force members--and reflecting such considerations as questionnaire responses, interaction with professional research and extension workers, and personal involvement in rural development efforts--the following recommendations are made:

Reallocation of present resources-The Task Force felt that relatively too many research resources were committed to the Human Resources category ( 50.1 percent). The reomended reallocation by major areas is to increase the allocation of SMY's to Community Services from 22 to 25 percent, decrease the SMY's allocated to Human Resources from 50 to 35 percent, increase the SMY's for Income and Employment from 26 to 35 percent, and increase SMY's for Environmental Improvement research from 1.5 to 5 percent. This allocation is not meant to diminish the importance of the Human Resources category, but to give recognition to the conviction that research effort will have a much greater marginal payoff in either the Community Services or Income and Employment areas.

Allocation of a 10 percent increase -- The recommendation for this alternative builds on the recommendation for reallocating present resources. A 10 percent increase would mean 12 additional SMY's. These should be allocated equally between the Community Services and the Income and Employment categories as follows:

| $1.01-1$ | $3.01-2$ |
| ---: | ---: |
| $1.04-1$ | $3.02-1$ |
| $1.09-1$ | $3.06-1$ |
| $1.10-2$ | $3.10-2$ |
| $1.12-1$ | $\frac{}{6}$ |

Recommended resource allocation to rural development research --
The Task Force approaches this subject cautiously--but not reluctantly. Our thesis throughout this review has been the need for rural development research. The benefits to be dertved from research are, however, contingent on a number of factors, including: (1) training, professional capability, and personal commitment of researchers; (2) recognition by administrators of the need to support rural development research; (3) ability of research and extension personnel to work together effectively to insure that research results are understood and transmitted with promptness and clarity to the desired audience; and
(4) that communication of information among researchers be adequate to prevent duplicative efforts and to enable the useful amalgamation of complementary research efforts and results. With this preamble, we recommend that the research effort presently expended by experiment stations, 1890 institutions, and USDA be increased by 105 SMY's (88 percent). Although we feel that such an increase would not be required under ideal circumstances concerning the factors noted above, the additional 105 SMY's appear to be a realistic hedge. We emphasize strongly that a doubling of effort as it is now being expended would be wasteful and ineffective.

A detailed comparison of present and recommended SMY allocations by problem area is presented in Table 6.
Table 6. Present and Recomended Allocation of Rural Divelopment Research by Major 0bjective
and Problem Area, Southern Region, continued.

Table 6. Present and Recomended Allocation of Rural Development Research by Major objective
and Problem Area, Southern Region, continued.

| $\begin{aligned} & \text { Major objective } \\ & \text { problem area } \end{aligned}$ | RPA | Present <br> allocatio |  | $\begin{aligned} & \text { ed A110ca } \\ & \text { Increase } \\ & \text { in } \end{aligned}$ | $\begin{gathered} \text { Long } \\ \text { rum } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 3.08 Enterprises for small and part-time farms | 807 | 3.66 | 4 | 4 | 4 |
| 3.09 Economic interactions in | 907 | 14.76 | 8 | 8 | 12 |
| 3.10 Income $\&$ emp. effects of |  |  |  |  |  |
| tax. \& reg. | 907 | . 65 | 6 | 8 | 8 |
| Environmental Quality |  | (1.50) | (6) | ${ }^{(6)}$ | (10) |
| ${ }_{4}^{4.01}$ Conservation |  |  |  |  | 0 |
| 4.02 Recreation |  |  |  |  |  |
| 4.03 Forest \& wildilife 4.04 Land use $\&$ zoning |  |  |  |  | 1 |
| 4.04 Land use \& zoning |  |  |  |  | ${ }_{3}^{6}$ |
| Total |  | 120 | 120 | 132 | 225 |

Appendix Table 1-A. Summary of Rural Development Research Projects and 1972-73 SMY Allocations
at Experiment Stations in the South: Community Services (1.00) a/

