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ABSTRACT

Experts from government, academia, and interest groups met to discuss and explore the impact of changes in agriculture, industry, and government in shaping events in rural agricultural communities. Texts of 15 of the 18 papers are reproduced in the proceedings, along with the letter of submittal, overview, an agenda, and a list of presenters and participants. Titles of papers are: "Rural America: A New Public Policy Frontier," "Agricultural Communities: Economic and Social Setting," "The Changing Nature of Agricultural Communities," "Natural Resources and Agricultural Communities," "Rural America in Passage," "Farm Structure and the Quality of Life in Agricultural Communities," "Past and the Prospective Economic Development of Rural Communities," "Economic Interrelationships in the Rural Community," "Family Farms and Agricultural Communities," "Rural Community Development and Agriculture: A Constructive or Destructive Relationship?" "Credit and Credit Institutions in Agricultural Communities," "Trends Affecting and Exhibited by Commercial Banks in Agricultural Areas," "Credit as a Public Policy Tool," "Rural Local Governments," "Agricultural Communities: Capacity To Govern," "The Rural Development Policy of the Carter Administration," and "Better Country: A Strategy for Rural Development in the 1980's." (NEC)

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AGRICULTURAL COMMUNITIES: THE INTERRELA-
TIONSHIP OF AGRICULTURE, BUSINESS, INDUSTRY,
AND GOVERNMENT IN THE RURAL ECONOMY

A SYMPOSIUM

PREPARED BY THE
CONGRESSIONAL RESEARCH SERVICE
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FOR THE
COMMITTEE ON AGRICULTURE
U.S. HOUSE OF REPRESENTATIVES



OCTOBER 1983

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LETTER OF SUBMITTAL

October 13, 1983

Honorable E (Rika) de la Garza
Chairman, Committee on Agriculture
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

In February, you requested the assistance of the Congressional Research Service in providing a forum to allow current views and information on the interrelationship of agriculture, industry, and government in the rural economy to be gathered, developed, and discussed. Accordingly, the Service sponsored a two-day Symposium on this topic, held in the Madison Building of the Library of Congress on May 19 and 20, 1983.

The Symposium had three basic purposes, defined as a result of conferences with Committee staff:

- (1) To obtain current information and statistical data that would assist in the identification and analysis of current conditions--or to determine whether such information is available.
- (2) To receive input from interested organizations, officials, individuals as to what the problems are, what issues are involved, and what are possible solutions.
- (3) To explore alternative approaches to dealing with current or developing conditions, including identification of approaches that have worked well or have demonstrated potential, as well as any new initiatives that may show promise.

The Symposium was not designed to make recommendations or to reach conclusions. Rather, it was designed to develop a base of information with regard to agricultural communities and the rural setting within which they operate, and to elicit ideas and points of view regarding the implications of this information for public policy.

Eighteen papers were presented at the Symposium by a variety of experts from government, academia, and interest groups. These presentations were discussed by the Symposium participants, who represented the various sectors of contemporary rural America. Both presenters and participants were chosen for their special competences and with regard for appropriate balance. One participant, noting the diversity of those involved, commented that:

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Honorable E (Kika) de la Garza

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October 13, 1983

I think the real plus of this kind of gathering is that for the first time that I know of you people are beginning to talk about agriculture and rural development in small communities in the same meeting instead of having an ag meeting and a rural development meeting. I think that may well be a real plus.

The Agenda of the Symposium and a list of presenters and participants are attached as appendices to the report that I am submitting to you.

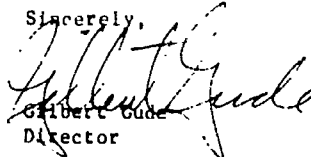
The Symposium was planned and organized by Sandra S. Osbourn, Specialist in American National Government, with the assistance of James H. Johnson. Barry Carr, Senior Analyst in Agricultural Policy, Dennis L. Little, then Specialist in Futures Research, and Jean Wells, Specialist in Money and Banking, served as moderators during the Symposium. James Bickley, Eugene Boyd, Charlotte Breckenridge, Romigius Jurenas, Stacy Kean, Nancy Miller, and Jeffrey Zinn served as rapporteurs. Ruth Allison, of the Office of Member and Committee Relations, was responsible for Symposium logistics.

The report that accompanies this letter contains the text of fifteen of the eighteen papers presented at the Symposium. Three of the panelists, Glenn Nelson, James Swiderski, and Robert Carleson, were unable to submit papers. Since the proceedings of the Symposium were recorded, we are able to include portions of these three presentations in the Overview. Glenn Nelson was chosen as a panelist because of his involvement in the work of the National Research Council's Panel on Statistics for Rural Development Policy; the summary and recommendations from the final report of this panel are included in this report. Robert Carleson was asked to present the Reagan Administration's position on the Federal role in the governance of agricultural communities and in rural development; his presentation, portions of which are included in the Overview, is supplemented by the executive summary of the Administration's rural development strategy, which was submitted to the Congress in February 1983.

The Overview was written by Sandra S. Osbourn. It summarizes the Symposium, and is based on the papers submitted for publication and on the presentations and discussion at the Symposium. Symposium correspondence and manuscript preparation were carried out primarily by Daphne Bigger and Daphne Lee.

I am hopeful that the Symposium and the report that resulted from it will be of assistance to the Committee and to the Congress in dealing with matters related to agricultural and other rural communities.

Sincerely,



Gilbert Gude
Director

Enclosure

Foreword

There is today a great and serious gap in the information which Congress and policymakers in other areas need to make intelligent decisions about issues involving the future of the nation's agricultural communities. We have a great deal of up-to-date and detailed information about the industry of agriculture. But we have much too little information about what is happening to the communities in which our farm families live, and what developments in those areas may mean to the people there and to the rest of the nation.

We need to know, as specifically as we can, what has been happening to agricultural communities as they have become more diversified, and what policy challenges this presents to Congress as we move into the late 1980s and beyond. We simply don't know all we should in this area.

To help fill this gap, I asked the Congressional Research Service in February, 1983, to help provide a forum in which expert analysts could discuss and explore the impact of changes in agriculture, industry, and government in shaping events in rural agricultural communities. The symposium was held at the Library of Congress on May 19-20, 1983, and this volume contains the proceedings of the meeting.

All too often, the many different types of communities we find in rural America are viewed through a glass that shows us an idealized picture based on childhood memories -- not a realistic picture of the complicated truth. The pictures we base on memory fail to tell us what happens when rapid changes in agriculture, in population growth, or in the non-farm rural economy put great strains on the ability of local governments to serve their people.

The symposium and the resulting papers in this volume represent the start of what I hope will become continuing educational process. The goal of this process is the development of a wide, current body of knowledge about our agricultural communities and the importance of keeping them economically and socially viable.

I would like to thank the Congressional Research Service for the excellent job it did in preparing this report. Also, I want to recognize the invaluable assistance, which took the form of generous contributions to the symposium, of the Ford Foundation, the Farm Foundation and the National Rural Electric Cooperative. I hope the information contained in this report will be useful to all who read it.

E (Kika) de la Garza
Chairman, House Committee on
Agriculture

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OVERVIEW

NEW REALITIES

A recent survey of rural research needs for the eighties concluded that the only available vantage points for reviewing scenarios for the future and identifying implications of these scenarios for research or for policy were "early and insecure. ^{1/} The Congressional Research Service Symposium on Agricultural Communities confirmed that finding. It is no longer possible to draw on the comfortable rhetoric and models of rural America that have dominated research and policy discussions for the past 25 years. Old images of people or communities left behind, or of universal rural deficiencies when compared to urban standards no longer seem to apply. New images and models are beginning to emerge, but are not yet clearly delineated. Ed Blakely, in a summary statement at the end of the Symposium, challenged the participants to go out and "try to come up with the model we are working toward, rather than dealing with the model we came from."* The product of the Symposium was not a new set of final answers, but a first step in an attempt to describe new realities and to relate these realities to policy.

^{1/} Dillman, Don A., and Daryl J. Hobbs. Issues for the 1980s. In their Rural Society in the U.S.; Issues for the 1980s. Boulder, Westview Press, 1982. p. 470.

* Indicates quoted material is taken from the transcript of the proceedings. Otherwise, quoted material is from written texts prepared for delivery at the Symposium.

Transition

Rural America is in a state of transition, the nature of which we do not yet fully understand, and rural policy needs to adapt to the new conditions; these are premises that seemed to be generally accepted. What seems to be missing, according to a number of participants, is a sense of crisis that might spark a response at the national level and a clear sense of direction and policy responses that will fit the new rural realities. James Giltmier seemed to sum up the feelings of many when he said he ". . . used to think I was pretty smart about rural America, but I don't know what it is any more."*

In part, this uncertainty was attributed to inadequacies in the data base relating to rural America. The lack of an adequate data base has been a constant theme of rural policymakers and analysts since rural development has been a national goal. It has become even more critical because of the changing nature of rural areas and communities and the need to reshape policy to adapt to this change. The report of the National Research Council's Panel on Statistics for Rural Development Policy, 2/ whose findings were discussed at the Symposium by Glenn Nelson, concluded that:

We know a great deal about rural America and the forces that are shaping it, but we know too little. 'Where we are,' 'where we have been,' and 'how we got here' are all subject to dispute.

It was the sense of the Symposium that where we are going is equally murky. David Brown captured the mood of the participants:*

I judge that there was very high level frustration in this room and the frustration is that people cannot identify the uniquely rural issues on which policy will focus in the next decade or so. What is the crisis and what is the issue? The truth of the matter is that there has been a lot of change in those conditions upon which rural

2/ Hereafter cited as the National Research Council Panel report.

policy has been focused. It was very easy to identify uniquely rural issues or issues that were important in rural areas such as poverty, racial discrimination, there was small scale, distance, and many of these things--many of these issues have really changed substantially. The gaps between urban and rural areas are diminished, the population is growing . . . and these traditional disadvantage indicators upon which rural policy is focused don't support the same types of programs anymore. So I think policy people and research people need to get about the business of trying to identify what in fact is the rural issue for which policy can be focused and it's clear from the discussion we had here that we're not really there yet. We don't really know what the issues are, and I would suggest that as a challenge.

Fred Buttel identified two "potentially pathbreaking set of technological changes" that are likely to have profound impacts for agricultural and other nonmetropolitan communities. The first is the move toward an "information society." According to Buttel, this trend will allow for continued industrial deconcentration which could benefit nonmetropolitan regions, but it might also make redundant many workers who perform the manual labor and clerical functions that will be assumed by computers, robots, and related machines. The second change is the emergence of biotechnologies in agriculture, which could lead to "massive changes in the nature of agricultural inputs and in the processing of agricultural outputs," factors of great significance to agricultural communities. Buttel concludes that:

The specific changes that will occur are, again, too nascent to be predicted with any accuracy. But it is likely that these changes will be far-reaching and will significantly affect the interface of agriculture and community over the next several decades.

Norman Reid suggested that the uncertain knowledge base and the continuation of rapid change requires that policymakers act cautiously:

The need to solve old problems at the same time as we are rethinking the configuration of our [federal] system provides a difficult environment in which to make policy. There is much that we do not know about either the old environment or the new one. While our picture of where we have been is probably accurate in its major

outlines, it remains both incomplete and out-of-date. We need to understand much better than we do the full effects of the institutional and financial changes of the last 20 years on the quality of rural services, and we need to be sure that the advances we had made through 1977 have not come unstuck during the fiscal austerity of the late seventies.

We know even less about where we are headed and will need to carefully monitor the new system as it evolves. During the transition period, special care will be needed in shaping policies. Policymakers must act cautiously as they respond to new and pressing needs to assure that new policies fit within the emerging governmental structure in a constructive way that does not prematurely foreclose other options for the longer run. It will not be easy.

Ed Blakely, in his summary statement, suggested that rural transition had created two crises at the national level, a crisis in understanding and a crisis in solutions. If these crises can be resolved, a workable policy can be developed:*

The first crisis that I think we would need to overcome is our crisis of understanding of what is rural . . . whenever there is change it's a crisis because people, if they don't have the old base for their understanding and no really new base has been formulated, they are very uneasy . . . we can't define things anymore, we don't know what we're working for, we don't know why we're trying to work for these things, why we're trying to define the family farm, is it important, why are we trying to define rural--is it important or isn't it important?

The other crisis in confidence we have is a crisis in confidence that comes from solutions. The solutions of the fifties and sixties don't seem to be workable in the eighties. Our war on poverty launch now would be ludicrous. People would laugh at you. If you attempted to get the current farm support programs in--if they weren't there, we would be in awful trouble trying to get these kinds of programs in, and I think there is a crisis in confidence particularly about social intervention--intervention to all kinds of things--education, etc. We put more money into schools and schools got worse. We have put so much money into agriculture that we are producing more than we need or want to, and we have real crises about government and what it is supposed to be doing. So I think we have those kinds of crises.

Blakely, in his prescription for resolving the crises of understanding and of solutions, argued that while the negative aspects of the new rural diversity--

the isolated, disadvantaged places and people that still exist--should not be overlooked, the emphasis should be on recognizing rural America as a place of opportunity:*

I think that if we constantly try to check out the old rural problems and address an old rural solution, no one in Congress is going to listen to us because we don't have any support for that and maybe we ought to look at and find some larger scale problems in the nation and in solving those problems, see what they do to rural America and trying to make rural America, as I try to talk, a place of opportunity rather than trying to characterize it as a place of the past. . . . We have to get in the middle of the big issues and make rural part of the big issues and not the side game--not the residual game, but part of the main game . . . my feeling is that we have to play the rural game to win, and that's to make rural places more vital, more robust, not the industrial hospices, but the places that get the new industries, have the best mixture, the best diversity, the matching of human and physical resources, and new patterns of community, and promote the new patterns of communities rather than trying to fight it.

Decentralization

Many of the new rural policy models are locally generated and may not be known at the national level or, if known, may not be suitable for national action. To those who are accustomed to active national involvement, this decentralization can lead to a frustrating and disconcerting sense of being left out of the action. To those who advocate less national government activity and greater local or private initiative, the current model is welcome.

Decentralization of policy was noted in the National Research Council

Panel report:

Many individual rural communities will reach a consensus about their problems and needs, but those local decisions will be different from community to community, they will receive only casual and sporadic attention at state and federal levels, and they will not sum to a national policy in any conventional sense. Federal and state governments will continue to serve specific needs with specialized programs that are coordinated poorly if at all.

Norman Reid pointed out that current trends in intergovernmental policy are likely to encourage decentralization, with two probable results:

First, the locus of decisionmaking for many critical intergovernmental issues will be shifted away from the Congress and into the halls of state legislatures. And second, for this reason, a multiplicity of intergovernmental approaches, rather than a unified one, will be the result as each state decides to define its own programs in its own way.

Catherine Lerza pointed out the difficulties involved in trying to translate a multiplicity of approaches into unified national policy:*

. . . the problem in terms of kind of marshalling the troops or something is that when things are happening at the state and local level, it's hard to make a national movement . . . [Things are] going on in Minnesota, Iowa, Ohio, a lot of different places. That's somewhat coordinated, but it's not coordinated with things that are going on in Texas or California or Massachusetts. I think the challenge is organizers, lobbyists, advocates, etc., for the agencies to try to find a way to pull that together.

Diversity

The national policy dilemmas associated with decentralization are akin to those associated with one of the most common themes in today's rural development literature: diversity. If there is one thing on which rural observers agree, it is that today's rural America is not a monolithic entity dependent on agriculture or mining and other natural resource industries, but a diverse landscape whose people rely on a wide variety of sources for income and employment: government, retirement income, junior or senior colleges, tourism, and service industries, to name a few. This diversity was eloquently described in the introduction to the summary of the National Research Council Panel's study:

Rural America is wondrously diverse. Some rural areas are changing rapidly; some are not. Some are bursting at the seams with new residents; some are quietly dying because they have been forsaken by succeeding generations of young people. Some rural areas are basking in prosperity, and their residents enjoy many of the amenities of urban life; some rural areas remain remote, isolated, and lonely places whose residents struggle to make ends meet in an oppressive atmosphere of grinding poverty. Some rural areas are becoming more and more like urban areas; others are becoming less so. One can have a hot argument about whether convergence or divergence is the more important trend for rural America, with compelling evidence on both sides: it all depends on the area and the traits that concern one most. Regions differ in culture and history. Communities range from a lobster port in Maine to a ski resort in Colorado, to a lumber town in Idaho. There are also similarities, however, in institutions and human aspirations and interactions. Few generalizations about rural America are valid, because any valid generalization would have to be so carefully hedged with qualifications that it could hardly be considered a generalization.

Communities in rural areas differ in style and substance. Even agricultural communities differ, as Daryl Hobbs points out: "It doesn't take a researcher to see that there are differences in organization, character and even appearance of rural communities that are surrounded by cattle ranches and those that are surrounded by dairy farms, between those surrounded by fruit and vegetable producers and those surrounded by cash grain farmers." Hobbs finds that generalizations are no longer possible and that at a minimum region of the country, size of farms, type of farm output, and the extent of off-farm activity will produce different community consequences.

Differences are even more marked among those communities that rely on functions other than agriculture, as Ed Blakely noted:

Particular rural communities cater to particular lifestyle choices and attract newcomers with similar interests. For instance, many small towns are principally or entirely oriented to retirees, various religious groups, tourists, or professional artists. Many small communities have attempted to accent and thus reify the lifestyle attractive features.

What does diversity mean for the developers of public policy? It seems fairly obvious that it becomes a complicating factor, making it more difficult to develop and attract support for policies and programs aimed at a generalized rural community or citizen. Lynn Daft said that:

The enormous diversity of circumstance and need that characterizes rural America in the 1980s calls for a much different national policy than we have witnessed in the past. Past policies have too frequently fastened-on to the issue of the day, whether it was economic development or poverty or capacity building. While Federal activities addressing these and other topics have served a useful purpose, they have also resulted in partial and oversimplified policies. Any national policy that attempts to force all of rural America into one mold is doomed from the start. For a political system that is accustomed to designing policy around simplified views of the political economy, this poses a special challenge.

Fred Buttel, analyzing the literature that might form the basis for the development of policy, found that diversity either had been ignored in the search for a high level of generality or, conversely, had succumbed to "holistic paralysis," which emphasized and unduly exaggerated diversity and advised that:

What is most needed to avoid holistic paralysis in the analysis of farm structure and the well-being of agricultural communities is an effective typology of agricultural communities that can provide a framework for placing previous studies in perspective and for enabling future research to disaggregate statistical relationships within types of agricultural communities.

Disparities

One element of diversity among rural areas is disparities, within communities and among communities. Eliminating or lessening disparities emerged as one policy goal in which the national government might usefully be involved.

According to Lynn Daft, the Carter Administration found that:

The severe economic stagnation and widespread poverty of the 1960s that was documented by the Rural Poverty Commission's report, The People Left Behind, had been replaced by a much more robust rural economy. Many of those rural areas experiencing population growth during the 1970s had also enjoyed a high rate of growth in employment and income. In the midst of this economic growth, however, there remained significant pockets of rural poverty. The incidence of poverty in rural areas, though declining, remained higher than in urban areas. Nearly two-thirds of the rural poor lived in the South where over 20 percent of the rural population lived on incomes below the poverty level in 1975.

The Reagan Administration's rural development strategy, submitted to the Congress in February 1983, found similar conditions:

Rural Americans have made it clear that, despite the encouraging statistics, progress has not visited every rural region and growth has generated new problems. Many rural areas continue to suffer poverty, isolation, and decay of facilities. On the average, rural America still lags behind urban America in measurable indicators of income, education, and housing conditions, though some argue that lower costs of living may offset part of the rural disadvantage.

Ed Blakely points out that the movement towards an advanced rural society is not universal among communities, and that the consequences of such change are not necessarily better for those involved. Some examples of the negative effects of change or being bypassed by change are:

Communities Left Behind: Nearly 500 rural counties generally concentrated in the central and southern regions of the nation are not benefiting from national economic movements. These poor counties, heavily dependent upon low technology agriculture, are isolated and without access to the major resources of the Nation. These communities face the prospect of continuing deterioration unless specific policy interventions are targeted for them.

People Left Behind: In spite of new jobs or job opportunities and real improvements in the social well being of many rural areas, poverty, unemployment, and underemployment remain high in most rural counties These forms of poverty might be described as:

1. The continuing poor. This group includes the rural ethnic black, Hispanic, and Native American populations of the mid and deep south and Texas. Nearly 41% of nonmetro black families had income below the poverty level compared with just 12% of the whites. Further,

the loss of farm land by black farmers in many counties reduces the potential of this population to develop a reasonable and stable economic base. Black farms are decreasing at a rate 2.5 times as fast as white farms. Among Native Americans these figures are even more distressing. Even in rural counties with increased employment opportunities minority unemployment rates remained high and educational levels low.

2. The emerging poor. Industrial and/or post industrial economic impacts in rural counties with new manufacturing or service sector jobs has created several forms of economic instability. Agricultural workers including farm owners taking jobs in factories to support their families find that farm income and sometimes even two wage earners barely keep families above the poverty line. As manufacturing jobs are lost in rural areas due to the same forces affecting urban manufacturing the impacts are both traumatic and dramatic. Rural job losses in manufacturing are even more devastating because many rural communities are dependent on a single industry or industrial type (e.g., textiles).
3. The new rural poor. The break-up of families and the increasing numbers of female heads of household in rural areas is creating new poverty conditions. . . . In addition to this group a more recent group of unemployables is emerging in rural as well as urban America. This group of individuals usually lacks basic education and skills and thus finds it difficult to find useful work. Heretofore, agricultural, lumbering, and low skilled employment absorbed them. Such employment is rapidly being displaced by machinery. . . . Finally, there are some voluntary poor in rural America. These are individuals who have decided for a variety of reasons that a rural marginal or simple life style is appealing to them. Their contribution or cost to rural areas is not entirely clear. But it is clear from our research that current social welfare programs are not appealing or useful to any of this new category of poor people.

In addition to disparities among people and among communities, there are also disparities in the ability of governments (especially local governments) to respond to local needs. Norman Reid found that while most rural governments have made such progress in improving their public services, there still are some areas where little progress has been made:

While a recent study found a significant reduction between 1962 and 1977 in the number of county areas below a "government services poverty line," a significant number of counties remain below minimum national standards for per capita local expenditures. Most of these counties are nonmetropolitan, relatively poor, predominantly black, and concentrated in the South.

Ken Farrell noted that public policy related to natural resource availability and to the tradeoffs between environmental quality and the provision of food and fiber will impact differently on different communities, creating potential disparities:

. . . the costs of adjustment in future use of natural resources in agriculture will not be distributed equally among agricultural communities nor among persons in any given community. Some agricultural communities stand to lose from higher-priced water, for example. Some may gain as a result of regional or interregional adjustments. It follows that because of uneven distribution of resources within communities, the costs (and benefits) of adjustments in resource use will differ among individuals in the community. Thus, public policies to assist in equitable adjustments among and within communities must not be overlooked in the design of national policies for agriculture and natural resources.

Various speakers addressed the disparity issue in various contexts during the Symposium. Throughout the proceedings, the idea recurred that if there is a clear role for the National Government in dealing with agricultural and other rural communities and residents, it is to redress the disparities, or at least not to make them worse. Dean Jansma recounted the history of distributional concerns, including fairness, as an element of public policy:

Fairness is a second reason given for the development of programs which help people in areas with insufficient resources to compete in the market place. If resources are immobile, the argument is that we need to develop policies to either increase mobility (normally not an alternative held in high esteem by the Congressman whose district will experience the exodus) or to bring additional resources to the region. The rationale for transferring additional resources to an area take almost as many forms as there are policy alternatives. Some are simply attempts to assist lagging areas--the programs of the Appalachian Commission are an example of this approach. Others follow the classic "infant industry" arguments which calls for subsidies,

often in the form of low cost loans or subsidized wages until an industry is well enough established to compete on an equal basis. A third approach is to increase the flow of knowledge to a region to increase productivity while a fourth is to enhance the distribution of information about a region to insure potential entrepreneurs recognize the opportunities available in the specific community.

Robert Carleson responded to concern about disparity of revenue sources in rural communities by asserting that there is a role for the National Government in facilitating redistribution among the States, to the extent that redistribution is needed:*

I think there is a proper national or federal role in redistribution among the states. I really don't believe that there is a federal role in redistribution in these kinds of programs among individuals, but I'm talking about among the states, and I think at the state level there is an even greater responsibility to insure that there is a guarantee of the form of redistribution among the counties or cities or whatever the jurisdictions are, although my first choice in the way that redistribution takes place would be through certain tax sources and other kinds of decisions that are to be made at that level.

Norman Reid responded that:*

The only point I guess I'll make is by turning back tax sources to places I'm not sure that you can really solve the problem if there is a disparity in terms of fiscal capacity because the places that have the greatest need are also places that don't have the ability to tax themselves anymore anyway. So you really are, if you're talking about redistribution, I think you're probably talking about external aid from some other level of government.

Ed Blakely offered a proposal for Federal aid intended to improve economic opportunity, especially for communities in the smallest and/or poorest rural counties, through a Rural Development Consolidated Grant Program. Luther Tweeten proposed a Federal wage supplement as a method of providing a socially acceptable wage without raising private sector wages above market levels.

The Urban/Rural/National Dilemma

For the past 25 years, national rural policy has tended to operate almost as a subset of urban policy. Rural development was encouraged because it would bring rural communities and citizens up to urban standards, and rural policy was based on the need to stem the flow of population (especially under-trained, under-educated minority population) from rural areas to the cities. Thus, the Agriculture Act of 1970 states congressional rationale for rural development as a necessity for creating a sound balance between rural and urban areas: "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." (Sec. 901(a))

Recent improvements in the quality of services in rural areas, progress in overcoming problems of distance through improved transportation and communications systems, and above all the "population turnaround" which sees rural areas growing at a faster rate than urban areas may have undercut this rationale for a national rural development policy. Ed Blakely says that:

Rural policy for most of this century has been a residue of urban or other public policies. Even when national attention has focused on rural resource issues such as timber, food, or fiber production it has been in the context of urban needs. Similarly, whenever the plight of the rural poor, unemployed, or undereducated has been considered the policy objective is inevitably to increase parity between rural and urban

Rural places have been viewed as underdeveloped or undeveloped, a source of shame, embarrassment, and inequality. This concept of rural as somehow lacking in resources, skills, and potential continues to plague the policy formulation process. Rural legislators and advocacy groups continue to justify rural needs in terms of bringing rural places up to an urban standard, a concept that is misguided and counterproductive. It condemns rural policy design and development to only one goal: urbanism. The need now is to fashion policies and programs that assist rural areas to define and meet their own goals and gain reasonable control over their destiny

New issues arising from integration of rural areas into an altered national socioeconomic structure create new policy needs. Therefore rural policy formulation must be designed to alter, intervene in, or create structures that will assist rural places to develop more diverse, self-sustaining economic and sociopolitical institutions. The model for these structural changes should be to create low density, livable communities that can share resources with similar communities, creating a balance between human settlements, industrial development, agriculture, and the natural resource base. Such a model can be developed and achieved through sensible policy, without national plans or imposed regional institutions.

As the National Research Council panel points out in their statement on diversity, the question of convergence versus divergence in the rural/urban relationship is unsettled. They concluded, however, that ". . . Although it cannot be proved, [we believe] that the diversity within rural society today exceeds that between rural and urban life." Calvin Beale points out the arguments for convergence in his paper:

There was a time when it was possible to characterize farm people and farm communities in terms of social disadvantage, as compared with the urban population. It was an obvious and relevant thing to do. There were striking contrasts in electrification, education, quality of housing, social security protection, income, transportation, and communication. Although there are residual levels of these deficiencies today, modernization of rural life has seen major convergence between the material living conditions of farmers and others All classes of agricultural counties have been affected by the revival of population growth in rural areas. (Even those that are continuing to lose people are typically having much smaller losses than in the past.) I expect the diffusion of nonagricultural economic activity into rural areas to continue. I am not suggesting that farm people have or will become indistinguishable in values, attitudes, and life situation from everyone else. But, it is hardly more than a truism to say that their economic and social setting is increasingly shaped by the complex forces of modern society and, indeed, by international trade and political factors as well. The internal variation among farmers may now be greater than their collective average difference from nonfarm America.

Despite these findings with regard to convergence, most speakers who touched on the subject reported that there are still certain uniquely rural characteristics that require special attention. Even so, they suggest that this special attention need not be limited to a rural focus, but should be

based on a national foundation with some specific rural element. The National Research Council panel on statistics, for example, based its recommendations on the principle that:

The United States does not have, and should not attempt to develop, a comprehensive 'rural data base' or a 'rural data system' separate from the information systems for other sectors of the population. The growing interdependence of rural and urban people causes the problems of each group to affect the other, and policies designed to meet the needs of either group will affect the other. Rural areas do have unique features, however, as well as considerable diversity, and there are good reasons to ask whether rural residents are served adequately by current data systems and institutional arrangements.

The Reagan Administration's rural strategy adopted a similar principle:

A policy confined to purely 'rural' measures, then, would fail to address the true nature of many of rural America's modern needs. For that reason not all the initiatives outlined in this strategy are focused on rural America exclusively. Many have a wider national application and are intended to benefit urban and rural areas alike. Too often in the past, however, the characteristics which help define 'rural' America--sparsely and distantly settled population centers, small-scale institutions, limited revenue bases, and widely dispersed channels of communication--have hampered the application of largely urban-oriented national policies in the rural setting.

Several speakers pointed out that although national policies had contributed to the population "turnaround" and to improvement in rural living conditions, many of these policies were not specifically rural in nature. For example, Luther Tweeten notes that: "Transfer payments are the largest single source of personal income in totally rural counties. Payments from social security, medicare and medicaid are critical to the well-being of rural communities and their residents." Tweeten says that agricultural and rural communities will be greatly influenced by national monetary-fiscal policies; by export policies; by farm commodity and credit policies; by community service, welfare, health, and education policies; and by work force policies.

Blakely says that national transfer payments, health programs, anti-poverty programs and certain categorical education grants have resulted in a safety net for rural areas and that as a result:

The principal disadvantages associated with rural places have been mitigated by a series of national government policies and programs. Only a few of these programs were specifically targeted for rural areas, but their net effect has been to allow people to live in rural areas without sacrificing many of the amenities associated with urban regions. These programs have also made rural settings more desirable to senior citizens with pensions or Social Security.

These observations are all based on national policies prior to the attempts to reverse or slow down the growth of the "safety net" programs beginning late in the Carter Administration. Fred Buttel depicts a more somber scene, based on his view of the impact of a world-wide "chronic contractionary downswing that can be dated from only 1974." Buttel says that the consequences of this global economic contraction are now being felt by nonmetropolitan and agricultural communities:

While the nonmetropolitan segment of the U.S. has been buoyed and continues to be stimulated by "turnaround" migration, this turnaround has been experienced very unevenly. There have also been indications that the 1970s trend toward the narrowing of metro/nonmetro disparities in income and service delivery has been reversed. The tendency toward exacerbation of metro/nonmetro disparities has been due, in part, to the demise of what had become a 'rural welfare state' based on federal outlays (transfer payments, service and public works subsidies, area economic development programs) that have now been slashed due to fiscal austerity. Moreover, federal and state government fiscal austerity is being transferred to local governments under the guise of the 'new federalism.'

Norman Reid wrote that:

Even if the proposals of the Reagan Administration should fail to be adopted, observers are agreed that major changes are on the horizon. The levels of financial aid to state and local governments peaked in 1978, two years before the Reagan administration took office, demonstrating that the current reductions are part of a long-term trend, and not merely the product of a particular political philosophy.

If urban/rural differences (especially disparities) have been eliminated or reduced by national policies not specifically directed at rural areas, and if these policies change so that the safety net (whether in the form of transfer payments to individuals or in the form of Federal aid to State or local government) becomes less secure, it may be that the gains made by many rural areas and citizens in recent years will be overturned. In any case, it seems clear that rural advocates will need to monitor these national policies and programs as closely as they monitor programs specifically directed to rural areas.

FEDERAL POLICY FOR AGRICULTURAL COMMUNITIES

The panelists and the participants addressed various aspects of the role of the Federal Government in dealing with agricultural communities. Three basic issues emerged in the papers and in the discussion: What should the Federal Government do? How should the Federal Government be organized to deal with agricultural communities? How can the impacts of Federal activities better be anticipated and evaluated?

The Federal Role

There was some disagreement as to the proper role (if any) of the Federal Government in this area. Should the Federal Government try to develop goals and a national policy framework for these communities, or should it simply respond to locally generated policies and goals, regardless of the collective impact of these decisions on the Nation as a whole and on the communities themselves?

One participant contended that a Federal policy of providing incentives and assistance for the development of rural communities would "simply accelerate the destruction of the characteristics that made the rural community attractive in the first place."* Jack Cornman, former Director of the National Rural Center, remarked, "I always get nervous when we sit in Washington, whether the Library of Congress or Congress itself and talk about how we are going to have to determine the future of these communities rather than a process of helping them to do that."*

Ed Blakely, who consistently argued for a strong Federal lead in articulating and developing policy for these communities responded to these comments as follows:*

What I fear is that what's happening is the non-thought about this, that what is happening is by having--not thinking about rural places as being important places for policy development we are simply extending things like enterprise zones and existing policies and procedures to rural areas and not understanding that we have to preserve that natural environment, we have to preserve those rural institutions, and in the form that the urban intellectual template would lead one to believe--to make every place have a shopping center and a McDonalds should not be the goal of rural policy development. But if we continue along the line of offering enterprise zones and offering what are basically urban programs to rural areas, that's what we are going to have.*

. . . I do believe that a lot of the policy development has come from the grass roots level that you are talking about, but we have to provide at the national level the resources so that can take place. And if we don't provide the resources, if we don't provide the policy and direction for that to take place, then we are going to get what we deserve . . . a silly pattern where many rural communities which once were agricultural all of a sudden go out and attract Ataris and all these other things, and build up the community, and I've seen this around the country--and attract manufacturing and forget the natural resource base, and then as soon as there is some little wave in the economy, they are gone because they are full of branch plants. I think we have to help rural places think through more clearly what kind of economy they want, and not simply taking branch plants from elsewhere.

Federal Government Organization

Several people commented that the Federal Government is not well organized to address and implement policy relating to agricultural and other rural communities. Bruce Hawley said that:

The federal policy making apparatus is largely unsuited to make the integrated decisions necessary to guide rural community growth in a manner that accommodates agriculture. Both the Congressional process and the bureaucracy are structured, either by committee or department, in a manner that encourages constituencies which must be catered to. As the constituency is served, other considerations are largely ignored. The 'Clean Water' committees of Congress deal with sewage treatment programs in the context of clean water, not the impact of an expanded sewage treatment capacity on a rural community's future growth. The Small Business Administration assists rural small business development, without consideration of such development on agriculture.

Catherine Lerza recounted her experience in working with the Family Farm Coalition in which she found that:*

. . . the Ways and Means Committee is up there dealing with taxes and the Ag Committee's over here not dealing with taxes and yet the two things are critically important. The Banking Committee deals with Farmers' Home housing programs and the Ag Committee deals with Farmers' Home every other kind of program, but never the twain shall meet, so you are really walking into that kind of roadblock.

At present, the Farmers Home Administration (FmHA) in the U.S. Department of Agriculture is the Federal agency with the major responsibility for programs with a rural orientation, although many other agencies operate programs with a significant impact. Many participants favored retaining this organizational structure, because of its experience and its existing network of county offices which provides a unique program delivery system. Others suggested changes, although the motivation for the changes varied. For example, Bruce Hawley sees FmHA's involvement in non-farm rural development as a threat to its original mission of providing assistance to farmers:

The Farmers Home Administration, dating back to the mid-thirties, was intended to provide a source of credit to assist farmers. For the first twenty years of Farmers Home's existence, it dealt almost exclusively with the agricultural community. As recently as 1970, farm credit accounted for close to 70 percent of the Farmers Home outlays. Today, Farmers Home Administration provides less than half of its available funding to farmers, and even this estimate understates the impact of the growth in rural community services on the Farmers Home Administration. An agricultural loan requires significantly less servicing and is of significantly greater volume than are most rural housing or community loans. As such, a disproportionate share of the monies and the manpower of the Farmers Home Administration has been diverted to nonagricultural activities.

Ed Blakely recommended a change, for a different reason. He argued that it is an injustice to rural Americans to make the principal liaison between them and the Federal Government the resource-oriented Departments of Agriculture and the Interior. In order to place the responsibility closer to a wider set of "people-serving resources," he proposed that the human services, housing, and similarly urban and community development responsibilities for nonmetropolitan places be transferred to the Department of Housing and Urban Development (HUD). He acknowledged the strong feelings expressed by many participants that such a transfer carries a risk that "rural areas would receive even less attention in HUD than in USDA," but contends that "strong Congressional oversight as well as specific legislation could lessen this danger."

As an alternative to a transfer to HUD, Blakely proposed the creation of a new Rural and Small City Development Administration as a quasi-independent administrative agency within the Department of Agriculture. The new agency would take over the Economic Development Administration, Farmers Home Administration and other USDA community development programs, and the HUD Small Cities Block Grant program.

Anticipating and Evaluating Impacts: Data Needs

A recurrent theme of the symposium was that the Federal Government needs to be more aware of the impacts of its actions, particularly of unintentional or unanticipated primary or secondary effects. Glenn Nelson commented that the development of information necessary to do this is a matter of efficiency, but also an aspect of the disparities or inequities issue summarized above.

Dean Jansma cited a study that indicated that federally subsidized irrigation programs in the West had had the unintended secondary effect of displacing one farm worker for every twenty remaining in southern agriculture. Jansma recommended that techniques be developed to make it possible for policymakers to understand the second and subsequent round effects of implementing various policy alternatives, with an emphasis on the "who and where" impacts. Thus, prospective programs could be evaluated in terms of the following questions:

1. Who are the primary beneficiaries and are the benefits concentrated in a specific area or region?
2. What is the general level and sectoral distribution (both positive and negative) of the forward and backward linkages associated with changes in the primary beneficiaries?
3. How are the impacts resulting from this policy distributed among various income classes?

During the general discussion following Ed Blakely's presentation, Jack Cornman observed that at least some of the resurgence in rural communities could be attributed to improved transportation and to the telecommunications revolution. He pointed out that these communities might be severely affected by infrastructure problems such as a disrepair of roads and railroads and by the deregulation of airlines, which could make these communities less

accessible.* Blakely agreed that deregulation, not only of airlines but also of telephone service and natural gas could have severe implications for rural places. Like Jansma, Blakely suggested that impact statements should be developed and suggested that responsibility for this should be placed in the Office of Management and Budget (for Administration proposals) and the Congressional Budget Office (for legislative proposals).

The findings and recommendations of the National Research Council Panel on Statistics for Rural Development Policy are set out in the body of this document. Glenn Nelson, who served as a consultant and editor in the preparation of the report, noted three basic limitations in the current data base:*

1. We don't have adequate frequency of data.
2. Aggregations are a problem--for example, the practice of lumping all nonmetropolitan areas into a "balance-of-state" category.
3. Concepts are outdated or inappropriate. For example, Nelson suggested that unemployment figures are not a useful measure for rural policy development.

Nelson pointed out that the Administration's rural strategy included a data component and commented that the National Research Council's Panel Report provided an existing analytic base on which to build in implementing such a recommendation. The Administration recommended that:

To help insure that statistical gaps do not impede rural America's access to Federal resources, the U.S. Bureau of the Census, Bureau of Labor Statistics, and Bureau of Economic Analysis will improve the quality and specificity of information collected and reported on rural housing, health, education, transportation, demographics, physical facilities, employment profiles, and other categories.

Nelson recommended that work on an improved data base should be limited to certain high priority areas that affect the distribution of Federal monies and the understanding of the quality of rural life. This would be data elements

in the following areas: demographics, employment, income, housing, government finance, and health.

There was some discussion to the effect that data improvement alone would not solve the problem. Bob Anderson, of the House Agriculture Committee, said that congressional staff do not have time to read statistical reports as they are currently presented. Jerry Welcome, also of that staff, said that useful information necessary to evaluate the effectiveness of programs or to assist in the design of new programs was not available. Ken Farrell remarked that what is lacking is a credible analytic framework to show the value of data and a sense of priorities.

AGRICULTURAL COMMUNITIES

Diversity was identified above as one of the undisputed characteristics of today's rural communities. One of the goals of the Symposium was to focus on one type of rural community--the agricultural community--and attempt to identify such communities, identify their characteristics, and identify policies which affect them. Each of the speakers was asked to focus on this type of community, if possible; however, in view of time constraints and lack of existing studies, they were directed to focus on rural communities in general if they could not readily deal with agricultural communities. This turned out to be the case in most instances, as Fred Hines remarked:*

We have talked about agricultural communities. I don't know that anyone really defined them. Certainly there is a possible typology of communities out there. I don't think anyone at these sessions has even come close to defining what kinds of communities we are talking about.

While it is true that no definition was developed, some ideas were presented and some concepts were raised that might be of use to anyone who is

trying to develop a typology of rural communities, with a focus on agricultural communities. One complicating factor was pointed out by Lynn Daft:

Communities are generally defined in terms of common geographic boundaries and a common set of social interactions that occur within this space. Against this standard, the visual images that come to mind when one thinks of agricultural communities are the small towns and villages that exist in rural parts of the United States. But are these really agricultural communities?

There are two principal reasons for answering: 'not necessarily.' First, in contrast to earlier times, most small towns and communities in the U.S. are now primarily dependent on non-agricultural economic activities. Though some of this activity is in support of agriculture, directly or indirectly, much of it is not. Thus, for many rural economies, agricultural employment and income accounts for a relatively modest share of the total.

A second and related point stems from the dramatic transformation of the structure of the agricultural system. This has been an evolutionary change, occurring over the past several decades. This transformation has now reached the point that, viewed from the standpoint of political economy, agricultural communities and communities in agricultural areas are now two quite different things. The community of interest that we call agriculture has lost much of its geographic dimension, largely because agriculture is no longer synonymous with farming. Not only has farming become a smaller and smaller share of the overall system--whether measured in terms of value added or employment--but the growth elements in the system are not geographically tied to farmland in the same way they once were. Thus, the worker on the John Deere assembly line in Moline or the bulk grain handler at the Port of New Orleans often has a more direct and more vital stake in the economic health of agriculture than do many of the farmers' nearby village neighbors.

The important point to be made here is not so much that farming has become relatively less important (which it has) or that the food and agriculture sector has become less important (which it probably has not), but that the scope and configuration of this sector--its dimensions as a community of interest--have been dramatically altered. The political and economic relationships that exist within this community have been fundamentally altered by this transformation . . . to the point that some would even question whether an agricultural community of interest still remains.

If there is any "agricultural community of interest," it would most likely be found in communities where agriculture is still the major economic force in the community. These communities, as several speakers noted, are now a

minority not only of all communities, but also of rural communities. Calvin Beale said that: ". . . agriculture as a direct or secondary employer is not the driving force of most of the communities of America today that are viewed as rural or small towns and that constitute the clientele of the Department of Agriculture for many Federal programs." Beale points out that there are only 19 counties in the United States in which half or more of all employed people work solely or primarily as farmers or farm laborers, and 271 counties with a fourth or more of their employment in farming. Most of these are thinly populated Plains counties, containing 8 percent of total U.S. farm population. Daryl Hobbs cites a finding that more than 2/3 of the rural population lives in counties in which less than 10 percent of their labor force is employed in agricultural production. In the late 1970s, agriculture accounted for just 6 percent of rural income, compared with 20 percent from manufacturing, 14 percent from government employment, and 11 percent from transfer payments.