Appendix Table 1-A. Summary of Rural Development Research Projectis and 1972-73 SHY Allocations

| Problem Area | Discipline |  |  |  | Total <br> Projects | $\begin{aligned} & \text { Total } \\ & \text { SMY's } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agricultural Economics | Rural Sociology | Home Economics | Agricultural Engineering |  |  |
|  | Ok1456(1.4) |  |  |  |  |  |
|  | Tx3026(.5) |  |  |  |  |  |
| 1.10 Planning | S987(1.9) |  |  |  | 2 | 2.25 |
|  | Ok1492(.35) |  |  |  |  |  |
| 1.11 Housing Equip. \& |  |  |  |  |  |  |
| Furnishings | Ar678(1.0) |  | V626116(1.1) | S872(.6) | 5 | 4.8 |
|  | N13327(.1) |  |  | T333 2 ( 0 ) |  |  |
| 1.12 Legal Institutions | \& |  |  |  |  |  |
| Legal servicas | v616152 (.1) |  |  |  | 1 | . 1 |
| 1.13 Financial Services | L1555 (.9) |  |  |  | 1 | . 9 |
| Total Projects | 29 | 4 | 1 | 3 | 37 | - |
| Total SMY's | 13.6 | 1.6 | 1.1 | 2.8 | - | 19.1 |

a/Letters represent states: A=Alabame, Ar=Arkansas, $N=$ North Carolina, etc,
SOURCE: Southern Regional Rural Development Research Committee, July 20, 1973

| Problem Area |  | $\xrightarrow{\text { Rura }}$ sociol |  |  |  | Education |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.01 human Developpent |  | $\begin{array}{r} \text { G425(.4) } \\ \text { K811(1.09) } \\ \text { Tx1969(.1) } \\ \text { A327(.4) } \\ \text { G439(.8) } \\ \text { L1231(.1) } \\ \text { M4006(.3) } \\ \text { S982(1.2) } \\ \text { Tx2811(.4) } \end{array}$ |  | ${ }_{\text {ctabe }}^{\text {T286(1.2) }}$ |  |  | ${ }^{17}$ | 9.47 |
| 2.02 velfare | ${ }_{\text {F1629 (1.1) }}$ | ${ }_{\text {F1629 (.2) }}$ |  |  |  |  | 2 | 1.3 |
| 2.03 Health \& Mutrition |  |  |  |  |  |  | 3 | 1.21 |
| 2.04 Denography | ${ }_{6442}(2)$ |  |  |  | 01523(.25) |  | 9 | ${ }^{3.38}$ |
| 2.05 Education Program | $\underset{\substack{\text { fana (2) } \\ \text { Txases (o) }}}{ }$ |  | Tx1839(0) | v616158(1.4) |  |  | 7 | 4.35 |
| 2.06 Houselold Dec, 8 ngt. |  |  |  |  |  | ${ }^{\text {113325(.9) }}$ | 3 | 2.46 |

Apeondix Table 1 1-3. S. Sumary of Rural Developgent Research Frofects and 1972 -73 sury Allocations at Expertinent

/Letters represent states: $\mathrm{A}=\mathrm{Alabama}$, Ar=Arkansas, $\mathrm{N}=$ North Carolina, etc.
Sourč: Southern Regional Rural Development Research Committee, July 20, 1973,
Appendix Table 1-C. Summary of Rural Development Research Projects and 1972-73 sMY Allocations at Experiment Stations in the South:

| Problem Area | $\xrightarrow[\substack{\text { Agricultural } \\ \text { Economics }}]{\text { ces }}$ |  |  | Diline | $\begin{aligned} & \text { Animal } \\ & \text { Science } \end{aligned}$ | Total <br> Projec | $\underbrace{\text { a }}_{\substack{\text { Total } \\ \text { SMY's }}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3.01Holding \& Attracting <br> Industry | G1146(.12) | 6435 (.5) |  |  |  | 2 | . 7 |
| 3.02 Plant Location |  |  |  |  |  | 0 | 0 |
| $3.03 \mathrm{Inc} . \&$ Enp. Effects of <br> Rurai <br> Industry | M43022(0) | к96(.75) |  |  |  | 2 | . 75 |
|  |  |  |  |  |  | 8 | 2.6 |
| 3.05 Alt. Uses of Nat. Res. | A053(1.3) |  | к814(.32) |  |  | 2 | 1.62 |
| 3.06 Rural Recreation Ent. | A299(.5) | 6436(.3) |  |  |  | 2 | . 8 |
| 3.07 Technology for Small Farms | $\underset{\text { P267(1.0) }}{\mathrm{LIL52(.2)}}$ | P277(2.1) |  | P267(.8) |  | 4 | 4.1 |
| 3.08 Ent. for Small \& PartTime Farms | $\begin{gathered} 61120(.16) \\ \operatorname{c1122(.4)} \end{gathered}$ | P245 (.2) | P245(.5) |  | Tx1972(.1) | 5 | 1.36 |
| 3.09 Economic Interaction in Rural Areas | F1436(.2) $\mathrm{L} 1553(1.8)$ | $\underset{\substack{61071(1.0) \\ \text { k89(.86) }}}{ }$ |  |  |  | 13 | 8.26 |