There are still certain areas, however, that are largely dependent on agriculture. Tweeten says that agriculture is the only major economic base in much of the Great Plains and western Corn Belt. Other speakers agreed that economic diversification (Beale calls it "deagriculturalization") has affected the south and west much more than midwest and the northern great plains. In totally rural counties, according to Tweeten, each job in agriculture as a farm proprietor, hired worker or agricultural services worker directly accounted for 23 percent of employment; when jobs associated with agriculture were added, nearly half the employment in these counties was attributed to agriculture in 1979.

Several speakers made the point that dependence on agriculture does not necessarily correlate with agricultural productivity. Beale says that none of the 100 counties most dependent on farming in 1978 was among the 100 top

counties in net value of agricultural output. There are substantial differences between the high dependency and high production counties: population declined by 6.9% in the former (largely because of lack of alternatives to farming), and grew by 20.4% in the latter group. Further, according to Beale, high dependence on farming corresponds with lower overall levels of education, income, minority race presence and female labor force participation but higher average age and percentage of children living with both parents.

There are certain differences within the total farm population that might have implications for agricultural communities. According to Beale, there are major differences in the extent to which:

1. Farm families depend on off-farm work, (and thus the extent to which their problems can be addressed through farm policy),
2. They and their interests dominate communities or are merely a minority social and economic segment within them, and
3. Agriculture is practiced by the modern day version of the yeoman farmer with his family labor, compared with the agricultural employer operating primarily with hired workers.

AGRICULTURE AND RURAL COMMUNITIES

If the Symposium skirted the issue of indentifying something called an "agricultural community," it did grapple with the issue of whether agriculture affects communities and if so, how. Much of this discussion dealt with the issues of large versus small farms, of the desirability of promoting diversity in farm size, of the potential costs and benefits of such a policy, and of how national policy related to these questions.

Farm Structure Effect on Communities: Research and Public Policy

Many of the speakers noted that there is a fairly extensive body of literature that attempts to identify the interrelationships between agricultural structure and community structure and quality of life. Research published over the past forty years seems to indicate that there is a connection between farm structure and such variables as the social class structure of communities, community participation, social values and attitudes. Catherine Lerza summarized the findings: family farm-based communities have better social services, community life and small business sectors; communities surrounded by larger, non-family "industrial" farms are marked by higher levels of poverty and economic inequity, fewer businesses and services, poor housing and community services, and a larger population of unmarried males and transients and the businesses that cater to them.

Fred Buttel also cited this literature, noting that there exists a "relatively convincing" body of research indicating substantial interrelationships between agricultural structure and community structure and quality of life: larger-than-family farms tend to be associated with adverse social and economic conditions in agricultural communities. Buttel identifies the following causal links between large-scale agriculture and adverse community conditions:

1. A high degree of mechanization and absentee ownership;
2. Size of the farm population;
3. Prevalence of agricultural wage labor; and
4. Patterns of input purchasing.

Buttel goes on, however, to question the utility of this research as a basis for public policy, contending that the social science community would

find it problematic to specify concretely the gains in the quality of life of agricultural communities that would result from restraining or reversing the growth of larger-than-family farms.' He attributes this weakness to the fact that past research has adequately identified the direction of this statistical association, but not the strength of and the processes that underlie the relationship. Furthermore, neither the costs nor the benefits that would be accomplished by reduction of the role of larger-than-family farming have been quantified.

Buttel identifies what he considers to be the major theoretical and methodological limitations in existing research. His recommendations for a more useful research base for public policy include placing contemporary data in historical context, developing a typology of agricultural communities, supplementing indicators of central tendency in farm structure with indicators of dispersion, the use of quasi-ethnographic community study techniques, and the pursuit of comparative multistate research on a regional or interregional project basis through the Cooperative State Research Service, with the Economic Research Service of USDA taking the lead in providing funds for comparative work in selected regions or states.

Ken Farrell notes similar weaknesses in the research that might be helpful in resolving necessary policy tradeoffs between the current "high-tech" agricultural system and high-quality environments for agricultural communities. Farrell says that there are three major problems that complicate resolution of these issues:

1. Scientific evidence is lacking in some respects on basic relationships involved in the controversy, e.g., the fate of pesticides after they leave the farmer's field.
2. The difficulty in valuation of the social costs of the environmental externalities--soil erosion, sedimentation, salinity, etc.--deriving from agricultural production.

3. Institutional mechanisms are not adequately developed to internalize to agriculture the social costs of environmental degradation even if they could be accurately valued.

The Disappearing Middle

The speakers at the Symposium were asked to try to identify current trends in agriculture that might have significant (if not necessarily quantifiable) impacts on the communities. Daryl Hobbs identified three trends of particular import:

1. Commercial agriculture has become more geographically concentrated--not all rural areas of the country contribute equally to the nation's agricultural output. Calvin Beale pointed out in his paper that agricultural dependency and agricultural productivity have each become concentrated and that the areas dominate by one type or the other show strikingly different community characteristics.
2. Larger, more capital intensive farms have become more specialized in production. In an era of general farms, there was a tendency for agricultural communities to be more similar to one another than now, when they tend to take on characteristics of the dominant type of production that surrounds them.
3. Farms have become increasingly stratified into a relatively small number of large volume commercial farms that produce a majority of the nation's output, and another category of small farms that includes a majority of the nation's farms but only a small portion of the output. These small and large farms tend to be located in different regions and have a different relationship with adjacent communities.

This latter trend, referred to as "dualism" or "the disappearing middle" was identified by a number of speakers as a hallmark of modern agriculture. If the U.S. is undergoing a transformation of agriculture, which will result in a dual system consisting of very large farms and small farms with part-time operators, what are some of the consequences?

Luther Tweeten gave the following reasons for the decline of medium size farms:

1. Cash-flow problems associated with the inflation cycle;
2. Increasing risk in the face of less sophisticated risk management opportunities than on large farms;
3. Less risk-reducing off-farm income than on small farms; and
4. High asset requirements for an economic unit.

The potential implications of this new composition of farms were summarized by Dr. Tweeten in a statement quoted by Catherine Lerza:

Numerous studies of farm-community interactions reveal that moderate size farms are most closely consistent with the well-being of rural communities. Middle-class families support churches, schools, clubs, and commercial businesses. Although the optimal size of a farm, if there is one, varies widely and no one size fits all conditions, the size of farm consistent with increased well-being of society as best measured with our crude tools is neither a small nor a very large farm but rather is a moderate-size family operation.

Tweeten presented data that indicate that economic activity in rural communities would decline to about 78 percent of 1981 levels with only large farms and would be 5 percent above 1981 levels with only small farms. A system of small farms with one family per farm would support nearly seven times as many farm families and social activity that depends on farm population than would a system of large farms. According to Tweeten, however, these gains to rural communities would be offset by higher food costs for the consumer and loss of competitive price advantage in export markets.

Hobbs reports that areas dominated by small farms have generally experienced the greatest amount of expansion and diversification of their economic base and have been recipients of much of the recent rural population turnaround. Conversely, States and regions dominated by larger commercial farms have generally either lost population or have experienced a slow rate of growth. Hobbs illustrates this relationship by comparing rural Missouri

counties characterized by larger commercial farms and an equal number of counties dominated by small farms.

Hobbs also notes that the traditional view of the relationship between agriculture and the communities that it surrounds stressed mutual dependence, with agriculture supplying the economic base and the community supplying services in support of agriculture. New conditions have changed that relationship, but in different ways for small and large farm regions.

Smaller farms tend to be more dependent on a healthy diversified community economy that can provide supplementary farm family income; that is, the community provides the economic base that allows the small farm to exist. Decline in off-farm income could lead to a decline in small farms.

In larger-farm areas, however, the smaller communities are a more dependent on agriculture, in part because there has been less economic diversification. Further consolidation, which decreases the number of farms, would produce additional economic pressure on these communities. In addition, these larger farms may require support services that exceed the capacity of adjacent small towns. Thus these communities may suffer the double jeopardy of fewer farms and diminished farm economic transactions from the remaining larger farms. Luther Tweeten cites a study of the estimated impact of the payments-in-kind (PIK) program on two Oklahoma communities, one with a population of 40,000 and a large service area and the other with a population of 1,500 and a small service area. In the larger community, a one dollar PIK payment would generate \$1.53 throughout the economy; in the smaller community, a total of \$1.05 would be generated. This may reflect the movement of agricultural transactions to the larger communities.

Competition for Resources

The issue of potential competition for resources between agricultural communities and the agricultural sector was addressed by several speakers. Attention was given to both the quantity and the quality of resources.

Bruce Hawley asserted that rural community growth is competitive and will diminish local agriculture. This premise is based on his assumption that growing rural agricultural communities and a viable agriculture both require land, water, short- and long-term investment capital, and labor. Hawley concluded that change in the structure of agriculture and of rural communities could be accommodated as long as the changes take place on a gradual basis, and as long as rural communities themselves (rather than the Federal Government) control the rate of change and address the associated problems.

Ken Farrell stressed natural resources. He considered the demand for natural resources in both agricultural and nonagricultural uses, the supply of those resources, and the technology likely to be available to complement or substitute for natural resources. He also reviewed the relationship of agriculture to quality of natural environment, especially the role of the current "high-tech" agricultural system. Farrell concludes that public policy in these areas will need to address the development of institutions to encourage more efficient use and socially desirable allocation of water; institutions to guide rational, more orderly, and farsighted use of land; targeting more closely agricultural production adjustment and natural resource protection and conservation policies and programs to environmentally vulnerable areas; the direction of public and private research so as to maintain or broaden options in the use and conservation of natural resources and the environment; and the need to assist in equitable adjustments among and within communities as adjustments in use of natural resources are made.

Ed Blakely also addressed the threat to the scenic beauty and natural surroundings of rural communities, and proposes the following as at least a partial solution:

Each state should be provided with new federal incentive planning grants similar to the old "701" planning grants program designed to develop comprehensive rural land use plans that recognize the demand for alternative settlement patterns. These plans would encourage the better use of existing small town urbanized areas, yet provide for increased population in low density settlement. In addition, such planning could incorporate new planning, zoning and mixed use formulas that assist in preserving farm land and natural habitat.

Policies for Agricultural Communities

Federal policies that affect the relationship between agriculture and agricultural communities are not limited to farm programs. Agriculture today is influenced as much by policies that affect exports as it is by commodity programs. In recognition of this, the speakers and participants at the symposium identified a wide variety of issues and policy areas that relate to agriculture and have an impact on the communities surrounded by agriculture.

General Economic Policies

Luther Tweeten commented that the "immediate overarching requirement for economic health of farming, rural communities and the economy at large is sound monetary-fiscal policy." He observed that the inflation cycle that has resulted from erratic monetary and fiscal policies especially disadvantages full-time farmers and shifts the composition of agriculture away from medium-size farms.

The importance of the export market to the health of agricultural communities has been noted by a number of observers. The Regan Administration's

rural development strategy observes that "Increased employment in rural America is directly related to trade expansion and reform." Tweeten remarked that "The economic vitality of agriculture and its contribution to rural communities rests firmly on export markets."

The administration's recommended program is to:

Encourage the formation of export trading companies to increase the export of agricultural and other rural products, and

More systematically disseminate Government-sponsored market research and other trade assistance to public and private rural trade interests.

Tweeten suggests that in the interests of trade stability embargoes might be reserved for national emergencies only. In addition, he recommends a Federal policy of multinational reduction in trade barriers and the encouragement of trade in general.

Catherine Lerza disagreed with the thrust of these export policy recommendations, arguing that the export market alone cannot eliminate the sectoral instability generated by the cost-price squeeze * Further, Lerza argues that given the current structure of agriculture it is unlikely that expanding exports would benefit small producers or small businesses.

Farm Programs

The Congress will write a major farm bill to authorize commodity programs in 1985. With that in mind, a number of proposals were offered to influence farm structure by revising major farm programs. The revisions would be aimed at buttressing the "disappearing middle" segment of farms by targeting Federal supports or payments to these farms.

Tweeten's proposals were aimed at maintaining as much free-market orientation as possible. While he sees medium size farms as needing income support, he would free large farms to compete in the world market and seek their maximum efficiency scale.

Income support for medium size farms would be achieved by retaining the current target price mechanism with target prices set to cover non-land costs of production. The deficiency payment would be the difference between the target price and the market price and would be computed on three-quarters of each farm's production base (normal yield times base acreage). Tweeten would freeze individual farm program yields and base acreages so as to remove any program incentives for farm enlargement. He also proposes a limit of \$25,000 per operator for deficiency payments. The farmer held grain reserve would be continued in order to promote economic stability in the farm sector.

Lerza's and Buttel's proposals were oriented toward maintaining a diversified farm structure by assuring successful entry for new farmers and maintaining land ownership in the hands of farm operators. In addition Lerza's objectives included sound management of natural resources and encouragement of innovative farming techniques. Lerza emphasized that stabilization of farm commodity prices and combating poverty in the farm sector are problems which cannot be addressed with the same programs. She also discouraged the role of expanded export markets in solving these problems.

Lerza specifically proposed supply controls with price support levels set at the cost of production. Limits would be set on the amount of production eligible for supports or payments made to any one producer. These limits would be set to reflect the scale of production necessary to reach reasonable economies of size.

Buttel's commodity program proposals were similar to Lerza's in that he would use a sliding scale provision to phase out program benefits to operators of larger than family size farms. In addition Buttel suggested that in the longer run Government intervention in or regulation of farmland markets might be required if excessive concentration or fragmentation of ownership is to be avoided.

Several people commented that even the farmers who might expect to gain from a revised policy might not necessarily support it. This bears out Jansma's point that the impact of past decisions must be incorporated into current policy discussions. He points out, as an example, the fact that commodity payments for selected agricultural programs have been capitalized into land prices and suspension of these programs would now result in major losses to present land owners.

Tweeten suggested, however, that a commodity program of the 1983 cost (\$20 billion) and acreage magnitude seems unsustainable, and that new directions will need to be considered after stocks are brought down to reasonable levels. Buttel perceives the current policy milieu as being comparable to that associated with the Great Depression in terms of potential for change:

. . . periods of economic crisis may create unanticipated openings for policy reforms. Where the Great Depression witnessed the establishment of farm commodity programs that have survived essentially intact up to the present, federal fiscal austerity has led to a situation which at this writing promises to result in an unprecedented diminution of the federal role in supporting farm product prices. Organized interests in agriculture may have little leverage in averting this policy shift. Other major policy changes may follow if the economic downswing continues.

Tax Policies

Several speakers suggested that tax policy is a major, if inadvertent influence in farm structure. Buttel recommends invoking major alterations in the tax system so as to "curb drastically the prevailing tax subsidies to capital intensity (i.e., curbing accelerated depreciation allowances and investment tax credits, and significantly raising capital gains taxation on farm real estate)." Tweeten said that:

Federal tax policies need not favor but sometimes have favored corporations over sole proprietor business organizations, large farms over medium and small size farms and capital over labor. Accelerated depreciation allowances and investment tax credits encourage substitution of capital for labor in production processes, thereby increasing farm size and decreasing farm numbers. A more resource-neutral tax policy could promote earnings and employment on farms, in rural communities and in urban communities.

Land Ownership Patterns

The issue of land ownership was raised at the Symposium as a factor in maintaining diversity in farm size. Catherine Lerza reported that only about 50 percent of the farmland in the United States is farmed by the person who owns it. Farm tenancy is increasingly common, and farmers frequently own only part of the land that they farm, renting the rest.

Lerza said that historically Americans have equated broadbased ownership of land with political stability and economic health, and this is a factor in the generally favorable image of the "family farm." She would support policies that would encourage broadbased ownership of farmland by farm operators.

Ruth Kobell, of the National Farmers' Union, raised the issue of the difficulties faced by beginning farmers as they try to gain access to land, either family land or that on other family's farms.* She noted that in the past

there have been national land policies to encourage settlement and development of land, citing as examples land grants and the Homestead Act.

Fred Buttel responded that the assumption that a beginning farmer must enter as an owner may no longer be tenable.* He noted that high levels of indebtedness are an element in the recession-related "shakeout" of certain farmers, so that making credit available to beginning farmers for land purchase, as some participants advocated, could be undesirable. Buttel suggested that the concept of tenancy might be rethought and re-evaluated in terms of today's conditions, rather than in terms of historic experience. He cited a Forbes magazine article that called for a partial nationalization of agricultural land, using the public funds that would otherwise be allocated to massive commodity program payments to purchase the land. One function of the Federal farmland reserve, Buttel suggested, might be to provide rental land for whatever social and economic purposes were thought to be important.

The Role of Alternative, Specialty Farming

The discussion that followed the presentation of the papers at the agriculture panel focused to a great extent on the desirability and feasibility of developing alternatives to the production of basic commodities such as grain, soybeans, and cotton. Daryl Hobbs noted elsewhere that one trend with significant meaning for agricultural communities is that:

Larger, more capital intensive farms have become more specialized in production. In an era of general farms, there was a tendency for agricultural communities to be more similar to one another than now, when they tend to take on characteristics of the dominant type of production that surrounds them.

Whether this specialization is a good or bad influence on agricultural communities was not discussed, except that it seems clear that the communities

might face the same vulnerabilities than any one-industry community would face. There was some feeling, however, that specialization, especially in the basic commodities, contributes to the forces pushing for larger farms; as we have noted elsewhere, larger farms may have an undesirable effect on the communities that they surround.

There was some concern that farmers had become overly dependent on the basic grains, and that Federal farm policy encourages this dependence. One participant described the role of Government programs in encouraging the production of wheat in North Carolina:*

. . . wheat itself is not profitable in North Carolina, but wheat and soybeans is, and the farmers, if they go with the federal program for wheat, they can harvest the wheat, get the loan break, sell off the straw in that area--straw is worth some money--use that loan break money then to finance the soybeans, and that gives them the cash flow and it is cheaper than going to the bank. And so we kind of in that local area--it may be an abnormality, but we kind of exacerbate the problem, all of a sudden we've got more wheat and we don't need more wheat. And so one solution could be in that local area: What else could these farmers do to generate cash flow instead of get locked into the cycle of staying in on this government program and thinking that's all they can do.

Ed Schaffer, of the General Accounting Office, commented that:*

. . . when we focus in on commodities, there are a lot of places where only basic grains can be grown. But when you get in closer to urban areas, the farmer does, under these market conditions where the price is going to drop down to cover his costs, if he is going to be growing basic grains, he is almost going to have to get larger And in a lot of cases where we have been commodity specific up on Congress and [in] the USDA we have lost the potential of saying that not everybody can get into this [specialty crops], but there are a lot of farms [that could].

Bud Kerr, Coordinator of Small Farms Research at the Beltsville Agricultural Research Center, spoke to this point from his professional perspective, and from the perspective of his experience as a practicing small farmer:*

I think it's time we realized that it's not all economics of scale as being talked about large scale agriculture. Large agriculture certainly has been a way of life, and I think at times we're just

spelling the wrong word. It's bin—the cotton bin, the grain bin, the corn bin. We need big agriculture, but we also very surely need small scale agriculture and if the person is working full time off the farm and has to operate on a system of time efficiencies of his operation, and he has to have technology to do that, we need that. As taxpayers, we need to give him that opportunity.

Luther Tweeten cautioned against placing too much faith in specialty crops or specialty enterprises as an overall panacea, though they may be a useful option for some. He cited a survey of 400 East Central Oklahoma farmers in which not one respondent chose specialty crops as a possible source of expanded income. He also cited an article by an advocate of specialty crops, Booker T. Watley, which enumerated a number of specific requirements for being successful at specialty crops. Dr. Tweeten considered that this list of requirements, which included a paved road, a location within 40 miles of a metropolitan area, full time operation, year-round crops, and a pick-your-own system, could be fulfilled by very few people.

The reluctance of the farmers in the survey to turn to specialty crops was echoed by one of the participants, who remarked that farmers who stuck to the basic grain crops were simply sticking with tradition: ". . . they've grown up on this system and they have always raised corn, wheat, soybeans, and everything else there, and they say well, you can't grow vegetables out here. This is wheat country." Ward Sinclair, agriculture reporter for the Washington Post, reported a similar attitude in a recent article: 3/

A visitor [in Mississippi] suggested alternative crops to get the cash-flow going. Asparagus or some other specialty crop seemed a natural. Big markets in Memphis and Jackson lay only several hours away. There was no shortage of farm labor or good growing weather. Why bring asparagus from California? But the farmers' reaction was instant. Asparagus was laughed out of the room. "I just couldn't do it," said one of them. "Those old beans are in my blood."

3/ Sinclair, Ward. Farmers Are Getting Soft. Washington Post, July 10, 1983: B1.

Although no one made the point, a reading of the transcript of the Symposium discussion of this issue shows that the anecdotal material related by various participants indicates that the people who are involved in specialty crops are generally younger, new to the area, and part-time operators with an off-farm income.

Access to technology seemed to be a key factor in making a successful transition to specialty crops, and there were indications that this support often was not coming from the extension agent or the land grant college, but from private sources. Bruce Hawley observed that such farms in the Northeast:*

. . . virtually all came into being without benefit of anything out of our beneficent federal government. They are a new kind of agriculture. They got there probably without federal funding because there wasn't a federal program to assist their entry, and I guess the point that I would try to make is that the evolutionary changes necessary for agriculture to accommodate its environment--and the environment in the Northeast has gone through a dramatic change in the past forty years--the evolutionary ability of agriculture to accommodate those things will happen best without government assistance, that in virtually every sector of agriculture in the country, in the major Midwest production areas, the Extension Service is unable to keep up with agriculture's needs for the technology to implement no-till agriculture. Associations have been formed, funded by farmers, to provide the expertise to help make that transition. The integrated pest management concept which the government talks about a great deal is being implemented by private consultants that are helping farmers develop and implement this technology. If we want a viable agriculture, we keep the government out of it and let it be viable.

CREDIT

Credit has been one of the major subjects of interest to those who are interested in how rural economic activities are financed. As James Mikesell pointed out, this is appropriate since credit is likely the major financing source in total and the method of financing most influenced by public policy

actions. Dennis Dickstein noted that Federal credit now accounts for almost three-fourths of all agricultural and rural development credit.

Credit Gap

James Mikesell observed that there are two basic views of credit availability and the operation of financial markets in rural areas. The "credit gap" view is that while U.S. financial markets are generally efficient, there is a shortage of credit in many rural areas. This view was expressed, for example, in the Reagan Administration's strategy for rural development:

In rural areas, financial institutions are significantly smaller in terms of asset size. Consequently, the range of financial and financially-related services is not as broad in rural areas for meeting community development needs as in large metropolitan areas (e.g., correspondent services may not be available).

The opposing view, according to Mikesell, is that private financial markets work properly; if rural areas receive fewer loans relative to the level of economic activity, this reflects the shortage of credit-worthy ventures rather than a weakness in the system.

Mikesell concludes that it is not possible to settle this question, in part because the general use of aggregate statistics, which show a highly integrated national credit market, may hide problems which apply to a subset of communities. Emanuel Melichar, of the Federal Reserve System, concluded that at least one source of credit, agricultural banks, ". . . now have the capital, liquidity, and access to funds that will enable them to respond vigorously to increased loan demands from farmers and other rural enterprises."

Ed Blakely suggested that the real credit gap is a venture credit gap, and recommended that:

. . . states develop new financing capacity for rural areas by issuing rural development revenue bonds. Bond proceeds would be used to establish a venture capital fund. This fund would be used as a resource in attracting job-creating people and industries to rural areas and in stimulating existing rural business or entrepreneurs to develop new products or service.

The details of such an effort require considerable thought and planning, but its basic strategy would be little different than current SBA and FmHA loans. One difference that is envisioned is that state or local governments would acquire equity participation in such ventures in order to stabilize its income and to enter into a longer term relationship.

Competition for Credit

While the credit gap issue was the subject of some discussion at the Symposium, more attention was given to the question of whether agricultural credit needs and non-farm credit needs compete to the detriment of one sector or the other. Bruce Hawley argued that such competition does exist, and that, for example, a disproportionate share of the Farmers Home Administration loan programs have been diverted to nonagricultural activities:

The Farmers Home Administration, dating back to the mid-thirties, was intended to provide a source of credit to assist farmers. For the first twenty years of Farmers Home's existence, it dealt almost exclusively with the agricultural community. As recently as 1970, farm credit accounted for close to 70 percent of the Farmers Home outlays. Today, Farmers Home Administration provides less than half of its available funding to farmers, and even this estimate understates the impact of the growth in rural community service on the Farmers Home Administration. An agricultural loan requires significantly less servicing and is of significantly greater volume than are most rural housing or community loans. As such, a disproportionate share of the monies and the manpower of the Farmers Home Administration has been diverted to nonagricultural activities.

Emanuel Melichar reported* that the evidence from the Federal Reserve System's quarterly survey of business and farm loans indicates that the size and number of both business and farm loans have increased, but that business loans are increasing faster. The sixty highly agricultural banks in the

survey made \$192 million worth of business loans and \$298 million worth of farm loans in the first quarter of 1977. In the first quarter of 1983, the banks reported \$419 million in transactions in both the business and farm loan categories. In the same six-year period, the average size of a farm loan increased from \$10,800 to \$18,600; business loan size grew from \$12,700 to \$29,000.

The discussion identified a number of factors that bear on the issue of farm and non-farm access to credit: access to deposits, competing demands for funds, lender's expertise, correspondent relationships, and the financial condition of banks. Bill Bivens commented* that a rural bank's portfolio may not contain many non-farm business loans for a variety of reasons: the potential borrower may perceive that such a loan would be turned down and go elsewhere in the first place, or the bank may not have the expertise to appraise the risk of such a loan. Both James Mikesell and Emanuel Melichar pointed out that since agriculture and agriculturally connected businesses are the primary business in agricultural communities, most business loans would naturally go to these sectors, and would be viewed as "business" loans, not "agricultural" loans.

The Federal Role

The Federal Government affects credit in agricultural communities in a variety of ways. James Swiderski, of Rural Ventures, Incorporated, identified the following four major activities as being particularly significant:*

1. Fiscal and Monetary Policy. Swiderski argued that when the economy is in an upswing and credit is made more available at a lower cost, it has beneficial effects on all-size communities and on both non-farm and farm jobs. To the extent that there is any single thing that the Federal Government can do to affect the economic health of rural communities and farms, it is to make credit generally more available at a lower cost.

2. Deregulation of Private Banking. Swiderski cited the increased competition allowed by deregulation, which favored money markets over small town banks and led to a decline in the capital available for farmers in general, as an example of the possible effects. Rationing of credit was made on the basis of which farms had the best individual financial picture; this tends to be more favorable to larger farms rather than smaller farms because of other structural issues in agriculture.
3. Farm Credit Administration. The Farm Credit Administration was the subject of considerable discussion, in large part because of recent administration proposals to change the status of the agency. Swiderski suggested that withdrawing agency status may have greater impact on medium-sized farms. He concluded that withdrawal would lead to increased interest charges, and the subsequent rationing of credit would favor large-size farms.
4. Direct and Guaranteed Loan Programs. Swiderski identified five programs that he considers to be of particular significance for agricultural communities: Small Business Administration loans, although they tend to favor larger farms; Economic Development Administration loans to the non-farm sector, which provide alternatives for communities to diversify the economic base; FaHA Business and Industry loans, which would have beneficial effects on all-sized farms; FaHA Emergency loans, now available without regard to size of farm or income needs, might be more beneficial to communities, Swiderski suggested, if restrictions were placed on the size of eligible farms, or if a cap were placed on the size of loans; and FaHA Ownership and Operating Limited Resource Loans, which have a fairly good impact on the structure of agriculture and on the economic base of rural communities, according to Swiderski, although he believes that graduated repayment schedules and a lower interest rate would make them more effective for low-income borrowers.

Dennis Dickstein, of the Office of Management and Budget, said that Federal credit programs have substantial effects on the Federal budget and the national economy: they change the allocation of resources and the distribution of income; they represent a subsidy; and they increase the Federal deficit and the national debt.

The future of Federal credit activities will depend, to some extent, on attempts to achieve greater control over the Federal budget. Dickstein observed that:

Federal agricultural policy, guided in large part by Federal credit programs, would be shaped by decisions and changes in overall credit policy. Conversely, the Federal credit budget, about one-third of which is agricultural credit would be significantly affected by decisions and changes in agricultural policy.

LOCAL GOVERNANCE

Local governments are a key factor in the development or maintenance of stable agricultural communities. In recent years, these governments have been faced with the need to adapt to economic, fiscal, intergovernmental, and demographic changes. The capacity of local governments to adapt to these changes, and the appropriate role of the Federal Government in helping them to adapt, were discussed during the Symposium.

Interdependence

Change was a recurring theme of the discussion on local governments in rural areas. The list of change agents that have affected these governments included the population turn-around, civil rights legislation, Baker vs. Carr, tax policy, the Vietnam War, the Great Society, environmental law, inflation, and fluctuation in energy prices. None of these agents are particularly rural or agricultural in nature, but their effects have been felt by the most remote agricultural communities.

Increased interdependence has made these communities more vulnerable to change than they were in the past. One element of interdependence is that rural governments have become integrated into the intergovernmental system, in large part as a result of the increases in intergovernmental aid described by Norman Reid and Robert Paciocco in their papers. Reid identified the following consequences of this change:

1. Increased funding has helped rural governments meet their service needs and has produced some dramatic improvements in their performance.
2. Rural governments are more vulnerable to fluctuations in the Federal budget process.
3. The aid has been accompanied by increasing complexity, as rural governments have become subject to new regulations, standards, and increased paperwork.
4. Rural governments have had to gain expertise in management techniques necessary for full participation in the intergovernmental aid system.
5. More communication between local governments and other institutions, public and private, has been required.

Paciocco reported that reductions in intergovernmental aid would create strains for local governing bodies who might be:

. . . forced to change their general operating procedures. This means we will have to learn to adapt, to decrease, and even to eliminate some of our programs, capital improvements and general governmental functions. Surely the raising of taxes is not the only solution! No doubt we can learn to innovate; or find new sources of funding; or learn better ways to do the same things we have been doing. It will force us to determine what our priorities really are; who gets what; who gets cut back; who gets cut off?

Change in the intergovernmental sector has led to increased interdependency for local governments; Ed Blakely pointed out that private sector changes have had a similar effect:

As rural communities diversify their economic base they also increase their vulnerability to external economic control. The increases in rural jobs have come largely through branch plant development or the establishment of firms serving metropolitan industries. Finance institutions remain concentrated in metropolitan centers, and accordingly, decisions that affect rural areas are made far away from rural communities. . . . as rural areas are integrated into the national system they become vulnerable and typically have less control over their destiny. Thus rural/nonmetropolitan areas cannot measure all changes as progress. The fundamental forces shaping rural areas have changed dramatically. By recognizing this shift new policies can be fashioned to assist rural communities and small towns to play a productive role in the national economy while simultaneously retaining rightful control over their heritage and destiny.

Local Government Performance

The speakers and participants at the Symposium reported varying perceptions of the capability of local governments to deal with changing circumstances. Both the Carter and the Reagan Administrations placed great faith in the increased capacity of rural local governments, and fashioned national rural development policies that envisioned a National Government responding to locally articulated policies and goals. Lynn Daft referred to this element of the environment in which the Carter policy was formulated:

In earlier times, the near total absence of governmental capacity at this level had often been used as justification for federal involvement. While this case could still be made for many rural areas, it could not be made uniformly. Both state and local governments had taken steps toward building their capacity to govern more efficiently and more effectively. This was augmented by the establishment of community based organizations in many rural areas.

Robert Carleson remarked that the Reagan Administration philosophy of federalism did not represent a turning back to the past.* Rather, he said, improvements in the capacity of State and local officials made it possible to move forward to a new federal system characterized by problem-solving at the State and local--not the National--levels. Although Carleson viewed the growth in Federal programs during the 1960s and 1970s as a negative experience, he commented that the one positive impact was that it forced State and local governments to become more sophisticated and to be staffed by a more professional cadre of people.

Norman Reid noted a variety of ways in which local governance has become more capable:

Rural leaders--more prone to be part-time, citizen officials--have made use of the greater number of training opportunities available through the Cooperative Extension Service, state community affairs agencies, associations of governments, community colleges, and the like. These have led to general improvements in the capacity of

rural governments to anticipate, influence, and direct change in communities through more effective policy development and program administration. Federal funds have provided incentives to hire professional managers, and many communities have done so, sometimes on a shared basis with other communities.

On the other hand, many participants maintained that even though there had been improvements, rural local governments still are not uniformly capable. Paid, professional managers are still uncommon and many local rural governing bodies have no staff at all. Robert Paciocco commented that:

This situation places even more responsibility on the elected official who must then do his own information gathering and report preparation before he can study the issues, and who must personally oversee the work of the community. We know of a county of about 8,000 with a three-member board of supervisors. In this county the board members meet at the courthouse daily to conduct county business normally done by an administrator.

Bob Carleson responded that even in cases where there is no professional staff, local authority is still to be preferred to Federal programs and authority:*

. . . the county you are talking of may be poorly run
Whether they do it well or whether they don't do it well, the fact that they are elected and re-elected means that on the whole they must be doing it well as far as the people in that county are concerned. . . . Isn't it better that they are the ones who are making those decisions than having somebody at the state level or worse yet at the federal level making those decisions or doing that work?

Bill Bivens pointed out that rural areas may be short changed even when they are able to obtain professional help.* Most professionals are "urban-oriented," and career ladders lead away from rural governments. Urban orientation was seen as a handicap for dealing with rural problems, on the grounds that the solutions should not be the same, given the different needs associated with different population densities.

A number of recommendations for improving local government capabilities were offered. The Reagan Administration's rural development strategy called for rural regulatory relief, the creation of State-level Technical Rural

Assistance Information Networks, the publication of a Rural Resources Guide, and improved rural data collection. Ed Blakely recommended that local and State governments expand experiments with circuit rider programs, possibly through expansion of existing regional agencies, use of Cooperative Extension, or a consortium of State and other colleges.

Rural local governments are faced with pressures on their financial capacity as well as their political and administrative capacities. To a certain extent, this results from limits on their ability to tap local resources. Norman Reid observed that: "Local governments--especially the smaller ones that predominate in rural areas--continue to labor under restrictive, state-imposed tax and debt limits that inhibit many creative local responses to these financial pressures."

Some participants suggested that the best way to resolve this problem was to have the states or the Federal Government assume responsibility for financing functions such as health and welfare. Robert Carleson disagreed with this position, commenting that:

If we start making decisions as to who should do what because of who is going to pay for it, I think that's the worst thing we can do. If the State government takes over functions as a means of fiscal relief to local governments or to rural areas, that's a very poor way to make a decision on who should handle functions. . . . if there is a fiscal problem, then the State government should give up some revenue sources to the local governments that they may not have. Maybe they shouldn't have to rely on the property tax. Just because that was the historical thing doesn't mean they should have to. But I would rather see them give up a tax base and tax sources rather than take over a function in the name of fiscal relief because with taking over the function in the name of fiscal relief you have taken over the complete control of the function.

Innovations in Service Delivery

Innovative methods of service delivery were seen as the most feasible way for local governments to meet the challenges brought about by reduced intergovernmental aid, revenue constraints, population growth and its accompanying service demands, and the need to replace aging physical plants or build new ones. It was suggested that the Federal Government could play a role in encouraging innovation by collecting and sharing local government experiences.

Many of the suggestions for innovation involved cooperative efforts among local governments or between the public and private sectors. Paciocco identified resistance to such cooperative efforts as one of the internal threats to the capacity to govern:

What must happen is for governing bodies to first admit there are barriers. Then an honest effort must be made to remove the barriers and to explore simple ventures where a cooperative approach will succeed. Once this has been accomplished, the door will be open for many ventures.

In order for the above to take place, we must be acutely aware of the fiercely independent nature of rural citizens in general which usually causes them to be somewhat suspicious of federal and state programs, and even a bit unsure of neighboring governing bodies. There always seems to be the fear that someone will try to usurp some of the authority of the locals. If this is the case, officials need to learn to overcome such an attitude or they could well 'drown in their own juices.'

Potential service delivery innovations, many of which already have been tried at the local level, include volunteerism, cooperative ventures, contracting for service delivery from private firms or other local jurisdictions, and consolidation of local jurisdictions. Opinion with respect to consolidation varied widely. Some argued that it is the only logical method of eliminating expensive duplication of services and easing the tax burden on local citizens. Others contended that consolidation is not acceptable to most citizens--"people want those governments there"--and that in those areas where consolidation has taken place--e.g., education--the results have not been entirely satisfactory.

RURAL AMERICA: A NEW PUBLIC POLICY FRONTIER

Edward J. Blakely
Ted K. Bradshaw

THE NEW RURAL FRONTIER

The massive changes occurring in rural America are well documented. Yet despite the increase in information available on rural and small town population growth, increasing and improved rural employment opportunities, and new problems facing small city and rural county government, little new public policy has emerged to ease rural America's transition. There are several reasons for this. First, the changes affecting rural America are difficult to disassociate from the changes occurring in the larger socioeconomic structure of the nation. Consequently, rural and metropolitan policy distinctions are blurred, making it increasingly difficult to fashion uniquely "rural" policy. Second, the direction rural policy could, or should, take is difficult to discern from the available evidence. The changes in rural America are so complex and contradictory that no single policy or even group of policy options seem to contain the requisite ingredients to deal intelligently with rural needs. Finally, because the nation's attention is focused on the issues of a slowing aggregate economy, national deficits, declining productivity, and diminished support at the state and local levels, the intellectual, physical, fiscal, and administrative resources required at the national, state, or local level to meet rural challenges are not available now and are not likely to be available in the foreseeable future.

The need for new national rural policy has been recognized for nearly a decade. Congress responded in 1980 with the Rural Development Policy Act. The Carter administration in 1979 and the Reagan administration, with "Better Country" (1983) attempted to fulfill this mandate. In spite of genuine efforts to meet the challenge, both administrations have fallen far short of the expectations of Congress and the needs of rural communities.

Differences, Diversity, and Development

During the past several years, the Rural Development Policy Project at U.C. Berkeley has been engaged in extensive research designed to provide a better understanding of the forces at work in rural areas and to suggest new policy tools and instruments which might inform or shape public policy. These research efforts led us to detailed studies of local communities and the migration patterns effecting them (Bradshaw and Blakely, 1981). In addition, in our book, Rural Communities in Advanced Industrial Society we examined state-level patterns of rural change in California in order to explain the effects of national economic change and state policy on rural development (Bradshaw and Blakely, 1979). Most recently our state-wide case studies and examinations of national rural policy are presented in New Challenges for Rural Economic Development (Blakely, Bradshaw, Shapira, and Leigh-Preston, 1983).

This work has given us an appreciation of the tremendous differences among rural places and the diversity of the policy requirements and basic tools necessary to insure that rural development benefits rural people and places. This paper summarizes and synthesizes our recent research, combining with it related data to provide guidance to policymakers developing policy for a new rural America.^{1/}

^{1/} We define rural as those communities, areas, towns, and small cities formerly (or currently) economically based on natural resource extraction or agri-

New Forces Shaping Rural America

Any policy intended to benefit rural America must proceed from a basic understanding of the forces at work in the nation and how they affect rural areas. Besides the uniquely rural deprivation of rural resource industries, the conditions of rural poverty have their roots in the urban industrial transformation (Presidents National Advisory Commission on Rural Poverty, 1967), as well as in the large-scale national forces which influence rural areas today. Unfortunately, rural conditions are often considered a residue of urban forces rather than as the unique result of forces at work in a low density geopolitical area, requiring unique policy.

Rural America today is not a residual or minor participant in the socioeconomic forces shaping the nation, but a full partner in the evolution toward an advanced industrial society. For the first time since the westward expansion of the United States, rural areas are an integral part of the U.S. society and economy. While rural values, culture, and economy do not in themselves establish an environment conducive to advanced industrialism, the contributions of rural areas are by no means small or insignificant.

The emergence of an advanced or "post" industrial society is characterized as one in which service sector industries increase, goods production declines, and knowledge-intensive production and information management replace labor-intensive processes. In addition, the rural advanced industrial society incorporates opportunities for diverse lifestyles, professional government, bureaucratic organizations, and improved communication (Bell, 1973; Bradshaw and Blakely, 1981; Hage, 1979; Warner, 1974). This general pattern is increasingly manifest in American institutions culture lying outside the commute range of major cities with a population under 25,000.

of all types and rural areas are contributing significantly to this development. Rural areas and small towns are, in fact, becoming a new advanced rural society, a society with unique economic, political, cultural, and human settlement patterns. The components of this advanced rural society are:

1. Communities restructured around a shift from natural-resource base economies to human-resource based economies;
2. Improved sociopolitical infrastructure and a national social safety net that extends to virtually all areas of the country;
3. Concern with quality of life and lifestyle in policy formulation; and
4. Population and industrial settlement patterns altered lag technological improvements in communications and transportation.

These four factors have not influenced every rural community to the same degree or in the same way. While some rural places are changing almost entirely because of residents' concern with lifestyle and quality of life, others are changing because of new technologies and industrial restructuring. Each of these factors is a component of the changing national economy to which some rural areas contribute, others, like central cities, are victims of a process presents them with new problems and reinforces old ones.

Natural to Human Resource Base

Rural areas are now clearly part of the advanced, or post-industrial, economy of the nation (Blakely, Bradshaw, Shapira, and Leigh-Preston, 1983). Rural can no longer be equated only with natural resources or agriculture. The transformation of rural employment from agriculture to new industries and services in all regions of the country has been astounding. Mechanized and scientific agriculture has for many years displaced labor, and agricultural

production has soared. The big shift in nonmetro employment has been to services (see Figure 1) and to a lesser extent to manufacturing. Service employment, now over 60 percent of the rural employment base, is clearly the leading employment sector in rural as well as urban locations. Since 1960 manufacturing has grown in rural areas while declining in urban, although both have declined in recent years.

More significantly, rural areas are changing from places where low-skill, dying industries locate to areas where new growth industries are locating. Many of the new rural jobs are in the leading high-technology industries. Miller (1980), for example, has shown that the most rapidly growing sectors of the nonmetro manufacturing economy between 1969 and 1975 were instruments and printing/publishing (see Table 1). The greatest declines in the rural economy were in traditional rural industries: lumber, primary metals, petroleum refining, and leather products.