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Profect No., Southern Region, 1972-73.a/

## Alabama

No. Implementation of Continuance Platle
ance Planning Program in Outdoor Economic Evaluatio
Facilities Of Selected Outdoor Recreation
Effects of Investments in Recreational Resources on Income and Employment in Barber and Marshall Counties Alabama
316 Rural Development and the Quality of Life in the Rural South
Impact of the Expanded Food and Nutrition Education Program on Low-Income Homemakers in Selected Alabama Counties
326 Full-Time Hired Farm Labor Situation in Alabama
the South and Their Parce Potentials of Rural Youth in
41 Patterns of Food Intake and Nutritional Hea
359 Post-Project Evaluation of the Cheaha Creek Watershed s Development Under Public Law 566
363 Solid Waste Management for Northwest Alabama Using Sanitary Landfills
Arkansas
$\frac{\text { No. }}{674}$ Delineation of Sociocultural Areas $\frac{\text { T1t1e }}{\text { and Ecological Regions }}$ of Arkansas
678 Rural Housing in Selected Areas of Arkansas: Situation, Needs and Potential, and the Role of Financing
693 Changes in the Socioeconomic Status of Families in Low-Income, High-Migration Rural Area
egional Income and Employment of Investments in Natural Resources
Services of Local Public Financing to Needed Public
746 Human Resource Development in the Framework of Rural
747 Factors Development of Arkansas
a/See Appendix Tables $1-\mathrm{A}, 1-\mathrm{B}$, and $1-\mathrm{C}$ (Continued)
SOURCE: Southern Regional Rural Development Research Council.

Appendix Table l-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region, 1972-73, continued.

## Florida

$\frac{\text { No. }}{1436}$ Determinants of the Rate of Growth $\frac{\text { Title }}{\text { In Employment of the North }}$ Florida Area Economy
Regional Income and Employment Effects of Investments in Natural Resources

## in Florida

Planning for Economic Growth and Resource Management
Incidence and Causes of Rural Poverty and Economic Benefits
of Poverty Programs
1630 Planning and Financing Public Services for Rural Communities
1632 Agricultural and Rural Labor Markets
Fla. A\&M Information Consumption by the Client System as a Strategy to (Un-numbered) Reduce the Impact of Rural Poverty
Georgia
$\frac{\text { No. }}{412}$
425
432

434
425
436
439
440
442
1071
1120
1121
1122
1146

Employment and Income Effects of Investments in Natural Resources in Georgia
Human Resource Development Problems and Potentials in Georgia and the Southeast
Rural Development. and the Ouality of Life in the Rural Sout Economic Impact of Property Taxes on Agricultural Land Us in Georgia
Expansion of Employment Opportumities in Rural Recreational Enterprises
Development of Human Resource Potentials of Rural Youth in the South and Their Patterns of Mobilit
Regional Analysis for Rural Development
Social and Economic Implications of the Changing Population of Georgia with Reference to the Entire South
The Magnitude and Significance of Rural Farm Labor in a Changing Economy
Potential and Alternatives for Land-Holding Rural-Nonfarm Residents and Part-Time Farmers in Piedmont, Georgia
Alternatives and Costs of Handling Solid Waste Materials in Urban Fringe and Rural Communities
of Alternative Enterprises for Part-Time Farm Familles
Industrial Parks in Rural Areas of Georgia

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region, 1972-73, continued.