In addition, marked improvement in quality of jobs occurred in rural areas over the last decades. By 1977, for the first time in history, white collar employees outnumbered blue collar in rural areas. The most rapid increase in rural areas has been in professional occupations (see Figure 2). These changes both in the types of manufacturing firms and in occupation pattern counter some of the "production cycle" arguments portraying rural areas as merely the recipients of declining urban industries. The production cycle argument suggests that new technologies are invented in urban areas and then move to rural places when the technology becomes standardized and mass produced. The low skill, lower wage rural worker is desired for these "mature" industries (Thompson, 1975, Hansen, 1973). While this thesis may have been true in the past and continues to be the pattern in some industries, rural areas are now receiving a large share of new advanced technology

Figure 1
 Percentage of Total Employment by Industrial Sector:
 Metro and Nonmetro, 1940-1980

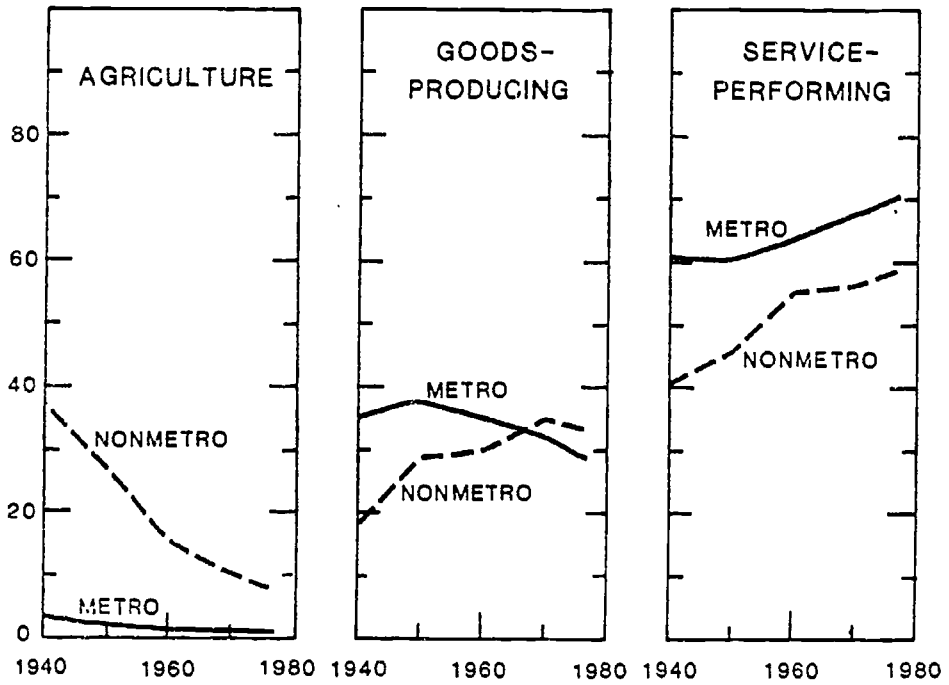


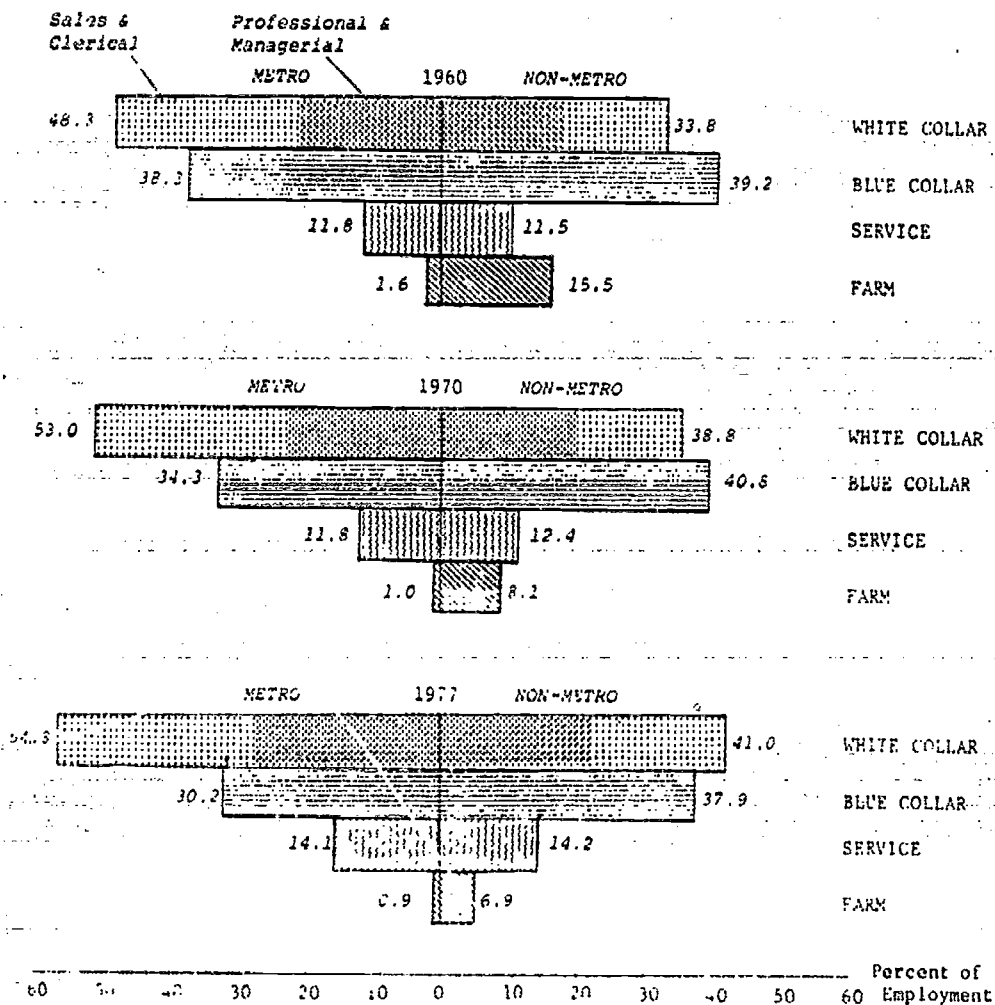
Table 1. Nonmetropolitan Employment Change by Industry, 1969-1975

	Employment 1969 (Thousands)	Change 1969-75 (Percent)
Instruments	46	19.6
Printing and publishing	131	19.0
Rubber and plastic products	123	16.2
Fabricated metals	225	8.0
Transportation equipment	197	4.6
Stone, clay, and glass	194	3.2
Nonelectrical machinery	377	2.4
Miscellaneous	84	2.4
Paper	175	1.2
Electrical machinery	313	0.5
Tobacco products	6	0.0
Apparel	440	-1.2
Textiles	470	-1.9
Food	376	-2.7
Furniture	165	-3.0
Chemical products	209	-3.9
Lumber	345	-6.9
Primary metals	218	-7.4
Petroleum refining	32	-12.5
Leather products	123	-17.9

Source: James P. Miller, "Nonmetro Job Growth and Locational Change in Manufacturing Firms," data from Dun and Bradstreet, 1980. Table 10, 11.

Figure 2

OCCUPATIONAL DISTRIBUTION, METRO AND NON-METRO AREAS, 1960-1977



Sources: Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1972 and 1970, Report S-23, No. 75, U.S. Bureau of the Census, 1974; U.S. Census of Population, 1960: Final Report PC(3)-1E, U.S. Bureau of the Census, 1961.

industries.

The new migrants to rural areas have contributed greatly to the skill base of rural areas. Data from several studies of recent migrants to rural areas demonstrate that new migrants have higher education and occupational skills than average rural residents. The migrant into rural areas is older and brings substantial intellectual and fiscal capital to small towns or rural areas. As a result employers now locate in rural places for the labor force, and not the physical resources or markets (Bradshaw and Blakely, 1981; Voss and Fugitt, 1979; Daberkow and Larson, 1982).

Educational achievement among long-time rural residents is also rising. The availability of community colleges, training programs, and good high schools has contributed to this. While lagging slightly behind urban educational efforts, rural educational programs have significantly upgraded schools, colleges, and human resource development programs at every level. In 1977 only 58.3 percent of rural residents were high school graduates, compared to 68.1 percent in metropolitan areas. From 1970 to 1977, however, rural areas were rapidly closing the educational gap, with higher growth rates among virtually all levels from high school graduate and above (see Table 2). For example, high school graduates in nonmetro areas increased 47 percent while high school graduates in metro areas increased only 34 percent during that period. Holders of advanced degrees (5 or more years of college) increased 64 percent from 1970 to 1977 in nonmetro areas, while increasing only 50 percent in metro areas (U.S. Bureau of Census, 1978).

The human resources available now in rural areas mean that rural places compete with urban areas for industrial location. Rural work values and habits, small community amenities, and general lifestyle make rural areas ideal sites for research-oriented as well as production facilities. Local

TABLE 2. Years of School Completed, Metro and Nonmetro, 1970-77

Years of School Completed	1977		1970		Change 1970 - 1977	
	Metro	Nonmetro	Metro	Nonmetro	Metro	Nonmetro
Total, 25 years old and over (thousands)	81,655	39,215	74,105	33,580	7,550	5,635
Percent	100.0	100.0	100.0	100.0	10.2	16.8
Elementary: 0 to 4 years	3.1%	4.9%	4.7%	6.8%	(-25.6)%	(-15.2)%
5 to 7 years	6.0	8.8	9.0	11.9	(-27.5)	(-13.5)
8 years	8.1	11.9	11.1	15.8	(-20.1)	(-12.5)
High School: 1 to 3 years	14.7	16.1	19.5	19.0	(-16.8)	(-1.4)
4 years	36.1	36.1	32.0	29.5	24.0	42.9
College: 1 to 3 years	14.7	10.9	11.5	9.1	40.1	39.9
4 years	10.1	6.8	6.8	4.6	65.2	71.7
5 or more years	7.3	4.4	5.3	3.1	50.1	63.9
Percent High School Graduates	68.1	58.3	55.6	46.3	34.8	46.7

Source: Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population 1977 and 1970, Current Population Reports, Report P-23, No. 75, U.S. Bureau of the Census, 1978.

entrepreneurship also contributes to rural economic development, with rural areas outpacing urban places in the number and type of small business starts. In sum, as Hage (1979:98) notes, rural areas have entered into a post-industrial state "so qualitatively different that one must look for quite different causal laws or hypotheses."

Clearly, the marked alteration and increased diversity of rural economies is a blessing. On the other hand, the rural employment growth is geographically, racially, and sexually uneven. There remain some 255 nonmetropolitan counties with persistently high concentrations of low-income blacks in the central Atlantic and southern states (Davis, 1979). In addition, low wage industries and agriculture are located in these counties.

Finally, female labor force participation has increased 25.1 percent from 1970 to 1980 (compared to a 1.8 percent increase for men). These female workers are often in low-wage industries, even in growth counties, and account for improvements in overall family incomes, thus lowering the total numbers of people in poverty. However, female wage rates in nonmetropolitan areas have dropped from 48.5 percent of male wages to 47.5 percent between 1969 and 1976 (Blakely, Bradshaw, Shapira, and Leigh-Preston, 1983, pp. 45, 55).

Social Infrastructure and Social Safety Net

A substantial portion of recent rural growth can be attributed to the overall improvement in and the expansion of sociopolitical institutions. For the past three decades federal government policy has had a profound impact, altering the quality and availability of governmental services to all parts of the nation. Rural areas have benefitted from these improvements. Virtually no area of the country is isolated from modern government systems providing clean water, housing, fire protection, schools, and police services. In large

measure federal grants and aid have provided the funds to develop or expand these services, although important differentials in federal per capita spending still exist between metro and nonmetro areas. Of the \$629.5 billion in federal outlays and loan guarantees made in fiscal 1980, metropolitan areas received \$2,529 per capita, while nonmetropolitan areas received \$2,139 per capita, or about 16 percent less (see Table 3). Federal expenditures on agricultural and resource programs, business assistance, community facilities, veterans' housing, and native Americans favored nonmetro areas. Spending on defense, space, transportation, non-veterans' housing, health and social services, employment and training, and higher education favored metro areas. Per capita federal spending on income security programs and elementary and secondary education was broadly equal in metro and nonmetro areas. The gap between metro and nonmetro areas in overall per capita federal spending widened between FY 1978 and FY 1980. Due to the expansion of defense programs in the current administration and reductions in community and human resource programs, this gap may have further widened in recent years (Reid and Whitenead, 1982).

Nevertheless, Social Security, Medicaid, and public housing subsidies have formed a new social safety net for rural places. Transfer payment programs including state and federal welfare programs have made the difference between rural and urban less dramatic. As Table 3 indicates, rural areas outpaced metropolitan areas in disability, retirement, and survivor benefits. These transfer payments not only provide retirees with comfortable livings in rural areas, but they also provide new jobs and stabilize many rural communities' economies. Hirschl and Summers (1982) have shown that Old Age and Survivors Insurance (OASI) is an efficient generator of service or non-basic employment in local economies. In their research they found that it

TABLE 3. Per Capita Federal Funds in Metropolitan and Nonmetropolitan Counties, Fiscal 1980

Function	Metro (Dollars per Capita)	Nonmetro	Nonmetro as a Proportion of Metro
<u>Agriculture and Natural Resources</u>	52	235	4.1
Agricultural Assistance	21	173	8.2
Agricultural Research and Services	12	8	0.7
Forest and Land Management	9	23	2.5
Water and Recreational Resources	14	31	2.2
<u>Community Resources</u>	452	440	0.9
Business Assistance	23	40	1.7
Community Facilities	33	126	3.8
Community and Regional Development	54	35	0.6
Environmental Protection	7	1	0.1
Housing (non-Veterans')	136	102	0.8
Housing (Veterans')	85	35	2.4
Native Americans	3	16	5.3
Revenue Sharing	21	20	0.9
Transportation	90	65	0.7
<u>Defense and Space</u>	725	287	0.4
Aeronautics and Space	32	2	0.1
Defense Contracts	435	115	0.3
Defense Payrolls and Administration	258	170	0.7
<u>Human Resources</u>	86	51	0.6
Elementary and Secondary Education	20	23	1.1
Food and Nutrition	1	1	1.0
Health Services	14	7	0.5
Social Services	4	2	0.5
Training and Employment	47	18	0.4
<u>Income Security</u>	940	978	1.0
Medical and Hospital Benefits	247	241	1.0
Public Assistance and Unemployment	86	89	1.0
Retirement, Disability, and Survivors	607	648	1.1
<u>National Functions</u>	268	148	0.6
Criminal Justice and Law Enforcement	4	2	0.5
Energy	36	39	1.1
Higher Education and Research	65	33	0.5
All Others	164	74	0.5
ALL FUNCTIONS	2529	2139	0.8

Source: J. Norman Reid and Eleanor Whitehead, Federal Funds in 1980: Geographic Distribution and Recent Trends, ERS Staff Report No. AGES820927, U.S.D.A., Washington, D.C. 1982.

takes about \$3,600 to develop one non-basic job from transfer payments, and about \$88,500 per job from manufacturing. While these data are not conclusive, they do demonstrate that jobs may well be generated from numerous resources including the government support structure.

In addition, the national safety net strengthened rural medical care. Government health care programs such as the Hill Burton Act added new hospitals to many rural areas and substantially altered the pattern of hospital-physician distribution. The Hill Burton Act provided 60.2 percent of all hospital projects in communities under 25,000 and 51 percent of the funds (Lave & Lave, 1974). Government policies encouraging the establishment of hospitals and clinics in rural areas have, according to several studies, increased and improved rural health services (Nuckton and Kushman, 1976). In addition, the rapid expansion of Blue Cross and other fee-for-service programs provide increases in the number and quality of nonmetro physicians (Evashwick, 1970).

The anti-poverty programs and rapid expansion of general aid programs for special populations such as the elderly or handicapped further reduced the burden associated with rural living. Finally, rural education has benefited from a number of specific federal grant in aid programs designed to improve rural school systems, vocational schools, and two year community or technical colleges.

Rural people's expectations of local government have increased as a result of improved rural conditions. The concentration on rural-urban parity in social services and government service has masked the fact that innovations in the design and implementation of rural programs benefited the nation, not just rural regions. Efforts in rural community development first developed through the Land Grant College System which formed one base for the anti-

poverty programs of the 1960s (Christenson and Robinson, 1980, p. 171). Rural health programs emphasizing family care and prevention have been adopted as part of the national health delivery system (Kasarda, forthcoming, p. 6). Finally, rural community experiments in multijurisdictional joint powers agreements to deliver a variety of services ranging from water and solid waste to transportation are important new developments for all municipal areas in the nation.

The principal disadvantages associated with rural places have been mitigated by a series of national government policies and programs. Only a few of these programs were specifically targeted for rural areas, but their net effect has been to allow people to live in rural areas without sacrificing many of the amenities associated with urban regions. These programs have also made rural settings more desirable to senior citizens with pensions or Social Security.

Lifestyle and Quality of Life Dimensions

Lifestyle and quality of life are elusive, but important perceptual concepts of the advanced industrial society. Lifestyle is how one spends time, with whom, and how daily routines are organized, including dress, public behavior, and roles. Quality of life includes such things as the place of residence, the type of work, the general ambiance of the environment, and the like.

Rural places often offer physical and social environments compatible with the quality of life and lifestyle desired by many. Virtually all surveys indicate that rural places are preferred to urban (Zuiches, 1980; Dillman and Tremblay, 1977). Most people wishing to raise families, retire, drop out of corporate life, or participate in a new wave of "back to the land" groups

consider rural places or small towns more to their satisfaction than urban places. To many new migrants, small towns, even those far from major cities, offer opportunities for pursuing individual ways of life not possible in urban settings. Our research indicates that the majority of people moving to rural places do so for these reasons without the prospect of immediate employment (Bradshaw and Blakely, 1981).

Particular rural communities cater to particular lifestyle choices and attract newcomers with similar interests. For instance, many small towns are principally or entirely oriented to retirees, various religious groups, tourists, or professional artists. Many small communities have attempted to accent and thus, reify the lifestyle attractive features. Dean MacCannell captures some of the dimensions of this in his book The Tourist (1976) which portrays how communities create tourist sites. These sites in some manner illustrate the community's sociopolitical structure. In short, small towns are now enclaves, and being pressed to accommodate the needs of new populations.

Technology and Communication Advances

The greatest limitation rural places consistently faced in the agricultural era was physical distance. The advanced industrial society removes or reduces this barrier, creating access to all parts of the country at low cost and making organized social systems independent of distance (Vining, 1982). Advanced technologies, particularly telecommunications, have transformed the settlement from a densely settled urban core to a new multinucleated dispersed development pattern (Webber, 1968). This new urban form is creating in rural areas and small towns the civic model of the future, oriented toward decentralized environments, as Kasarda (forthcoming) suggests, consisting "of functionally integrated systems of nodes and networks and

social and economic exchanges sustained via advanced technologies on a time cost rather than spatial cost bases."

Further, the development of 43,000 miles of interstate highway has made most rural places easily accessible. Initially the interstate provided better truck and bus links between urban areas and extended the distances city workers were willing to commute from rural communities adjacent to metropolitan areas. But the interstate system has also given rural communities easy access to urban areas, granting them an unanticipated self-sufficiency. The addition of regional airports to rural communities made many rural areas not only more accessible, but desirable locations (La Porte, 1974). Consequently, rural residents are, with few exceptions, only a short drive and one extra plane trip further away than an urban resident from anywhere else in the world.

Retirees and tourists were the first to take advantage of these improved communication and transportation systems. Second home construction and improved physical and social infrastructures associated with tourists and retirees have made possible full year residential development in many places. The communities most likely to benefit from these improvements are those with physical amenities appealing to specific life styles. As a result, there has been a differential pattern of development among rural communities. While some places remain principally tourist and retirement communities, others have become professional/trade centers.

In sum, our contention is that rural communities are becoming an integral part of the transition to an advanced industrial society. In this transition rural as well as urban communities are at the leading edge of the transformation. Some rural communities and small towns, in fact, offer a quality of life, social institutions, and industrial developments that

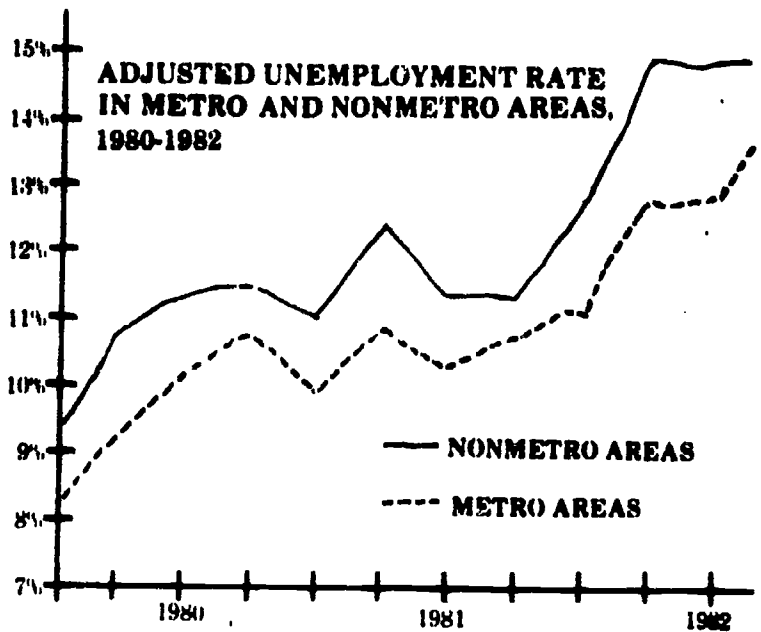
contribute to advanced industrial evolution. On the other hand, where there is a leading edge there is also a "trailing edge." Some rural areas are trailing, they have not been, and may never be, part of the new socioeconomic transition.

CONSEQUENCE OF CHANGING CONDITIONS

Clearly most policymakers and scholars are pleased with the rural population turnaround, the diversification of rural economic structures, and improved living conditions. Yet these changes do not come without risk, pitfalls, and problems. Advanced industrial society, rural or urban, is not necessarily better for those involved. Many people are displaced and disoriented, victims rather than beneficiaries of these changes. Further, the movement towards an advanced rural society is not universal among rural communities. Some rural areas remain deeply embedded in their agriculture- or resource-based economies, others continue social and political traditions of previous eras, and some are so isolated that they lack both fundamental resources as well as access to the national socioeconomic system. For example, current unemployment in rural areas is the result of declines in manufacturing employment and technological innovation displacing the workforce in mining, lumber, and agriculture. While new sectors are emerging, the human consequences of this transition are borne by current rural and urban residents. As Figure 3 indicates, rural areas continue to have high rates of unemployment parallel to the urban pattern.

Some rural areas are being integrated in the national economy, and even playing an active role in the national picture, but the consequences for the communities and their residents are mixed. This situation is illustrated by such examples as:

Figure 3
Adjusted Unemployment Rate
in Metro and Nonmetro Areas
1980-1982



The adjusted unemployment rate increases the conventional rate by taking into account "discouraged workers" and involuntary part-time employment (which is counted as half-employment).

Source: Rural America, March-April 1983,
p. 5.

- The Communities Left Behind - Nearly 500 rural counties, generally concentrated in the central and southern regions of the nation, are not sharing national population growth (Buale, 1981). These are largely poor counties, heavily dependent upon low-technology agriculture, are isolated, and are without access to the major resources of the nation. These communities face the prospect of continuing deterioration unless specific policies intervene on their behalf.
- The People Left Behind - In spite of new jobs or job opportunities and substantial improvements in the social well-being of many rural areas, poverty, unemployment, and underemployment remain high in most rural counties. The types of manufacturing jobs available to rural people even in leading industries tend to be those that pay low wages and employ high proportions of females. Thus in rural counties with resources as well as those with more diverse economic structures, the effects of these improvements are not as great as anticipated, and profound patterns of old and new forms of rural poverty persist. They are:
 1. The continuing poor - This group includes the rural ethnic black, hispanic, and Native American populations of the mid- and deep south and Texas. Nearly 41 percent of nonmetro black families had income below the poverty level compared with just 12 percent of the whites (Hoppe, 1980). Further, the loss of farm land by black farmers in many counties reduces the potential of this population to develop a reasonable and stable economic base. Black farms are decreasing at a rate 2.5 times as fast as white farms (U.S. Civil Rights Commission, 1982). Among Native Americans these figures are even more distressing. Even in rural counties with increased employment opportunities minority unemployment rates remained high and educational levels low.

2. The emerging poor - Industrial and/or postindustrial economic impacts in rural counties with new manufacturing or service sector jobs have created several forms of economic instability. Agricultural workers, including farm owners, taking jobs in factories find that farm income and sometimes even two wage earners are barely enough to keep families above the poverty line. As manufacturing jobs are lost in rural areas due to the same forces affecting urban manufacturing the effects are traumatic and dramatic. Rural job losses in manufacturing are even more devastating than in urban regions because many rural communities are dependent on a single industry or industrial type (e.g., textiles).
3. The new rural poor - Rural communities are not insulated from broader social forces which are changing the conditions of poverty. For example, family instability is now affecting rural society with increasing numbers of rural female heads of household living under poverty conditions. In 1979 there were 1.8 million women living in nonmetro areas below the poverty level, or about 12.2 percent of nonmetro females aged 15-44 (U.S. Bureau of the Census, 1979). The majority of rural poor families are headed by a male (69.5 percent in 1975). The woman is employed in almost half of all rural female headed households (42.3 percent). In contrast, most urban poor live in non-working female headed households (Hoppe, 1980). In addition, newer groups of unemployables are emerging in rural America who lack basic education and skills for employment in an information and service economy. Heretofore agricultural, lumbering, and low-skilled manufacturing absorbed them, but such employment is rapidly being displaced by machinery. Since urban areas can no longer absorb this population, they are becoming an increasing social problem for rural

communities. Finally, there are some voluntary poor in rural America, individuals who have decided for a variety of reasons that a rural marginal (or simple) lifestyle is appealing to them. Their contribution or cost to rural areas is not entirely clear. But it is clear from our research that current social welfare programs are not appealing or useful to any of this new category of poor people (Bradshaw & Blakely, 1981).

● Uneven Impacts of Recent Growth

Population growth, economic diversification, and improved social infrastructure have not resulted in uniform or even general improvements for rural locales. Even in rural areas which have made substantial increases in jobs, people, and services, severe community problems remain. In some places, rural boomtowns in the mountain states for example, development has occurred so swiftly that requisite infrastructure has not kept pace with demands for service. Consequently, few of these communities or their residents have been able to benefit from the increased wealth.

In other growing communities there are new pressures on the existing residents, particularly the poor and moderate income families, which in a number of communities, have led to their displacement to unincorporated areas or other smaller towns, forming new low-income ghettos as distressing as those in the inner city.

● Land Use and Environmental Constraints

A principal attraction of rural areas is their scenic beauty and natural surroundings, including the presence of agriculture. Yet as rural communities diversify their economic and population bases this valuable resource is threatened. The threat goes well beyond the mere disappearance

of farm and timber land per se. It includes the damage to natural habitats resulting from the introduction of domestic animals, hikers, campers and diseases transmitted by man that endanger both plants and animals (Bradshaw and Blakely, 1978, Blakely, 1982).

The competition over conversion of land used for agriculture, timber, fishing, and recreation to manufacturing and housing has created debates which range beyond the boundaries of rural cities and counties. Rural governments are frequently bewildered and frustrated by metropolitan-dominated state legislatures that limit the uses of land within rural areas.

Finally, land use zoning and other planning tools designed for urban environments are woefully inadequate to deal with the problems of rural areas. As Healy and Rosenberg point out in Land Use and the States (1979), large-acre zoning and similar measures are sometimes counterproductive measures which hasten ill-conceived and poor uses of environmentally sensitive landscapes.

• Fragile Rural Institutions

Rural and small town communities place a special significance on the character of various local institutions. Small town post offices, swimming holes, local restaurants, parks, and churches have unique character developed over many years, even, in some cases, centuries. As towns become cities, attempts to preserve or protect these institutions' physical and social role ends to "museumize" them, altering their true character and sterilizing their role. The genuinely rural institution becomes artificial, thereby reducing its value as the cultural glue that gives a community its real character. In essence, as Randy Hester (1983) points out, the real community people seek in rural places is at least partially destroyed by the seekers.

• Interdependent Control

As rural communities diversify their economic base they also increase their vulnerability to external economic control. The increases in rural jobs have come largely through branch plant development or the establishment of firms serving metropolitan industries. Finance institutions remain concentrated in metropolitan centers, and accordingly, decisions that affect rural areas are made far away from rural communities. Rural public officials are, in many cases, totally unaware of them and unprepared to cope with corporate actions that affect the destiny of their community.

Rural areas are even more affected by national urban- or fiscal-oriented policy such as the deregulation of telephones, natural gas, and trucking. These policies can have enormous impacts on rural communities.

In sum, as rural areas are integrated into the national system they become vulnerable and typically have less control over their destiny. Thus rural/nonmetropolitan areas cannot measure all changes as progress. The fundamental forces shaping rural areas have changed dramatically. By recognizing this shift new policies can be fashioned to assist rural communities and small towns to play a productive role in the national economy while simultaneously retaining rightful control over their heritage and destiny.

FORMULATING RURAL PUBLIC POLICY

Rural policy for most of this century has been a residue of urban or other public policies. Even when national attention has focused on rural resource issues such as timber, food, or fiber production it has been in the context of urban needs. Similarly, whenever the plight of the rural poor, unemployed, or undereducated has been considered the policy objective is

inevitably to increase parity between rural and urban. The work of Michael Harrington (1962) and Niles Hansen (1970), explains the premise that reducing rural poverty would reduce the urban crisis.

Rural places have been viewed as underdeveloped or undeveloped, a source of shame, embarrassment, and inequality. This concept of rural as somehow lacking in resources, skills, and potential continues to plague the policy formulation process. Rural legislators and advocacy groups continue to justify rural needs in terms of bringing rural places up to an urban standard, a concept that is misguided and counterproductive. It condemns rural policy design and development to only one goal: urbanism. The need now is to fashion policies and programs that assist rural areas to define and meet their own goals and gain reasonable control over their destiny.

Historic Rural Policy Base

Historically, national rural policy has proceeded from either geographic or human resource concerns. As a consequence, it is difficult for policy formulation to move beyond old ideas.

Rural Geographic Policy Focus. For most of the century national rural policy was designed to reduce the isolation of rural places. Public policy focused on increasing modern services such as electricity, telephone, and highway access. These policies aimed at improving rural peoples' access to urban places, urban culture, and urban jobs. Massive amounts of public assistance provided indirectly through the Land Grant Colleges and directly through agencies such as Economic Development Administration, and public authorities or cooperatives that provide electricity, roads, water, sewers, and public facilities. These programs remain important to rural areas, but their mission has subtly changed from modernizing to economic development and

community stabilization.

Rural Human Resource Base. Directly improving rural human resources and ending poverty is a more recent undertaking of the federal government, largely commencing in the 1950s and 1960s as part of the massive antipoverty efforts. In its report The People Left Behind (1967) the President's Advisory Commission on Rural Poverty left no doubt as to the severity and the consequences of rural poverty. The programs mounted under these auspices created the safety net discussed earlier. In many respects this safety net formed the base for recent improvements in rural life.

Contemporary rural problems move beyond either geography or human resource issues. New issues arising from the integration of rural areas into an altered national socioeconomic structure create new policy needs. Therefore rural policy formulation must be designed to alter, intervene in, or create structures that will assist rural places to develop more diverse, self-sustaining economic and sociopolitical institutions. The model for these structural changes should be to create low density, livable communities that can share resources with similar communities, creating a balance between human settlements, industrial development, agriculture, and the natural resource base. Such a model can be developed and achieved through sensible policy, without national plans or imposed regional institutions.

NEW DIMENSIONS AND DIRECTION FOR RURAL POLICY

Two succeeding administrations have been given the responsibility by Congress to formulate new rural policy. Each of these administrations has missed the opportunity to design policies and programs that place rural areas within the larger context of national social and economic development. The Carter administration's efforts missed because their plan failed to examine

the changed conditions of rural America carefully. Consequently, the Carter plan repackaged old efforts to solve the problems of the rural past. The current administration's effort recognizes the changing circumstances, but presumes that these trends need little or no reinforcement and that administration programs will meet most rural needs. As a result, these two approaches leave enormous gaps and policy needs unfulfilled.

Rural areas can play a leadership role in the future socioeconomic order. This is not to suggest that all of the economic changes associated with an advanced rural society are good, or that they are uniformly good in all rural areas. But if we consider rural communities as potential contributors and actors in the evolution toward a more technocratic socioeconomic system, rather than as reactors or impact-prone areas, the policy response will be far different. It is our contention that rural places should be seen as the new venue for an advanced industrial society, and that national policy should be based on this concept.

It is the responsibility of national policymakers to develop the context for policy and to articulate the role of state and local government. Each level of government has different responsibilities and tools to meet the needs of rural communities. Further, the precise geographic and conceptual boundaries between urban and rural will have to be modified at all policy levels in order for effective policy to emerge.

The National Role

Rural is no longer equated with agriculture or natural resources, yet the principal liaison between rural people and communities and the federal government are the resource-oriented Departments of Agriculture (USDA) and the Interior. Consequently, rural people and communities are lower priorities

than the land they occupy, an enormous injustice to 61 million rural Americans who have limited access to the Departments of Housing and Urban Development (HUD), Labor (DOL), Health and Human Services (HHS), and other human resource agencies.

The Administration's designation of an Under Secretary for Rural Development and Small Towns within the Department of Agriculture is an important step, but, the resources required by most rural communities remain under the auspices and direction of other federal agencies. Therefore, small towns and nonmetro areas continue to receive residual or watered down urban policy such as the Enterprise Zone legislation.

In order to place the responsibility of rural places closer to a wider set of people-serving resources, we propose that the human services, housing, and similar urban and community development responsibilities for nonmetro places be transferred to HUD. The risk in this proposal is that rural areas would receive even less attention in HUD than in USDA. But strong Congressional oversight as well as specific legislation could lessen this danger. Further, appropriate resident expertise in HUD could maximize and enhance the total array of programs within that department's scope.

Alternatively a new Rural and Small City Development Administration could be formed as a quasi-independent administrative agency within the Department of Agriculture. The new agency would subsume the current EDA, Farmer's Home Administration (FHA), HUD Small Cities Block Grant Program, and other Department of Agriculture programs designed specifically for community development. The new Rural and Small City Development Administration should be directed by a commission similar to the Office of Personnel Management, Security and Exchange, or other similar independent commissions. Commissioners would be nominated by the President to serve terms of six years

and would have the responsibility to report to both the President and the Congress on the needs of rural and small cities annually and to propose steps to be taken to meet the needs of rural people. The Commission could also establish guidelines, rules, and regulations based on Congressional Acts to administer programs under its jurisdiction. The Department of Agriculture would have the responsibility for program administration as directed by the Commission and the President.

Data Requirements

National data and policy analysis necessary to determine rural needs is not available. As a result, the effects of such measures as the deregulation of telephone, trucking, and airlines are difficult to assess. Even when economic effects can be measured, their effects rural development are not considered. In essence, the current rural turnaround can be stymied by, or even collapse under, inappropriate or insensitive policy measures. Therefore we propose that the U.S. Office of Management and Budget develop staff capacity and expertise as well as data systems to support analysis of administration proposals on rural areas and small towns. As a companion to this proposal, the Congressional Budget Office should be similarly staffed to assess legislative proposal effects in the same way.

Rural Economic Opportunity

In addition to program and plan assessment, the federal government must be responsible for improving economic opportunity among rural communities and people. The federal government should sponsor a series of initiatives designed to.

1) Increase economic diversity of rural communities. The approach to achieve this would be a Rural Development Consolidated Grant Program administered by the Under Secretary for Small Towns and Rural Development. These new grants, awarded through the states, would incorporate current EDA, Community Services Block Grants, Department of Labor, (JTPA programs for balance of state [rural] areas), Vocational Education grants and aid, UDAG, Transportation (DOT), and housing programs into a single consolidated grant program. The consolidated grant program would not be a typical block grant program inasmuch as it would be a competitive endeavor with fewer guidelines, considerable flexibility, and no minimum distribution formula. This approach has several valuable features. First, it reduces paper work and bureaucracy by allowing a community to make a single submission to meet many of their needs. Second, it improves internal planning and coordination by forcing long-range thinking rather than attitudes based on single ad hoc grant submissions for available federal funds. Finally, it improves rural communities' ability to compete successfully for federal resources.

As a requirement for participation, communities submitting proposals would be required to demonstrate that their planning included consideration of agriculture and other natural environments under their sphere of influence. To assist rural communities in planning and developing staff resources, states would be awarded additional funds matching on a dollar-for-dollar basis the funds appropriated by state legislatures for rural development. The majority of the funds for this consolidated grant program would be designated for communities in the smallest and/or poorest rural counties based on a weighted formula favoring them.

2) human resource programs. There is substantial evidence that the quality of human resources in rural communities affects both population and economic improvement (Bradshaw and Blakely, 1981; Beale 1982). In addition, two and four year colleges are most often the critical factor in more knowledge-intensive industrial development. Therefore, we propose an expansion of the federal government matching grant programs designed to assist postsecondary educational institutions in some of the nation's poor rural counties engage in training and economic development programs. This project would be aimed principally at helping institutions develop programs more closely targeted to emerging employment opportunities, support programs for small business development and entrepreneurship, and to provide economic development services to existing and potential employers in their region.

In addition, the current Jobs Training Act (JTPA, mentioned earlier) and similar DOL funds should be restructured to meet rural needs by providing that a larger portion of such funds be made available for job generation and job creation projects in rural areas. Further, within the Department of Labor a Rural Jobs Development Division should be established to plan and administer these funds to states and within states, to rural counties. The most distressed rural counties would be made eligible for the largest share of such funds.

The State Role

States have not developed creative roles in rural development, yet there are significant areas in which state policy can be of enormous benefit to rural communities. Our research and observations suggest to us that the federal government should encourage the states to provide the support

structure for local economic development. States are in the best position to determine whether local city or county planning is sound. Further, states can develop the infrastructure for small and medium-size business loans and loan guarantee plans. Therefore, we propose that the federal government initiate a series of matching grant and aid programs to develop:

1. New indigenous local business establishments in rural areas. This program would be designed to assist indigenous business creation in rural areas. Funds would be available as below market loans, loan guarantees or interest write-downs for new sole owner or small partnership businesses opening for the first time in rural areas in technical, industrial, or similar fields. The funds for this activity would come via expanding current agricultural banking and Farmer's Home Administration programs to this purpose and setting an initial goal that 30 percent of existing agricultural and FmHA loans be used in this manner. Local government support of the project would be required. Firms taking advantage of the program would be required to pay back funds in total amount of the loan plus prevailing interest rates and penalties if they relocated elsewhere (inside or outside the U.S.) before the loan was repaid.
2. Rural opportunity centers. Each state would be required to establish a rural economic and employment opportunity center. The purpose of these centers would be to establish a mechanism to reach the underprivileged and difficult to assist population in rural areas. The centers would provide both technical assistance training and combined grants and aid to community groups in disadvantaged communities or local government in the same communities. State centers would combine federal and state resources to stimulate and implement economic development activities for the disadvantaged in rural areas, including the provision of housing and social

services.

3. State venture finance banks. Several states have experimented with some form of state finance agency. To date, these efforts have merely supplemented the Small Business Administration (SBA) and similar efforts. Our research indicates loans of this type to be marginally helpful to rural business (Bradshaw & Blakely, 1981). The gap in rural finance is venture capital. One reason for this is that rural areas are distant from financial centers and financiers. Further, the potential for the deregulation of banks to reduce or deplete rural cash reserves is very great.

Since people with ideas are the critical ingredient in the natural to human resource transition, we propose that states develop new financing capacity for rural areas by issuing rural development revenue bonds. Bond proceeds would be used to establish a venture capital fund. This fund would be used as a resource in attracting job-creating people and industries to rural areas and in stimulating existing rural business or entrepreneurs to develop new products or services.

The details of such an effort require considerable thought and planning, but its basic strategy would be little different than current SBA and FmHA loans. One difference that is envisioned is that state or local governments would acquire equity participation in such ventures in order to stabilize its income and to enter into a longer term relationship.

4. Land use planning and policy. We believe each state should be provided with new federal incentive planning grants similar to the old "701" planning grants program designed to develop comprehensive rural land use plans that recognize the demand for alternative settlement patterns. These plans would encourage the better use of existing small town urbanized

areas, yet provide for increased population in low density settlement. In addition, such planning would incorporate new planning zoning and mixed use formulas that assist in preserving farm land and natural habitat.

The Local Role

Rural local government is much maligned, even by small town officials. While it is clear that rural public officials have fewer staff, it does not follow that they have access to fewer intellectual resources. Clearly the availability of specialists and the elaboration of administrative infrastructure is helpful. But there are more creative ways to solve this problem than by adding more public officials. We suggest that:

1. Local and state government expand experiments with the circuit rider programs to provide rural and small areas with expertise in special areas such as housing, budgeting and the like on a partial reimbursement basis. This special assistance might be provided through expansion of existing regional agencies, use of Cooperative Extension or through a consortia of state colleges and others. This proposal might be coupled with the Administration's TRAIN program and provide a specific mechanism for information transfer to rural areas.
2. Rural local governments should establish nonprofit development corporations which act as development authorities and have the legal capacity to hold equity positions in local enterprises. Local government would use the development corporation to hold shares, collateral, and other forms of equity in businesses. Subsequently, the development corporation could hypothecate its holdings in local enterprises as investment capital for other community projects.

In addition, we believe that local, county, city, town, and/or township governments must develop internal land-use and zoning patterns compatible with total regional development rather than as separate entities. Such planning can bring about more improved total investment and increased opportunities for all the participatory communities.

Conclusion

Rural areas are a significant contributor to the nation's transformation to an advanced industrial society. Public policy then must be designed to enhance the role of rural communities. At the same time, the rural physical, social, and institutional landscape is fragile. It will take care and sensitive policy instruments to achieve the necessary transition to a compatible rural/small-town living pattern. Rather than fighting small town and rural development as forms of urban growth, planners and policy makers need to learn to support them in productive ways in order to make use of their unique contribution.

National policy that fails to provide a new understanding and articulation of the role of rural areas in the transition of the economy is doomed. Therefore, it is important that a clear set of national policies and programs be designed to assist rural areas in mitigating the problems associated with poor or unplanned development. Rural and urban people of all races, ethnicities, and classes must have equal access to and benefit from this next stage of advanced rural society. Every level of government has a role to play in reaching this objective. The national government must set the context, offer direction, and provide resources to the poorest places while state and local governments must develop innovative implementation strategies. The new frontier can be a better one than earlier frontiers have been for rural America and all Americans.

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AGRICULTURAL COMMUNITIES: ECONOMIC AND SOCIAL SETTING

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The agrarian ethic was long a dominant theme of American life. Yet even when it was at its epic proportions in the homesteading era and in the sundering of the Nation over an agriculturally-based slavery, it was also a diminishing theme. Decade by decade, throughout the nineteenth century industrialization and urbanization emerged. When finally in 1920 the urban population exceeded the rural for the first time, the shock was so great that Congress, for the only time in its history, found itself unable to reach any consensus on Congressional reapportionment and ignored its Constitutional requirement to reapportion. The debates of the time make it clear that distrust of urban society and disbelief in the permanence of the outmovement from farming were major factors in this failure.

After the onset of World War II, the farm population declined rapidly, being reduced by half in the period from 1940 to 1960. Factors impelling farm mechanization and enlargement, together with the lure of superior urban employment and income, produced this result. In particular, the

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agrarian component of the South was greatly reduced as the historic share tenancy form of cotton, tobacco, and peanut farming was abandoned for procedures using fewer workers. Gradually the fact that the farm population had become a small minority of the total population was accepted. However, it has taken much longer to get the point across that farm people are also only a small minority of the rural population. We have 5.6 million farm population today, out of the total of 59.6 million rural people. (There were 30 million farm people in 1940 out of 57 million total rural.) Farm linkages with other economic sectors have increased as modern farming has required vastly higher purchases of equipment, fertilizer, pesticides, and services, and as we have moved to increased processing of many products before final consumption. But many of these linkages are urban based and/or do not necessarily involve a community of like interests with farmers. (For example, in the short run, what is bad for the farmer may not be bad for a supplier or buyer.)

AGRICULTURAL DEPENDENCY VERSUS AGRICULTURAL PRODUCTION

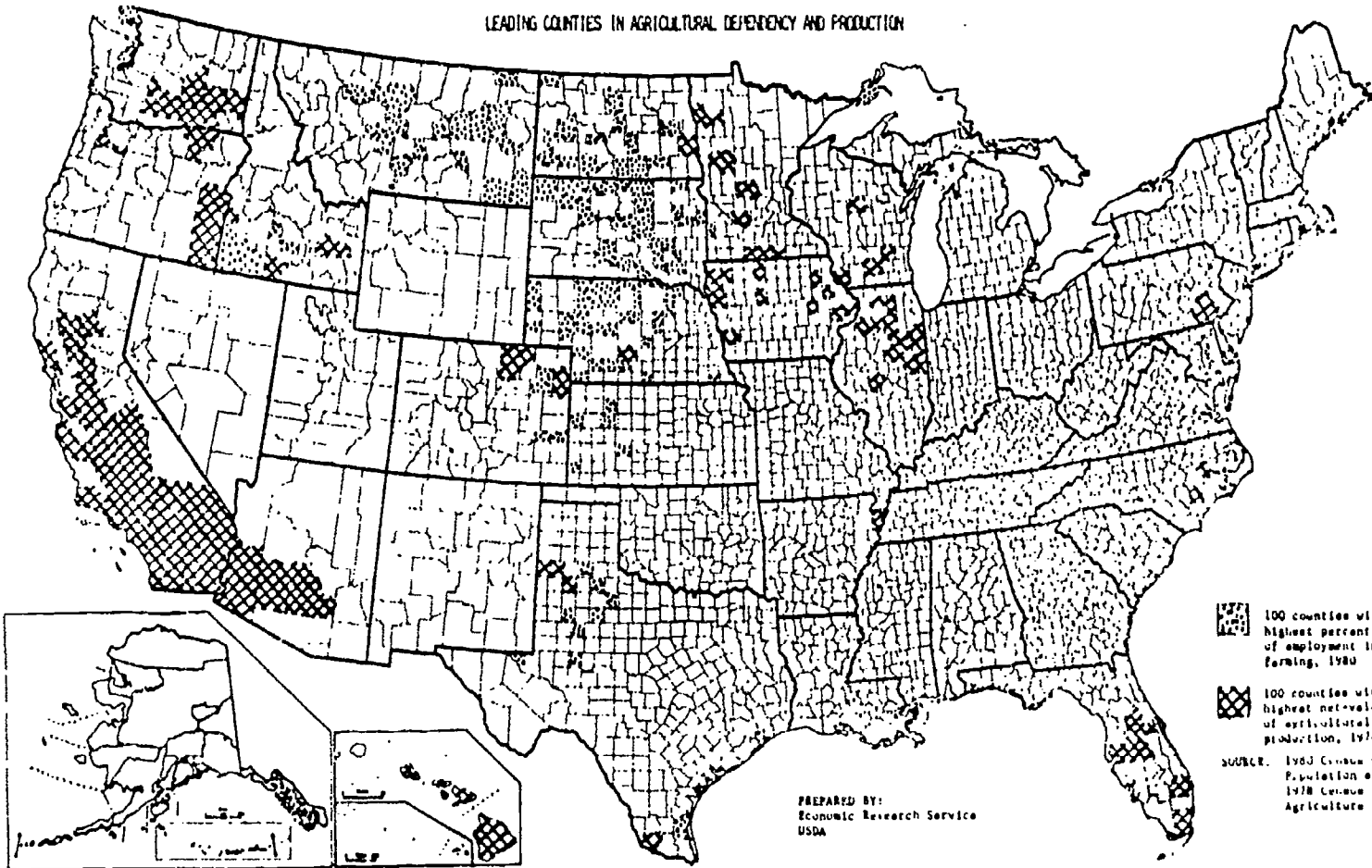
There is no easy way of defining the limits of "agriculture" or "agricultural communities", and it is not the intent of this paper to do so here. But, no matter how these concepts are defined, agriculture as a direct or secondary employer is not the driving force of most of the communities of America today that are viewed as rural or small towns and that constitute the clientele of the Department of Agriculture for many Federal programs. This does not derive from any contraction of agricultural output. Indeed the central fact of American agriculture is the increase in its output despite the loss of three-fifths of its labor force in 40 years.

The deagriculturalization of rural America results from a major expansion and diversification of the nonfarm rural and small town economy which has permitted the total rural population to increase despite the farm sector losses. However, this growth has not been evenly spread. In general it has affected the timbered and desert areas of the Nation much more than the open plains and prairies of the midcontinent. In the northern plains, in particular, there are still counties in which the economy can be described as almost entirely agricultural. Other equally rural areas, however, either have almost no agriculture (for example, parts of the Southern Coal Fields) or have retained an agricultural function, but have seen it overwhelmed in employment by such industries as manufacturing or mining (many parts of the South or West).

Today there are only 19 counties left in the whole country in which half or more of all employed people work solely or primarily as farmers or farm laborers. Thirty years ago Kentucky alone had over 50 such counties. Counties with a fourth or more of their employment in farming--a level at which one can safely assume that agricultural interests still clearly dominate the economy--numbered 271 in the 1980 Population Census.

Most of these are thinly populated Plains counties and they only contain 8 percent of the total U.S. farm population. With some exceptions, their agriculture tends to be extensive farming of grain (usually wheat) or cattle ranching, requiring large acreages. Thus we encounter the anomaly that none of the 100 counties most dependent on farming in the United States (as measured by employment) was among the 100 top counties in net value of agricultural output in the 1978 Agriculture Census.

LEADING COUNTIES IN AGRICULTURAL DEPENDENCY AND PRODUCTION



The latter (top producing) class of agricultural counties is more widely distributed. One major concentration is in California and Arizona. A second major group is in the more productive parts of the Corn Belt. Other counties are in Florida or the Columbia Basin. Many of them are characterized by irrigated farming, with its high value of output per acre. In sharp contrast to the high dependency counties with their small populations, many of the ranking top producers are metropolitan counties (46 of 100), including the counties that contain such large cities as Los Angeles and its suburbs, San Diego, Phoenix, Honolulu, Sacramento, Miami, and Tampa. Much of our most productive farming is embedded in a metropolitan environment, in which the farm community is a very small part of the total. The three percent of counties that constitute the 100 top producers, yield 20 percent of the Nation's total net value added of agricultural products.

The demographic contrasts between the high dependency and high production counties are substantial. In the high dependency group (most of which have no urban population at all), the total population declined in the 1970's by 6.9 percent because of the lack of alternatives to farming. In the high production group, where 87 percent of the people are urban, population grew by 20.4 percent. This is a level of growth far above that of the United States as a whole (11.4 percent) and one that unquestionably puts pressure on the price of farmland and its continued use for farming.

There is a gradient of social and economic conditions associated with varying degrees of agricultural dependence. In general, one can say that the higher the relative dependence on farming, the lower the overall levels are of education, income, minority race presence and female labor

force participation, but the higher the average age and the percentage of children living with both parents (see Table 1).

FAMILY WORKERS VERSUS HIRED WORKERS

In the past, a major organizational feature that distinguished agricultural people and communities from one another was tenure status, especially the contrast between the South with its extensive share tenancy system, and the rest of the country. Today, the incidence and importance of full tenancy is greatly diminished and is actually somewhat less in the South than in the rest of the Nation. There is another measure of organizational structure, however, that strongly differentiates agricultural communities and regions in the United States, and that is the comparative reliance on operator labor versus hired labor to do the work. At the time of writing, these data are not yet available from the 1980 Census. The pattern, however, can be reliably seen from the previous census.

In a large and basically contiguous area comprising the northern and central Great Plains, the Corn Belt, the midwestern Dairy Belt, the Ozarks, and much of Kentucky and Tennessee, the ratio of self-employed farmers to hired farm workers is more than 2 to 1. This region is dominated by commercial but family-scale operations. Some full time hired labor is required on the larger operations and there may be seasonal needs for extra help, but the main reliance is on family labor.

Adjoining this region and extending into the northern Rockies, the southern Plains, more of the upland South and the interior Northeast are many other counties where self-employed farmers are more numerous than hired workers, but not by a 2 to 1 margin.

Characteristics of Counties by Selected Levels of Agricultural Dependency and Production

County characteristics	No. of counties	Population, 1980				Pct. of population		Pct. households with income		Pct. children -18 not in married couple families		Pct. adults 18+ with 1 yr+ of college labor force		Pct. of U.S. net value farm products sold, 1978
		Total	Rural	Rural	Urban	20-34	60 +	- \$10,000	\$30,000+	16+ in	16+ in	1 yr+ of college		
		(000)		farm	nonfarm									
Pct. of employed people in farming, 1980														
33.3 or more....	104	353	35.9	61.4	2.7	19.0	22.2	43.5	9.2	7.7	38.2	25.2	2.4	
25.0 to 33.2....	167	1097	27.4	61.7	10.8	19.5	22.5	39.8	10.4	9.0	41.0	23.4	NA	
20.0 to 24.9....	150	1444	23.7	53.7	22.5	20.3	22.0	38.1	11.2	9.9	41.8	22.9	NA	
15.0 to 19.9....	238	3507	15.8	49.2	35.0	22.1	19.0	37.4	12.0	12.6	43.9	23.2	NA	
Top farm production counties.....	100	30,152	1.8	11.3	86.9	27.1	15.1	27.4	22.1	20.3	51.7	36.9	20.5	

Source: Unpublished tabulations from 1980 Census of Population and 1978 Census of Agriculture

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At the other extreme, are agricultural areas in which two-thirds or more of people in the production phases of agriculture are hired workers. These include most of the top producing counties in California and Arizona, most of the Rio Grande area in Texas and New Mexico, most of the Florida Peninsula, a predominance of the Mississippi Delta, many counties around major cities, and Hawaii. Areas where hired workers are in the majority but are less than two-thirds of the farm work force fill in most of the rest of the West, the lower South, and Northeast.

The character of agriculture in the two opposite types differs greatly, on average. The area with high percentage of self-employed workers is focused on the products whose surpluses, low prices, or policy problems seem chronically to dominate farm news; namely, wheat, corn, soybeans, and dairy products. This is also the area whose agriculture has become rapidly more dependent on export markets in recent years.

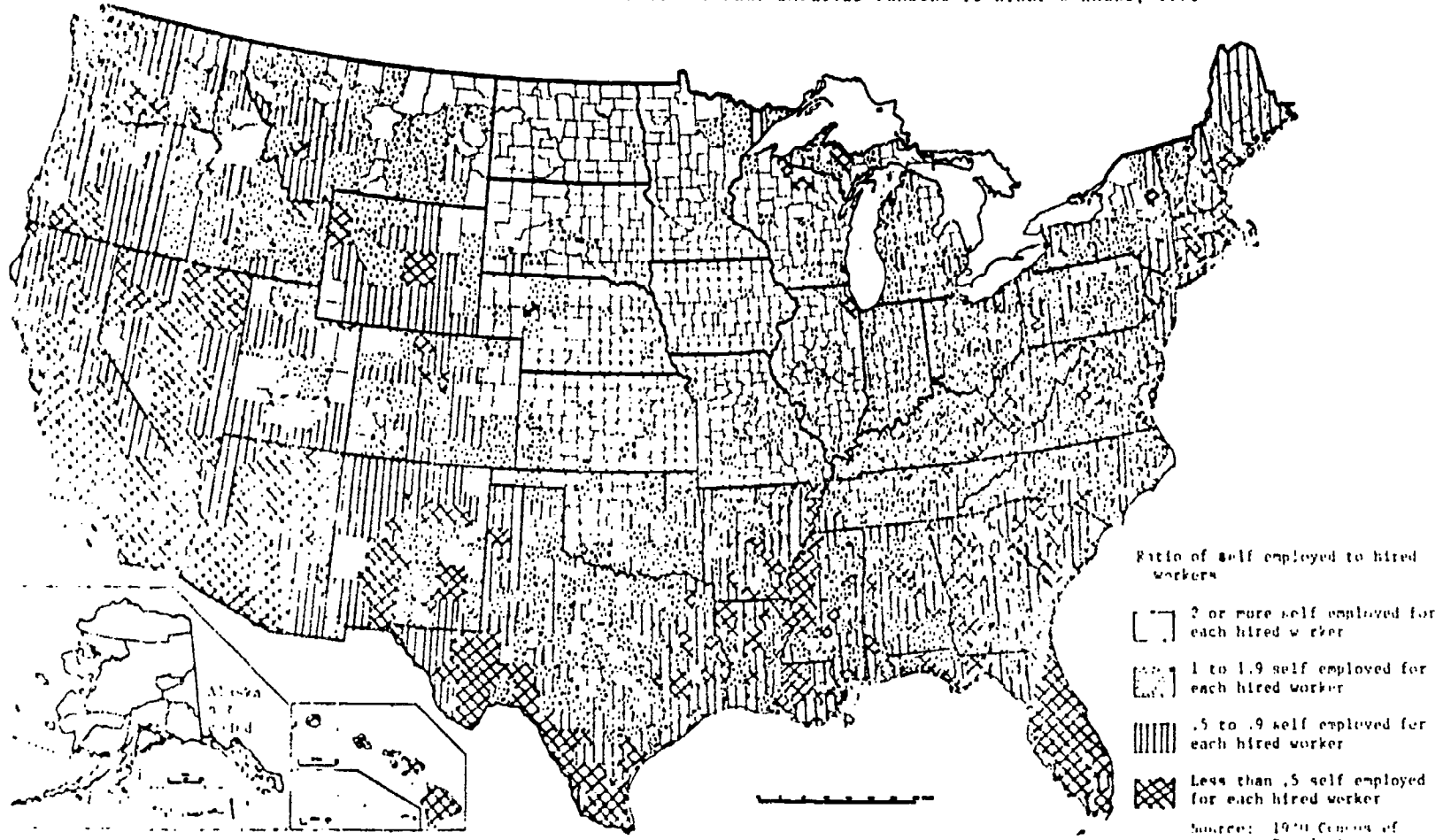
The areas that hire most of their farm workforce, on the other hand, produce much of the Nation's supply of vegetables, fruits, tree nuts, sugar cane, horticultural goods, and cotton. With the exception of cotton, they are producing heavily for the American market.

Producers are frequently large-scale, and fewer in number than farmers in the area dominated by self-employment. Some of the areas of high use of hired workers are characterized by nearness to the Mexican border--providing a ready source of cheap labor--or by the previous existence of large plantations that once were farmed by tenants and now are too large for family labor operation--such as in the Mississippi Delta.

Although precise data have not been calculated, it is apparent from the location of the areas with high ratio of hired work to self-employed

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AGRICULTURAL EMPLOYMENT: RATIO OF SELF-EMPLOYED PERSONS TO HIRED WORKERS, 1970



work that they very often--perhaps characteristically--have hired workers of different ethno/cultural and social class background from the operators. Many of them are areas in which hired workers are predominantly Mexican-American, Black, or--less frequently--Filipino or Indian, whereas the operators are usually White. Labor issues are prominent and have racial and social class overtones in this context. In the operator-dominated areas, such farm labor as is used is typically drawn more from the same social stratum as the operators, although some Mexican-American migrants are used and some of them have "settled out" locally.

The question arises recurringly as to which form of agricultural organization--family operated versus employer-hired labor--is superior for the general welfare of the local communities or for society as a whole. I do not intend to go into that literature here, of which Goldschmidt's Arvin and Dinuba study is the off-cited prototype, but it typically concludes that the family operated pattern is the more socially desirable (Goldschmidt, 1946). It seems to me that the issue has become more prominent in research and policy-oriented discussions in the last 5 or 10 years.

Over the last decade both the relative and absolute importance of hired workers in U.S. agriculture has risen, while that of farm operators and other family labor has diminished. In 1970, hired workers averaged 28 percent of the farm work force; by 1982 this had climbed to 38 percent. Farming is still a preeminent source of self employment, as compared with any other major occupation. Ironically, however, the numerical importance of the self-employed is decreasing in farming at the very time that self employment has expanded rapidly in the nonagricultural population.

Although hired farm work is up, there is another and quite antithetical element in the farm community that has also been growing, but for which little more than subjective evidence is available. I am referring to the "homesteaders" or "back-to-the-landers". This population has come into or back to the rural areas over the last decade or so. It has a strong ideology of the value of rural living, of self sufficiency, and stewardship of the land. Some of its members want to be comfortable; others are anti-materialist. Their role in farming seems to be typically small scale, often with a focus on organic farming, vegetables, or livestock specialties. Almost anything said of them lacks quantification, for it is difficult to identify this population and thus estimate its size in regular data series. The homesteaders probably account for the increase in small scale farms shown in the last census of agriculture. They seem to go especially to partly timbered areas of marginal productivity where the land was long farmed and a stock of farmsteads exists, but where land value in recent decades has been comparatively low.

CHARACTERISTICS OF FARM PEOPLE

Within the agricultural community as a whole it is useful to identify significant ways in which farm people differ from the nonfarm community as well as among one another.¹ Because of the declining number of people in farming and despite the entry of a number of younger operators into the profession in the last decade, the farm population averages more than 5

¹ In this section most of the data on characteristics of farm people are derived from Current Population Reports, Series P-27, No. 55, Farm Population of the United States: 1981, U.S. Bureau of the Census and U.S. Department of Agriculture jointly, 1982. Most of the material on income is from Farm Income Recipients and Their Families: A Socioeconomic Profile, by Vera J. Banks and Judith Z. Kalbacher, Rural Development Research Report No. 30, Economic Research Service, September 1981.

years older than the nonfarm. Median age in 1981 was 35.7 years compared with 30.3 for nonfarm. The farm population is still comparatively short of younger adults 20-34 years old (17.6 percent versus 25.9 percent for nonfarm), and has a higher percentage of persons 60 years old and over (19.0 percent versus 15.5 percent) despite the fact that many older farm couples leave the farm in retirement.

The percentage of high school graduates among young farmers (25-44 years old) is now as high as that among nonfarm workers (83 versus 84 percent), although farmers 45-64 years are much less likely to have finished high school (57 percent versus 67 percent for nonfarm workers). However, only a minority of hired farm workers have a high school education, even among the younger ones (39 percent). The educational disparity between the operators and the hired workers is widening, not closing.

With the heavy exodus of Black tenant families and small owner operators since World War II, only 4 percent of the farm population now consists of Blacks, compared with 15 percent as late as 1940. Persons of Hispanic origin amount to just 2 percent of farm people, and the role of both of these groups in farming is now preponderantly as hired workers rather than as operators. Forty-five percent of all hired farmworkers for whom farm work is the primary employment status are Black, Hispanic, or other minority race, which is 11 times their representation among farm operators.

At present, about two-thirds of employed farm men work solely or primarily in agriculture and the rest at nonfarm jobs. The opposite is true for women. Nearly two-thirds of farm women who are in the labor force are doing nonagricultural work. The men are heavily employed in

manufacturing and construction and the women in service industries and retail trade. In addition, people engaged in agriculture at all are more likely than persons in any other major industry to have a second job. Nonfarm work is especially common for both farm men and women in the South, probably because of both greater need and greater opportunity.

A national survey in 1976 showed that of all persons receiving self employment income from farming (including those who had losses) 15 percent had no income from any other source; 38 percent had nonearnings income, such as rents, interest, or social security; the remaining 47 percent had wage, salary, or nonfarm business income to supplement their farm income, and usually had other income sources as well. A fourth of the families that received self employment income from farming also had social security income (including railroad retirement), but only 1 percent had received any public assistance or welfare payments.

As a result of these patterns, a majority of farm families receive more income from nonfarm sources than from their farming. In 1975 (a better year for farm income than any since then), 71 percent of persons in families that received some self employment receipts from farming reported that more than half of their total net income was from other sources. Fully a fourth reported a loss from farming. The total median income of persons reporting loss or negligible income from farming (less than \$1,000), was as high as that of persons having moderate to above average incomes from farming. In median family income from all sources, farm families collectively tend to run anywhere from a seventh to a fourth below nonfarm families, depending on the relative status of the farm and nonfarm economy in a given year. In 1981, 23 percent of the farm population had income below the official poverty level, compared with 13.8

percent of the nonfarm population. There are indeed many asset-rich people in commercial farming, but it is also clear from the poverty data that there is a rather large minority whose incomes inclusive of public assistance and social security fall below societal standards.

CONCLUSION

There was a time when it was possible to characterize farm people and farm communities in terms of social disadvantage, as compared with the urban population. It was an obvious and relevant thing to do. There were striking contrasts in electrification, education, quality of housing (heating, water supply, sanitation), social security protection, income, transportation, and communication. Although there are residual levels of these deficiencies today, modernization of rural life has seen major convergence between the material living conditions of farmers and others.

In the process of farm consolidation, many of the poorest people in farming left or were displaced, with large numbers going to the cities. For some years to come many of the overall remaining differences between farm and nonfarm communities will be partly shaped by the size and character of the prolonged exodus from farming in the period 1940-1965ca, and the continued more gradual decline since then. For example, until the farm population stabilizes, it will continue to be an older than average population. However, social indicator comparisons that are age specific show less farm-nonfarm difference.

Within the farm population itself, there are major differences in the extent to which:

- (1) farm families depend on off farm work (and thus the extent to which their problems can be addressed through farm policy),
- (2) they and their interests dominate communities or are merely a minority social and economic segment within them, and
- (3) agriculture is practiced by the modern day version of the yeoman farmer with his family labor, or by agricultural employers operating primarily with hired workers.

All classes of agricultural counties have been affected by the revival of population growth in rural areas. (Even those that are continuing to lose people are typically having much smaller losses than in the past.) I expect the diffusion of nonagricultural economic activity into rural areas to continue. I am not suggesting that farm people have or will become indistinguishable in values, attitudes, and life situation from everyone else. But, it is hardly more than a truism to say that their economic and social setting is increasingly shaped by the complex forces of modern society and, indeed, by international trade and political factors as well. The internal variation among farmers may now be greater than their collective average difference from nonfarm America.

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THE CHANGING NATURE OF AGRICULTURAL COMMUNITIES

Daryl Hobbs *

INTRODUCTION

The economic base of a rural community has a direct influence on the character and organization of the community. One need not depend on the ample research evidence that documents that relationship; the connection is apparent even to the untrained observer. It doesn't take a researcher to see that there are differences in organization, character and even appearance of rural communities that are surrounded by cattle ranches and those that are surrounded by dairy farms, between those surrounded by fruit and vegetable producers and those surrounded by cash grain farmers. There are even more obvious differences between rural communities dependent on fishing and those dependent on lumbering, or those dependent on mining and those heavily dependent on tourism, retirement, or a factory, as is so often the case today.

The type of economic base also accounts for why some rural communities have been growing and others declining. Rural communities located near previously untapped energy reserves for example, have recently boomed (some have just as quickly busted), while those exclusively dependent for their existence on serving the needs of fewer, but larger and more mechanized farms, have struggled in their search for ways to bolster their sagging economies.

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DIVERSIFICATION OF THE RURAL ECONOMY

A discussion of U.S. agricultural communities in the 1980's must necessarily begin by drawing a distinction between agricultural communities and the remainder of rural communities. All agricultural communities today are rural, but only a minority of rural communities remain predominantly "agricultural".

Over the past generation both the farm and non-farm economic base of rural (non-metropolitan) America has changed impressively. The economy of rural America has expanded and diversified, causing agriculture to shrink as a source of aggregate rural income and employment, despite dramatic increases in total agricultural production. Manufacturing, government employment, retirement income and commuting have led the way in diversifying the rural economic base.

The story of rural America has been one of replacement. Farm employment and farm families have been more than replaced by rural non-farm employment and exurbanites moving to smaller towns and the country. A result is that most rural communities today are less dependent on agriculture for their economic existence and support of local services than they were a generation back. Jordan and Hady (1979) reported recently that more than 2/3 of the rural population of the country lives in counties in which less than 10 percent of their labor force is employed in agricultural production. The combined non-farm and urban influences have been so extensive it has led some to question whether rural is really rural anymore except for agriculture (Friedland, 1981).

Largely because of lower rural wage rates, fewer labor unions and other perceived rural competitive advantages, the 1960's and 70's produced substantial growth in rural manufacturing and some movement of manufacturing from metro to non-metro areas. During the 1960's non-metro manufacturing employment

grew by about 31 percent compared with a 15 percent growth rate in metro areas. The 1970's saw the rate of non-metro employment growth drop to a 12 percent increase but metro areas experienced a 3 percent decline. (Haren and Holling, 1979)

Growth in rural government employment has also kept pace with government employment growth in urban areas, contributing further diversity to the rural economy. (Bradshaw and Blakely, 1982)

But job growth has not been the only contributor to expansion and diversification of the rural economy. The widely reported rural population turnaround of the 1970's was produced as much or more by the attractiveness of rural areas as a place to live, as by the lure of actual or potential jobs. (Brown, 1979) Persons employed in urban areas often moved further away from their work to surrounding rural areas while large numbers of retirees brought their retirement income with them to new RFD residences. (Beale, 1982) Neither the commuters nor the retirees depend on local rural economies for income and employment but do add a multiplier effect to the economies of many rural communities.

These changes have combined to add to sources of rural income, thereby reducing the proportion attributable to agriculture. The USDA (1980) reports that in the late 1970's agriculture accounted for 6 percent of rural income compared with 20 percent from manufacturing, 14 percent from government employment and 11 percent from transfer payments.

But these additions to the rural economy have not been uniformly distributed across the landscape. Clearly not all rural communities have diversified their economy to the same extent. Many rural communities, especially in the midwest and northern great plains, remain as dependent on agriculture as ever, although

the nature of that dependency has changed. On the other hand by far the largest increases in non-farm salary and wage employment and in urban-rural population movement have occurred in the south and west.

These different regional patterns have led some to observe that aggregate assessments of the importance of agriculture in rural areas tend to over-emphasize its significance in some areas and under-emphasize it in others. (Penn, 1979)

THE CHANGED STRUCTURE OF AGRICULTURE

However, while the rural economy generally has been diversifying, agriculture hasn't been immune from change either. Three recent structural changes in agriculture seem particularly relevant to our concern for agricultural communities. One trend has been for commercial agricultural production to become more geographically concentrated--not all rural areas of the country contribute equally to the nation's agricultural output.

A second trend of relevance is that larger, more capital intensive farms have become more specialized in production (Ready, 1980). A result is that certain states and regions of the country have become increasingly devoted to the production of some particular commodity or mix of commodities. This adds to the tendency for agricultural communities to take on characteristics of the dominant type of production that surrounds them. This is in contrast to the norm of general farms of a generation or more past, when each farm produced a smaller quantity of each of a larger number of commodities. In an era of general farms there was a tendency for agricultural communities to be more similar to each other.

A third trend of relevance is that the nation's farms have become increasingly stratified into a relatively small number of large volume commercial farms that produce a majority of the nation's output, and another category of

small farms that includes a majority of the nation's farms but only a small portion of the output. These small and large farms are not only different in size and methods of operation, but they also tend to be located in different regions and have a different relationship with the communities they surround as well.

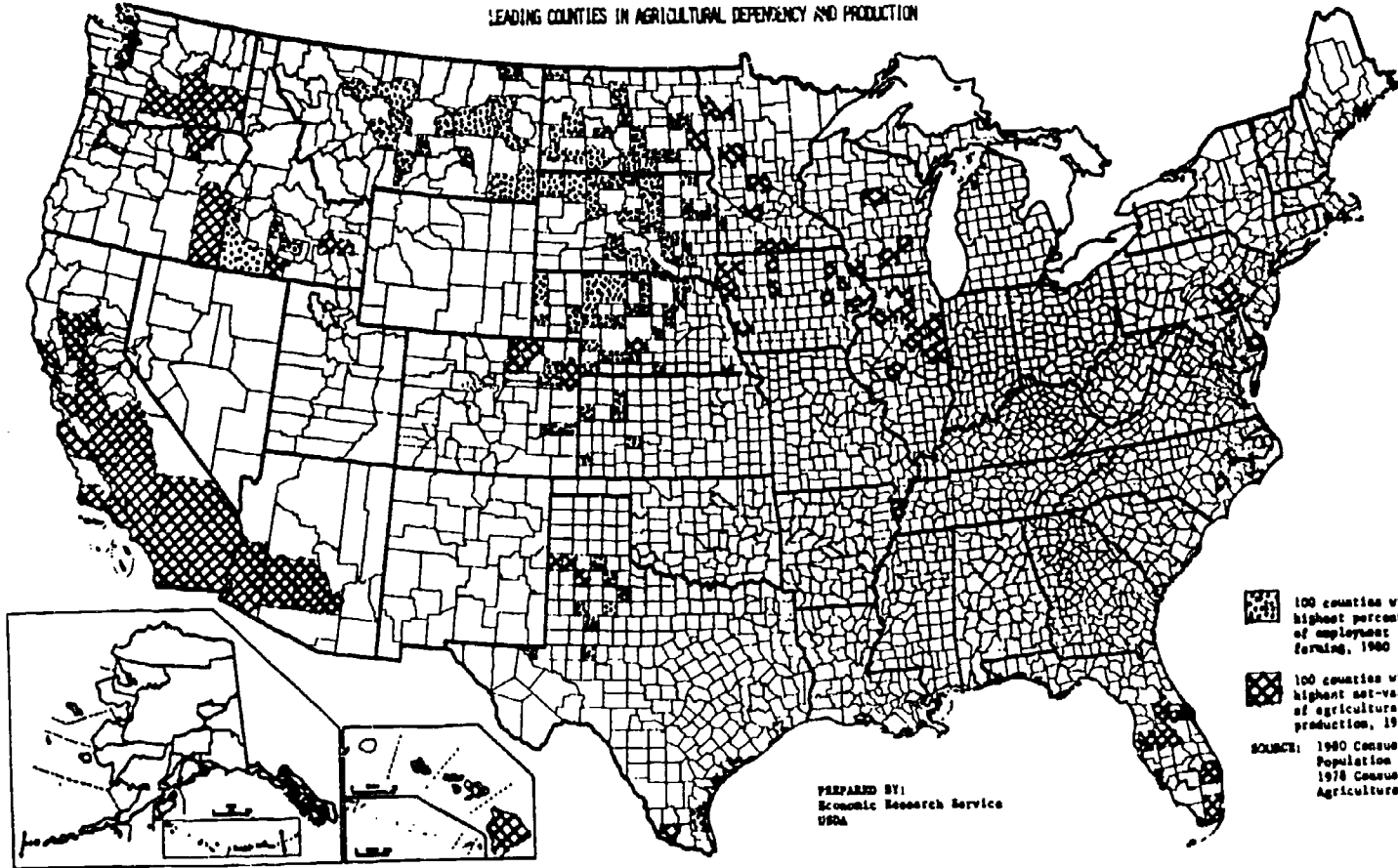
Where Are The Agricultural Communities?

The nation's agricultural production has become more geographically concentrated than it was a generation back. In 1981 seven states (Iowa, Illinois, Minnesota, Kansas, Nebraska, Texas and California) accounted for 46 percent of the nation's cash receipts from agriculture (U.S. Statistical Abstract, 1982). By contrast it takes the output from another 21 states combined to account for an additional 10 percent of the nation's cash receipts from agriculture.

The extent of concentration of commercial agriculture is further illustrated by the attached map. It shows a majority of the 100 leading agricultural producing counties to be in the heart of the midwest and in the fruit and vegetable producing areas of California and Florida. Conversely the 100 counties having the highest percentage of their labor force employed in agricultural production are concentrated in the more sparsely populated northern plains states. Those counties tend to be dominated by agriculture largely by default--there is little diversity in the rural economy of that region.

This map is not alone sufficient to identify agricultural communities since 28 states, including such farm belt states as Indiana, Ohio, Missouri and Michigan have no counties in either category. On the other hand certain

LEADING COUNTIES IN AGRICULTURAL DEPENDENCY AND PRODUCTION



100 counties with highest percentage of employment in farming, 1980

100 counties with highest net-value of agricultural production, 1978

SOURCE: 1980 Census of Population and 1978 Census of Agriculture

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Economic Research Service
USDA

highly urbanized counties such as Los Angeles, Tucson and Phoenix, Arizona are included among the top producing agricultural counties.

But the map does suggest that if we are to think of agricultural communities as those most economically dependent on agriculture, then clearly "agricultural" communities are not as ubiquitous and dispersed about the country as they were a generation back.

The Emergence of a Dual Agriculture

A part of the reason why agricultural production has become more highly concentrated is that some areas of the country have experienced a more profound pattern of farm consolidation and increasing size of farms than others. That has occurred in part because the topography, climate and productivity of the land in some regions have contributed to making larger scale and mechanization more economically feasible.

USDA data for 1981 reports slightly over 2.4 million farms in the country. Of those, about 4 percent (112,000) accounted for 50 percent of total cash receipts and 87 percent of net farm income. Conversely farms selling less than \$20,000 in farm output per year included 61 percent of all farms but accounted for only 6 percent of cash receipts and had a net loss from farming equivalent to 8 percent of total agricultural income (USDA, 1982). The key to perpetuation of these small farms lies in off-farm employment and income sources of the operator and family. Operators of these smaller farms were receiving an average of more than \$20,000 in off-farm income (USDA, 1982).

Larger commercial farms have also been a part of a general move toward specialization in production. Specialization has tended to characterize not only individual farms but also regions. Some commercial farming regions have

become largely devoted to cash grain farming, while others are characterized by dairy, broiler production, livestock feeding, cattle ranching, etc. If, as stated above, the organization and character of communities is directly influenced by the type of economic base then the conditions have been produced to expect considerable variation between communities in different agricultural regions.

Implications of a Dual Agriculture for Community

Important to our analysis of agricultural communities is that small farms and large farms tend not to be interspersed. There are regions and states where large output farms predominate--those described above. On the other hand there are major regions and states where small, part-time farms constitute the majority. Most of the states of the southeast, for example, can best be described as small farm states. Similarly there are noticeable differences between one part of some states and another; e.g. east Arkansas is dominated by commercial farms while small farms dominate in west Arkansas. Similarly west Oklahoma is generally commercial, east Oklahoma generally small, north Missouri generally commercial, south Missouri small, etc.

The topography and productivity of the land seem to play a contributing part. Small farms seem to be most prevalent in hilly, mountainous or more wooded areas of the country. Such characteristics of the land tend to discourage larger scale mechanization and the consolidation of farms that usually follows. On the other hand land of marginal value for capital intensive agriculture has often been lower priced and more suitable for recreation, hobby farming and rural residence.

These geographic and structural factors are important to our concern with the relationship between agriculture and community because small, part-time farms

have a different relationship with the rural community than larger commercial farms. A part of the difference in relationship is attributable to the importantly different social, economic and demographic trends associated with each kind of region over the past decade or two (USDA, 1982). Areas dominated by small farms have generally experienced the greatest amount of expansion and diversification of their economic base and have been recipients of much of the recent rural population turnaround. Conversely states and regions dominated by larger commercial farms have generally either lost population or have experienced a slow rate of growth (Beale, 1982).

To provide some support for this generalization we made some comparisons between rural Missouri counties characterized by larger commercial farms and an equal number of counties dominated by small farms. The larger farm counties were taken as the 20 counties having the highest percentage of farms in the "over \$40,000" sales class according to the 1978 Agricultural Census. (There are 114 counties in Missouri, 97 of which are non-metropolitan) The small farm dominated counties were taken as the 20 counties having the smallest percentage in the "over \$40,000" sales class. The "large" farm counties averaged 38.4 percent of their farms in the over \$40,000 category; the small farms counties averaged 6.5 percent in that sales category. None of the 40 counties were immediately adjacent to the Kansas City or St. Louis metropolitan areas. As indicated in the attached table the two sets of counties tended to be quite similar in average population and in average number of farms per county.

The large farm counties experienced an average of +0.7 percent population growth, and a 6.0 percent increase in number of businesses, from 1970 to 1980, while the small farm counties experienced more than 23 percent average growth in population and 26 percent growth in non-farm businesses.

Population and Business Change in Missouri
Small and Large Farm Dominated Counties

	Population 1980	Number farms 1978	Change in pop. 1970-80	Changes in # nonfarm businesses 1970-1980
20 Counties Most Dominated by Large Farms	16,400	925	0.7%	0.6%
Without 6 Counties Having a Town of 7,500 or more	10,900	797	-2.0%	1.7%
20 Counties Most Dominated by Small Farms	17,800	735	23.3%	26.3%
Without 4 Counties Having a Town of 7,500 or more	12,200	658	25.3%	28.4%

Regardless of the type and significance of agriculture in a local economy, the presence of a larger town produces effects beyond those directly attributable to agriculture. Among the 20 large farm counties there were six that included a town of 7,500 or more; four among the small farm dominated counties included a larger town. When those counties are eliminated from the average the differences are even more pronounced. The large farm counties as a group declined by 2.0 percent in population and had a very slight increase in number of businesses while the more rural among the small farm dominated counties exhibited larger increases in both population and businesses when the counties with larger towns are omitted.

COMMUNITY DEPENDENCE ON AGRICULTURE AND VICE VERSA

The traditional view of the relationship between agriculture and community stressed mutual dependence, with agriculture supplying the economic base and the community supplying services in support of agriculture. In the past because there were more farms in all parts of the country, each having fewer and simpler needs, the closest community was most often the locus of the off-farm support structure--the bank, cooperative, school, repair services, household goods, market outlets, etc. Most of the surrounding agriculture economy flowed through the community both ways--inputs coming to farms and outputs leaving farms--and in so doing it helped sustain the community economy. But recent rural trends and the changes in agriculture structure outlined above, contribute to a revision of that view--but in different directions for small and for large farm regions.

The more vigorous pattern of rural growth and expansion in small farm dominated regions supplies some explanation for the persistence, and even growth, in the number of small farms. Rural industrialization and off-farm economic expansion in these regions have made it possible for small farms to survive, by becoming part-time farms, and by providing a source of supplementary farm family income. Thus in those regions, rather than the community being dependent for continued existence on farms, it appears that the reverse is more likely the case--the continued existence of these farms may be at least partially dependent on the viability of the off-farm economic base. Should the future include a decline in off-farm employment in some small farm dominated areas, it is reasonable to expect that there would be a decline in small farms in the area as well.

Conversely in larger farm regions, especially smaller communities remain generally more economically dependent on agriculture, in part because there has been less diversification of the rural economy in those regions. Expectations are that continued farm consolidation, without a concomitant diversification in economic base, will continue to produce a downward multiplier on the community, causing continued decline in population and community based services (Flinn and Buttel, 1982). This has been happening for several decades especially in those regions currently dominated by large farms. In those regions expectations are that farms will continue to expand in size (Heady, 1980).

But we offer the observation that many smaller communities surrounded by large farms, which are becoming larger, may be experiencing a form of double jeopardy. They may not only experience the effects of fewer farms, but the very size of the farms themselves may contribute to a smaller portion of local farm economic transactions flowing through the closest community. Large farms have a large appetite for capital and production inputs as well as a need for often specialized markets. Consequently their requirements may exceed the capacity of the services and institutions of the nearest small towns. Thus many of the support needs of larger scale commercial agriculture do not flow through the local community economy.

It appears therefore that large farms are increasingly becoming associated with a large farm support structure, many features of which are to be found in a multi-community or county region rather than being duplicated in every small farming community. Thus many smaller communities, in the midst of some of the more productive agricultural regions, are finding themselves extensively by-passed by the capital intensive agriculture that surrounds them.

CONCLUSION

We have attempted to show, that if there ever were a generalizable relationship between agriculture and community, that events of recent years have rendered such generalizations obsolete. At a minimum region, size of farms, type of farm output and the extent of off-farm economic activity all produce different consequences for rural communities.

Given the requirement of brevity we have chosen to focus most attention on the increasing stratification between the relatively small number of large commercial farms and the large number of remaining farms. They are located in different parts of the country, place different demands on their environment, and produce importantly different implications for the communities they surround.

In concentrating on small and large farms we have neglected a rich history of research on community organization associated with different kinds of farming. Different kinds of farms have different implications for the social class structure of communities (Goldschmidt, 1978), for community participation (Heffernan, 1982) and on social values and attitudes (Flinn and Buttel, 1982) to mention but a few. But throughout much of the research on the relationship between agriculture and community the size of farms surrounding the community occupies a prominent place. When it comes to the effect on community one farm is not the same as another.

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NATURAL RESOURCES AND AGRICULTURAL COMMUNITIES

Kenneth R. Farrell*

Agriculture is the largest single user of natural resources. The adequacy of that natural resource base, quantitatively and qualitatively, to sustain development of agricultural production and rural communities in the decades ahead has been the subject of much discussion and speculation in recent years. In this paper, I explore two broadly interrelated issues in the context of the next decade or two. The first is whether the availability of natural resources will become a serious constraint to development of U.S. agriculture; the second pertains to the quality of the natural environment as it relates to agriculture. Neither is a new or novel issue. But each may pose critical public policy choices in the years ahead.

NATURAL RESOURCE AVAILABILITY

To speculate on availability of natural resources and its implications for the future requires that we consider two broad, interrelated sets of relationships - (1) the demand for natural resources in both agricultural and nonagricultural uses, and (2) the supply of those resources and technology likely to be available to complement or substitute for natural resources in agricultural production. Each is complex and highly uncertain but, stripping away the caveats, let me try to bring them into brief, speculative perspective.

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First, the demand for agricultural products themselves and what that might imply for future natural resource needs (demand).

On one aspect of the future there is a widely held consensus, even by economists--the prospective expansion in domestic demand for food well into the 21st century, by itself, poses no major threat to the U.S. resource base. The combined effects of increases in U.S. population and economic growth suggest increases in aggregate demand for food of slightly less than one percent annually by the year 2000. A heavily subsidized program to produce ethanol, of course, could add to domestic agricultural demand for resources. However, barring precipitous increases in petroleum prices and assuming continuance of the general emphasis of current U.S. energy policy, the growth in commercial demand for agricultural commodities for ethanol production will be marginal at least to the year 2000.

But if there is general consensus on prospects for domestic demand, the same cannot be said for export demand. Projections of recent years in annual growth rates in exports range from 2.3 to 6.5 percent to the year 2000 from the relatively high levels of the 1970s.

There are, however, several reasons to believe that the high rates of growth in U.S. exports in the 1970s will not be sustained even to the year 2000. First is the likelihood that price increases which would attend such growth would dampen foreign demand and encourage production outside the United States. Second, some of the events of the 70s which triggered rapid expansion of U.S. exports may have represented cyclical or transitory, rather than long term, shifts in export demand. And, there is cautious, but growing optimism that the developing countries where much of the potential growth in food demand resides, will continue to enhance their own agricultural productive capacity through a more appropriate mix of capital investments, research and development, and more foresighted forms of public policy stimuli.

But, what about demand for resources for nonagricultural uses? Over the past decades, U.S. agriculture has become increasingly interdependent - economically, socially, politically - with other sectors of the U.S. and world societies. That interdependence can be expected to grow into the 21st century and with it will come increasing competition for natural resources. On the margin, the value of water and generally the value of land in non-agricultural uses will continue to exceed its value in agriculture. Thus, where markets are operating unfettered and efficiently, agriculture in many locations will be in a weak competitive position for use of those resources in the 21st century as it is now. Somewhat related is the likelihood of continued slippage in the political power of agriculture at the national level and in many states. By the 21st century, agriculture will find increasing difficulty to obtain or even maintain "special interest" policies for water, other resources, or for that matter, agricultural commodities themselves.

Clearly, further transfers of resources from agriculture will occur in the next two decades and beyond. In the case of water, the transfers could well be much larger than in the past two decades through expansion of the market for ground water rights and institutional interbasin transfers. However, the rate of conversion of agricultural land may decline as a result of several factors. National population growth rates are slowing; the dramatic migration from metro to nonmetro areas in the 70s likely will slow; the rate of household formation likely will decline beginning in late 1980s; construction rates for new airports, water and highway transport systems, dams and reservoirs--all significant claimants upon cropland in the past--have already slowed. Recision or deferral of plans for construction of several major synfuel plants, have lowered projections of conversion of coal-and shale-endowed agricultural land in the next decade or two.

Summing up, competition and demand for resources will continue to increase into the 21st century. However, the "demand-pull" thesis which undergirded the more extreme food-resource scarcity scenarios of the 1970s seems overstated in the context of current perspectives. Still we might expect as much as 20-25 million additional acres of agricultural land (8-10 million cropland) to be converted to nonagricultural uses by the year 2000. Considering that demand and the additional requirements which might be needed to accommodate domestic and export demand for agricultural commodities, a plausible "guesstimate" is that total additional demand for cropland might be 35-50 million by the year 2000 from the current "cropland reserve" estimated to be about 127 million acres.

Does that mean rising real costs for both food and resources into the 21st century? It is tempting to say yes. There is only a finite amount of land and water available. But resource fixity is meaningful only in a physical context. Resource use is determined by human choice and powerfully influenced by social and economic criteria. Scarce resources are socially valuable resources. As a resource becomes scarcer and more socially valuable, users conserve that resource by substituting other resources and by adopting resource-saving technologies and management practices currently available or induced by scarcity. This principle of substitution is dramatically evident in the performance of U.S. agriculture in the past century.