## Title

Funding and Resource Allocation in Rural Kentucky Schools Supplying and Financing Local Public Services in Rural Areas to Meet Changing Economic Conditions
Econolc Well-Being of Pural Areas nol
Economic Impling then in Kentucky the Marketing of Wood Handicraft Products In Kentucky Supplies
Influences on Occupational Goals of Young People from Three Subcultures in the South
Social Factors in the Development and Use of Kentucky's Natural Resources for Outdoor Recreation
Supply of and Demand for Public Forest Recreation in the North Central Region
Rural Development and the Ouality of Life in the Rural South

Characteristics and Problems of the $\frac{\text { Title }}{\text { Aged }}$ in a Diffused Rural Society
Development of Human Resource Potentials of Rural Youth in the South and Their Patterns of Mobility
Economic Feasibility of Organizing, Financing and Managing Farm Cooperatives for Low-Income Farmers and Rural
The Impact of Agricultural and Non-Agricultural Developments upon the Economies of Selected Rural Areas in Louisiana The Potential for Development and Economic Impact of Outdoor Recreation Facilities in Selected Rural Areas in Louisiana
An Economic Evaluation of Credit and Financial Resource Problems of Low-Income Farmers and Rural Residents in selected Areas of Loulsiana
The Human Ecology and Recreational Impact of Toledo Bend Reservoir
Rural Development and the Quality of Life in the Rural South Home and Family Decision Making Processes for Rural Families

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region, 1972-73, continued.

Appraisal of Public Expenditures and Sources of Public Revenues with Emphasis on Land Resources Areas of Louisiana

## Mississippi

4003
,
4006
4008

Titie
Nutritional Status: A Sociological Approach
Distribution, Composition, and Major Demographic Processes of Population
Development of Human Resource Potentials of Rural Youth in Mississippi and Their Patterns of Mobility
Alternative Medical Service Delivery Systems for Rural Areas in Mississippi
Alter Mive Methods of Funding Public Services in Rural Areas of Mississippi
ocioultural and Situational Factors in Poverty in Selected In Mississippi
Rural Development and the Quality of Life in the Rural South ional Income and Employment Effects of Investments in Natural Resources
Job Creation and Employment in Rural Areas
Costs of Alternative Water and Sewerage Systems in Rural Areas of Mississippi
Institutional Structures for Improving Rural Community Services Economy

North Carolina
The Changing Community

## Title

3266 Determinants and Consequences of Population Trends
11079 Rural Development and the Quality of Life in the Rural Sout
13231 Problems of Population Decline in Rural Areas
13323 Consumer Preference, Choice and Decision-Making of Rural Low-Income Families
13326 Decision Models for School Facilities Construction in Nonmetropolitan Areas of North Carolina
13327 Development of Improved Housing for Rural North Carolina Development
Families

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region,
1972-73, continued.

13332 The Economics of Professional Driver Training
13357 An Economic Analysis of the Financing of Local Governments 338 in North Carolina
using Needs and Satisfactions of Rural Families in North Carolina

## Oklahoma

No. 145 Title
1457 An Econommation Services for Rural Areas
1492 Analysis for Rural Development Planning
1494 Design and Criteria for Health Planning Systems in Rural Areas
1523 Construction and Evaluation of a Career Development Program in Agricultural Occupations for Advantaged and LessAdvantaged Rural Youth

Puerto Rico
$\frac{\text { No. }}{245}$ Title
in the Coffee Region
267 Scientific Farm Organization for Rural Development
277 Organization of Family-Type Food Crop Farms
South Carolina
 Improving Access by Rural Residents
26 Influences on Occupational Goals of Young People
872 Physical, Social and Economic Aspects of Functional Housing for Low Income Families
32 Economic Study of Alternative Systems for Distributing Water Supplies in a Decentralized Urban-Industrial Area
965 The Social Impact of Economic and Population Change in Tran sitional South Carolina Counties
970 Analysis of Demographic Data for the Human Resources of South Carolina
982 Development of Humen Resource Potentials of Rural Youth in South Carolina and Their Patterns of Mobility
986 The Effects of Selected Changes in the Real Property Tax System on Agricultural Land Use and Tax Revenues in South Carolina
987 Economic and Sociological Aspects of Comprehensive Land-Use Planning in South Carolina

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region, 1972-73, continued.