The availability and price of water and energy rather than land appear to be the more critical natural resource variables for agriculture through the remainder of the century, particularly in the West. In the absence of subsidized large interbasin water transfers it seems clear that water will be increasingly costly in the southern Great Plains with the possible result of forcing conversion of substantial amounts of land from irrigated to dry-land

farming systems. Transfer of water from agriculture to meet demands in growing urban centers in the West and Southwest are likely to induce major adjustments in agriculture in those areas. Quantification of Indian and Federal claims to water of the Colorado River and other water sources in the West pose other potentially unsettling issues for agriculture. And, it seems evident that there will be no large scale Federal investment in the next decade or two in large scale water development projects. Public policy for water in the West is moving from that of development of additional supply to that of managing the increasingly more valuable current supply.

What seems likely to ensue over the next several decades is a series of marginal agricultural adjustments to higher priced water--more efficient water application, reduced rates of application, shifts from lower to higher valued crops, and shifts in resource use and production patterns within and among regions of the country. The potential to conserve water from such adjustments is substantial. For example, it is estimated that current water application efficiencies of about 50 percent could be increased to 85 percent by changing application techniques--a 70 percent gain. In the context of the West as a whole, the physical requirements for water to meet projected urban and other nonagricultural uses to the year 2000 are small relative to the total quantities now used in agriculture. Nevertheless, the water issue will be the source of many difficult, controversial choices in the decades ahead. One of the major challenges is to develop more effective institutions to reduce distortions caused by policies predicated upon the premises of an abundant, low-priced natural resource.

Agricultural adjustments to the higher energy prices of the 1970s have already been substantial--conservation in use of energy-based products through such technologies as minimum till, integrated pest management, etc.

Crosson of RFF predicts that by the year 2010 as much as 50-60 percent of the nation's cropland might be farmed by means of conservation tillage. Although vulnerable to any major interruption of energy supplies, it appears that further moderate, gradual increases in energy prices could be accommodated in agriculture without major impacts on agricultural communities or the nation's food supply by the year 2000.

Likewise the so-called cropland crisis of the 1970s seen in the light of the principle of resource substitution seems less foreboding than popularly depicted at that time. Although the annual net conversion of 875,000 acres of cropland in 1967-75 has been highly dramatic, it constituted only slightly more than one-tenth of one percent of the 540 million cropland base. Even if conversions were to continue at that rate, which seems unlikely for reasons I have indicated, the cumulative losses to the year 2000 would be only 3-4 percent of the 540 million cropland base. Nevertheless, that cropland base is a valuable national asset, the future use of which warrants our careful attention. And, preoccupation with a single national level statistic can be misleading. All land is not created equal! Soil characteristics differ and in combination with climate and management variables may have unique characteristics for production of high-valued crops. Thus, while the cropland base does not appear to be a physically or economically limiting factor to development of agriculture in the next decade or two, that should not suggest that actions to conserve it, maintain its quality, or regulate its rational, economic use at the local level are either irrelevant or unnecessary. Indeed the issues and choices of land use planning to serve multiple demands are likely to be increasingly important policy issues at local levels in decades ahead.

With respect to the stock of resource-saving technology currently available or likely to come "on-stream" in the next decade or two, scientists suggest that yields for major crops most probably could be increased 40-50 percent by the year 2000 relative to current levels with technologies now available or readily available from the "shelf." Impressive gains in livestock productivity are cited as possible within the next decade or two. And there are many who suggest that with additional investment in basic research, major breakthroughs to enhance both crop and livestock yields are possible by the year 2000 or before.

AGRICULTURE AND QUALITY OF THE NATURAL ENVIRONMENT

The relationship of agriculture to quality of the natural environment poses another set of issues of growing importance and controversy -- issues which seem likely to pose several critical public policy choices in the next two decades.

There are those who contend that the current "high-tech" agricultural production system is a major source of environmental degradation in the United States. Some contend that the system is simply not sustainable in the long run as a result of its self-defeating tendency to impair the quality of natural resources upon which it depends. An opposing view is that technology and improved management regimes are available or can be developed to ameliorate if not eliminate, the worst of the environmental abuses attributed to "high-tech" production system. Further, contend such spokesmen, no alternative practicable system is available unless we are prepared to pay much higher prices for food--life consists of a series of tradeoffs between that which is optimum and that which is attainable.

Three major problems complicate resolution of these issues. First, is that scientific evidence is lacking in some respects on basic relationships involved in the controversy, e.g., the fate of pesticides after they leave the farmer's field. Second, is the difficulty in valuation of the social costs of the environmental externalities--soil erosion, sedimentation, salinity etc.--deriving from agricultural production. Third, institutional mechanisms are not adequately developed to internalize to agriculture the social costs of environmental degradation even if they could be accurately valued.

Crosson and Brubaker, RFF, have published recently a comprehensive report on the subject of the resource and environmental effects of U.S. agriculture in which they speculate on such effects to the year 2010. Among the troublesome environmental problems associated with agricultural production - pesticide, insecticide, herbicide pollution; eutrophication; salinity of soils and water - they conclude that the major threat to the nation's environment is that of soil erosion through its effects on water quality and potential productivity losses on agricultural cropland.

Air pollution, which derives largely from sources external to agriculture, is of growing concern not only because of its immediate effects on agricultural production in urban areas but because of its potential longer run effects on the climate of the globe and upon life support systems in the form of "acid rain" and "greenhouse effects." Much additional scientific research is required before reliable assessments of the impacts of such phenomena can be drawn. However, looking well into the 21st century, such issues could readily become the source of increasing social concern and require difficult public choice on a global basis.

Thus, the issues surrounding agriculture and the quality of the natural environment are neither transitory nor ephemeral. Nor are solutions simple or absolute. It is impossible to reduce the environmental risks of a "high-tech" agriculture to zero: tradeoffs between food production and quality of the environment are required inevitably. By the 21st century, the choices will be more complex, more difficult, and more important to both agriculture and the remainder of society.

SOME POLICY ISSUES AND OPTIONS

The scenario I have depicted for agriculture and natural resources in the next decade or two is based on cautious optimism of the capacity of the sector to adjust to what is clearly an uncertain and potentially highly unstable economic environment. It may be that our best strategy is to hope for the best but be prepared for something less!

I see no immutable imperatives to suggest an approaching crisis in U.S. agriculture or in the availability of natural resources for future development of agriculture. Despite this optimism, it would be erroneous to conclude that there is no cause for concern about either. Complex, critical public policy issues and choices will confront us. Generally, we will need to develop institutions to encourage more efficient use and socially desirable allocation of water. Policies and institutions to guide rational, more orderly, and farsighted use of land will pose other choices not on the basis of an impending national cropland crisis but on the basis of long term needs to serve multiple uses and protect the quality of an increasingly valuable resource.

Some of the most difficult and critical choices we will face turn not on the quantity of natural resources per se but on the quality of resources and

relations of agriculture to the natural environment including those which Castle terms "open access" resources which lie outside the operation of commercial markets. We are not well prepared to address scientifically or quantitatively the tradeoff terms between environmental quality and provision of food and fiber. The development of more coherent, integrated, and consistent public policies involving agriculture, natural resources, and the environment will require much greater attention and more difficult choices in the future than in the past. The need to target more closely agricultural production adjustment and natural resource protection and conservation policies and programs to environmentally vulnerable areas is obvious.

And there are critical choices to be made with respect to investments, public and private, in research to maintain or broaden our options in the use and conservation of natural resources and the environment. In the past, society has chosen to make substantial investments in agricultural research even at times when current technology was contributing to current economic surplus on the premise that those investments were a form of social insurance against long term food and resource shortages. Will we continue to do so? If so, what strategies are most appropriate? If cropland and water will become increasingly scarce economic resources for agricultural communities are current R and D policies appropriately targeted and adequately funded to produce new or improved land and water conserving technology?

Finally, we should bear in mind that the costs of adjustment in future use of natural resources in agriculture will not be distributed equally among agricultural communities nor among persons in any given community. Some agricultural communities stand to lose from higher-priced water, for example. Some may gain as a result of regional or interregional adjustments. It follows that because of uneven distribution of resources within communities, the costs (and benefits) of adjustments in resource use will differ among individuals in the community. Thus, public policies to assist in equitable adjustments among and within communities must not be overlooked in the design of national policies for agriculture and natural resources.

**RURAL
AMERICA
IN
PASSAGE:
Statistics for Policy**

**Dorothy M. Gilford, Glenn L. Nelson,
and Linda Ingram, *Editors***

**Panel on Statistics for Rural Development Policy
Committee on National Statistics
Assembly of Behavioral and Social Sciences
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SUMMARY AND RECOMMENDATIONS

INTRODUCTION

Background

Rural America is wondrously diverse. Some rural areas are changing rapidly; some are not. Some are bursting at the seams with new residents; some are quietly dying because they have been forsaken by succeeding generations of young people. Some rural areas are basking in prosperity, and their residents enjoy many of the amenities of urban life; some rural areas remain remote, isolated, and lonely places whose residents struggle to make ends meet in an oppressive atmosphere of grinding poverty. Some rural areas are becoming more and more like urban areas; others are becoming less so. One can have a hot argument about whether convergence or divergence is the more important trend for rural America, with compelling evidence on both sides: it all depends on the area and the traits that concern one most. Regions differ in culture and history. Communities range from a lobster port in Maine to a ski resort in Colorado, to a lumber town in Idaho. There are also similarities, however, in institutions and human aspirations and interactions. Few generalizations about rural America are valid, because any valid generalization would have to be so carefully hedged with qualifications that it could hardly be considered a generalization.

Rural areas will always be different from urban areas, to some degree, because of space and the cost of distance, which lead to many of the advantages and disadvantages of rural areas. Public and private institutions in rural areas must respond differently to the problems and potentials of open space and few people. Many rural people have job links with a natural resource base that demands extensive area for its effective use, and the rhythm and style of rural life are often tied closely to natural events. For many reasons, more rural than urban families are poor and live in substandard housing, and rural people suffer higher rates of chronic disease, infant mortality, and other measures of poor health (Deavers and Brown 1979).

We know a great deal about rural America, and the forces that are shaping it, but we know too little. "Where we are," "where we have

been," and "how we got here" are all subject to dispute. The procedures used to collect and disseminate data about rural people and their problems have never been entirely satisfactory, and today they are increasingly obsolete. Current data practices emphasize a simple dichotomy between rural and urban, or between metropolitan and nonmetropolitan, but rural areas and people quite definitely are not a homogeneous and undifferentiated residual of urban or metropolitan America. Current data continue to be more available for farming than for other economic activities, but farming is only one of many economic activities in rural areas today. The census of population is taken only once a decade, and census data are soon out of date in rural communities, as elsewhere; but formulas for transferring federal and state funds to local governments, which have become an important source of revenue for rural governments, continue to use census data or crude estimates. Data on public and private economic activities in small areas are inadequate for evaluating the effects of governmental policies and programs on geographic patterns of development. Society's ability to alleviate the problems of the needy, who are still disproportionately concentrated in rural areas, is handicapped by the lack of data on target populations, program recipients, and program effects.

Discovering What Concerns Rural America

The panel and its staff undertook a variety of activities to obtain information for the study. Staff members interviewed officials at the national level and panel members interviewed people involved in rural development in their home states. A letter survey was mailed to more than 600 people, in a random sample of 465 counties, inquiring about rural development issues and data needs. Two workshops were convened to discuss the recommendations under consideration by the panel and to check the completeness of the list of data needs the panel had identified: the participants in the first workshop were regional (multistate) and state planners involved in rural development; the participants in the second workshop were representatives of rural interest groups.

Intended Audience

This report is intended primarily for policy makers and for decision makers who can initiate changes needed in information systems relevant to rural development. At the federal level, the Farmers Home Administration in the Department of Agriculture, the sponsor of the study, is a key agency because of its financial resources and network of personnel at county, substate, state, and federal levels. The Economic Development Administration in the Department of Commerce and the Department of Housing and Urban Development also have major financial resources and sizable staffs. Another key network of people and programs is the Department of Agriculture's Cooperative Extension

Service, which concentrates on information dissemination and collection and education (rather than on delivery of physical goods and services). These are the larger programs, but there are many others at federal and state levels. At the state level, there are state rural development coordinating committees with representation from key agencies. The panel urges the members of these committees to aid in the dissemination of this report and in the implementation of its recommendations.

Producers of data are another important part of the intended audience. Agencies at the federal level include, but are not limited to, Bureau of the Census (Department of Commerce), Bureau of Labor Statistics (Department of Labor), Economics and Statistics Service (Department of Agriculture), several agencies in the Department of Health and Human Services, and the National Center for Education Statistics (Department of Education). We hope the state rural development coordinating committees will also distribute this report to appropriate producers of data at the state level.

Another important set of readers are elected officials and their staffs at all levels of government. Providing timely and adequate resources is clearly crucial to improving the rural component of information systems.

Finally, some users of rural data will find our extensive documentation of sources of information useful. This documentation was an important and necessary part of our task, and we are pleased to share the results.

THE PROBLEM CALLED RURAL DEVELOPMENT

Improving the life of rural people is the major goal of rural development policy. Everyone agrees that society should strive to satisfy the basic physical needs of all people, which include enough food, clothing, and shelter for an active life and health care for preventable diseases and for curable illnesses. Other widely shared goals of development include better education, improved public services and community facilities, greater economic opportunity, and careful management of natural resources, especially nonrenewable resources. The pursuit of these specific development goals is influenced by two additional goals: an equitable distribution of opportunities, goods, and services, and self-determination at the community level.

Diverse philosophies characterize the debate about an appropriate national policy for rural development. For example, one view holds that the federal government should focus on human resource and job development programs for people who are poor or unemployed. Another view focuses on area development directly increasing the economic activity in a rural area through industrial, infrastructure, or other development programs. A third view holds that a unified national rural development policy is neither politically feasible nor socially desirable because rural areas are too heterogeneous and because people want local self-determination.

The panel takes no position on the appropriate public policy for rural development. The data concepts and procedures for collecting data that the panel recommends will be helpful to those who must select among policies and will also aid in the implementation of whatever national policy is chosen.

Two important principles emerge from an examination of current rural development policy: rural development is an ill-defined problem; and rural development must be part of total development.

Rural Development: An Ill-Defined Problem

The factual ("what is"), prescriptive ("what should be"), and operational ("how to get from here to there") dimensions of rural development are all ill-defined.

First, our knowledge of rural people and their environment is imperfect and incomplete. Regular collection of information about small, sparsely settled areas is expensive, and the data base for rural areas consists of annual statistics for large aggregations of areas with only occasional benchmark data for census years for small areas. The aggregated data are often misleading because rural areas are so heterogeneous. The panel believes, although it cannot be proved, that the diversity within rural society today exceeds that between rural and urban life.

Second, the prescriptive dimension of rural development is equally ill-defined because of the heterogeneity of rural areas, the political fragmentation of rural people, the disagreement among rural people about growth and planning, and the lack of coordination of governmental efforts on rural issues.

Third, the operational aspects of development policy are not well understood. Linkages between the tools available to government and their effects on the quality of life are well defined only when the chain of causation is short and direct. The indirect effects of programs probably are significant in the aggregate, but causal chains and magnitudes are largely a mystery.

The panel was charged to make recommendations, not about rural development policy and analysis, but rather about improving the statistical foundations for research, policy analysis, and program implementation. We would be remiss, however, if we failed to recognize current conditions and to anticipate future directions that are relevant to planning. Rural development will remain an ill-defined problem at the federal and state levels for the foreseeable future. Many individual rural communities will reach a consensus about their problems and needs, but those local decisions will be different from community to community, they will receive only casual and sporadic attention at state and federal levels, and they will not sum to a national policy in any conventional sense. Federal and state governments will continue to serve specific needs with specialized programs that are coordinated poorly if at all.

Information systems, if they are to be effective in such a policy environment, must be flexible and accessible at all levels of

government. The heterogeneity of areas and changes of values and beliefs over time demand flexibility. Local decision makers must have access to data, and to producers of data, as they struggle to solve local problems while meeting the demands of state and federal requirements. Federal and state decision makers must have data that are comparable over many areas in order to make efficient and equitable allocations and to design appropriate programs. Although decisions must always be made in some degree of uncertainty, current information systems must be improved and augmented to meet those data needs.

Rural Development: Part of the Whole

The United States does not have, and should not attempt to develop, a comprehensive "rural data base" or a "rural data system" separate from the information systems for other sectors of the population. The growing interdependence of rural and urban people causes the problems of each group to affect the other, and policies designed to meet the needs of either group will affect the other. Rural areas do have unique features, however, as well as considerable diversity, and there are good reasons to ask whether rural residents are served adequately by current data systems and institutional arrangements.

These two related points indicate that the panel had a difficult task--a review of all data systems for accurate and equitable treatment of rural people and rural communities. The panel established priorities in attempting to make its task manageable, but it remained awesome even when it was restricted to subjects clearly and directly related to the quality of life of rural people.

RECOMMENDATIONS

The creation of information systems adequate for the needs of decision makers dealing with rural development requires a multidimensional strategy. Conventions and standards must be adopted in order to facilitate communication and mutual understanding, but these conventions should allow considerable flexibility. Improvements are needed in some of the basic procedures for generating and reporting data, which affect a number of data series. The institutions linking data producers and data users must be strengthened so that each group will understand the problems and potentials of the other. Finally, there are a few specific high priority needs for new data collection instruments and improvement of existing procedures. Our strategy and recommendations emphasize the development of the essential institutions, standards, and methodology rather than new, large-scale data collections. The panel was mindful of the cost implications of the recommendations and was parsimonious in recommending the collection of new data. Most of the recommendations can be implemented at a relatively low cost. (The chapter designation following each recommendation indicates where the detailed discussion of the recommendation and underlying rationale can be found.)

Conventions and Standards

County building blocks Rurality is a multidimensional phenomenon and no single definition of rural is satisfactory for all purposes. There are obvious polar extremes of urban and rural, but in the fuzzy middle ground, a value that is critical in terms of one criterion may have little or no significance in terms of others. There is no clear, unique, and unambiguous concept of "rural"; it is a concept evolving out of experience that, by consensus, is accepted as having meaning but one that cannot be defined precisely.

Current reporting practices for rural data are highly variable and often frustrate rather than facilitate aggregation and comparisons. Since no single definition of rural is feasible or desirable, data should be organized in a building-block approach. The basic building blocks of the data base should facilitate aggregation regardless of how rural is defined. The county is the most commonly used geographic unit for reporting small-area data.

Recommendation: County Coding. The panel recommends that federal and state data be recorded with a county code to permit tabulations for individual counties and groups of counties (Chapter 2).

The multiple programmatic definitions of rural have discouraged evaluations of the effects of governmental activities on the geographic distribution of growth. The difficulties of aggregating data and making comparisons between programs have frustrated the coordination and assessment of overall economic development policy. Although no single definition of rural would be appropriate for all purposes, varying legislative requirements and agency interpretations have created a great deal of confusion within the federal government. Of course each agency must administer its programs in compliance with the law, but at the very least its projects should be identified by a county code. It is especially important for federal agencies awarding grants or contracts to include the county code in their records.

County classification To make comparisons and assessments of the geographic impacts of programs, a common aggregation scheme for counties is needed. A further distinction between urban and rural areas within counties would be desirable. The Statistical Policy Division in the Office of Management and Budget should take the lead at the national level in initiating and coordinating development and in overseeing implementation.

Recommendation: Classification Scheme for Nonmetropolitan Counties. The panel recommends that a standard classification of nonmetropolitan counties relating to level of urbanization (in the spirit of the Hines et al. (1975) classification) be developed for use in program analysis and evaluation at each level of government. If possible, the county classification

should be supplemented by a distinction between urban and rural areas within counties (Chapter 4).

Federal role Although many programs and data systems are appropriately left to state and local governments, the use of standardized definitions and procedures at state and national levels has distinct advantages. The function of making comparisons and aggregating state data, which is necessary for improved understanding, can be performed effectively only at the federal level in a broad and continuing dialogue between users and producers of data at the local, state, and federal levels. The responsibility for coordination and standards at the federal level should be in the Statistical Policy Division.

Recommendation: Federal Role in Coordination and in Setting Standards. The panel recommends that the federal government take a more active role in the coordination of statistical activities and in developing and promulgating common definitions and other statistical standards that are appropriate for implementation at the federal, state, and local levels (Chapter 4).

State role Statistical activities and standards must also be managed at the state level. States are solely responsible for many statistical programs, and state officials have a major interest in many other statistical activities in which the state shares responsibility for producing data with other levels of government or for which the state is a major user of data produced by other governmental levels. The panel believes that each state should have a program-neutral statistical coordinating agency with statewide responsibilities. Developing statistical standards is a consensus-building process that needs to be very open and to be managed in a way that recognizes the many difficult decisions on use and production of data that must be made at each level of government.

Recommendation: State Role in Coordination and in Setting Standards. The panel recommends that each state designate or develop an organization for managing the state's role in statistical coordination and in establishing and implementing standards, if such an organization does not now exist (Chapter 4).

Basic Procedures for Generating and Reporting Data

Standard statistical areas The difficulties of defining rural should not be allowed to result in inequitable treatment for rural people, as may occur when rural is defined as the residual that remains after the delineation of urban. The quantity and quality of statistical measures for the general population and for specific target groups should be comparable over rural and urban areas.

A specific concern of the panel is that the "balance of state" statistics often reported for nonmetropolitan areas are inadequate. Standard metropolitan statistical areas (SMSAs) are used extensively for statistical purposes, leaving other areas in a residual non-SMSA, or nonmetropolitan, category. Urban centers are designated as SMSAs when they exceed a population of 50,000, and additions occur frequently. A common practice is to compile and report data for states, SMSAs, and a residual "balance of state." Longitudinal comparisons are hindered by the frequent changes in the "balance of state" category that result from the proliferation of SMSA designations. In addition, the statistics generated and reported for non-SMSA areas often apply to very large aggregations of people.

Procedures for obtaining, analyzing, and reporting data should be developed to provide data for rural people and problems that are comparable in scope and reliability to those for SMSAs. Designation of standard statistical areas (SSAs) encompassing the entire geographic area of the nation would provide continuous, inclusive, and systematic data based on boundaries that would be changed less frequently than the presently relaxed SMSA criteria. The SSAs would be delineated in cooperation with states, conforming where possible to substate planning and development districts, but encompassing more than one such district when necessary to meet the statistical reliability standards now used for SMSAs. Delineations would consider nodal and homogeneous areas as used in designation of substate districts. The procedure would preserve the building-block approach for county data with appropriate urban orientation codes to facilitate analysis of county differences within rural SSAs as well as among rural and urban SSAs. If continued use of the label "SMSA" is deemed useful for an urban subset of the SSAs, the rural SSAs could be labelled standard rural statistical areas (SRSAs).

Recommendation: Standard Statistical Areas. The panel recommends that the Statistical Policy Division in the Office of Management and Budget develop and implement a system of standard statistical areas (an extension of the present set of SMSAs) to encompass the entire geographic area of the nation (Chapter 2).

Small-area data The cost of surveys large enough to provide reliable direct estimates of desired measures for small local areas is prohibitive in many situations. In such situations it may be possible to use existing information to construct local area estimates. Some of the more promising statistical techniques are described in the panel's report (see Chapter 12 and Appendixes G and H). The 1980 Census data provide a timely benchmark for evaluating and refining the methodology for making estimates and projections for small areas. The need for improved estimates is especially great for statistics that are used to allocate intergovernmental grants because the quality of those data is vital to program equity.

Recommendation: Small-Area Estimates and Projections. The panel recommends that state and federal agencies give high priority to upgrading the quality of small-area estimates and projections, particularly those used to allocate funds (Chapter 12).

Health One of the most important components of federal health programs aimed at alleviating geographic maldistribution of resources is the identification and designation of those specific areas that are most in need. While several shortage or medical "underservice" indexes have been developed in order to allocate resources, the degree to which any of these indexes contain the appropriate indicators to specify those areas with the most health problems or the least medical care is not clear. The indexes used now depend heavily on the physician/population ratio, a measure that has been found to be misleading in several respects as an indicator of medical need. More work is required to reach consensus on an acceptable definition of health service scarcity and to isolate and combine the various indicators of this important rural problem.

Recommendation: Measures of Health Service Scarcity. The panel recommends that such Public Health Service agencies as the Health Resources Administration and the Health Services Administration devote further effort to the development of a definition of health service scarcity and to research on measures of this concept (Chapter 7).

Education Education is an important factor in individual and community development. The financing and organization of schools are major concerns of state and local governments. The low density of students in rural areas affects school organization. Despite these compelling and well-known facts, the National Center for Education Statistics does not tabulate data on a rural-urban spectrum. A first step to improving data on education would be to code school districts using the county classification scheme for nonmetropolitan counties recommended above. A more refined alternative would be based on the size of the largest place in the school district. Ultimately classification of schools on a rural-urban spectrum would be desirable.

Recommendation: Rural-Urban Codes for School Districts. The panel recommends that codes for rural-urban location of school districts be recorded with all school district data (pupil, personnel, curriculum, finance, and facilities) to facilitate comparison of resources available to rural and urban school districts. The National Center for Education Statistics is the appropriate organization to implement this recommendation (Chapter 8).

Local data The panel has emphasized the limitations of federal and state data sets in applications to problem definition and solution at the local level. A desirable information network for rural

development could not be complete and adequate without primary data collected at the local level to meet local objectives. At that level, expressions of goals, aspirations, attitudes, and perceived problems can be generated. Many states and communities have been experimenting with practical and inexpensive methods for generating such data.

Recommendation: Local Data Gathering. The panel recommends that the Farmers Home Administration encourage local efforts to generate rural development data for local purposes. To this end, the panel recommends that existing efforts at the local level be surveyed and that particularly innovative and useful examples be widely disseminated (Chapter 12).

Distributional Statistics Progress toward meeting development goals often entails identifying particular groups of the population, measuring their welfare, and meeting their special needs. Public opinion has shifted from a general faith in the goodness of aggregate growth to more sophisticated concerns for the quality of growth, including the question of who gains and who loses. Numerous action programs targeted for specific groups of the population have been a response to distributional goals and values.

The reporting of data has not kept pace with the increasing commitment of society to distributional concerns and programs. Tabulations too often reflect the outdated view that aggregate or average measures for an entire population are sufficient measures of progress. There is potential for improved practices because computerized data bases can be structured so that distributional information may be easily extracted, subject to limitations of small sample size and requirements of confidentiality.

Recommendation: Distributional Measures. The panel recommends that government agencies include additional frequency distributions or measures of dispersion in presenting data, especially for income, wages, housing quality, health, and the adequacy of public services (Chapter 12).

Institutional Linkages

The panel's review of the current statistical activities for rural development reveals a pressing need for better communication linkages among the parts. In fact, the linkages and coordinating institutions are either missing or so poorly developed that the term "information system" is not even appropriate. The recent conclusion of the Advisory Commission on Intergovernmental Relations that "contemporary federalism is in serious disarray" (Beam 1980:6) applies to rural development with particular force. Some settled order of compatible roles and of linking decision institutions must prevail from local through federal levels of government before one can specify a coherent rural development policy data base.

State statistical service centers The ideal information system for development policy, rural and urban, should recognize the complementary roles of local, substate, state, and federal governments. The system should facilitate communication of data needs from users to producers of data and of information on potential effective uses of existing data from producers to users. At the local and state level the system should facilitate comparisons and linkages among data sets. The system should not be designed and administered solely as a means of disseminating data from producers to users of data. Without an effective two-way linkage of users and producers of data, maintaining policy relevance in information systems is impossible, and statistical resources will not be used efficiently.

Recommendation: State Statistical Service Centers. The panel recommends that each state develop or designate a lead institution (or institutions) in the state to facilitate local government access to state and federal statistical information, if no such institution currently exists. The panel further recommends that the federal government encourage use of the statistical service centers by providing general financial assistance and, in addition, that federal program agencies fund the centers to maintain the local and state data bases necessary for application to their programs (Chapter 4).

No confidential information, only publicly available statistical aggregates, would be maintained by these centers. The centers should provide information on statistical data sources, prepare tabulations on request, and provide other appropriate services. Some states may wish to place in the center the responsibilities for statistical coordination and standardization that we recommended above. The center itself should not produce statistics, because doing so might generate bureaucratic conflicts in the statistical system. We note that some states have already established statistical service centers.

State statistical service centers would focus the demand for new data and together would have the political leverage necessary to ensure a response from the federal statistical system. The necessity for such institutions to communicate state and local data needs is underlined by the administration's failure to provide planning money for the mid-decade census authorized by Congress. A mid-decade census is critical for major improvements in state and local data. During a workshop at the National Rural Center, a member of President Carter's White House staff indicated that they were surprised by the lack of support for the mid-decade census. He added that the administration probably would not have withheld planning funds for a mid-decade census in fiscal year 1981 if, for example, the National Governors' Association had supported the idea of such a census.

Representation and data for users One way to ensure that the interests of local and regional users are considered in planning federal statistical programs is to invite them to serve on the various advisory committees. The federal government should provide supporting

services to the information network and should serve as a central contact point and guide for those seeking information.

Recommendation: Representation on Advisory Committees. The panel recommends increased representation of local and regional users of information on federal statistical advisory committees (Chapter 4).

Recommendation: Federal Information Locator System. The panel recommends that the Federal Information Locator System (FILS) be developed as rapidly as possible with an expanded mission to provide public access to federal data sources (Chapter 4).

The FILS is presently designed to serve the process of internal federal government forms clearance, not user needs, so additional information on data characteristics would have to be added to FILS. Before FILS could be of substantial value to users, several user services would also have to be developed. These user services should include, but not be limited to, serving as a central contact point for information on data availability and sources, preparing annual guides to federal statistical sources, and maintaining a computerized bibliography of major regional and local data collection efforts. If the Office of Management and Budget, which operates FILS, is not considered the appropriate location for such a data user service, it could be located elsewhere as long as an interactive computer link to FILS is provided; to do otherwise would lead to major duplication of partially identical files.

Statistical training There is generally a low level of statistical training at the local level, although there are notable exceptions. A constructive activity for agencies at the federal and state level would be provision of statistical assistance to local agencies. An attempt should be made to develop in nontechnical language the statistical tools most needed for exploitation of existing data bases. Sources of data could be identified and explained. In addition, it may be possible to develop manuals focused on sampling methods and questionnaire design for use in collection of certain kinds of local data.

Recommendation: Manuals on Acquisition and Analysis of Data. The panel recommends that the Statistical Policy Division initiate and coordinate the development of manuals to assist local officials and planners in the acquisition and analysis of data (Chapters 9 and 12).

Data for grant applications Documenting need in grant applications is one of the major uses of data at the local level. Local governments rely heavily on generalists and have limited capacity to handle the myriad requirements and expectations of state and federal agencies. The burden on local units could be lightened by better

coordination at state and federal levels. This could be effected by leadership from the Statistical Policy Division.

Recommendation: Standardized Data Requests. The panel recommends that application and reporting forms required by federal and state agencies be standardized to the extent possible and that the instruction sheet provide references to data sources when the form requires data from federal statistical publications (Chapter 4).

High-Priority, Specific Data Bases

Mid-decade census The 1980 census data, which will become available during 1981, will meet many data needs. The 1980 census, however, will show how quickly such data become obsolete and may well also show how estimates based on the 1970 census in many instances were not serviceable during the last years of the 1970s. There is every reason to believe that changes in the 1980s will be rapid and that reliance on the 1980 census in the latter part of the 1980s will be very misleading. One solution is to be found in the proposal for a mid-decade census, as provided by law. The panel recognizes that it is unlikely that a mid-decade census could be conducted in 1985 because of the lack of planning appropriations in the budgets for fiscal 1981 and fiscal 1982. The success of all major statistical collections requires careful advance planning, but especially in this case, since the activity will either be the first mid-decade census or the largest sample survey attempted in this country.

Recommendation: Mid-Decade Census. The panel recommends that the mid-decade census of population and housing be implemented at the earliest possible date--in 1985 if possible--as required by the 1976 legislation. If the mid-decade effort takes the form of a large sample survey rather than a complete count, the panel further recommends that the sample be large enough to permit direct estimates or good regression estimates for all counties, the basic building blocks of the data system (Chapter 5).

Federal outlays The annual reports by the Community Services Administration (CSA) about federal outlays by program and county are a valuable source of information about federal influences on the geographic distribution of development. The federal outlays data can sometimes be used in combination with other data to evaluate specific programs. The principal problem with these data is their uneven quality. Some agencies give low priority to producing high-quality estimates for CSA. Major problems are the failure to report subcontracts let by private firms with prime contracts and grants and the failure to report transfers by states to local governmental units. Some of the proration procedures used in the absence of direct estimates are very crude.

Recommendation: Federal Outlays. The panel recommends that in reporting federal outlays data, the program agencies, in cooperation with the Office of Management and Budget and the Community Services Administration, make a greater effort to improve the quality and geographic detail of the data and to provide users with information on the quality and limitations of the various components of the report (Chapter 10).

Survey of income and program participation The survey of income and program participation (SIPP) is a promising endeavor. Individual agencies collect data on their clients to meet legal requirements and for internal administration. They typically do not collect information on their clients' use of other programs, nor do action agencies necessarily have good data on the number and type of potential clients that do not avail themselves of the services of the agency. Also, the data collected by a particular agency from its own clients are not necessarily of the type required by planners charged with coordinating a number of agencies or developing new programs.

Recommendation: Survey of Income and Program Participation. The panel recommends that the survey of income and program participation be expanded to include samples of clients of rural development programs and rural clients of general programs. The panel recommends that agencies with rural development responsibilities provide the funding for the cost of the additional samples (Chapter 12).

Underemployment index Unemployment rates reported for rural areas, especially those that are economically depressed, are an inadequate measure of the underuse of human resources (Nilsen 1979, Tweeten 1978) because: potential workers who are relatively immobile become discouraged and do not seek work when local job opportunities are chronically lacking; the costs of additional active search for jobs exceed gains more quickly in rural areas with few employers than in urban areas with many employers; underemployed seasonal workers and self-employed workers are often classified as employed when urban criteria are applied in rural areas; and relatively few jobs in rural areas are covered by unemployment compensation.

The failure of unemployment rates to measure the underuse of human resources can be costly for rural areas because government allocations to areas are increasingly tied to statistical formulas. In 1976, for example, some \$16 billion in federal funds was allocated according to criteria of employment or unemployment (Norwood 1977).

A preferable measure of underutilized labor in rural areas is underemployment. Underemployment is measured as the difference between the output of individuals in a given area and what they would produce if they were as productive as workers in the nation with similar age, education, and training; it includes, but is not confined to, unemployment. Although several procedures and formulas have been proposed to measure underemployment (for a review see Tweeten 1978),

an in-depth study is needed to ascertain whether current data and concepts are adequate to construct a useful measure.

Recommendation: Underemployment Index. The panel recommends that the Statistical Policy Division of the Office of Management and Budget establish an interagency committee to guide the conceptual research for and the development of an underemployment index for counties on a periodic basis. The panel further recommends that the Bureau of Labor Statistics fund the research and assume the responsibility for implementing the procedures upon the completion of the methodological study (Chapter 10).

Rural cost-of-living index Meaningful comparisons of the economic well-being of communities, regions, and program target groups require that wages, salaries, income, net worth, transfers, outlays, taxes, and other dollar indicators be expressed in comparable units. Data series often are deflated for the cost-of-living differences of regions and sectors, but they cannot be adjusted for urban-rural differences because we have no good measure of these differences.

Rural cost-of-living data should identify differences between rural areas in different parts of the nation and between urban and rural areas in each region. These differences probably would change only slowly, and an annual updating for benchmark purposes would be adequate. Month-to-month adjustments could be based on changes in the urban consumer price index. A recent study by the Urban Institute (Holden et al. 1979) is a useful starting point for developing a measure of regional cost-of-living differentials.

Recommendation: Rural Cost-of-Living Index. The panel recommends that the Bureau of Labor Statistics provide an annual index of cost-of-living differentials between each of eight to ten rural areas and selected urban areas (Chapter 10).

A Word on Costs

The panel considered estimating the financial and staff resources that would be required to implement its recommendations. Such estimates would force the panel to be fiscally responsible in its recommendations; in addition, since many of the recommendations entail relatively low costs, making this fact known to decision makers might hasten implementation of the recommendations. However, there are several arguments against providing cost estimates. First, an estimate made today might be unrealistic at a future date when an agency considers implementation of a recommendation and thus might be a barrier to implementation. Second, the panel was composed largely of university faculty members who are inexperienced in estimating the costs of federal and state statistical activities. The panel might have requested the federal agencies designated to implement some of the recommendations to make cost estimates, but it was considered

unlikely that they would be willing to devote the staff time unless the recommended activity were already on the planning horizon. Also, cost estimates for recommendations for changing organizational structures in the states could be expected to vary widely among states. Finally, the contract for the study did not call for cost estimates. On the basis of these arguments, the panel decided against making estimates of the resources required to implement the recommendations.

DATA GAPS

The panel has made recommendations above to fill the five data gaps identified as most important for rural development policy. Chapter 2 and each chapter devoted to a specific substantive topic (Chapters 5-11) have a detailed list of additional data gaps. The breadth of rural development policy and the heterogeneity of rural communities are mirrored in the wide array of specific data gaps compiled by the panel in its work. If our recommendations concerning general procedures and other institutional matters are implemented, many of the specific data listed in the chapters would become available, some through new surveys and others because data collection and tabulation would be facilitated by the new standard definitions and codes. Some data would also be collected and published because new organizational structures, such as state statistical service centers, would focus the demand for new data and would have the political leverage necessary to ensure a response from the federal statistical system.

Although the panel has recommended only a few new data bases, we consider the following data gaps, selected from the more inclusive lists in each chapter, to be high-priority items for statistical agencies to consider:

Data Gap: Direct measurement and indirect estimation of migration flows into and out of small areas.

The inadequacy of migration data is probably the weakest link in making population estimates and projections for local areas. While births and deaths are known from registration data, data are lacking about the people who have moved into or out of an area. Migration affects both the number of people and their characteristics and is a major factor in population change in most areas. For example, migration of the elderly is thought to have contributed to recent population growth in several rural counties.

Data Gap: Data on schooling for the appropriate jurisdictional level, especially data on outputs, e.g., retention (or dropout) rates, age-grade retardation, incidence of post-secondary schooling, and educational attainment.

Public schools usually represent the largest category of public investment in rural communities, and schools are an important agency

of social and economic development. There is little evidence, however, that education planners have much information about public education and its effects.

Data Gap: Measurement of multiple job holding and the tabulation of the employment of all family members in family units.

There is a complex relationship between families and employment activities, which may have important implications for rural labor markets. For example, a study of one rural area found that labor force entry and exit of household members was an important determinant of the distribution of family incomes. Available data have only limited information on employment by family composition and on multiple job holding by individuals. Designing the necessary data tabulations would be a difficult but valuable activity.

Data Gap: Annual Internal Revenue Service data on adjusted gross income by county of residence.

Although the Bureau of Economic Analysis constructs annual estimates of personal income by county, its definition of personal income differs from the IRS's definition of adjusted gross income. Information on adjusted gross income is especially useful for analyzing the effects of federal fiscal decisions on small areas. The data would be more valuable if it were available on an annual basis rather than only in selected years.

Data Gap: County data on access to health care variables, including ability to pay.

Access is an important but complex topic in any discussion of rural health care. Access to health care can be measured by assessing various deterrents to access such as lack of knowledge, finances, geography, timeliness, and sociocultural acceptability. Some studies using national data sets have found that rural people are disadvantaged with regard to access to health care. However, more refined data, such as those at the county level, are needed in order to analyze, compare, and combine the various indicators of access.

Data Gap: Use and impact of housing subsidy programs for low-income and other groups.

Rural areas have a disproportionate share of housing that fails to meet accepted standards of quality, but they have few savings and loan institutions for financing new construction. Therefore, federal housing subsidy programs, especially those of FmHA, are particularly important. The targeting of those programs to low-income and minority people is a priority, and data are needed in order to determine whether this is happening.

Data Gap: National data on perceptions of both factual and value issues.

Rural development goals include such various things as meeting basic human needs, economic security, education, natural resource protection, and equity. Information on the disparity between these goals and reality, as perceived by rural people, is useful to policy makers. While local community surveys about values and perceptions of issues have been used in setting local priorities, such surveys at the national level would be able to clarify broad trade-offs, establish targets and measure progress.

These data gaps deserve the serious attention of appropriate agencies. In some cases modification of existing collections might meet the need. In others more effort would be required. In the absence of a coordinated set of policy institutions, the panel finds it difficult to establish priorities for filling these data gaps. Each item on the list, however, is directed at an important facet of improving the quality of life of rural people.

CONCLUSION

Rural development policy and the data needs for it are ill-defined. Today only pieces are known or even knowable. The precondition for greater coherence is a more integrated and coordinated set of institutions to support policy making and its data base. The panel has addressed this problem within the scope of its mandate and knowledge. It is not the province of the panel to say what rural policies and policy-making institutions should exist. Rather, we have considered the statistical institutions and linkages needed to support coherent policy making. We have identified new and modified statistical conventions and standards that are needed, and we have also recommended new or changed procedures for producing and reporting data on rural America. We have also recommended high-priority, specific data bases.

Rural America is in passage. Its future is unknown. Its people are growing in numbers and diversity. A more complex economic and social fabric creates many opportunities and dangers about which decisions must be made. Many of these decisions are of immense significance not only for rural areas and rural life but for all America. Improving the data base for such decisions is imperative.

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FARM STRUCTURE AND THE QUALITY OF LIFE IN AGRICULTURAL COMMUNITIES:
A REVIEW OF LITERATURE AND A LOOK TOWARD THE FUTURE

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INTRODUCTION

It is paradoxical and discouraging to note that there has been a tendency for agricultural issues--for example, agricultural resource degradation, the consequences of public agricultural research, equity aspects of agricultural policy, socioeconomic aspects of mechanization, the loss of prime agricultural land, the demise of the "family farm"--to fail to reach the public agenda until a point at which many of their socioeconomic consequences are a fait accompli. Much the same can be said for the issue of the interrelations between farm structure and the quality of life in agricultural communities. Massive and largely irreversible changes in farm structure and the structure of agricultural communities have already occurred by the early 1980s. I do not wish to argue that because these major changes have proceeded so far that there is no justification or room for creative scholarship and public policy; rather, I make this observation as a comment on the historical state of our agricultural social sciences (mainly agricultural economics and rural sociology) and as a plea for social scientists and public officials to be more questioning and forward-looking than they have been in the past

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I will begin my remarks on the question of farm structure and its relationships with the well-being of agricultural communities by making what will appear to be two contradictory arguments. On one hand, there exists a relatively convincing body of research indicating substantial interrelations between agricultural structure, and community structure and quality of life. This research is sufficiently solid and consistent so as to justify a most crucial conclusion: Larger-than-family 1/ tends to be associated with adverse social and economic conditions in agricultural communities. 2/ On the other hand, our empirical knowledge is only partially adequate to serve as a basis for public policy; in particular, the social science community would find it problematic to specify concretely the gains in the quality of life of agricultural communities that would result from restraining or reversing the growth of larger-than-family farms. The explanation of the apparent contradiction is as follows: The research methods employed in the multiple studies that converge on the conclusion that large-scale agriculture or larger-than-family farming is associated with adverse community socioeconomic

1/ I use the term "larger-than-family" broadly to encompass those farms in which the majority of the labor is hired (rather than family) labor. This category would include large-scale family proprietorships as well as absentee-owned, "industrial" farms of the type that predominate in major regions of California, the southwestern states, and Florida. It should be kept in mind that these large family proprietorships, while generally smaller than industrial farms, are predominant among larger-than-family farms, especially in numbers but also in the proportion of U.S. farm sales they account for. Using 1978 Census of Agriculture data for farms with annual sales of \$200,000 or more as a rough proxy for larger-than-family farms, these farms represent roughly 3.3 percent of all farms and account for about 44 percent of gross sales. The growing prevalence of these farms based on hired labor can be gauged by data recently reported by Smith and Coltrane (1981). These data indicated that the percentage of farm labor that was hired increased substantially over the 1970s. In 1972, only 26 percent of farm labor was hired, but this figure had increased to 35 percent by 1980 (Smith and Coltrane, 1981: 3).

2/ The relevant research literature consists of roughly 15 separate studies. Citations and reviews of these studies can be found in Buttel (1982), Flinn and Buttel (1980), Heffernan (1982), and Sonka (1980).

conditions have been adequate to identify the direction of the statistical association, but have been limited in understanding the strength of and the processes that underlie the relationship. The theoretical and methodological limitations of this literature and their implications for future research and policy will accordingly receive primary attention in this paper. First, however, I will summarize the dominant thrust of the research literature in question.

The research literature on farm structure and quality of life in agricultural communities has generally revolved around the following conclusions relating to the impacts of larger-than-family farming and large-scale agriculture. Large-scale agriculture has been found to be associated with (1) high proportions of the community population at or below the poverty level, (2) low levels of community service availability, (3) low community cohesiveness (e.g., lack of participation in community organizations), and (4) a low number and diversity of retail sales outlets. Several interrelated mechanisms have been identified as leading to these adverse community socioeconomic conditions. First, a high degree of mechanization and absentee ownership, which generally characterize large-scale agriculture, have been found to result in disproportionate decreases in the size of the farm population and in disproportionate changes in the composition of the farm workforce (chiefly, a higher prevalence of agricultural wage labor than prevails in communities in which large-scale agriculture is not predominant). Second, size of the farm population has been found to be positively correlated with the number of retail businesses, the volume of retail sales, and the level of tax revenues. Thus, large-scale, larger-than-family agriculture, by virtue of its tendency to lead to a small farm population, is associated with low levels of community

business activity and public revenues. Third, the prevalence of agricultural wage labor has been found to be inversely correlated with the level of community business activity and with the level of community social participation. Fourth, larger-than-family farming has been found to affect patterns of input purchasing; the proportion of inputs purchased in the community of residence is lower than in "family farming" communities, resulting in the transfer of multipliers outside of the local agricultural community.

These unambiguous findings would appear to be a clear guide for public policy: Agricultural and related policies that would restrain or reverse the expansion of larger-than-family farms would, all other things being equal, enhance service delivery, employment, income, retail access, and the quality of life in agricultural communities. Unfortunately, as I will expand upon below, the character of the research that has been conducted has been inadequate to specify either the level or the spatial distribution of the gains that would be experienced by agricultural communities. Moreover, it is unclear whether all other things would be equal. For example, would policies that restrain larger-than-family farming have adverse or positive impacts on net farm income, and with what impacts on agricultural communities?^{3/} The next section of the paper will explore some of the reasons why existing research on farm structure and agricultural community well-being has major limitations as a guide for public policy.

^{3/} See Sonka (1980) for what to my knowledge remains the only discussion of how one might approach the benefits and costs of farm structural policies oriented toward increasing rural employment and quality of life. Sonka makes a point that I will stress later: The failure of social scientists to analyze jointly the benefits and costs of prospective structural policies renders this literature impotent for policy purposes.

LIMITATIONS OF EXISTING THEORY AND RESEARCH

The literature of farm structure and the quality of life in agricultural communities has significant limitations of both a theoretical and methodological nature. Many of these theoretical and methodological limitations are interrelated, however, since inadequate theoretical notions have led to inappropriate or restrictive methodologies. While recognizing that the distinction between theory and method is somewhat arbitrary, I will discuss problems with the research literature that are largely theoretical in nature first, to be followed by an examination of more technical, methodological problems.

Theoretical Limitations

I have noted elsewhere (Flinn and Buttel, 1980) that research into the relations between farm structure and rural community well-being has in a sense had a long history in the U.S. This issue was of paramount concern to many members of the first cohort of rural sociologists who did their major research during the 1920s to the 1940s. Kolb and Brunner (1952) contains a convenient summary of this pioneering work on farm and community structure, which has been masterfully brought up to date in the context of current research by Larson (1981). Unfortunately, little research of this type was conducted during the 1950s and 1960s, and it was only during the early 1970s in a milieu of agricultural activism that Goldschmidt's (1978a) work was "rediscovered" and new research was initiated. Implicit in Larson's (1981) recent summary is a striking difference between the early and contemporary literatures: The founding literature was rich and detailed in its historical

perspective, while the current literature typically has had little or no historical backdrop. The lack of historical perspective on contemporary research has led to two unfortunate tendencies. On one hand, there has been a tendency to look toward imagined utopias of the past when assessing the results of analysis of recent data; in particular, there has been a strong tendency to glorify the "good old days" of family farming and bucolic agricultural communities. On the other hand, there is a strikingly different tendency--one emphasizing imagined "disutopias" of the past--in some current research, particularly that written by economists; the dislocations caused by the exodus of excess "human resources" from the agricultural economy are sometimes viewed as the necessary price to be paid for a much-needed modernization of the rural economy (Barkley, 1978). The past no doubt had desirable and undesirable features. However, there has recently been little attempt to place contemporary data in a historical context so that one can concretely gauge improvement and deterioration in the agricultural and rural economy.

A second theoretical limitation of the bulk of current research is the inability to grapple effectively with the diversity within rural nonmetropolitan ^{4/} and agricultural America. There is a growing recognition of the profound diversity of rural/nonmetropolitan communities (Brown and Beale, 1981; Goudy and Ryan, 1982). These differences have both historical

^{4/} Although the expressions "rural" and "nonmetropolitan" are often used interchangeably (see, for example, U.S. Department of Agriculture, 1981: Chapter 2), it should be kept in mind that these terms involve two different procedures for population classification. The rural population has generally been defined as those persons who live in small places (i.e., with less than 2,500 inhabitants). The nonmetropolitan population consists of those persons who live in counties other than those which contain a large central city (of 50,000 or more inhabitants) or those which are statistically defined as adjacent "bedroom" counties of the one containing the large central city.

and more recent antecedents. The character and structure of agriculture have left a lasting imprint on most nonmetropolitan and/or agricultural communities, as a superficial comparison of the differences among communities in the post-plantation South, the urbanized Northeast, and the sparsely populated West would indicate (Larson, 1981). At the same time, nonmetropolitan and agricultural communities have been affected by a variety of forces--industrial deconcentration, the growth of the service sector, fiscal austerity, improved communications--that have modified, and in some cases transcended, the effects of farm structure on community structure (Johnson and Beegle, 1982).

This diversity of agricultural and nonmetropolitan communities has been treated in two very different ways in studies of the interrelations between farm and community structures. The most prevalent tendency is an unfortunate legacy of the otherwise pioneering work of Goldschmidt (1978a, 1978b): This diversity is largely ignored as the investigator strives for a high level of generality across regions and types of communities. A refreshing corrective has been emphasized by Goss (1979) in his review of the reissue of Goldschmidt's (1978a) As You Sow, which was originally published in 1947. Goss noted that California, the research location for Goldschmidt's classic study of Arvin and Dinuba, has an agrarian and rural social structure that was historically and remains at present highly unique (see also Sonka, 1980). Most simply put, one simply cannot generalize from California studies (especially those conducted four decades ago, as was the bulk of the data reported in Goldschmidt [1978a]), or, for that matter, from research in any other state.

A contrary theoretical tendency in addressing the diversity of nonmetropolitan/agricultural America has been to succumb to "holistic paralysis"--to emphasize and unduly exaggerate this diversity. This tendency is reflected in the otherwise useful paper by Brown and Beale (1981). The

authors, of course, are not incorrect in emphasizing that "diversity is a necessary key to understanding current conditions in nonmetro America" and that "broad generalizations about nonmetro trends and issues often conceal as much information as they provide" (Brown and Beale, 1981: 27). The point I wish to make is that arguments emphasizing tremendous diversity and the limits of generalization can, and have, become a form of "holistic paralysis" that prevents meaningful research on farm and agricultural community structures. We must recognize that not all non-metropolitan communities are agricultural communities, although we should not ignore the possibility that nonmetro communities in which agriculture is not the predominant industry may still be affected by structural changes in the agricultural systems that surround them. What is most needed to avoid holistic paralysis in the analysis of farm structure and the well-being of agricultural communities is an effective typology of agricultural communities that can provide a framework for placing previous studies in perspective and for enabling future research to disaggregate statistical relationships within types of agricultural communities.

A third theoretical problem with most of the current studies is another unfortunate legacy from Goldschmidt's (1978a, 1978b) work: the unidirectional causality that is presumed such that farm structure is visualized as affecting community quality of life. The vast bulk of the literature on farm structure and agricultural community well-being over the past decade has been directly inspired by Goldschmidt's previous research or has been "in the Goldschmidt tradition" (Heffernan, 1982: 339). This tradition, while it has yielded several innovative studies, has also been limited because it tends to ignore how community structure may affect farm structure. Community structure can affect farm structure through a variety of mechanisms--e.g., service availability, availability of agricultural product markets, taxation, and land

use regulation. Unfortunately, these mutual and reciprocal linkages between agricultural structure and community structure have remained largely unexplored.

The unidirectional image of causality has been associated with another limitation of the research literature--namely, restricted conceptions of both agriculture and community. Agriculture, again following Goldschmidt, has generally been defined as the farm-level production sector alone. This conception ignores the input provision and marketing sectors of agriculture, and ignoring the "agribusiness" sectors that surround production agriculture has led to only limited consideration of the spatial distribution of income and employment multipliers that result from the particular confluences of the input, farm production, and output-marketing sectors of agriculture broadly construed. There has also been a restricted conception of community structures and institutions, and many crucial aspects of agricultural communities that likely have important relations with agriculture have been ignored. Among these community factors that have rarely been considered include the fiscal capacity of local governments, community demographic composition, community stratification and politics, and the impacts of local population growth on agricultural land markets.

A final theoretical shortcoming in the research literature on farm structure and the quality of life of agricultural communities has been its restricted image of structural change in production agriculture. The conventional image has been that large, nonfamily industrial farms are displacing small family farms. This change process is typically indexed by change in average farm size or some other indicator of central tendency. This conception, while it had a relatively high degree of applicability before the 1970s, now tends to oversimplify the nature of farm structural change in the U.S. The predominant tendency over the past decade has been toward dualism,

in which larger-than-family farms have grown in numbers and proportion of sales, small 'subfamily' (Buttel, 1983) farms have increased slightly (or at least held their own) in numbers, and medium-sized family-type operations have declined in both numbers and proportion of sales (Tweeten and Huffman, 1980; Buttel, 1981). 5/ As the U.S. farm structure has become more dualistic--as relatively large and relatively small farms have come to predominate at the expense of the traditional, full-time family farm--indicators of central tendency become increasingly unrealistic as indexes of farm structural change. To wit, average farm size in acres changed relatively little in the U.S. during the 1970s (Buttel, 1981) even though larger-than-family farms rapidly increased in predominance during the decade (U.S. Department of Agriculture, 1981). More importantly, the literature on farm structure and the structure of agricultural communities has yet to trace the additive and interactive impacts of changes in the three types of farms on change in the well-being of agricultural communities, or vice versa. At a minimum, researchers must begin to supplement indicators of central tendency in farm structures with indicators of dispersion in order to grapple more fully with the causes and consequences of farm structural changes in the post-1970 period.

Methodological Limitations

Three major methodological problems have limited the utility of the farm and community structure literature for the development of policy. First, the data employed in most studies are not at the community (or subcommunity) level,

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5/ The distinction is made between "subfamily" and family farms on the basis of whether the farm resources would be adequate in normal years to yield a family income above the poverty line (Buttel, 1983). Roughly speaking, farms with annual sales of less than \$40,000 per year can be considered subfamily farms, while farms with sales of \$40,000 or more would fall into the family category (see also footnote 1 above).

but instead are generally data collected by the U.S. Bureau of the Census at the county level. Several studies have even utilized state level data. By contrast, there have been only a few recent studies (Small Farm Viability Project, 1977; McCannell and White, 1981) that have utilized community level data, all of which are California studies with limited applicability to the rest of the U.S. The use of highly aggregated data has led to problems of aggregation bias (in which statistical measures of association are likely to be overestimated by comparison with what they would be at the community level of analysis). Highly aggregated units of analysis also make it very difficult to isolate the differential relationships between agricultural and community structures across diverse agricultural communities, since county level data on agricultural and community structures are likely to mask major internal community-level variations in both.

The second methodological shortcoming is the strong imprint of methodological monism. Virtually all studies are based on samples (or universes) or areal units ^{6/} and employ regression, linear programming, or analogous techniques. Moreover, most researchers have tended to rely primarily on cross-sectional analysis. My point is not to criticize this form of analysis but rather to argue that the literature could benefit from greater methodological diversity. In particular, it is ironic that the now-classic study of Goldschmidt (1978a) that serves as the exemplar for much of this research utilized a quasi-ethnographic community study technique which could be profitably employed to address many empirical problems in the field. The

6/ The major exception to this observation has been studies conducted by sociologists using sample surveys (see, for example, Heffernan, 1982). These studies have been undertaken primarily to assess the cross-sectional relationships between farm structural categories and indicators of community social participation, community attachment, perceived social well-being and quality of life, and patterns of retail purchases.

relations between agricultural and community structures could also be more effectively illuminated with longitudinal/historical approaches, both quantitative, as in the Harris and Gilbert (1982) study, and qualitative, as in the rural sociological community studies tradition of the 1930s and 1940s discussed by Larson (1981).

A final methodological concern regarding agricultural and community structure research is that it has tended to lack a comparative perspective across regions. Most research, except that using states as the unit of analysis, has tended to be confined to county-level areal units within one state (see, for example, Flora and Conboy, 1977; Small Farm Visibility Project, 1977). This has largely been the case because of the fact that such studies have been funded by State Agricultural Experiment Stations (SAESs) of land-grant universities, which place a premium on research applicable to the particular state. While there is little that can be done to militate against the parochialism of SAESs in their approach to social science research, comparative multistate research could be pursued on a regional or interregional project basis through the Cooperative State Research Service, and the Economic Research Service of U.S.D.A. could take the lead in providing funds for comparative work in selected regions or states of the U.S. Comparative research will be crucial in enhancing its generalizability and policy relevance. Only by examining the mutual interrelations of agricultural and community structures across diverse regions can one determine precisely the processes through which agriculture affects communities and vice versa, and identify the public policy instruments that would be effective in the many socioeconomic milieus in which agriculture exists in the U.S.

The point of undertaking this extended critical review of research on farm structure and the quality of life in agricultural communities is not to

suggest that this literature is without merit or that its results should be discarded. Indeed, this literature has been relatively effective when examined in terms of its major objective--that of determining whether large-scale agriculture has adverse impacts on the quality of life and well-being of agricultural communities. The results have been unambiguous; "it seems significant that a dozen studies, spanning four decades and all regions of the nation and performed by different researchers using different methodologies, have rather consistently shown that a change toward corporate agriculture produces social consequences that reduce the quality of life in rural communities" (Heffernan, 1982: 340-341). But, as the very author of this statement adds later in his article,

Despite the consistency of results, however, researchable questions remain Research is needed to identify key variables in the agricultural system that, if altered, lead to a change in the quality of community life. Past studies indicate a relationship between agricultural structure and measures of quality of life, but they provide limited insight into the ways that certain features of the structure lead to deterioration in quality of life. A better understanding of the social factors involved might enhance anticipation of the consequences as structural changes occur (Heffernan, 1982: 341).

Moreover, as I shall attempt to demonstrate below, the additional rapid changes being experienced in the early 1980s make it especially urgent that rural social scientists sharpen their theoretical and methodological skills to understand what promises to be a crossroads in the rural and agricultural economies of the U.S.

THE CHANGING SCENE IN THE 1980s: RURAL SOCIOECONOMIC TRANSITIONS IN AN ERA OF CHRONIC ECONOMIC STAGNATION AND RAPID TECHNOLOGICAL CHANGE

It is now becoming apparent that the U.S. and the larger world economy has been mired in a chronic contractionary downswing that can be dated from roughly 1974. This downswing has set in motion a variety of forces that are likely to

alter the trajectories of development in agriculture and the nonmetropolitan economy. These changes pose further uncertainties of utilizing the farm/community structure literature as a basis for policy, and raise intellectual challenges concerning how agricultural and rural issues will be conceptualized and acted upon in the 1980s and beyond.

Chronic economic stagnation has over the past two or three years begun to have a major impact on the agricultural sector. Recession has at least temporarily interrupted the early- and mid-1970s dynamic of agricultural expansion. Briefly, this dynamic consisted of the expansion of large-scale (generally larger-than-family) part-owner farms. These farms tended to combine land rental (to generate adequate cash flow and to spread fixed costs over larger acreages) and land ownership (to take advantage of asset appreciation and the deduction of interest payments from tax liability). This expansion was catalyzed as well by the tax system, which in addition to making attractive interest deductions from tax liability for those in high income tax brackets, also subsidized farm size expansion through investment tax credits, accelerated depreciation allowances, and low rates of capital gains taxation (see Buttel, 1984; U.S. Department of Agriculture, 1981: Chapter 6). Moreover, the temporary surge in export sales during the 1970s stimulated unprecedented appreciation in land asset values and minimized the role of government payments in bolstering farm incomes.

Global economic stagnation has attenuated many of the major forces that underlay this dynamic of expansion. Market contraction abroad has led to sharp declines in export sales and to downward pressure on agricultural product prices. The result has been declining net farm income and growing federal commodity program expenditures that should reach \$20 billion during the current fiscal year. There have been significant declines in farmland values. Real

interest rates (the nominal interest rate less inflation) have, despite declines over the past year, remained very high by comparison with those that prevailed a decade ago. Many farm operators are in a precarious financial position, and the continuation of low agricultural product prices--not an unlikely prospect for at least one and perhaps two years--will likely lead to a major "shakeout" in the agricultural production sector. This raises a number of questions that are difficult to anticipate at this point. For example, which types of farmers will be "shaken out?" With what consequences? Who will buy (or lease) the land they currently operate? For what reasons and with what impacts?

Parallel consequences of global economic contraction have been experienced by nonmetropolitan and agricultural communities. While the nonmetropolitan segment of the U.S. has been buoyed and continues to be stimulated by "turnaround" migration, this turnaround has been experienced very unevenly (Brown and Beale, 1981). There have also been indications that the 1970s trend toward the narrowing of metro/nonmetro disparities in income and service delivery (Tweeten, 1982) has been reversed (Rogers, 1982). The tendency toward exacerbation of metro/nonmetro disparities has been due, in part, to the demise of what has become a "rural welfare state" based on federal outlays (transfer payments, service and public works subsidies, area economic development programs) that have now been slashed due to fiscal austerity. Moreover, federal and state government fiscal austerity is being transferred to local governments under the guise of the "new federalism." International economic contraction and the heightened competitiveness in many traditional manufacturing industries are now beginning to have dramatic effects on nonmetro communities as these industries, which had moved many plants to rural regions over the past two decades (Summers et al., 1976; Summers, 1982), are now tending to shift plant

locations to the third world in search of cheap labor (Frobel, 1980; Bluestone and Harrison, 1982). The post-1974 economic contraction has placed particular economic pressure on markets in primary raw materials such as minerals and lumber. The result has been profound downcycles in many natural resource-based industries such as lumbering and coal mining (especially coal mines established in the Western states in anticipation of supplying what is now a near-moribund synthetic fuels industry). Finally, the future of nonmetropolitan America is clouded by what most analysts agree will be a long-term structural unemployment problem; since nonmetro communities have long had disproportionately high levels of unemployment (Tweeten, 1982), persistent unemployment will confer especially severe hardships on nonmetro residents and their communities.

These economic stresses and uncertainties being experienced in production agriculture and in nonmetropolitan communities may well be compounded with what promise to be epoch-making technical changes in the world economy during the next several decades. One such change will be toward the "information society" based on computerization, robotics, and related information systems. The information society has both positive and negative implications for nonmetro America. On one hand, computerization will further reduce many of the locational advantages of large population concentrations as sites for manufacturing industries and other commercial businesses. Thus nonmetro regions can expect to benefit from continued industrial deconcentration. On the other hand, the information society will make redundant many of those workers who perform the manual labor and clerical functions that will be assumed by computers, robots, and related machines; many nonmetro workers will face the undesirable "choice" of working for low wages, having their jobs shifted to the third world, or losing these jobs entirely to computer-based automation.

A second potentially pathbreaking set of technological changes will be that of biotechnologies. It is as yet too premature to speculate on what might be the implications of biotechnology for agriculture and nonfarm industries located in nonmetropolitan areas (Buttel et al., 1983; Kenney et al., 1983). Nevertheless, the emergence of biotechnologies in agriculture promises massive changes in the nature of agricultural inputs and in the processing of agricultural outputs. Possible changes in the farm production sector might include a significant increase in the capital-intensity of agriculture, leading to further pressures toward concentration of assets and sales. The processing of agricultural commodities might also be dramatically affected as a result of further developments in recombinant DNA technology and industrial microbiology; food may increasingly be produced in factories via genetically engineered bacteria and industrial fermentation processes. Accordingly, substantial fractions of agriculture might be shifted to producing the organic substrates to be utilized in industrial microbiology--arrangements that might lend themselves to unprecedented increases in contract farming (Kenney et al., 1981). The specific changes that will occur are, again, too nascent to be predicted with any accuracy. But it is likely that these changes will be far-reaching and will significantly affect the interface of agriculture and community over the next several decades.

I began this paper by noting that existing research on farm structure and the quality of life in agricultural communities is sufficient to warrant a conclusion that the rise of larger-than-family farming has tended to result in low levels of community quality of life. Public policy that would restrain or reverse the expansion of larger-than-family farming would undoubtedly increase the size of, and reduce the proportion of hired laborers among, the farm population and thereby lead to increases in nonfarm employment, retail sales

volume, public revenues, and service availability. Such changes would also likely lead to intangible or nonmaterial benefits such as greater community integration and social participation. Unfortunately, one nagging dilemma haunts the efforts of those, including myself (Buttel, 1980), who have advocated farm structural change as a lever for rural community development: There exists only a fragmentary picture of the costs 7/ (or, alternatively, the potential parallel gains 8/) that would be accompanied by reduction of the role of larger-than-family farming in U.S. agriculture. To my knowledge only one of the researchers (Sonka, 1980) who has investigated farm and community structure relationships (see Sonka and Heady, 1974) has even bothered to inquire into the mix of costs and benefits that would be appropriate for restraining larger-than-family farming while maximizing the benefits and minimizing the costs for farmers and the nonfarm segments of agricultural communities (Buttel, 1981). In sum, what has intellectually been an unusually satisfying literature because of the consistency of its empirical findings is quite impotent from a policy perspective.

The impotence of this literature for policy purposes probably is of little consequence at the present time (or more than likely for the foreseeable future), however. The prognosis for the types of policies that would effectively restrain larger-than-family farming is not good. My own view has been that the policies that would be required would be relatively drastic in the context of U.S. political institutions (Buttel, 1981). Over the short-term,

 7/ Examples of possible costs might be higher farm commodity prices, lower aggregate farm income, or declines in farm asset values.

8/ Examples of parallel benefits might include greater opportunities for rural youth to enter farming, reduced energy consumption and soil erosion, and less exploitation of hired farm laborers.

it would be essential to : (1) invoke major alterations in the tax system so as to curb drastically the prevailing tax subsidies to capital intensity (i.e., curbing accelerated depreciation allowances and investment tax credits, and significantly raising capital gains taxation on farm real estate), and (2) deny commodity program payments to farm operators who operate at a larger-than-family scale (presumably on a progressive sliding scale which places the greatest penalty to scale on large-scale industrial farms). Over the longer-term government intervention in or regulation of farmland markets may be required to ensure that land ownership patterns are neither too concentrated nor too fragmented to be consistent with economic efficiency or community goals. These changes would clearly be extremely difficult to achieve in the context of "normal politics." They would be opposed not only by privileged farm operators and absentee owners, but would be resisted by farmers generally--including the small- and medium-sized family farmers who are their intended beneficiaries--as well as by those nonfarmers who have vested interests in tax subsidies to capital-intensive investments and real estate speculation and who disfavor government regulation. Effective political advocacy that can counter these multiple powerful interests would be exceedingly difficult to muster, perhaps regardless of whether the agricultural social science community is prepared to marshal comprehensive evidence on the benefits (and costs) that might result from the restoration of a family farming system.

The foregoing is not to preclude the possibility that the future may bring agricultural policy changes that would today be considered radical or revolutionary. It must be kept in mind that the current milieu is characterized by chronic economic stagnation (despite current signals of "economic recovery") and that this milieu, similar to that of the Great Depression, may become the breeding ground for changes in political structure that make possible

unanticipated policy reforms. This notion was brought home to me after reading a provocative article in Forbes (Kindel and Saunders, 1982) less than a year ago. The article began by posing a paradox: While it is generally understood that the U.S. economy is plagued by underinvestment and slow productivity growth, agriculture--one of the shining stars of the otherwise dismal U.S. economy according to these criteria--remains mired in what promises to be chronic economic distress. Moreover, the authors argue that no readily identifiable set of policy instruments will be able to locate agriculture from its economic crisis. The authors conclude by arguing that only a bold policy initiative can restore the economic health of agriculture. They make the case that a partial nationalization of agricultural land--using the public funds that would otherwise be allocated to massive commodity program payments to purchase farmland--would be a worthy policy alternative even though it will be resisted as a governmental incursion in the free-enterprise economy. Kindel and Saunders suggest that the creation of a federal farmland reserve would enable the federal government to control overproduction in the future; these lands could be rented to farmers or withheld from production based on projections of world food demand and farm product prices. In addition, the assembly of a federal farmland reserve would ultimately eliminate the need for expensive farm commodity programs.

The program briefly sketched out in the Kindel and Saunders article would be dismissed as radical propaganda or as the delusionary thoughts of the underworked academic were it not for the fact that the article was published in an otherwise conservative business magazine and written by the magazine's regular staff. I emphasize the Kindel and Saunders article not because it has already had a significant impact in agricultural policy circles. It clearly has not. Instead, the article is a testament to the lost faith in the

trajectory of U.S. agricultural development (and in the public policies that have undergirded this development) and a reminder of the fact that periods of economic crisis may create unanticipated openings for policy reforms. Where the Great Depression witnessed the establishment of farm commodity programs that have survived essentially intact up to the present, federal fiscal austerity has led to a situation which at this writing promises to result in an unprecedented diminution of the federal role in supporting farm product prices. Organized interests in agriculture may have little leverage in averting this policy shift. Other major policy changes may follow if the economic downswing continues.

The challenge that remains for social scientists is that major policy "innovations" born of social and economic crisis are not necessarily progressive or socially desirable. Partial federal ownership of farmland may just as easily result in land consolidation as in a deconcentration of farm operations. The social science community can and should do a better job in conducting policy relevant research and in anticipating the "openings" in which this research might have a major policy impact. My view of the state of knowledge on farm structure and the quality of life in agricultural communities is that a considerable amount of research remains to be done so that the social science community can influence policy meaningfully.

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PAST AND PROSPECTIVE ECONOMIC DEVELOPMENT OF RURAL COMMUNITIES

Luther Tweeten*

INTRODUCTION

This paper examines past and prospective economic forces shaping rural communities. Emphasis is on:

The past and likely future economic contribution of agriculture to rural communities;

Outlook for farm output and structure; and

Policy requirements for economic health of the agricultural and the rural economies.

Many rural communities depend on the farming industry which is expected to expand 1-2 percent annually in output and stabilize in population during the next two decades. But rural areas now depend on a wide range of economic bases including manufacturing, mining and retirement industries. Within this context, the paper briefly reviews various public policy options for agricultural and rural development.

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SOURCES OF INCOME IN RURAL COUNTIES

Data in Table 1 and 2 shows the direct contribution of agriculture and other sources to income and employment in metropolitan and nonmetropolitan counties. Each job in agriculture as a farm proprietor, hired worker or agricultural services worker directly accounted for 23 percent of the employment in totally rural counties and for 12 percent of employment in nonmetropolitan counties in 1979 (Table 1). ^{1/}

Service industries such as transportation, trade and finance exist in rural communities in part because of basic industries of agriculture, mining and manufacturing. Employment and income multipliers differ considerably by size of community, enterprise or industry, and distance from other communities (Tweeten and Brinkman, p. 321-28). A rough approximation is a multiplier of 1.5 for a typical rural community and 2.0 for rural counties in aggregate. Based on the latter multiplier and data in Table 1, nearly half the employment in totally rural counties and nearly one-fourth of the employment in nonmetropolitan counties was attributed to agriculture in 1979.

Other basic industries such as manufacturing are in rural counties in part because of raw materials and "part-time" labor available from farms. Manufacturing in 1979 accounted for over 18 percent of income and 20 percent of employment in nonmetropolitan counties. Although agriculture is not as important to the economic base of rural communities as a whole as in prior years, it is the only major economic base in much of the Great Plains and

^{1/} Primary agricultural production is widely dispersed because natural resources are dispersed. It is cheaper to produce near natural resources and ship products to consumers rather than ship resources to plants located close to consumers. Secondary and tertiary economic activity locates to serve agricultural economic activity.

TABLE 1. Composition of Employment in Metropolitan and Nonmetropolitan Counties, U.S., 1979

Industry or Type	Metropolitan		Nonmetropolitan		Total Nonmetropolitan
		Urbanized ^{a/}	Less Urbanized ^{b/}	Totally Rural ^{c/}	
Total Employment (1,000) (Percent)	78,719 100.0	11,085 100.0	12,723 100.0	2,925 100.0	26,733 100.0
Total Wage and Salary	93.4	89.3	81.1	72.1	83.5
Farm Employment	.6	2.3	3.5	4.9	3.1
Ag Services	.4	.7	.6	.7	.6
Forestry and Fisheries	.03	.1	.1	.1	.1
Mining	.5	1.3	2.4	3.0	2.0
Construction	4.4	4.2	3.9	4.2	4.0
Manufacturing	19.9	21.5	20.7	13.6	20.2
Transportation, Communication and Utilities	5.3	4.1	3.6	2.9	3.75
Wholesale Trade	5.5	3.4	3.4	2.7	3.3
Retail Trade	14.9	14.2	12.0	9.4	12.6
Finance, Insurance and Real Estate	5.5	2.9	2.3	2.0	2.5
Services	19.4	14.6	12.4	11.4	13.2
Gov't.: Civilian	3.0	2.5	1.6	2.2	2.0
Gov't.: Military	2.2	3.8	1.4	1.5	2.4
Gov't.: State and Local	11.8	13.9	13.3	13.5	13.6
Proprietors	6.6	10.7	18.9	27.9	16.5
Farm Proprietors	.7	3.5	9.7	17.0	7.9
Nonfarm Proprietors	5.9	7.2	9.2	10.9	8.6

Source: Compiled by Economic Development Division, ERS, U.S. Department of Agriculture from basic data provided by the Bureau of Economic Analysis, U.S. Department of Commerce.

^{a/} Counties with more than 20,000 residents in urban places of more than 2,500 population.

^{b/} Counties neither in the "Urbanized" or "totally rural" category.

^{c/} Counties with no city containing at least 2,500 residents.

TABLE 2. Composition of Income in Metropolitan and Nonmetropolitan Counties, U.S., 1979

Industry or Type	Metropolitan	Nonmetropolitan a/			Total Nonmetropolitan
		Urbanized	Less Urbanized	Totally rural	
Total Personal Income					
(\$ billion)	1,482	185	211	49	445
(Percent)	100.0	100.0	100.0	100.0	100.0
Labor and Proprietors' Income					
-- By Industry					
Fare	.7	3.3	7.2	10.9	6.0
Ag Services	.2	.4	.4	.4	.4
Forestry and Fisheries	.05	.1	.1	.1	.1
Mining	.7	1.9	3.7	4.6	3.0
Construction	4.8	4.6	4.2	4.9	4.4
Manufacturing	26.1	21.1	17.8	10.3	18.4
Transportation, Communi- cation and Utilities	6.4	5.0	4.5	3.7	4.6
Wholesale Trade	5.8	3.3	3.0	2.3	3.0
Retail Trade	7.8	7.8	6.8	5.6	7.1
Finance, Insurance and Real Estate	5.1	2.6	2.1	1.8	2.3
Services	14.6	9.9	7.6	6.9	8.5
Gov't.: Civilian	3.2	2.7	1.7	2.4	2.2
Gov't.: Military	1.1	2.2	.4	.4	1.2
Gov't.: State and Local	8.2	9.3	8.1	7.7	8.6
-- By Type					
Wage and Salary Income	67.2	60.5	50.5	42.4	53.8
Other Labor Income	6.6	6.0	5.4	4.2	5.5
Farm Proprietors' Income	.5	2.4	5.9	9.0	4.8
Nonfarm Proprietors' Income	5.0	5.4	6.0	6.4	5.8
Other Income and Contributions					
Personal Contributions to Social Insurance	- 4.3	- 4.0	- 3.5	- 3.0	- 3.7
Dividends, Interest, and Rent	13.9	14.0	15.1	16.1	14.8
Transfer Payments	12.3	14.4	15.6	17.3	15.3
Population (Millions)	158.4	24.2	29.9	7.7	61.7

Source: Compiled by Economic Development Division, ERS, U.S. Department of Agriculture from basic data provided by the Bureau of Economic Analysis, U.S. Department of Commerce.

a/ See Table 1 for definitions.

western Corn Belt (see Bluestone, p. 14; Hoppe). Nonetheless, the data in Tables 1 and 2 support an important conclusion: Rural areas now depend on a diversified base of economic activity including agriculture.

PROSPECTIVE CONTRIBUTIONS OF AGRICULTURE TO RURAL COMMUNITIES

The contribution of agriculture to rural communities depend on aggregate food and fiber demand and its linkage to rural communities. Technology plays a key role in the linkage. Cars and trucks reduced the time and cost of transportation, making it possible for farm people to go farther to shop for jobs, goods and services. Many bypassed small communities have disappeared. Roads and vehicles will continue to improve but the principal impact of transportation probably lies behind. The rate of growth in small rural communities with populations of 1,000-5,000 is comparable to rates in larger communities. The rural renaissance in employment and population is broad based, and is apparent in rural counties near and distant from metropolitan areas.

Emphasis in this section is on two important dimensions of farming that influence rural communities: One is farm size, numbers and population that determine community social activity tied to population. The second dimension is farm income and expenses that determine business activity tied to buying power. Before turning to projections of these variables, it is well to review the relationship between farm structure and community.

Impact of Farm Size on Communities

Public policy could conceivably shape whatever farm structure society desires. Not every farming configuration is equally desirable (see Sonka and Heady). And what is good for farmers or rural communities is not necessarily good for society. Data in Table 3 show economic impacts on prices, input, output, receipts, expenses and farm numbers of sole reliance on large, medium or small size farms. Results assume full adjustments have occurred in prices and quantities but values are in 1981 dollars.

Market adjustments are presumed to be complete so that prices cover all costs of production. Because small farms are less productive per unit of input than are large farms, sole reliance on small farms requires 90 percent of 1910-14 parity to cover all resource costs. Large farms that currently account for half of farm output cover all costs with prices only 54 percent of parity.

Income and employment multipliers relating the farm to the community depend partly on forward linkages and farm output and partly on backward linkages and farm input. It is notable that aggregate farm output is greater with large farms but farm input is greater with small farms. Input volume even under the small farm scenario is less than actual aggregate input volume in 1981 because the analysis assumes heroically that inputs are freed from existing large numbers of low productivity farms with sales of under \$20,000. Also, our exports are priced out of the market with only small farms.

Income and expense data provide clues to the impact of farm structure on rural communities. Given time, all costs equal all receipts. Adding off-farm income to farm receipts (or costs) indicates that economic activity in rural communities would decline to about 78 percent of 1981 levels with only large farms and would be 5 percent above 1981 levels with only small farms.

TABLE 3. Estimated Economic Impact of Adjusted U.S. Farming Structure
Comprised Solely of Large Farms, Medium Farms or Small Farms

Item	Farm Size			Actual 1981
	Large Farms Sales \$200,000 +	Medium Farms (Sales \$100,000- \$200,000)	Small Farms (Sales \$20,000- \$40,000)	
Output (\$ billion) ^{a/}	164	137	112	154
(Percent of 1981)	(106)	(89)	(73)	(100)
Domestic	114	107	100	111
(Percent of 1981)	(103)	(96)	(90)	(100)
Export	50	30	12	43
(Percent of 1981)	(116)	(70)	(28)	(100)
Input (\$ billion) ^{a/}	164	185	187	205
(Percent of 1981)	(80)	(90)	(91)	(100)
Productivity (Output/Input)	1.00	.74	.60	.75
(Percent of 1981)	(133)	(99)	(80)	(100)
Parity Ratio (1910-14=100)	54	73	90	61
(Percent of 1981)	(89)	(120)	(148)	(100)
Receipts (\$ billions)	146	164	166	154
(Percent of 1981)	(95)	(106)	(108)	(100)
Costs (\$ billion)	146	164	166	154
(Percent of 1981)	(95)	(106)	(108)	(100)
Net Off-Farm Income (\$ billion) ^{b/}	4	10	36	39
(Percent of 1981)	(10)	(26)	(92)	(100)
Total Income and Outlays (\$ billion)	150	174	202	193
(Percent of 1981)	(78)	(90)	(105)	(100)
Number of farms (1,000)	243	868	3,274	2,436
(Percent of 1981)	(10)	(36)	(134)	(100)

Source: For basic data, see Tweeten (March 1983).

^{a/} Domestic demand elasticity -.2; export demand elasticity -1.5. Output and input are quantities weighted by actual 1981 prices.

^{b/} Same off-farm income per farm as in 1981.

The composition of rural economic activity also would change with the size of farm. To provide off-farm jobs, a system of only small farms implies more nonfarm economic base in rural communities relative to the farm base. Large farms would tend to be two-family operations so 240,000 farms might have 480,000 families. Still, a system of small farms with one family per farm would support nearly seven times as many farm families and social activity that depends on farm population than would a system of large farms. It must be remembered, however, that in strictly economic terms the gain to rural communities from a system of small farms is more than offset by higher food and other commodity costs to consumers due to the lower economic efficiency of small farms. A system of even smaller farms than shown in Table 3 might provide more stimulus to rural communities but the social cost would be huge in terms of lost exports and high food costs.

It is also notable that 26 percent more real input than actually used in 1981 would have been required to produce the actual 1981 output solely with small farms. This figure contrasts sharply with the 9 percent less input with only small farms as shown in Table 3. The latter occurs because the higher prices required to cover all costs reduce sales, output and input.

Trends in Farm Size and Numbers

As noted above, farm size influences farm population and income and thereby the vitality of rural communities. Table 4 shows the impact on farm size of four key elements--labor-saving technology, the opportunity cost of farm labor, off-farm income and the gap between farm and nonfarm income per capita. Farming technology caused farms to grow between 3-4 percent per year on the average from 1940 to 1980. Farm firm growth from technology is projected to slow no more than 3 percent annually by year 2000.

Personal income of farm people will keep up with income of nonfarm people over time in a well functioning economy. Other things equal, this means the scale of farming must increase with real personal income per capita of nonfarm persons which advanced 2 percent per year in the 1970s. U.S. real per capita income growth has slowed and is projected to require farms to grow in size by only 1.0-1.5 percent per year between 1980 and 2000.

Combined technology and personal income gains required farms to grow 5-6 percent per year from 1940 to 1980. An offsetting force was nonfarm income of farm people from off-farm jobs, transfer payments and other sources. The growth rate in the proportion of income farm people receive from off-farm sources is expected to slow in the 1980s and 1990s.

A final major element explaining changing farm size is farm expansion and consolidation to close the once huge gap between farm and nonfarm income per capita. In Table 4, the difference between actual sales growth and the inflated total required sales growth reflects farm firm changes to close the accumulated income gap between farm and nonfarm people. Farm size expansion for that purpose averaging 7 percent per year in the 1940s and approximately 4 percent per year in the 1950s had essentially closed the income gap by the late 1970s. Success was apparent even in the depressed farm economy of 1981. With farm prices only 61 percent 1910-14 parity in that year, farmers income from all sources averaged 88 percent of nonfarmers' income per capita. Further closing the gap will not be an important source of farm growth in the future.

Based on the above factors, the average commercial farm is expected to grow approximately 3 percent per year to the year 2000, a slower rate of growth than in the past. With total acreage in farms somewhat stable, the implication is that farm numbers may decline slightly. However, a decrease in number of

TABLE 4. Actual and Required Growth in Sales per Farm by Decade From 1940 to 1979 and Required Growth Projected from 1980 to 1999

Decade	Growth required per farm ^{a/}					Total Sales		Actual Sales Growth
	Technology	Personal Income	Subtotal	Off-farm income	Real	Inflated		
					Annual average, percent			
Actual								
1940-49	3.4	2.6	6.0	-4.1	1.9	7.5	12.6	
1950-59	3.6	1.2	4.8	-5.4	-.6	1.5	5.3	
1960-69	3.3	3.0	6.3	-6.0	.3	3.0	7.3	
1970-79	3.2	2.0	5.2	-2.9	2.3	9.4	7.8	
Projected								
1980-89	3.1	1.5	4.6	-1.4	3.2	---	---	
1990-99	3.0	1.0	4.0	-1.2	2.8	---	---	

Source: Tweeten (1981).

^{a/} To the extent that farmers keep up with technology, income growth, etc, required growth is also actual growth.

mid-size farms is expected to be nearly offset by an increase in the number of large farms and small part-time farms (see Tweeten, 4 March 1983, Figure 1). The latter category is less influenced by the forces examined in Table 4 and shows signs of continued growth in numbers.

Data on economies of size indicate pressures for firm expansion and provide additional insight into future trends in farm size and numbers. Lower cost per unit of output for large farms than for small farms encourages expansion in size and reduction in numbers of farms. Most economies of size are realized on farms with sales of \$100,000 or more (Tweeten, March 1983). However, some production and market economies extend beyond \$100,000, providing incentives for even commercial farms to grow. Many small farms with high per unit costs remain but an increasing proportion of these are part-time farmers who willingly now and in the future will support farming with off-farm income. Full-time small farmers are a vanishing group. Farm size and numbers will tend to stabilize as entrance of large and part-time small farms offsets exit of full-time medium size and small farms.

Farm numbers will tend to stabilize, but the composition of farms will change. Medium size farms are expected to account for a declining share of farm numbers and output. In competing with large and small farms, medium size farms will be disadvantaged because of (1) cash-flow problems associated with the inflation cycle, (2) increasing risk in the face of less sophisticated risk management opportunities than on large farms, (3) less risk-reducing off-farm income than on small farms, and finally (4) high asset requirements for an economic unit.

Trends in Supply and Demand for Farm Output

Table 3 was a snapshot in time ignoring expected trends in supply and demand for farm output. Future trends in inputs purchased and products marketed through rural communities depend on trends in the aggregate supply-demand balance for farm output. Estimates from several sources of that balance are presented in Table 5. After productivity shifted the supply curve faster than the demand curve to the right in the 1950s, generating surpluses that carried well into the 1960s, demand grew faster than supply in the 1970s. The estimates in Table 5 are varied but in general indicate that farm output demand and supply may increase at somewhat equal rates in the later 1980s and 1990s. The implication is that no strong upward or downward trend in real farm prices is foreseen. However, acute, unpredictable periods of surplus and low prices alternating with periods of shortage and high farm prices are expected. Chances seem slim for persistent gains in demand relative to supply and in real farm prices that would help create a long-term boom in rural communities.

CONTRIBUTION OF OTHER POLICIES AND INCOME SOURCES TO RURAL COMMUNITIES

A striking feature of Tables 1 and 2 is the similarity of economic structure in metropolitan and nonmetropolitan counties. Rural economies on the whole are now highly diversified and integrated into the national and international economy.