Influences on Occupational Title
Influences on Occupational Goals of Young People
Migration Patterns of the Tennessee Population
Farm in Tennessee
Regional Income and Natural Resources
Delineation of Functional Econome Areas in
Socio-Economic Charactert
in Tennessee
Rural Development and the Quality of Life in the Rural South Evaluation and Improvement of Low-Cost Rural Housing in Tennessee
Assessment of Family Functioning in Rural Areas of Tennessee Evaluation of Vocational Training for Rural People

Interindustry Analysis of the Economy of Texas: Emphasizing the Regional Economy of Northeast Texas
Human Resource Characteristics and Changes in Relation to Agriculture and Rural Development in Texas
An Evaluation of the Effectiveness of Indigenous Personnel In an Educational Program
The Interaction of Oxganizations and Individuals in Econom-Ically-Growing Nonmetropolitan Texas Communities of
, 0 ,
Food Choices and Nutritional Health of the Older Age Group Factors Affecting Patterns of Living of Disadvantaged Families duction and Marketing on Small Farms Computer Symbiosis: The Rural Development and Academic Implications Economic and Sociological Study of Agricultural Labor in the Northeast States South
Development of Human Resource Potentials of Rural Youth in the South and Their Patterns of Mobllity
Rural Communities In the Great Plains
Institutional Structures for Improving Rural Comminity Services

Appendix Table 1-D. Rural Development Research Projects at Experiment Stations, by State and Project No., Southern Region, 1972-73, continued.

## Virginia

$61 \frac{\text { No. }}{6152}$ The Real Property Tax in Community $\frac{\text { Title }}{\text { Development }}$
616154 Economic Consequences of Ecological Decisions: A Case Study of Saltville, Virginie
616155 Economic Development of the Eastern Shore of Virginia
616158 Effects of Education and Food Programs Upon Health and Level

626179 Processes of Rural Tcoromic Change in the Northeast

| Matrix <br> Code | Agency or <br> ERS Division* | Place | SMY | Title |
| :--- | :--- | :--- | :---: | :--- |
| 1.01 | EDD | Texas | 1.0 | Location of Central Public Facilities in <br> Rural Areas |
| 1.09 | EDD | Tenn. | .2 | Analysis of State $\&$ Local Public Facility Needs <br> and Investment in Southeast United States |
| 1.10 | RDS | E. C. | 1.5 | Relationship of Community Services and Economic <br> Development in a Multi-County Area |
| 2.01 | EDD | Ark. | 1.0 | Ability of Rural Families in Ozark Region to <br> Find Adequate Housing <br> Development-County Areas for Economic |


| Matrix Code | Agency or ERS Division* | Place | SMY | Title |
| :---: | :---: | :---: | :---: | :---: |
|  | EDD | Ark. | . 4 | Analysis of Poverty in Arkansas and Nearby States |
|  | EDD | Ark. | . 6 | Factors Affecting Occupational Choice and Adjustment of Rural Youth |
|  | RDS | N. H. | . 5 | Household Responses in an Area Undergoing Technological Change |
| 2.07 | RDS | Ok. | . 6 | Improving Local Rural Development Decisions in the Great Plains |
| 2.08 | EDD | D. C. | . 8 | Factors Associated with Upward Escape from Poverty Among Male Household Heads in the Mississippi Delta |
| 2.09 | EDD | Va. | . 6 | State-Local Fiscal Structures and Local Government Finances and Services |
| 3.03 | EDD | Miss. | 1.2 | Job Creation and Employment in Rural Areas |

Appendix Table 2. Summary of Rural Development Research Projects and SMY Allocations for
USDA, Southern Region, 1972-73, continued.

| Matrix <br> Code | Agency or <br> ERS Division* | Place | SMY | Title |
| :--- | :--- | :--- | :---: | :---: |
| RDS | Fla. | .1 | Relationship Between Changes In Economic Activity <br> and Employment in Rural Multi-County Areas |  |
| EDD | D.C. | 1.4 | Interindustrial and Interregional Structures of <br> Economic Regions |  |
|  | EDD | Mo. | 1.1 | Economic Development, Structure, and Areas of <br> Potential Growth <br> Identification and Spatial Impact of Regional <br> Growth Areas |