Defining basic industries as those which bring dollars from outside, it is apparent in Tables 1 and 2 that mining and manufacturing as well as transfer payments for retirement or other purposes are vital components along with agriculture of the economic base for rural communities. Transfer payments are the largest single source of personal income in totally rural counties.

TABLE 5. Projected Increases in Demand and Supply
for Farm Output from 1982 to 2000

Source		Demand			Supply (productivity)
		Domestic	Exports	Total	
RCA-USDA <u>a/</u>	Quantity, year 2000 as % of 1982 (Annual increase, %)	117 (.9)	151 (2.3)	127 (1.3)	122 (1.1)
Tweeten	Quantity, year 2000 as % of 1982 (Annual increase, %)	117 (.9)	170 (3.0)	132 (1.6)	131 (1.5)
RFF, EEC constant <u>b/</u>	Quantity, year 2000 as % of 1982 (Annual increase, %)	115 (.8)	154 (2.8)	135 (1.7)	----
RFF, EEC liberalized <u>c/</u>	Quantity, year 2000 as % of 1982 (Annual increase, %)	115 (.8)	210 (4.2)	151 (2.3)	----
NALS-USDA <u>d/</u>	Quantity, year 2000 as % of 1982 (Annual increase, %)	118 (.9)	259 (5.4)	161 (2.7)	----

Source: Table taken from Tweeten (March 1983).

a/ Resource Conservation Act "moderate" estimates.

b/ Resources for the Future projection for crops with continuation of current EEC policies. My adding of domestic and export components gave total demand index of 129 in year 2000 for a 1.4% annual increase rather than the reported index of 135.

c/ Same as footnote (b) except my adding of domestic and export components gave total demand of 141 and 1.9% increase compared to the reported demand of 151 in year 2000.

d/ From National Agricultural Lands Study.

Payments from social security, medicare and medicaid are critical to the well-being of rural communities and their residents. Numbers of persons reaching retirement age will rise in forthcoming decades. The amenities of rural communities will attract many retirees.

The challenge is to devise public policies consistent with the interests of agriculture, rural communities and the public at large. Immediate needs to revitalize the farming economy are (1) national and international economic progress (with stable prices) to boost demand especially for farm exports, (2) elimination of excess commodity stocks, and (3) no better than normal weather for crops. Agriculture and rural communities will be much influenced by national monetary-fiscal policies; by farm commodity and credit policies; by community service, welfare, health, and education policies; and by work force policies.

Monetary-Fiscal Policy

The immediate overarching requirement for economic health of farming, rural communities and the economy at large is sound monetary-fiscal policy. That policy is now in disarray. Most economists condone budget deficits incurred during recession and condemn large deficits incurred after economic recovery. To promote steady economic progress without inflation requires decisive movement towards a balanced federal budget. The money supply as measured by M1 or M2 has been increasing at a rapid rate since July 1982. Unless the rate is cut back soon, inflation will reemerge. Unemployment and recession again will follow high inflation rates.

Erratic monetary-fiscal policy has given rise to an inflation cycle featuring inflation in the expansionary phase and high unemployment in the

stabilization phase. The inflation cycle creates undesirable cost-price, cash-flow and instability-uncertainty impacts on farmers which I have explained in detail elsewhere (Tweeten, December 1980; July 1983). Inflation and instability attending such policy especially disadvantage full-time farmers and shift the composition of agriculture away from medium-size family farms.

In recent years a tight monetary policy has been combined with expansionary, high-deficit fiscal policy. One result of monetary and fiscal policies working at cross purposes has been high real rates of interest damaging to both farm and nonfarm economies. High real interest rates impact unfavorably on farmers directly. High real rates also impact indirectly through international linkages by attracting capital investment from abroad. The inflow of money raises the value of the dollar in international exchange markets. The result is more expensive U.S. wheat, corn and soybeans to foreign buyers. A depressed U.S. economy imports less from other countries. Inability to export to us depresses economies abroad; those economies in turn import less from us. International recession and high real interest rates contribute to international financial crises.

Export Policy

The economic vitality of agriculture and its contribution to rural communities rests firmly on export markets. The business integrity of farmers willing to risk competing in unstable export markets deserves respect. Past actual and future possible export embargoes imposed by our government violate business trust and exacerbate an already high level of uncertainty in the farm economic environment. Perhaps embargoes should be reserved for national

emergencies only. At the same time, a federal policy of multinational reduction in trade barriers and encouragement of trade in general can help boost the farm and rural economies.

Commodity Programs and Payment-In-Kind

As best can be determined from a number of studies, the net impact of commodity programs on farm structure has been minimal (see Spitze et al.). To be sure, commodity programs have helped to maintain vitality of farms and demand for goods and services in rural communities during depressed times. But on the other hand, commodity supply control programs have reduced farm production and hence input purchases from rural communities. In aggregate, commodity programs added at least modestly to the economic base of rural communities in the last five decades. In some periods such as the 1960s the contribution was substantial.

In part because of the drop in world demand for farm exports attributed indirectly but in no small part to our monetary-fiscal policies, the government initiated a massive payment-in-kind (PIK) program bringing total federal commodity support costs to \$21 billion in 1983. Research on PIK (U.S. Department of Agriculture, 1983) indicates that net farm income will increase by 20 percent, machinery inputs will decrease by 2 percent and all other agricultural inputs will decrease by 6 percent. These changes will impact a rural community in two ways.

One, rural firms or individuals such as elevators, fertilizer firms, gasoline retailers and farm laborers from which farmers purchase inputs will experience decreased demand for their products. In regional economic terms,

this is the "indirect" effect. Two, farm families receiving the PIK payment will have additional money to spend. Increased household spending is referred to as the "induced" effect.

The estimated total effect of the PIK program on two Oklahoma communities is shown in Table 6. The first community has about 40,000 population with a large service area. The second community has 1,500 population and has a small service area. Outcomes are estimated from a simulation model (Woods et al.) which uses the gravity model and location quotient technique to derive an I-O (input-output) model for a community and its service area. For Stillwater, a one dollar PIK payment generates \$1.53 throughout the economy. Some sectors experience a positive impact whereas others experience a negative impact. The latter occurs because agricultural inputs, especially hired labor, will be reduced. The service and wholesale and retail sectors especially benefit from the increase in consumer spending resulting from increased income.

The smaller community with less service area receives only modest positive impact from the PIK program. For each PIK dollar, a total of \$1.05 is generated throughout the small community. In general, the agricultural input sectors have a negative impact and retail and services a positive impact.

The principal crop is wheat on farms around the two communities shown in Table 6. Wheat had already been planted so fertilizer, pesticides and other operating inputs had been purchased. The PIK program for crops not yet planted would entail less input purchases and less payments, hence would be less beneficial to communities. Communities will benefit from PIK induced higher commodity prices after 1983 because of PIK-induced stock reduction.

TABLE 6. Income Impact of PIK on Two Oklahoma Communities
per Dollar of PIK Payment

Sector	Community	
	Stillwater	Pawnee
PIK Transfer Payment to Farmer	\$1.00	\$1.00
Agriculture and Mining	-.28	-.05
Construction	.00	.00
Man-Nondurables	.00	.00
Man-Durables	.01	.01
Transportation	.03	-.01
Communications	.00	-.01
Wholesale and Retail	.19	.03
Finance, Insurance and Business Repair	.14	.00
Professional and Related Services	.49	.08
	\$1.58	\$1.05

Source: Unpublished results from Gerald Doeksen, Department of
Agricultural Economics, Oklahoma State University.

A commodity program of the 1983 cost and acreage magnitude seems unsustainable. After stocks are brought down to reasonable levels, new directions for commodity programs need to be considered 3/.

Research and Extension

Publicly supported agricultural research and extension emphasizes development of scale-neutral technologies (Carter et al.). Output-increasing technologies such as improved varieties and management emphasized by land grant university research and extension probably does not have a major impact on farm size and numbers. Agricultural research and extension have been high-payoff investments in the past and will be essential to keep farmers competitive in world markets in the future.

3/ The following program option is market oriented, discouraging international production and encouraging consumption with lower prices. The program frees larger farms to use their efficiency to compete in international markets while providing income protection for family size farms. Supply control and nonrecourse loan support would be abolished.

Small farms do not benefit much from commodity programs and many part-time small farmers do not need income support; medium size farms are most at risk and most need programs. A greater share of funds could be focused on medium-sized farms by retaining the target price at levels that cover nonland cost of production and with payments limited to (say) \$25,000 per operator recipient. The deficiency payment would be based on the difference between the market price and the target price on three-fourths of normal yield times base acreage. Established yields and acreage bases would remain unchanged for at least the four-year life of the program. The Farmer Owned Reserve might be retained to promote economic stability but with a cap for each commodity--in the case of wheat, at about 800 million bushels. Any unfilled capacity in the Farmer Owned Reserve would be prorated to farmers according to established yield and base acreage. Farmers would have incentives to cutback excessive output because incremental output would receive the market price.

Rural Services

Some federal programs influence farm and community structure by reducing costs of community services through technical assistance, low interest loans and, in some cases, direct subsidies. Government assistance to electrical, water, telephone, school bus and other services encourages people holding nonfarm jobs to reside on small farms. Many such rural residents would choose to live in rural towns or cities if they had to pay the high full cost of bringing public services to their farm residence. The net impact on rural communities from withdrawing federal assistance to rural services might be small because the decrease in the number of farm residents would tend to be offset by an increase in town residents.

Work Force and Human Services Policy

Manufacturing is the largest single industry in many rural counties. It has been attracted to rural areas in part by low labor costs. The importance of nonfarm industry to rural counties and to farming is clear--two-thirds of total income of farm people is from off-farm sources. For manufacturing industries to flourish in rural communities, federal and state governments must resist measures to arbitrarily raise wages above market levels. A federal wage supplement might be useful to (1) provide a socially acceptable wage to persons who have limited earning capacity, (2) promote employment especially in labor intensive industries competing against imports, and (3) encourage employers to hire disadvantaged workers.

Education, welfare and health service programs provide major benefits to rural areas. Their impact on farm and community structure is not well understood. Possible reforms are discussed elsewhere (Twetten and Brinkman, Chapters 5 and 6).

Tax Laws

The nation's tax policies impact rural communities both directly and, through farm structure, indirectly. Federal tax policies need not favor but sometimes have favored corporations over sole proprietor business organizations, large farms over medium and small size farms and capital over labor. Accelerated depreciation allowances and investment tax credits encourage substitution of capital for labor in production processes, thereby increasing farm size and decreasing farm numbers. A more resource-neutral tax policy could promote earnings and employment on farms, in rural communities and in urban communities.

CONCLUSIONS

Conclusions of this study are as follows:

(1) The economic base of many rural communities is agriculture. A large number of rural communities with growing nonfarm population and a diversified economic base also rely partly on agriculture for income. The future of all these communities depends in no small degree on farm structure and income.

It seems unlikely that food and agriculture will be dominated either by chronic surplus or chronic shortage in the next two decades. Real farm prices are expected to fluctuate but around a somewhat flat trajectory over time.

Persistent real farm price gains that could transform economic fortunes of rural communities seem unlikely. The real demand for farm output and hence agriculture's contribution to the economic base in rural areas is expected to grow about 1.5-2.0 percent per year on the average to year 2000.

Farm population will tend to stabilize. About as many farms will exit (particularly full-time smaller farms) as enter (particularly large farms and part-time smaller farms).

Sole reliance for food and fiber on small farms would increase the farm population and boost rural community activities which depend on the number of people but society would pay a substantial price in terms of higher food costs and lost export earnings.

(2) The economic base of rural communities is highly diversified, contains many similarities to the economic base of urban communities, and is integrated into national and international markets and government policies.

Farmers increasingly depend on the nonfarm sector for production inputs and off-farm jobs. More nonfarm workers are moving to small farms. With integration of farms and hence rural communities into national and international output and input markets, federal transfer payment and monetary-fiscal policies become more important for the well-being of farms and rural communities. Federal policies to keep international trade channels open and promote steady economic progress without marked unemployment and inflation are critical for economic health of agriculture and rural communities. Decisive action is also required to bring dairy and grain, especially wheat, supplies in line with demand either by lower market and support prices or through supply control.

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ECONOMIC INTERRELATIONSHIPS IN THE RURAL COMMUNITY

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INTRODUCTION

A recent book, sponsored by the American Agricultural Economics Association and published by the University of Minnesota, includes three review articles under the general heading "Rural People, Communities and Regions." (Martin, 1981). These three articles reference more than 1,000 published studies relating to some aspect of the interrelationships among various economic entities within rural regions. Thus, the general topic of economic interdependencies in rural communities has not escaped the interest of economists or other social scientists.

What then, can be added by another look at this complex set of linkages between the agricultural sector and the rural community? Perhaps the most promising area for making a contribution is to focus the discussion somewhere between the generalizations associated with theoretical formulations and the empirical estimates of studies of specific programs or regions. In more specific terms, the thrust here will be on what are some of the relevant questions which should be asked when considering alternative strategies for implementing policies which will effect agriculture-rural community interrelationships. By providing a structure for these questions, it is

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hoped that the basics of an economic framework for viewing policy alternatives can be developed.

One caveat before proceeding. The discussion here will be limited to two concerns--economic efficiency and distributional impacts. A host of related concerns (e.g., social, political, cultural) are arbitrarily defined as being outside the boundaries of our assignment. This is not to suggest these concerns are less important, but rather that efficiency and distributional issues are the targets in this analysis.

DETERMINANTS OF RURAL AREA ECONOMIC VIABILITY

Before addressing the question of the kind and magnitude of impacts resulting from implementing policies affecting the agricultural-rural community linkages, it is necessary to determine what forces are responsible for the economic viability of a rural community. That is, we need to develop "norms" or benchmark data. In general, the determinants of the economic viability of an area can be traced to four interrelated forces:

1) The level of demand for goods and services in the region. A conceptual basis for viewing the level of demand as the basis for economic viability is provided in export-base theory. The causality link is that the level of economic activity in a community is determined largely by the extent to which that community can export goods and services. That is, what does the community produce that is desired by the "outside world." However, this descriptive demand-oriented model does not address the question of what forces determine the demand for the goods and services produced in a region.

2) The level and productivity of the human and natural resources in the region. The competitiveness of the input to output relationships is another

determinant of an area's economic viability. That is, how productive and what is the level of availability of resources in a particular region when compared to other regions producing similar goods and services? Related are a host of questions concerning such factors as resource mobility, spatial relationships, etc.

3) Economies of size. The effect of economies of size on the shape and composition of a community provides an added dimension to the demand considerations mentioned above. For example, as economies of size forces push for larger and larger farms, the number of farms decrease with a corresponding decline in the number of farm families. The expected result is a decrease in the demand for goods and services in the local community. Thus the economies of size factors are an important first round effect on the relationship between agriculture and the rural community. Relatively large multipliers generally associated with the agriculture sector suggests there are also important second and subsequent round effects. (The multiplier is an estimate of the total economic activity generated by an original 1.0 unit increase in agriculture production.) The guidelines provided by central place theory, in conjunction with export-base theory, assists in predicting the type of rural community that will be associated with various types of agriculture production areas.

4) Historical precedence. Although of less immediate concern in evaluating most policy proposals, historical precedence is an important consideration when attempting to explain the current size and composition of rural communities. The location of a firm which starts in "grandma's kitchen" and grows into a multinational firm with headquarters at the original rural site is difficult to predict. Similarly, one would probably not predict that the rural town of

Rochester Minnesota would be the home of the world famous Mayo Clinic. Public, as well as private investments are important in determining the size and composition of a significant number of rural communities. Many of our Land Grant Universities are located in rural communities but the economic base of these communities is not the agriculture sector in the surrounding countryside.

FRAMEWORK FOR EVALUATING POLICY IMPACTS

Once the benchmark measures have been developed, the next assignment is to examine the effects of alternative strategies for implementing policies. It is my belief that economic efficiency is often used to justify policies, but distributional impacts play a more important role in the adoption and implementation of policies. I think this is a crucial point and needs to be examined in more detail.

There are two major approaches to evaluating policy alternatives when designing programs. (Cameron, 1970, Cumberland, 1973, Leven, 1965). One is the efficiency approach where the most efficient area, technique, income class (or some other grouping) is selected as the beneficiary of a policy action regardless of the distributional consequences. This approach is responsible for a great deal of interesting rhetoric, but it is used infrequently as a single objective in public decision making. The whole concept of economic efficiency as a single objective is somewhat counter to our system of representative government in which congressmen represent a group of citizens within a spatially defined district. Thus, economic efficiency is a useful yardstick against which the costs and benefits of various policy alternatives are measured, but it is not often used as the single criteria for the allocation of public funds.

A second approach, which is weighted toward the distributional concerns, is based on gaining policy objectives through a system of planned adjustments. The rationale for this approach is usually based on one of the following arguments.

1) The impact of past decisions must be incorporated into current policy decisions. For example, commodity payments for selected agricultural programs have been capitalized into land prices and suspension of these programs would now result in major losses to present land owners. Thus, present policies, it is argued, need to consider the effects of previous actions. Using another example, it is argued that individuals who have invested private capital on the presumed continued availability of publicly supplied irrigation water or grazing permits to public land should be protected.

2) Fairness is a second reason given for the development of programs which help people in areas with insufficient resources to compete in the market place. If resources are immobile, the argument is that we need to develop policies to either increase mobility (normally not an alternative held in high esteem by the Congressman whose district will experience the exodus) or to bring additional resources to the region. The rationale for transferring additional resources to an area take almost as many forms as there are policy alternatives. Some are simply attempts to assist lagging areas--the programs of the Appalachian Commission are an example of this approach. Others follow the classic "infant industry" arguments which call for subsidies, often in the form of low cost loans or subsidized wages, until an industry is well enough established to compete on an equal basis. A third approach is to increase the flow of knowledge to a region to increase productivity while a fourth is to enhance the distribution of information about a region to insure potential entrepreneurs recognize the opportunities available in the specific community.

APPLICATION OF THE EVALUATION FRAMEWORK

The focus here will be to examine the probable impacts of hypothetical policies which result in a change in agriculture production. For example, what are the aggregate impacts of a program associated with increased agriculture production? Edwards (1983) argues, on the basis of national input-output tables, that the probable overall multiplier effect associated with an increase in agriculture production for domestic consumption is in the 2.5 range. Conversely, if the increased agriculture production is destined for export, the estimated multiplier is probably closer to 1.8. The major reason for the difference in the size of the multipliers is due to the forward linkages associated with the increase in production. That is, when agriculture production is for domestic consumption, the agriculture products tend to move from agriculture to the food and kindred sector for further processing and then into the wholesale and retail trade channels. Each step in the process increases economic activity and enlarges the overall multiplier effect. Conversely, the forward linkages associated with increased agriculture production for export is often limited to transportation to a shipping terminal where any additional activity associated with commodity is "leaked" from the system with no further stimulus to the economy.

Measurement of other forward linked impacts such as an increase in farm family expenditures for consumption items requires another set of questions. If there are no policy provisions to support price, an increase in agriculture production without a comparable increase in export for commodities with an inelastic demand (a majority of farm products) will result in an aggregate decrease in returns to the farm sector (i.e., prices will decrease more than quantity increases). In reality, there will probably be some farmers with

significant gains and others with severe losses. There is little disagreement, however, that in nearly all cases the major beneficiary will be the international and domestic consumer who gains through increased product availability and lower prices.

From a backward linkage perspective, the results are not significantly different in the two scenarios. Increases in the demand for seed, fertilizer, machinery and other farm production will be similar regardless of whether the ultimate disposition of the product is for export or domestic consumption.

Similarly, the differences in the impact on local government revenues and expenditures would be minimal. Small area input-out studies suggest that increased activity in the agriculture sector results in only small increases in local government revenue. (Sharma and Conner, 1974) In general, studies have found that unless policy has a significant effect on the property tax, the impact on local government revenues will tend to be small. Changes in the level and composition of expenditures by local government resulting from the implementation of a policy will depend on whether new infrastructure is required.

Other types of agriculture policies would have different impacts. Programs designed to hold land and/or labor resources out of production (e.g., land bank programs, PIK, etc.) have a direct effect on firms supplying inputs to agriculture. Thus, evaluating the backward linked economic activities becomes a more important concern, but it does not negate the need to examine the forward linkages discussed in the previous example. In both examples, the type and probable distributional impacts among the agricultural subsectors (e.g., poultry, dairy, grains) and their corresponding impact on the rural community needs to be evaluated.

An impact that is often neglected, or at least treated only in generalities, is the spatial distribution of costs and benefits of public programs. An article by Tolley (1959) entitled, "Reclamation's Influence on the Rest of Agriculture" is a classic study of the spatial distribution of impacts resulting from subsidized irrigation water being supplied by the Bureau of Reclamation. He examines the spatial impacts of increased cotton production on irrigated areas in the West on other regions of the nation through an acreage change matrix. Although the study is now dated and Tolley admits the concept is more important than the exact numbers, he concludes that "---it may be that one farm worker for every twenty remaining in southern agriculture has been displaced by western reclamation." (p. 180).

A related concern is the extent to which the size and distribution of impacts depends on the complexity of the economic system where the policy is being implemented (Jansma, et al 1981). For example, the frequency of need for a particular good or service to support agriculture production in an area is one predictor of its availability. The farmer's demand for gas, lubricants and minor repairs is likely to be at least weekly. In addition, the capital requirements for a gas station-minor repair shop are relatively low. Thus, nearly every rural community will have this type of business activity. Conversely, farm equipment is purchased less frequently and dealers often have substantial overhead and must sell a relatively large number of units to cover fixed costs. As a result, major farm equipment dealers tend to be located in medium or larger sized rural communities. In terms of impact, policies which effect short run decisions (i.e., the purchase of fuel and minor repairs) will tend to affect smaller communities the most, while policies more directly affecting intermediate to long term decisions (machinery or land purchases) will be more of a consideration in the larger rural communities.

Another factor that should be included in any evaluation of the impact of policy alternatives is the high and increasing percentage of the farm population's personal income derived from non-farm sources. Recent statistics (1981) indicate that 59 percent of the personal income of the farm population is from non-farm sources. (USDA, 1982) Thus, any measure of the impact of agriculture policy needs to include not only the direct relationship between the agriculture sector and the community, but also the effect a change in agriculture policy will have on the ratio of farm to non-farm sources of income--and how a change in this ratio effects the economic viability of the entire community.

A PROPOSAL

This review of some of the factors affecting the interrelationships between the agricultural sector and the rural community suggests, in my opinion, the need to focus attention on the development of impact statements when evaluating various strategies for implementing public policy. It is argued here that in addition to measures of overall cost effectiveness (or benefit to cost comparisons if the benefits are readily quantifiable) there should also be an emphasis on the "who and where" impacts.

The desirability of a general comparison of the costs and benefits of a policy proposal is generally accepted--at least by most economists. That is, measures such as cost per acre of land retired or net outlay per employee retrained are usually accepted as useful indicators of a policy's desirability. I would argue there is also a need to provide policy makers with additional information about the second and subsequent round effects of implementing various policy alternatives.

For example, would it be that difficult to evaluate the probable impact of alternative farm programs in terms of the following questions?

1) Who are the primary beneficiaries and are the benefits concentrated in a specific area or region?

2) What is the general level and sectoral distribution (both positive and negative) of the forward and backward linkages associated with changes in the primary beneficiaries?

3) How are the impacts resulting from implementing this policy distributed among various income classes?

A trade-off would need to be made between the cost of this additional information and the value of the information to policy makers. However, I would argue that "rule of thumb" estimates of who gains and who loses and where the benefits and costs would be located would be a cost effective activity.

I would emphasize that I am not suggesting we undertake a major research endeavor to study each policy alternative. Rather, the suggestion is to use the research base that is available--plus allocating a minimal amount of funds to add to this base--in order to provide better information to the policy makers who are required to make the difficult policy decisions.

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FAMILY FARMS and AGRICULTURAL COMMUNITIES
Catherine Lerza*

In addressing the topic "Family Farms and Agricultural Communities," I'd like first to examine several questions that must be answered before any useful discussions of public policy toward family farms or agricultural communities can take place.

As a way to put the issue in perspective, I'd like to pose a question: What is it about family farmers that captures the concern and imagination of the non-farming public? To answer that question, I will briefly examine:

- The relationship between family farms and agricultural communities;
- What it means to "save" the family farm;
- Long range policies that must be put in place if we are to save the family farm.

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Most people who support family farms perceive a relationship between a healthy family farm-based economy and the existence of a healthy agri-

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cultural community. Some take this several steps further and relate the well-being of the entire U.S. economy to the health of family farms.

A small, but growing, body of research has attempted to prove empirically that the economic, social and political make up of rural communities is directly related to the kind of agriculture practiced around them. While these studies have not examined these relationships over time, they are the body of evidence supporting the thesis that family farm-based agricultural communities have better social services, community life and small business sectors than do communities surrounded by large, non-family farms. Communities surrounded by larger, non-family, "industrial" farms are marked by higher levels of poverty and economic inequity, fewer businesses and services, poor housing and community services, and a larger population of unmarried males and transients (and, hence, businesses and services that cater to them rather than to families).

Most of these studies are well-known and build upon the historic work of Dr. Walter Goldschmidt who, in 1944, studied two San Joaquin Valley towns, Arvin and Dinuba. He found that Dinuba, surrounded by family-owned farms, was healthier economically, socially and politically than was Arvin, a town of comparable size surrounded by larger, more industrialtype farms. More recent studies have reached similar conclusions and have amplified Goldschmidt's work. (See Fujimoto, et.al., Rodefeld, McCannell)

In a recent paper, rural sociologist Dean McCannell of the University of California, Davis, noted the following relationship between community and farm size:

Midwestern rural communities are different from communities in the American South and West in almost every respect except that many of the problems they currently face can also be traced to increasing farm size, and land and capital concentration in agriculture. The communities of the American Midwest were originally predominantly middle class and professional and functioned as service and market centers for the surrounding locally owned and operated farms..... Studies.... indicate that the number of businesses and services found in small towns in Iowa and Nebraska is much greater per unit of population than in other areas of the U.S.... [M]idwestern communities have twice as many businesses and services per capita than their Western counterparts....

While the nature of their vulnerability is quite different from communities in the other regions of the U.S., Midwestern towns are equally at risk from increasing concentration of farm ownership. Even as ownership remains local and labor remains in the family unit, decreasing the number of farms in the region erodes the support base for the communities.... Some of the businesses stagnate and collapse while others move into the larger regional centers, vitiating the infrastructures of the small communities.

Thus, a large number of family farms provides a stable economic and political base by creating a stable population with a tangible stake in its community's well being. This concept is the very underpinning of American political philosophy which equates landownership with political power and stability. As U.S.D.A. historian David Brewster explains,

So strong was this conviction, that land ownership was a factor in deciding who could vote well into the 19th century. The traditional attitude held that people who possessed property had an unmistakable stake

in society. Their holdings demanded protection and freed them from the threat of economic coercion, thus making them the most desirable citizens.

From this premise derived an obvious conclusion: the way to guarantee a republican form of government and a reliable electorate was by wide distribution of property.

It is not surprising then that family farmers see themselves, and are seen by the public, as the bedrock of democracy. Of course, this concept of the family farm implies that a family farmer owns his land. That statement is no longer a self-evident one, however.

Only about 50 percent of the farmland in the U.S. is farmed by the person who owns it. In fact, 70 percent of the people who own farm land are not farmers. Farm tenancy is increasingly common, and it is the rule, not the exception, for farmers to own only part of the land they farm, and rent the rest.

The fact that landownership is no longer a given in the definition of family farm backs us into the old, and difficult, question, "What is a family farm?" It is just not an academic question, although many an academic has wrestled with it, because, in fact, the definition of family farm must be broadly understood and accepted if farm policy based on the "family farm" is to have any meaning.

For example, a recent New York Times article highlighted Secretary of Agriculture John Block's family farm in southern Illinois. Secretary

Block refers to it as a "family" operation -- all 3000 acres of it including its seven employees who produce 50,000 bushels of soy beans, 6000 hogs, and 230,000 bushels of corn per year. I would guess that Secretary Block's definition of family farm is very different from that of the "average" American, particularly when it comes to public policy that supports family farms.

The definition of "family farm" has changed drastically over the past two hundred years. General elements of the definition include: land tenure, decision making, provision of labor, and income. Most people would assume a family farm is one owned and operated by a family which provides the bulk of the labor on the farm and which makes all decisions related to farm operations. Such a farm should generate enough income to support the family. No definitions of "family farm" imply any standard size in terms of acreage or income, nor any standard farming practices.

In his paper on the changing concept of the family farm, David Brewster notes,

Gradually over two hundred years, the family farm concept has shed its components. Jefferson saw the institution as one combining land, management, sustenance and labor plus a host of elements that were even harder to pin down -- political probity, moral soundness, economic stability and the like. By the 1940s, the family farm was perceived more narrowly as a family controlled business that provided a living and full time employment. Today, it is commonly regarded, in practice, as a farm that hires less than a designated amount of labor. These definitions have not neatly succeeded one another.... Much confusion about agricultural policy has arisen

in recent years because people using the same expression have had very different meanings in mind.

Today, a commonly accepted, by policy makers and economists at least, definition of "family farm" is one developed by U.S.D.A. economist Radoje Nokolitch in 1972:

The essential characteristics of a family farm are not to be found in the kind of tenure, or in the size of sales, acreage or capital investment, but in the degree to which productive effort and its reward are vested in the family.

The family farm is a primary agricultural business in which the operator is a risk-taking manager, who with his family does most of the farmwork and performs most of the managerial activities.

According to this definition, "most of the farmwork" means the farm operation cannot use more than 1.5 person years of outside labor on the farm each year. Because this definition is so broad, almost every farm in this country becomes a family farm, which means, writes David Brewster, that "policy makers [can] claim that, whatever problems beset the agricultural sector, the family farm is holding its own as a percentage of the total."

I doubt that is how most Americans envision the family farm, however. Most people probably assume land ownership is an essential part of family farming, not realizing perhaps that the high cost of farmland and the increasing scale of agriculture make land ownership, for new farmers especially, only a remote possibility. Economist Don Paarlberg has argued that as "it becomes increasingly difficult for the farmer to supply all

the factors of production, he will gradually slough off providing the capital, owning the land and even supplying the labor. He will retain to the last that most precious role of all, entrepreneurship -- the decision-making function."

Critics of this concept wonder how a farmer without control over land, labor and capital can, in fact, be an entrepreneur. However knotty this conflict -- particularly as it affects farm policy -- it will have to be addressed and resolved in the very near future if farm policy is to have any meaning.

Many people also think the family farm is, by definition, a small farm or a limited resource operation. Thus, in their minds, the reason to support public policy that helps the family farm is based on a wish to eliminate poverty. The "average" American who thinks of family farmers this way is of course, angry when she/he hear about family farmers who operate 1000 or 10,000 acres and drive air conditioned four-wheel drive tractors. They expect to feel sorry for farmers and instead wind up face-to-face with middle income people who complain about inadequate income just as do auto workers or lawyers or federal bureaucrats. People with this image of the family farm must feel they've been "had" by public policy. This same attitude carries over into attitudes toward "rural programs" -- people assume that all rural programs are anti-poverty programs when they are not.

It is therefore important to re-frame the debate around farm and rural policy so that the urban and suburban public whose support is necessary for the enactment of such policies understands that the goal of such policies is not to eliminate poverty per se, but is to preserve the stable, prosperous economic base that has been (and could be once more) generated by moderate sized family farms.

As Luther Tweeten explains in a recent paper:

Numerous studies of farm-community interactions reveal that moderate size farms are most closely consistent with the well-being of rural communities. Middle-class families support churches, schools, clubs, and commercial businesses. Although the optimal size of a farm, if there is one, varies widely and no one size fits all conditions, the size of farm consistent with increased well-being of society as best measured with our crude tools is neither a small nor a very large farm but rather is a moderate-size family operation.

It would appear, then, that for many people the real issue in "saving the family farm" is saving a heterogeneous, pluralistic structure of agriculture that encourages many scales of agriculture, broad based land ownership and the potential for the successful entry of new farmers into agriculture. Unhappily, however, it is just this structure and the middle sized farmers that give it life, -- the ones described so eloquently by Dr. Tweeten -- that we are now losing.

There are about 2.3 million farms in the U.S., but in 1981 71 percent of them grossed less than \$40,000 a year. The vast majority of

those farms gross less than \$10,000 per year. These small farms differ greatly from one another, however. Many might best be called "rural residences." Some small farm operators use their farm operations as a hobby and make the bulk of their income elsewhere. Other small farmers work off the farm in order to make enough income to stay on the farm. Some small farmers -- particularly minority farmers and those in regions like Appalachia -- are chronically poor and are severely limited in their access to land and capital. These 1.63 million farms accounted for only 13 percent of the value of all farm output in 1981.

At the other end of the scale, about 5 percent of all farms about 115,000 (farms) grossed more than \$200,000 in 1981. These farms accounted for 49 percent of the value of farm output. According to U.S.D.A. projections, by the year 2000, the largest three percent of US farms will control 66 percent of farm output.

In the middle are the operators most of us would call "family farmers" -- those who gross \$40,000-\$200,000 per year. In 1981, 24 percent of all farms were of this "mid-size" and accounted for 38 percent of all farm output. In 1978, however, 19.6 percent of all farms were of this size and accounted for 37 percent of the value of farm output. In contrast, in 1978, only 2.4 percent of all farms grossed more than \$200,000 per year, and accounted for 39.3 percent of all farm output.

The U.S.D.A. study A Time To Choose noted, too, that "the full time farmers who are having the most difficulty surviving as farmers fall

within the \$40,000 to \$100,000 sales group. These are men and women who have farms that are, for the most part, large enough to realize most of the efficiencies associated with size, who have little off farm income, and who, in some cases do not have sufficient volume for an adequate income."

These farms are what economists now call the "disappearing middle." As U.S.D.A. economist Neal Peterson explained in Farmline (April 1982), "These mid size farms [Ed. Note: Those that gross \$40,000-99,999 especially] seem to be too large for part time farms and too small for full time farms. They are under greatest adjustment pressure." These farms are forced to expand to increase production, and hence gross sales, or to contract and rely more heavily on off farm income. Peterson and associate Donn Reimund conclude that these mid size farmers face competition from all sides and that "as their numbers rise, there seems little likelihood of easily replenishing their ranks." Ironically, the typical farmer in the lowest sales categories can often out bid the mid size farmer for land and other resources because farmers in lower sales categories tend to have significantly larger off-farm income.

Yet it is within the middle range of farm operations that the greatest economies of scale are reached, numerous researchers have concluded. (See Madden, Miller et.al.) Summarizing this research, Luther Tweeten notes, "In short, the optimal size of farm to increase well being as best that can be measured appears to be the typical commercial size farm of

today -- approximately \$100,000 in sales and \$1 million in production assets." But given low farm prices and the high fixed costs of machinery and equipment, it is difficult for a farmer to stay moderate-sized when given the opportunity to grow. The combination of market forces and public policies that reward, for example, volume of production and the purchase of large scale equipment, have made the middle income farmers "disappear" -- despite the fact that mid-sized farms appear to be the most efficient users of economic and natural resources and the most beneficial to rural communities.

Given the severity of the crisis in agriculture, many people argue that all farmers -- not just those in the "disappearing middle" -- are suffering. Today's farm problems are often likened to those of the Great Depression of the 1930s. But, the farm crisis of the 1980s is affecting farmers very differently than did the depression of the 1930s. And those differences get to the roots of today's problems.

In the 1930s, agriculture was not as top heavy as it is today. Thus, while some farmers were better off than others, the disparity between them was not as great as it is today; the depression of the 1930s hit the great majority of farmers pretty hard. Today, however, the farm crisis has not struck with such impartiality. The most graphic example of this uneven-handedness is the fact that about 50 percent of all farmers now carry all \$200 billion of the nation's farm debt. As Wall Street Journal reported Meg Cox has noted, the high cost of farming has "stratified" operators

along the lines of debt. Those farmers who inherited land or did not over-leverage themselves to finance expansion in the late 1960s and throughout the 1970s are now relatively debt free. They are in a different situation than are those with heavy debts.

But even those farmers without debt face huge fixed operating costs. As farmer Robert Duxbury, former South Dakota State Agriculture Commissioner, told reporter Cox, "In the 1930s and 1940s, if there was a bad year, you could slide along awhile, farmers burned wood, had no electricity and raised their own food. Now, your fixed expenses are so high, you can lose in one year more than you can recover in five or 10 pretty good years."

Thus, today's "farm problem" is not just a reflection of inadequate income and a nationwide depression. It is, instead, an income problem overlaid upon a system which has become increasingly unstable.

As the U.S.D.A. report A Time to Choose notes,

The inherent instability in agriculture significantly increased in the 1970s with the advent of rapid growth in foreign markets. This instability, ultimately reflected in farm earnings, most severely affects those farms most reliant on farm income, who also depend most heavily on debt financing -- the primary and, to a lesser extent, the small farmers.....

The financial structure of farms is much different today, owing to the proportionately larger use of purchased production inputs and the still growing use of debt capital. This has greatly increased the annual cash requirements of most farms, because they now have larger and more numerous fixed

financial obligations. This pattern varies across farm sizes, becoming greater for farms of larger sizes.... where the debt-to-asset and cash-expense-to-production-receipt ratios are much larger than for the smaller ones. (66)

In its report The Changing Character and Structure of American Agriculture, the U.S. General Accounting Office summarized the problem this way:

Since World War II, general inflation and rising costs of farm inputs have continually narrowed profit margins. To survive, to maintain income, the surviving farmer increased his farm size, expanded production, and sought off-farm income. While the cost-price squeeze during the 1950s and 1960s removed many of those smaller volume farmers who did expand or improve production, even the most aggressive farmers of the 1970s are feeling economic pressures. This is because biological productivity per acre has leveled off and thereby has limited, at least temporarily, future production increases to farm expansion. This cost price squeeze particularly inhibits the entering farmers whose land amortization costs alone can exceed over 40 percent of this gross income in an average production year. Slight variations in yield and prices can cause extreme financial difficulties.

Given the complexity of this situation, it is nearly impossible to prescribe one or two remedies to the "farm problem," particularly when the "problem" is defined as a structural one, rather than a "family farm" problem. From my observations, it would appear that public concern about what is happening to family farmers is really a concern about the loss of an agricultural system that offers the possibility of a diversified, pluralistic base -- one which creates opportunities for new entry farmers and one which does not allow the public monies to encourage the unlimited growth of farm operations. Because Americans equate, and probably

correctly, broadbased ownership of land with political stability and economic health, efforts to create a farm economy that promotes such broad-based ownership ought to have widespread public support.

It is ironic that the most vociferous critics of efforts to "restructure" agriculture are often farmers themselves, most of whom have a vested interest in agriculture as it exists now. Most farmers rebel at the idea (or at least have in the past) of supply controls, caps on target or other support payments, or limitations on who or how many bushels of production can receive price supports (a la the Brannan plan). Many family farmers want to be able to expand as much as they can even though the nation has long since passed the point where every farmer could grow without having to cannibalize a neighbor or two to do so. In addition, the nation no longer needs to increase the scale of agriculture or reduce the numbers of farmers on the land in order to maximize efficiency. Past farm policy has encouraged such growth, but it is clearly time to re-think policy goals in light of a drastically altered structure of agriculture.

Given the current structure of agriculture, public policy and programs can no longer simply put more money into agriculture or into rural areas and assume it will benefit all farmers or all rural people. In fact, with the current structure of agriculture, simply increasing farm support prices, without any thought to targeting them or to long range goals, might further consolidate the power of the wealthiest farmers and

non-farm investors in agriculture, and further reduce the options for new entry farmers or for the stabilization of the disappearing middle.

Certainly there is no guarantee that increasing farm income will automatically improve the rural economy. As we've seen, only a few counties are agricultural today and, second, given the structure of agriculture, money flowing into today's farm economy may go straight to corporations or investors in New York, Chicago or San Francisco -- not to Churdan, Iowa, or to Wadesboro, North Carolina, or to Junction, Texas.

As Dean McCannell explains,

Accelerating concentration of land and capital within agriculture during the last 25 years has produced a new and clear division within the rural sector: namely policies that benefit large scale agricultural businesses do not automatically improve the life of agricultural laborers and rural non farm peoples. In fact, there is mounting evidence that current policies designed to promote agriculture, insofar as they lead to the expansion of existing operations and greater concentration, in actual practice also promote the deterioration of rural community life.

To create the structure of agriculture necessary to preserve the family farm advocates will have to develop, articulate and support enactment of public policy with greater clarity and consistency than they have in the past. Various U.S. Department of Agriculture studies indicate that if current trends continue, concentration within the farm sector will also continue and intensify. Costs of entry into agriculture -- as a landowner, that is -- will become prohibitive, and the now disappearing middle

will disappear entirely. It will take specific, sustained intervention in the farm economy to change the course of American agriculture. Anyone concerned about the fate of agricultural communities and about the future of broad-based ownership of land should support such intervention.

Because Congress will write another omnibus farm bill in 1985, now is time to examine the policies and programs that will encourage an agricultural system with options for new farmers, for innovative farming techniques and for minority farmers; a system which promotes the sound management of food producing resources including soil, water and energy; and a system which does not encourage the concentration of resources into farms which are larger than efficiency would dictate.

Several things must happen before an agricultural system like the one I've just described is even a possibility.

First, we must sort out the income needs of smaller farmers from the need to create a stable farm economy. In the past, farm policy has attempted to reduce poverty in the farm sector and to stabilize farm prices. Today, the goal of "price policy" might better be eliminating the sectoral instability generated by the ever-tightening cost-price squeeze. The export market alone can't do this; here, then, I disagree substantially with the recommendation of the new Administration rural policy which states that by expanding the export of "agricultural and other rural products," the overall economic situation in America's rural communities will

improve. The report further claims that small businesses "may be especially well suited to play a major role in expanding exports of processed agricultural products." Given the current structure of agriculture, it seems unlikely that expanding exports will benefit small producers or small businesses.

Supply controls combined with a coherent and stable export policy and a price policy that supports farm prices somewhere close to cost of production would go a long way toward making agriculture more stable. Finally, we might look at a Brannan-type plan that would limit the amount of production for which any one producer could receive federal supports or payments; this limit would reflect the scale of production needed to reach economies of size. Such a plan should enjoy public support, particularly at a time when the federal budget is under such close scrutiny.

Second, public policy must address, and change, the fact that agriculture is now more profitable for those who own farm land and some kinds of production assets than it is for actual farm producers who do not own farm land. In fact, for the last decade or so, capital gains have generated more farm income than has the sale of farm commodities. This has made agriculture a prime target for speculators and has turned farmers into speculators. Obviously, federal tax laws must be changed so that speculation and investment are not rewarded more than is the actual work of producing food.

Finally, given the high cost of entry into agriculture, special credit and technical assistance programs must be made available to qualified new farmers. The Minnesota state new farmer program is a model for such a new farmer program. Along with the creation of new farmer programs should come a redirection of the Farmers Home Administration to insure that FmHA does in fact serve family farmers who cannot obtain credit elsewhere, but who are otherwise qualified borrowers. Special attention should be paid to the credit and technical assistance needs of minority farmers who have been victims of discrimination through the years.

This is only a beginning, but given the crisis in agriculture and the impact agriculture has on rural communities and on the rest of our economy, neither the Congress nor the public can afford to postpone looking carefully at farm policy and at the kind of agricultural economy this country ought to have when the 1985 farm bill is only two years away.

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RURAL COMMUNITY DEVELOPMENT AND AGRICULTURE:
A CONSTRUCTIVE OR DESTRUCTIVE RELATIONSHIP?

Bruce Hawley*

For purposes of this paper, agriculture means farming and ranching, but does not include agribusiness support activities. Rural community development refers to the transition of a community from agriculture support to agriculture support plus industrial. The premise I wish to speak to is: rural community growth is competitive and will diminish local agriculture.