*EDD- Economic Development Division, Economic Research Service.
RDS- Rural Development Service (now returned to EDD after reorganization).
Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at
1890 Institutions, Southern Region, 1972-73.

| Matrix Code | Agency or ERS Division <br> \& Project Number | Place | SMY's | Title |
| :---: | :---: | :---: | :---: | :---: |
| 1.05 | $\begin{aligned} & \text { CSRS } \\ & \text { NC. X-PR-0007- } \\ & \quad 309-12 \end{aligned}$ | N. C. | 1.5 | Methods for Selecting, Planning, Managing and Evaluating Recreational Sites, Phase I |
|  | CSRS OKLX-PR-0004-375-EL | Ok. | 0.8 | Cultural and Recreational Facilities in Towns of 10,000-18,000 Population in Oklahoma |
| 1.08 | $\begin{aligned} & \text { CSRS } \\ & \text { SC.X-PR-0003- } \\ & 011 \end{aligned}$ | S.c. | 0.2 | Effect of Commumication and Transportation on Utilization of Services by Low-Income Rural People |
| 1.11 | $\begin{aligned} & \text { CSRS } \\ & \text { MISX-PR-0003- } \\ & \quad 1973-4 \end{aligned}$ | Miss. | 1.0 | Basic Human Needs in Rural Development - Housing |
| 2.01 | $\begin{aligned} & \text { CSRS } \\ & \text { AR. } \mathrm{X}-45-2110 \end{aligned}$ | Ark. | 0.5 | Factors of Disadvantagement as Relaied To School Performance |

Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at
1890 Institutions, Southern Region, 1972-73, continued.

| Matrix <br> Code | Agency or <br> ERS Divion <br> \& Project Number | Place | SMY's |
| :--- | :--- | :--- | :--- |

Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at
1890 Institutions, Southern Region, 1972-73, continued.

| Matrix Code | Agency or ERS Division $\qquad$ | Place | SMY's | Tit |
| :---: | :---: | :---: | :---: | :---: |
| 2.03 | CSRS <br> NCOO107-35-c | м. с. | 0.1 | Economic Adjustment of Poverty Stricken Rural People in North Carolina |
|  | $\underset{4733}{\substack{\text { CSRS } \\ \text { FLAX-PR-0004- }}}$ | Fla. | 0.5 | Improvement of the Nutrition of Teen-Agers in Selected Counties of North Florida |
|  | CSRS <br> GEO-FVSC-CSRS- <br> 02 | Ga. | 0.2 | Soybean Protein in Improving Nutritional Status of Low-Income Families |
|  |  | ку. | 0.8 | Identification of Sub-Clinical Malnutrition |
|  | $\underset{\substack{\text { CSRS } \\ \text { Kr.-PR-0001- }}}{ }$ | ку. | 0.9 | Monitoring Sub-Clinical Malnutrition to Enhance Rural Development - Business and Economics |
|  | $\underset{\substack{\text { KSRS } \\ \text { KY-PR-0001- }}}{15}$ | Ky. | 0.3 | Monitoring Sub-Clinical Malnutrition to Enhance Rural Development - Psychology | Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at

1890 Institutions, Southern Region, 1972-73, continued.

Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at

| Matrix <br> Code | Agency or <br> ERS Division <br> \& Project Number | Place | SMY's |
| :--- | :--- | :--- | :--- |

[^2]| Matrix Code | Agency or ERS Division <br> \& Project Number | Place | SMY's | Title |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TENX-PR-0004- } \\ & 34536 \end{aligned}$ | Tenn. | 0.5 | Nutritional Status of Low-Income Families in Four Tennessee Counties |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TEN-01-4122 } \\ & 34204 \end{aligned}$ | Tenn | 0.5 | Eating Habits and Patterns of Selected Low-Income Families in Two West Tennessee Counties |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TEXX-PR-0004- } \\ & \quad \text { G-1969 } \end{aligned}$ | Tx. | 0.4 | Factors Affecting Patterns of Living of Disadvantaged Families |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { VA.X-PR-0002- } \\ & 111779 \end{aligned}$ | Va. | 0.5 | Improvement of Food Safety and Consumption in Rural, Low-Income Southside Virginia |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { VA.X-PR-0004- } \\ & \quad 1771 \mathrm{~A} \end{aligned}$ | Va. | 0.5 | A Study of Fire Hazards in Homes of Low-Income Families of Southside Virginia |
| 2.04 | $\begin{aligned} & \text { CSRS } \\ & \text { TENX-PR-0001- } \\ & 34556 \end{aligned}$ | Tenn. | 1.0 | Human Resources in Rural Areas of West Tennessee |

Appendix Table 3. Sumnary of Rural Development Research Projects and SMY Allocations at
1890 Institutions, Southern Region, 1972-73, continued.

| Matrix <br> Code | Agency or <br> ERS Division <br> \& Project Number | Place | SMY's |
| :--- | :--- | :--- | :--- |

Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at
1890 Institutions, Southern Region, 1972-73, continued.

| Matrix Code | Agency or ERS Division \& Project Number | Place | SMY's | Title |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { SC.X-PR-0003-08 } \end{aligned}$ | s. c. | 0.1 | An Exploratory Study of Socio-Economic Conditions in South Carolina |
| 3.07 | $\begin{aligned} & \text { CSRS } \\ & \text { LA.X-PR-0002- } \\ & 8-15-5 \end{aligned}$ | La. | 0.8 | An Analysis of the Economic Factors Affecting the Success of Small Farm Operators |
| 3.08 | $\begin{aligned} & \text { CSRS } \\ & \text { GEOX-PR-0003- } \\ & \quad 72 P S-0 \end{aligned}$ | Ga. | 1.2 | Asparagus as a High Income Per Acre Cash Crop for Limited Resource Farmers |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { NC.X-PR-0001- } \\ & 309-86 \end{aligned}$ | N. C. | 0.2 | Alternative Income Opportunities for the Limited Resource Farmer in Three North Carolina Counties |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { SC.X-PR-0003- } \\ & 010 \end{aligned}$ | s. c. | 0.5 | Economic Feasibility of Organizing Marketing and Supply Cooperatives by the Low-Income Farmers |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TEXX-PR-0003- } \\ & \text { G-1971 } \end{aligned}$ | Tx. | 0.2 | Economic Feasibility of Pre-Broiler Production by Low-Income Farm Families |

[^3]| Matrix Code | Agency or ERS Division <br> \& Project Number | Place | SMY's | Title |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TEXX-PR-0003 } \\ & \quad \text { G-1972 } \end{aligned}$ | Tx. | 0.2 | Alternative Technical and Economic Systems of Swine Production and Marketing on Small Farms |
| 3.09 | $\begin{aligned} & \text { CSRS } \\ & \text { ALAX } \\ & \text { ALA-PR-0003-1- } \\ & \quad 73 \end{aligned}$ | Ala. | 0.1 | Income Inequality and Its Relationship to Community Structures and Community Interactions |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { AR. } \mathrm{x}-45-2090 \end{aligned}$ | Ark. | 1.0 | Earnings of Farmers Through Cooperative Action in Arkansas |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { SC00003 } \end{aligned}$ | S. C. | 0.2 | Migrant Labor in the Southern Coastal Plain of South Carolina |
|  | $\begin{aligned} & \text { CSRS } \\ & \text { TENX-PR-0001- } \\ & 34816 \end{aligned}$ | Tenn. | 0.1 | Changes in Industrial Structure in West Tennessee and Its Impact on Development in Rural Areas |
| 4.00 | CSRS $\begin{gathered} \text { NC. } \mathrm{X}-\mathrm{PR}-0006- \\ 309-12 \end{gathered}$ | N. C. | 1.5 | Agricultural Waste Management and Environmental Quality, Phase I |

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[^0]:    1/This section draws heavily on $[14,16,18$ and 19]

[^1]:    2/These are only a few of the problems listed in [4].

[^2]:    ppendix Table 3. Summary of Rural Development Research Projects and SMY Allocations at
    1890 Institutions, Southern Region, 1972-73, continued.

[^3]:    Appendix Table 3. Summary of Rural Development Research Projects and SMY Allocations ai
    1890 Institutions, Southern Region, 1972-73, continued.