A viable agriculture is dependent upon land, water, short- and long-term investment capital, and labor. Agriculture has a preference for land that lays well and drains well. The agricultural need for water is variable in quality and quantity, ranging from water for irrigation to water for livestock. Agricultural short-term debt amounts to approximately \$80 billion on an annual basis and its long-term credit needs are in the neighborhood of \$100 billion. The labor needs of agriculture are filled about 65 percent by the farm owners, operators, and members of their families and 35 percent by hired farm labor.

As rural agricultural communities grow, they will compete with agriculture for each of the above identified resources to a greater or lesser extent. Let us examine each of these four major categories of agricultural resources in the context of rural agricultural community development.

There are 2.3 billion acres of land in the United States of which the federal government owns one third. Of the remaining two thirds, agriculture

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owns or operates approximately 60 percent. Between 30 and 40 percent of the farmer-owned land is used for crop land. Obviously, agriculture tends to crop its best land—land that is relatively the flattest, best drained, and most suitable for sustained long-term agricultural production. The very characteristics that make land particularly well suited for agriculture also make land attractive for rural agricultural community development. Flat land, already cleared, with good drainage is the easiest and least expensive to develop. As rural communities expand, there is need for additional land resources for sewage treatment facilities, housing, and transportation. It is this prime agricultural land that is the first choice of developers.

The water issue is far more complex to quantify or deal with. Of the approximately 675 billion gallons of usable water per day that is available in the United States, agriculture accounts for close to 75 percent of the consumptive use of that water. Consumptive use includes direct rainfall on crops, irrigation, and livestock watering. In areas of the country where water is abundant, significant competition for water has not yet occurred and rural community development is of limited consequence. Where water is already in short supply and there is currently heavy competition, any new user must be at the expense of an existing user. As rural communities develop, their interest in water is perceived as a threat to existing agriculture.

A third area of potential conflict or competition between agriculture and rural agricultural community development is in the credit field. Agriculture borrows in the neighborhood of \$80 billion in short-term capital on an annual basis for production expenses of crops and livestock. The long-term agricultural debt is approximately \$100 billion. Rural community development requires capital which will generally come from one of two major sources—either from a federal grant or a loan program or from the private sector. Local banks

and private capital account for approximately 52 percent of total agricultural credit; farm credit system is 35 percent and FmHA is 12 percent. A useful illustration for purposes of our study, is the Farmers Home Administration. The Farmers Home Administration, dating back to the mid-thirties, was intended to provide a source of credit to assist farmers. For the first twenty years of Farmers Home's existence, it dealt almost exclusively with the agricultural community. As recently as 1970, farm credit accounted for close to 70 percent of the Farmers Home outlays. Today, Farmers Home Administration provides less than half of its available funding to farmers, and even this estimate understates the impact of the growth in rural community service on the Farmers Home Administration. An agricultural loan requires significantly less servicing and is of significantly greater volume than are most rural housing or community loans. As such, a disproportionate share of the monies and the manpower of the Farmers Home Administration has been diverted to nonagricultural activities.

Rural community growth, increasing the size of the labor pool is a mixed blessing for agriculture. The agricultural community has hired approximately the same number of employees for the past decade. Of this outside hired labor, 16 percent work on a year-round basis, 13 percent work 150 to 249 days, and almost 75 percent work less than 150 days. Many of the casual and seasonal workers are students, housewives, and residents of rural communities. The stability of the hired agricultural work force would suggest that there are not significant new jobs available in agriculture. This overlooks the desire on the part of the farmers, in some instances, for part-time or seasonal assistance. Such assistance can frequently be found from persons with full-time occupations off the farm who are interested in picking up a little cash on the side, driving tractors in the evening or assisting with the milking before or after a regular shift at some other job.

An expanding rural community creates a mixture of impacts on farming. Obviously an expanded rural community provides an additional potential market for direct-marketing activities of farmers. As rural areas grow, farmers discover that many of the new residents came to the country, partly in anticipation of access to "farm fresh" produce. Many farmers have successfully capitalized on this market, sharing with the consumer what had historically been the middle man's markup in the cost of food. Additionally, one of the attractions of moving to the country for many people, has been the "wide open spaces." These same people discover that those wide open spaces are owned and operated by someone who relies upon them for a living and that they are not readily and freely available to any and all. However, satisfactory arrangements have in some instances been worked out between the new rural residents and the farmer to provide access to various agricultural space under specified conditions for a fee. These arrangements have ranged from access for purposes of hunting to access for snowmobiling. Such undertakings have met with mixed results.

Certainly an expanded rural community is likely to attract and be able to maintain better medical services than had historically been true. As more people move into a community, additional doctors and/or hospital space become a necessity from which the agricultural community may benefit. Expanded rural communities normally involve expanded education facilities at the primary and secondary level. Expanded education facilities generally lead to a broader education curriculum which is of benefit to all in the community, including the farmer's family.

Virtually all of the expansions involved in a rural community require expansions of the secondary support systems including schools, police, fire, sewer, water, transportation, and energy. All of these facilities need to be

funded, usually—at least partially—at local expense. A primary mechanism for funding rural community development's local share historically has been the property tax. As rural communities are expanded, the pressure for an expanded property tax base leads to higher assessments, higher property valuations and inevitably, significantly higher property taxes for farmers. Additionally, the increased population pressures lead to increased vandalism of farm buildings, farm equipment, farm livestock, and farm crops. Expanded demand for energy inevitably leads to additional pipelines and power lines which frequently interfere with irrigation, drainage, and cropping practices. As population increases, so does competition for services that had been thought of previously as primarily agricultural services. The local veterinarian frequently finds it more profitable and easier to deal with small animals than the large animal problems of agriculture. Farm supply centers frequently find that the "lawn and garden" portion of their business, which is generally more lucrative than the agricultural portion of their business on a relative basis, merits additional time and additional floor space that had been devoted exclusively to agricultural products. Farm machinery dealers may increase the stocking of lawn and garden equipment and utilizing inventory space, parts, and manpower that had previously been devoted to servicing the agricultural clientele.

Creation of industrial parks is a viable tool to assist in rural community development and rural community jobless rate reductions. However, an industrial park will accelerate the rate of development in a previously rural, agriculturally oriented community. As management level people are drawn to the industrial park by employment opportunity, anticipating an agricultural neighbor, they are sometimes dismayed to find that agriculture is not always a pleasant neighbor. Agriculture's evolution into more concentrated and intensified production practices sometimes translates into large livestock or

poultry facilities with the associated flies, odors, and other undesirable elements; large farm equipment which may involve such things as irrigation pumps running around the clock creating a noise offense; and tillage activities that, because of the limited seasonal time of appropriateness, must be conducted with intensity, sometimes resulting in tractors or harvesting equipment running around the clock adjacent to nonfarm neighbors who take little delight in these nuisances to their hoped for tranquil rural life.

None of the above situations need be an insurmountable problem of rural community development. Transitions in the structure of the rural community, as transitions in the structure of agriculture, are an evolutionary process that have been going on virtually since the beginning of agriculture and residential development. The key appears to lie in allowing the evolutionary changes to take place on a gradual basis. Change can be accommodated by both the agricultural and the nonagricultural segments of the community.

The federal policy making apparatus is largely unsuited to make the integrated decisions necessary to guide rural community growth in a manner that accommodates agriculture. Both the Congressional process and the bureaucracy are structured, either by committee or department, in a manner that encourages constituencies which must be catered to. As the constituency is served, other considerations are largely ignored. The "Clean Water" committees of Congress deal with sewage treatment programs in the context of clean water, not the impact of an expanded sewage treatment capacity on a rural community's future growth. The Small Business Administration assists rural small business development, without consideration of such development on agriculture.

Rural community growth will continue, and the local agriculture will change to be compatible, or diminish. The federal government cannot stop this trend, nor should they try. Rather, the proper federal role should be to minimize the degree to which they contribute to the problem.

CREDIT AND CREDIT INSTITUTIONS IN AGRICULTURAL COMMUNITIES

James J. Mikesell*

INTRODUCTION

I have been asked to discuss today how access to credit may differ for rural and urban communities, with an emphasis on agricultural communities; and to describe both private and public institutions that operate in rural credit markets. The bigger picture is how rural economic activities are financed. Financing by one's own resources, and by raising equity capital are often used alternatives to borrowing for many businesses, whether small proprietorships or large corporations. Focus on credit is appropriate since credit is likely the major financing source in total and the method of financing most influenced by public policy actions. Credit markets are where money is bought and sold. Restating my objective today, it is to describe this market for the use of money from a rural and agricultural community perspective, and to contrast this with the nonrural view.

There are two basic views of credit availability and the operation of financial markets in rural areas. The "credit gap" view is that while U.S. financial markets are generally efficient, there is a shortage of credit in many rural areas. Holders of this view contend that there

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are many rural enterprises which would be considered more credit-worthy if only located in an urban area. These firms suffer from market failure in the sense that they borrow at disadvantageous terms, are underfinanced, or are unable to obtain financing at all. The opposing view is that private financial markets work properly; meaning that rural lending opportunities are fairly and accurately valued. If rural areas receive fewer loans relative to the level of economic activity, this reflects the shortage of credit-worthy ventures.

RURAL CREDIT MARKET IMPERFECTIONS

This paper discusses the evidence that the "credit gap" argument is correct. Although the U.S. financial markets are generally believed to work efficiently, imperfections can exist which would prevent credit from flowing freely to all areas of the economy. These restrictions may make credit less accessible to smaller enterprises and those distant from financial centers. Two such complications are information and transactions costs. On-site inspection of a commercial project, analysis of financial statements and discussions with management can be costly and time consuming. When some of these costs are fixed, smaller transactions are at a disadvantage. Furthermore, certain information and transactions costs increase with distance. This can put smaller rural enterprises and those which are more isolated, at a disadvantage in attracting capital. A related information issue is what public information, such as annual reports, is available about a venture. Lenders tend to be skeptical of the unfamiliar, whether products, technologies, processes, locations, firms or people. Thus, financial center institutions may favor an urban

lending opportunity over an identical rural loan, and be reluctant to finance new techniques and enterprises.

Government regulation can restrict financial institutions in their investment choices, and location of operation. Bank examination procedures may also restrict bank lending activities. Some regulations also increase the per-dollar costs of obtaining smaller amounts of funds. The cost of SEC requirements for stock or bond sales (i.e. registration fees, printing costs, etc.) can total several times more to small firms than to large firms relative to the funds raised.

Since rural communities usually have few financial institutions the local financial markets are less competitive in structure than those of more urban areas. Lenders in such markets are also likely to be more conservative in their lending policies (Milkove and Weisblat, 1982).

A final market complication relates to risk diversification. Some attractive lending opportunities may require such a large loan that they would be an unacceptably large portion of the loan portfolio for small financial institutions. Also, if most lending opportunities are limited to the local community, these loans are more likely to be similar in type and closely tied to the local economy. To the extent that such lending is typical of rural banks, it reduces their ability to lower risk through portfolio diversification. When local farmers have a particularly bad year a bank in an agricultural community may face concurrent high delinquency rates on loans and reduced deposits. Particularly for large loans correspondent relationships offer rural banks an opportunity to share loans and reduce these risk problems.

RURAL LENDERS

It is not possible, using currently available data, to distribute total credit used between urban and rural America. The diversity of credit sources is indicated in the following discussion of both rural and national data. For certain types of credit it seems apparent that most rural areas are fully integrated into a national market. But for other credit, linkages beyond the local rural community may often be imperfect.

Much of the data on volume of lending activity cannot be separated into its rural component. There are several important sources of credit where the aggregate data is somewhat questionable. However, the volume of lending by certain of these sources is fairly large and has clearly expanded in recent years. The following information on auto loans, installment credit (including auto loans), credit cards and retailer and supplier credit are only available at an aggregate national level. In fact, to the extent that these credit markets are truly national, there seems to be little reason to make any disaggregation.

Nonfinancial firms are gaining importance in credit markets. From the end of 1978 to the end of 1981 financing subsidiaries of the 3 major U.S. auto companies increased their share of all outstanding auto loans from 20 to 33 percent while the bank share fell from 60 to 47 percent (Rosenblum, 1983). The auto company total volume of \$41 billion, which is as large as the total of outstanding FmHA loans for all their programs, went to rural and urban communities alike.

In 1981 finance companies provided 66 percent of the \$20 billion increase in installment credit to households, up from 22 percent in 1978 (Luckett, 1982). The bank share of the increase fell from 55 to 12

percent. However, of the \$332 billion in outstanding installment loans, finance companies provided 27 percent compared to the banks' 44 percent.

The three largest credit card companies are Sears and the two bank cards, Visa and Mastercard. Each has between 23 and 26 million customers, and the outstanding loans of these 3 operations totaled \$35 billion in 1981.

Many retailers supply consumer credit through their own charge accounts. Moving backward along the distribution and manufacturing chain, businesses often are provided financing by their suppliers. While the volume of such financing has not been accurately estimated, the general feeling of experts, and the results of several localized studies, indicate that this is an important source of credit for many businesses.

Mortgage debt by source and use is illustrated in Table 1. Savings and loan associations supply the most mortgage credit, nearly 30 percent, because they are the largest home mortgage lender and home mortgages are about 75 percent of all mortgage loans. This table indicates specialization of lenders in particular types of lending rather than broad participation across credit markets. Farm lending and Farmers Home Administration (FmHA) loans can be identified as rural lending activities. Federal Land Banks were the largest source of farm real estate loans. The lending activities of FmHA were only 2 to 3 percent of loan volume in each loan type except farm loans, where they were 9 percent.

Federal Government Programs

In fiscal year 1980 nonmetro America received \$2,139 of Federal funds per capita, 15 percent less than did metro America (Reid and Whitehead, 1982). 417 dollars of these funds were in the form of loan

TABLE 1. Distribution of Mortgage Debt Holdings for the United States, December 31, 1982

Source	Homes		Commercial	
	1 to 4 units	5 + units	Nonfarm	Farm
	<u>---Percentage---</u>			
Commercial banks	16	11	34	8
Savings and loan assn's	36	24	16	-
Mutual savings banks	6	10	5	-
GNMA	10	5	-	-
FNMA	7	4	-	-
FHLMC	4	7	-	-
Federal land bank	-	-	-	44
FmHA	2	3	3	9
Life insurance companies	2	13	31	12
Individuals and others	17	23	11	27
Total	100	100	100	100
	<u>---Billion dollars---</u>			
Total	1,120	148	295	107

Source: Federal Reserve Board of Governors. Federal Reserve Bulletin, February, 1983. p. A41.

guarantees and insurance, more than 50 percent above the metro level. Crop insurance programs are the major reason for this high level of nonmetro loan and insurance activities (Bureau of the Census, 1982). In fiscal year 1982, crop insurance was 34 percent of all federal loans and

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insurance programs. FmHA's farm loans were 6 percent, housing loans were 6 percent and business and industry loans 1 percent of the total. Small Business Administration (SBA) rural loans were also probably less than 1 percent of Federally insured loans. One should be cautious when interpreting this data, since it combines the dollar value of all lending programs with the potential loss exposure for all of the insurance programs; there is no consideration of either net government cost or likely losses.

RURAL BORROWERS

While we have already looked at some borrower statistics in combination with those of lenders, this section will concentrate on rural borrowers. Much of this data was collected from those borrowers rather than from the lenders.

Small Business

Studies in rural communities of Wisconsin and Washington had consistent findings on sources of capital for small nonfarm businesses (Combs, Pulver, and Shaffer, 1983) (Stevens, Bunch, and Soth, 1981). The major source of startup capital was the owners' resources. Banks were the major single source of operating loans, and most businesses at some time borrowed from a bank. Personal loans from friends and relatives, and supplier credit were also used frequently.

Short-term credit was less expensive for rural than urban members of the National Federation of Independent Business (NFIB), from the fourth quarter of 1980 to the second quarter of 1982 (Dunkelberg, 1983). However, these NFIB members may not be representative since relative to

all rural businesses there tend to be few very small or new firms, and more firms in the Western states. Even if the firms are representative the conclusion that rural firms paid less for credit during this period should not be generalized to other time periods. There is some evidence that rural lenders respond slowly to what happens in national money markets (Weisblat, 1982). Thus, when interest rates are increasing rural borrowers may pay less than do urban, while they may pay more during times of falling interest rates.

Home Mortgages

Savings and loan associations (S and L's) are the major nonmetro home mortgage lenders, as was shown earlier at the national level. However, this may not be the case in the most rural areas. A 1975 study of branch banking states found per capita deposits of only \$70 in the S and L's of totally rural (i.e. no town over 2,500) nonmetro counties (Spurlock and Bird, 1978). S and L's in other nonmetro counties had deposits of \$1,100 per capita, while metro counties had \$2,000.

Based on special tabulations of the 1979 Annual Housing Survey, 20 percent of the mortgages on rural homes were insured or guaranteed by a Federal program. VA and FHA each insured 7 percent, and FmHA insured 6 percent. When compared to similar tabulations for 1976 we find a decline in FHA and VA activity, from 11 and 8 percent respectively to the current 7 percent (Spurlock, 1979). Only FmHA loans were typically made to lower income borrowers. The average income of VA borrowers was \$23,132, conventional borrowers \$20,920, FHA borrowers \$19,813 and FmHA borrowers \$13,651.

Comparisons of rural and urban home mortgages showed that in the early and mid 1970's terms were frequently less advantageous to the rural borrower. Rural mortgages tended to have shorter repayment periods and require larger downpayments. The Survey of Residential Finance provides data for a comprehensive rural/urban comparison of home mortgage lending activity. Data from the 1981 survey should be available soon, providing the base for a current picture of mortgage lending activity.

Farms

As shown in Table 1, Federal Land Banks are the major providers of farm real estate credit, followed in order of size by individuals, life insurance companies, FmHA, and banks. The volume of short term production credit for agriculture is nearly as large as is real estate lending. In 1981 commercial banks had the largest dollar share with 36 percent; production credit associations (PCA's) had 25 percent; individuals, 17 percent and FmHA, 15 percent. The relative importance of banks in the supply of both types of farm credit has been declining.

Governments

Despite lower bond ratings and smaller issue size, nonmetro governments faced no higher interest costs for borrowing than did metro governments in 1977 (Sullivan, RDRR-35, 1983). However, since their marketing costs were higher per dollar raised it is likely that nonmetro governments had a somewhat greater average total cost of raising funds. Commercial banks owned 43 percent of all state and local government securities in 1979, while households and nonlife insurance companies owned 24 percent each (Sullivan, RDRR-34, 1983).

RURAL BANKS

Commercial banks are the predominant financial institutions in most rural communities. Banks lend for a wide assortment of uses and perform an important intermediary function by linking the community to broader financial markets. Institution level data on the operation of banks is readily available from the Federal Deposit Insurance Corporation (FDIC) and the Federal Reserve Board of Governors (Fed). However, to look specifically at rural or nonmetro banks one is restricted to dealing with unit-banking states. That is because call report data is for the entire banking company, and is reported as if there were only one bank, at the headquarters location. But, for a focus on agricultural communities this may suit our purposes, since a large number of the most agricultural counties are located in unit-banking states (Hoppe, 1981). A comparison of maps of unit-banking states and of agricultural counties (those with 20 percent or more of their income from farming) found both to be concentrated in the midwest, from Texas at the southern extreme to North Dakota on the Canadian border. In this mid-section of the country only South Dakota has statewide branch banking. It seems reasonable to interpret the nonmetro and rural statistics for unit-banking states, shown in Table 2, as being representative of the situation in most of the Nation's agricultural counties at the end of 1981. The changing structure of commercial banking, partly via holding company activity in unit-banking states, may have an important impact on the way in which these rural banks are operated in the future.

The portfolios of banks in the totally rural nonmetro counties (those with no town of over 2,500 population,) are consistent with a

TABLE 2. Selected Portfolio Items of Banks in Unit-banking States,
December 31, 1981

Portfolio Item	Nonmetro		Metro	
	Totally Rural	All	All	Greater Metro
	---% of Assets---			
U.S. govt., securities	21	19	9	8
Loans:				
All	49	50	54	56
Real estate	12	15	14	14
Agriculture	19	12	1	-
Commercial and industrial	9	12	24	27
Financial institutions	1	1	5	6
Deposits:				
All	88	87	74	70
Time and savings	69	68	49	46
Equity capital	9	8	7	6
Federal fund purchases (net)	-6	-5	6	10
Interest expense	6.8	7.0	9.3	10.2
Income *(net)	2.0	1.7	1.3	1.1
	---% of Equity Capital---			
Income *(net)	22	20	20	17

*Operating income minus operating expense.

Source: Federal Reserve Board of Governors. Report of Condition and Report of Income. December 31, 1981, special tabulations by Economic Research Service, United States Department Agriculture.

very conservative banking operation. For instance the holding of large amounts of U.S. government securities, which are virtually risk-free, is a very conservative strategy. Totally rural banks held 21 percent of their assets in such securities, compared to 8 percent for banks in large metro

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areas. ^{1/} These rural banks also held somewhat fewer of their assets in loans.

The major difference in composition of the loan portfolio by level of rurality is the large share of agricultural loans held by nonmetro banks. When agricultural loans are added to commercial and industrial loans, the total of business loans is not greatly different across the rurality categories. If bankers and regulators have this perspective of a single business loan category, there would be a tendency for bankers in agricultural counties to make agricultural loans, thus greatly limiting their funds for making nonagricultural business loans.

Rural banks get 88 percent of their assets from deposits, particularly time and savings deposits, compared to 70 percent for greater metro banks. The equity capital position of rural banks, at 9 percent of assets, is stronger than that of more urban banks. Nonmetro banks do much less borrowing of funds, as evidenced by their negative net purchases of federal funds, a conservative method of operation. This tends to lower their cost of funds below that of metro banks, who are heavy borrowers. While the high level of time and savings deposits for rural banks, rather than low-cost demand deposits, tends to increase expenses, their average cost of funds is well below that for metro banks.

The conservative posture of rural banks does not seem to have an adverse impact on the bottom line, their level of profits. Measured as

^{1/} The greater holdings of U.S. government securities by rural banks does not seem to be a response to high interest rates in 1981. The same situation held in tabulations for 1970 and 1978.

the net return on either assets or equity capital, rural banks show higher profit rates. One obvious explanation is that less competition in rural markets allows rural banks to earn higher returns.

While nonmetro areas have more small banks and fewer large banks, as compared to metro areas, both nonmetro and metro areas have a wide distribution of banks by asset size. In fact many of the rurality differences in bank portfolios disappear when banks of similar size are compared. A strong exception is the rate of profit for small banks, those with less than \$10 million in assets. Small metro banks have very low rates of profit; while small nonmetro banks have profit levels roughly comparable to those of all other banks. But, since small banks hold less than 1 percent of all metro bank assets, they have little impact on the relative profit levels of metro and nonmetro banks.

SUMMARY AND CONCLUSIONS

The credit markets of rural and urban America, and of agricultural and nonagricultural counties, are highly integrated. However, for some uses of credit and for certain sources of credit, there is evidence of important differences in the kinds of lending institutions, and in their lending behavior, between rural and urban areas. Home mortgage credit is the most likely instance where rural areas are at a disadvantage. However, the strongest evidence for that situation is now quite old. The extent to which this rural disadvantage persists should be shown by analyses of the 1981 Survey of Residential Finance, which will be available soon. It is also felt by some that small rural businesses have problems borrowing. In part this view may be supported by the fact that

most small business borrowing from financial institutions seems to be from banks; and banks in agricultural areas many agricultural loans and relatively few loans to nonagricultural businesses.

Rural and urban credit markets differ in terms of participants and structural relationships; however it is not clear whether either has an advantage over the other. Certainly the evidence presented in this paper does not settle the question of whether a "credit gap" exists for rural areas. However, there are special characteristics of rural credit markets which result from the small scale and remote nature of rural communities. The use of aggregate statistics for nonmetro, or rural communities can hide many real problems with credit access which befall a subset of these communities. Perhaps the smallest, most remote and most agricultural rural communities do have such a problem; but even this has not been demonstrated convincingly.

Despite their operating characteristics, which could be characterized as conservative, rural banks have been more profitable than urban banks through 1981. Their profitability and a relatively strong equity position should work to the advantage of rural banks during current and future periods of rapid financial market changes.

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TRENDS AFFECTING AND EXHIBITED BY COMMERCIAL BANKS
IN AGRICULTURAL AREAS

Emanuel Melichar*

Of the trends affecting commercial banks in agricultural areas, the most important is the trend in the prosperity of the primary industry in these areas--agriculture. Agricultural income affects the growth of deposits at these banks as well as the demand for and condition of their loans, and thus is a primary influence on bank profits and capital growth. Conversely, net income of indebted farmers has been greatly affected by changes in interest rates on farm loans, including the new cyclicity in loan rates of rural banks that has resulted from changed regulations governing interest rates paid on bank deposits. Therefore I find it essential to consider agricultural and banking experience jointly, and to discuss longer-term trends as well as current conditions.

FALSE IMPRESSIONS OF TRENDS AND CONDITIONS

Unfortunately, many persons have acquired false impressions of several key trends and relationships that affect the progress and viability of banks in agricultural areas. Here is a typical set of such impressions of the farm sector:

Except for short-lived bulges in the 1970s, real farm income has shown little growth, and furthermore has currently sunk to Depression levels.

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Over time, net farm income has shrunk to a smaller fraction of gross income, which has increased its volatility and thus added to risk in farm lending. The price of farm land has for years risen in the face of stagnant net income, producing low rate of return to farm assets and posing the threat of eventual collapse of a speculative spiral.

Given these impressions of farm sector profits and values, what does one think about banks whose assets consist in large part of loans to such an industry and its suppliers? The erroneous conclusion is reinforced by additional prevalent but false impressions of rural bank experience:

With farm profits generally low, bank deposits of farmers have grown relatively slowly, which is confirmed by USDA estimates of these deposits. Thus farmers' liquid assets have decreased relative to their total assets, adding further to risk in farm lending. And, with slow growth in farmers' deposits holding down growth of rural banks, the size of loans that these banks can make has not kept up with growth of individual farm loan demands. In recent years, the loss of deposits to money-market mutual funds has worsened this situation, especially since small banks cannot raise funds in money markets to supplement their local deposit growth.

What does one conclude about the condition and viability of banks operating in such a dismal deposit and loan environment? Fortunately, in spite of the familiarity of many of the foregoing statements, they are false.

FARM PROFIT TRENDS

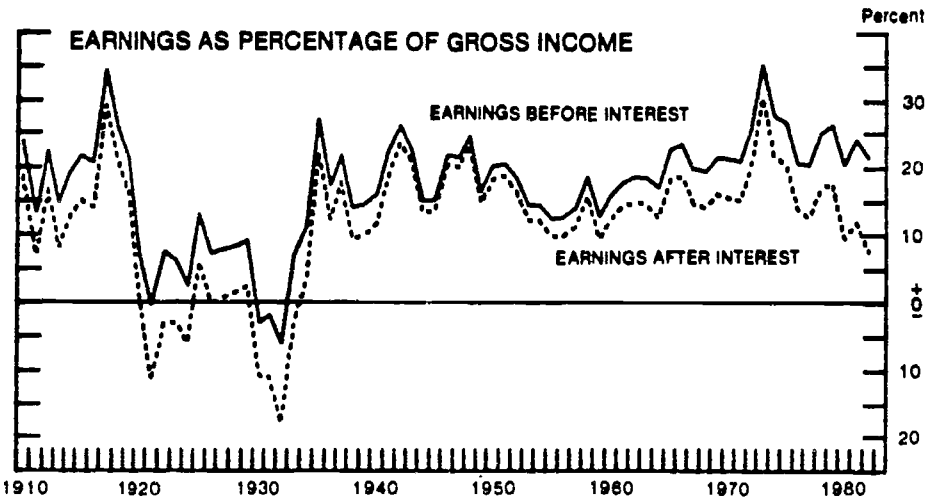
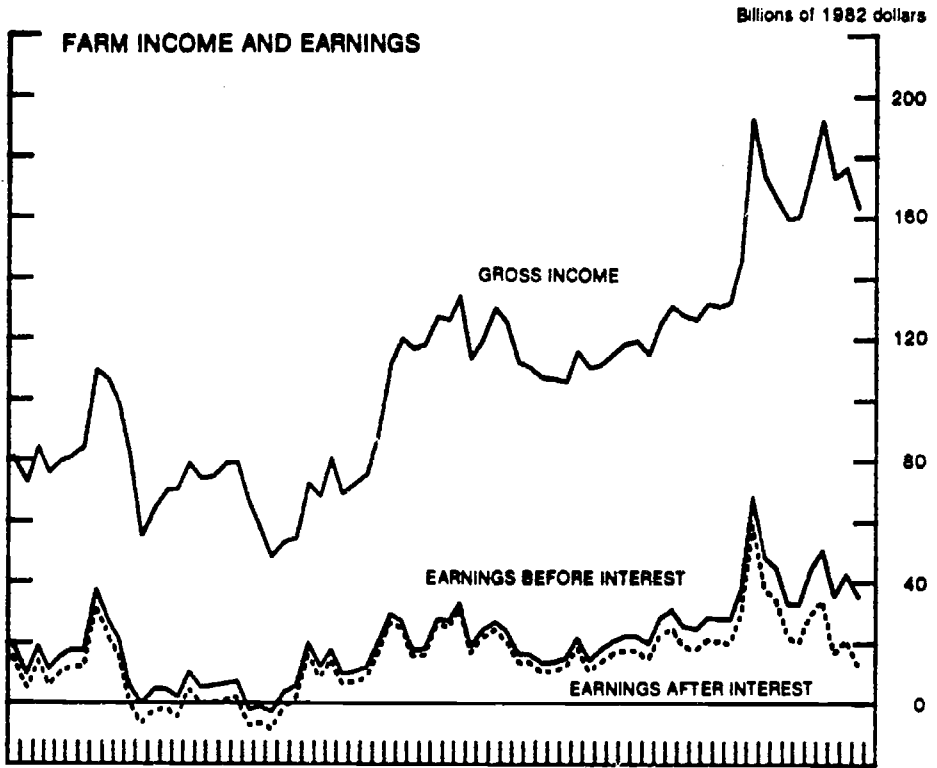
To the thoughtful rural observer, the foregoing impressions are at odds with the new bank buildings prominent in rural towns, as well as with the excellent growth and profit records reported by these banks. But how did rural banks achieve such results in the face of the poor financial experience

of farming--the primary industry they serve? The answer is that they did not have to do so. Agriculture also has shown excellent profit growth over time. Indeed, the financial record posted by agricultural banks surely reflects that posted by agriculture, plus a fillip from recent interest rate relationships. Only very recently has that financial record begun to be adversely affected by the severe financial problems of heavily indebted farmers.

In much aggregative analysis in which the key factor is the return to farm capital, many writers look instead at operators' net farm income, which includes returns to operators' labor and management work as well to their capital investment. But over time, capital has been substituted for labor in farm production, and the amount of operators' labor has decreased drastically. Consequently, even though real net income has not grown over time, the real return to capital--the "earnings before interest" plotted in the top panel of Chart 1--has posted a strong uptrend. Note that the farm programs in place during the aftermath of the farm booms of the 1940s and 1970s helped to prevent a repetition of the collapse of earnings that followed the boom of World War I, which would probably again have been the market's way of forcing farm production to adjust to lower post-boom demand for farm products. Also note, in the lower panel, that farm profit margins--net earnings before interest payments as a percentage of gross income--have not declined over time.

The strong long-term uptrend in real earnings goes a long way toward explaining the relatively low rate of return to farm assets, shown in the lower panel of Chart 2. That kind of earnings record produces expectations that it will continue, causing the assets to sell at a relatively high price/earnings ratio as buyers pay in advance for the expected earnings growth. In the top panel of Chart 2, earnings and assets are plotted with the scale for assets

Chart 1

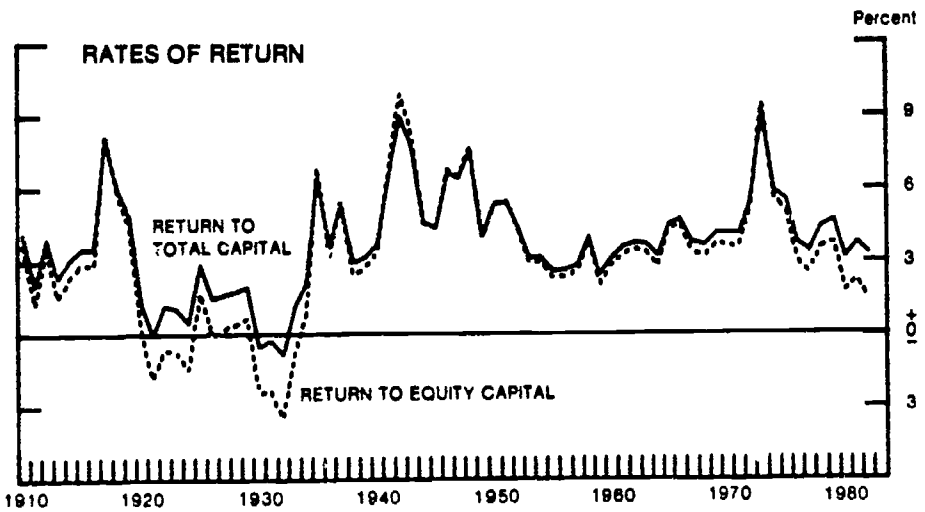
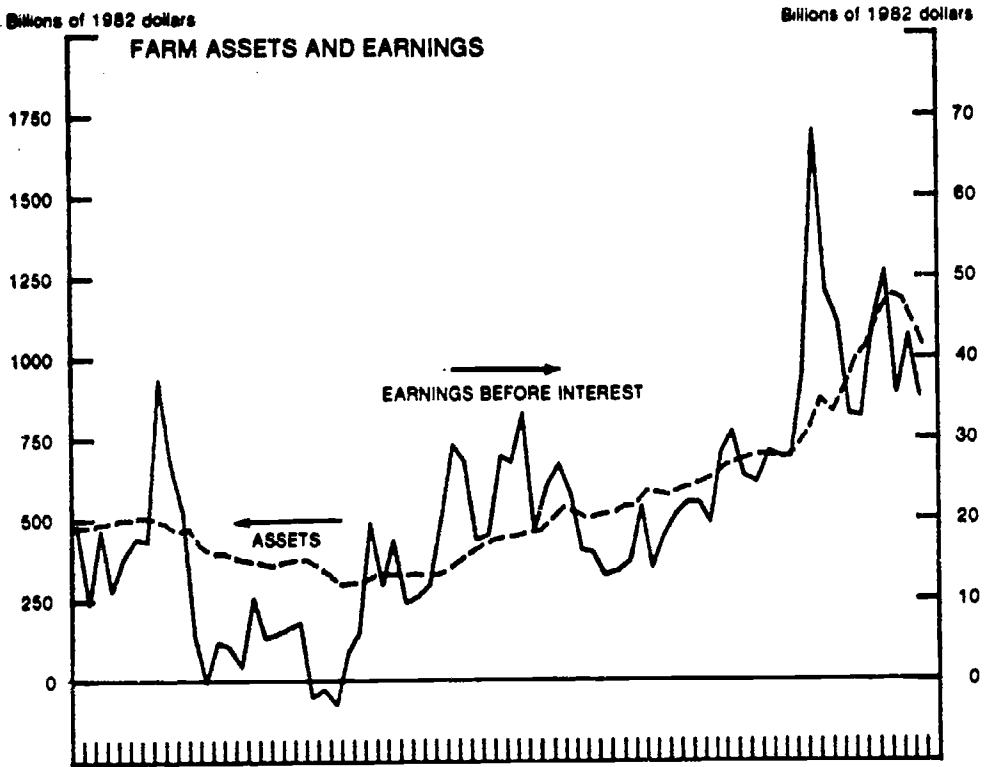


set at 1/25 of the scale for earnings, so that, if the lines are at the same level, it means that assets are selling at 25 times earnings--which puts the rate of return at 4 percent. These have been the approximate long-term average values.

Chart 2 shows that asset values, dominated by real estate prices, tend to follow the trend in earnings. During the 25-year period preceding 1980, annual increases in real earnings and in real asset values each averaged over 4 percent. When one adds, to this return in the form of a real capital gain, the earnings return which also averaged 4 percent, farm assets are seen to have produced a total return of about 8 percent. If this return was competitive with other investments during this period and if expectations generally held that the prevailing growth of real earnings would continue, then farm assets were "correctly" priced rather than overvalued. But with roughly half of asset values pegged on such expectations of earnings growth (to produce the same total return of 8 percent in the absence of earnings growth, farm assets would sell at only 12.5 times earnings), buyers of farm land and their lenders were staking much on the achievement of the future earnings growth for which the buyers were making advance payment.

The historical record in Chart 2 also illustrates the key role that expectations of the future trend of earnings play in the reaction of asset prices to ongoing changes in earnings. During the farm earnings boom of World War II and the second boom that soon followed during Marshall Plan exports to Europe, an eventual postwar collapse in earnings was widely expected. Consequently, the rise in asset prices was relatively moderate. In contrast, during the mid- and late 1970s there was widespread optimism regarding future growth in farm earnings because of fundamentally favorable worldwide supply-demand relationships for farm products, and farm asset prices were bid up to

Chart 2



a level that can be viewed as fully reflecting expectations that earnings would continue rising along the relatively steep 1954-79 trend.

FARM FINANCIAL STRESS

Although the return to total capital has been fairly well supported, its current level of 3.3 percent is far below interest rates being paid by indebted farmers. As rising interest rates opened this gap in recent years, the average return to equity was depressed as indicated in the lower panel of Chart 2. In this respect the present period differs from the last post-boom experience, in the 1950s, when interest rates were not much higher than the return to capital. Now indebted farmers are generally experiencing much greater financial strain than those without debt, while in earlier decades farmers using credit had usually made the faster financial progress.

Table 1 illustrates the present importance of a farmer's relative debt level on his rate of profit or loss after payment of interest, and it also shows the difference made by the rate of interest being paid. The table assumes a farm with the sector-average return to total capital, 3.3 percent, which is also the return to equity if the farmer has no debt. At the sector-average debt/asset ratio of 20 percent, and paying the sector-average interest rate of 11 percent on outstanding debt, the return to equity is 1.4 percent. At debt/asset ratios above 40 percent, increasingly stressful losses are sustained--moderate if debt consists mainly of old long-term fixed-rate loans at an interest rate such as 7 percent, more severe if debt is composed of short-term bank loans at last year's average loan rate of 17 percent. And because similar tables for 1980 and 1981 would look much the same as this one for 1982, highly leveraged operators have probably sustained cumulative losses.

Agricultural banks and other farm lenders are greatly affected by the distribution of farmers and farm debt among the various debt positions.

Table 1. Effect of alternative debt leverage and cost on profitability of a farm in 1982

Debt/asset ratio (percent)	Interest rate on outstanding debt (percent)		
	7	11	17
	<u>Return to equity capital in 1982 (percent)</u>		
0.....	3.3	3.3	3.3
10.....	2.9	2.4	1.8
20.....	2.4	1.4	.0
30.....	1.7	.0	-2.6
40.....	.8	-1.8	-5.8
50.....	-.4	-4.4	-10.4
60.....	-2.2	-8.2	-17.2
70.....	-5.3	-14.7	-28.7
80.....	-11.5	-27.5	-51.5
90.....	-30.0	-66.0	-120.0

This farm had the farm sector average rate of return to total capital (before interest payments on any borrowed capital), 3.3 percent.

If, for example, it also had the farm sector average debt/asset ratio of 20 percent and the average interest rate of 11 percent on that debt, its return to equity capital was 1.4 percent (row 3, column 2).

The top panel of Table 2 shows such information derived from the recently available 1979 Farm Finance Survey, adjusted and updated to be indicative of current conditions. These estimates indicate that a majority of farm operators have relatively little or no debt. The last column shows that only 18 percent of all operators now have debt/asset ratios over 40 percent--the relative level of indebtedness that the preceding table indicated to be associated with unprofitable operations.

For banks and other lenders, however, the amount of debt owed by farmers experiencing financial stress is more important than farm numbers, and from this perspective the picture looks much different. The middle panel of Table 2 indicates that about five-eighths of the total debt is owed by operators with debt/asset ratios over 40 percent, and thus lenders see much of their money in the hands of operators who are experiencing financial difficulties. Viewed in another way, an estimated 84 percent of total operator debt is owed by the 30 percent of operators with debt/asset ratios that are above the all-operator average of 23.5 percent. Thus the bulk of farm debt is owed by a sizable minority of operators whose relative debt is large enough that, at current interest rates, scheduled debt service may easily exceed recent earnings before interest.

EFFECT OF FARM PROFITS ON RURAL BANK DEPOSITS

Given both the strong longer-term growth of real farm earnings and the maintenance of earnings of the less-indebted majority of farmers during recent years, it is logical that agricultural banks have experienced substantial deposit growth over time as well as recently. Table 3 shows the deposit growth record each year at banks grouped into 18 classes based on the relative importance of farm lending at the bank. Nonagricultural banks are in the top few lines, and as one goes down each column, the banks are progres-

Table 2. Estimated distribution of farms by relative debt level within farm-size groups, January 1, 1983

Size of farm (annual sales, thousands of dollars)	Relative debt level of farm operator (debt/asset ratio, percent)					Percentage distribution in classes with debt/asset ratio over 40 percent, by farm-size groups
	Total	0-10	11-40	41-70	71 and over	
	<u>Percentage distribution of operators</u>					<u>Operators</u>
All farm operators.....	100	58	24	11	7	100
Large farms (200 and over)....	100	20	36	25	19	10
Medium farms (40 to 199).....	100	34	35	18	13	39
Small farms (10 to 39).....	100	55	26	11	8	23
Very small farms (under 10)...	100	73	16	7	4	29
	<u>Percentage distribution of debt</u>					<u>Debt</u>
All farm operators.....	100	5	32	32	31	100
Large farms (200 and over)....	100	3	26	33	38	40
Medium farms (40 to 199).....	100	5	34	33	29	52
Small farms (10 to 39).....	100	7	37	29	26	10
Very small farms (under 10)...	100	8	37	32	23	8
	<u>Percentage distribution of assets</u>					<u>Assets</u>
All farm operators.....	100	47	31	14	8	100
Large farms (200 and over)....	100	26	38	22	14	38
Medium farms (40 to 199).....	100	38	37	16	8	43
Small farms (10 to 39).....	100	61	26	8	4	10
Very small farms (under 10)...	100	73	18	6	3	9

Data from the Census Bureau's 1979 Farm Finance Survey, as tabulated by ERS, USDA, and adjusted and updated by the author for probable underreporting and to reflect changes during 1980-82, including increases in total debt and assets, more indebted operators, and liquidation by some highly indebted operators.

Table 3. Percentage change in total deposits, by farm loan ratio classes
(Banks with total assets under \$500 million)

Farm loans as percentage of total loans at bank	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	Addenda: December 1982	
														Number of banks	Average deposits, millions of dollars
Under 1.....	11	15	16	9	6	9	11	14	9	10	9	9	12	3,956	66
1 to 4.....	11	14	15	10	7	9	11	13	9	9	8	9	10	1,959	58
5 to 9.....	10	14	15	11	7	9	11	12	10	10	9	9	9	1,306	43
10 to 14.....	10	13	16	12	8	10	12	12	9	10	8	9	9	886	38
15 to 19.....	10	14	15	13	8	11	12	12	9	9	9	10	9	816	34
20 to 24.....	10	14	15	13	8	10	11	12	9	10	9	10	8	671	29
25 to 29.....	9	14	15	14	9	11	12	11	9	12	9	10	9	581	29
30 to 34.....	9	13	16	15	10	12	11	12	10	10	10	9	8	523	27
35 to 39.....	9	14	15	15	9	12	12	11	8	11	10	10	8	479	23
40 to 44.....	10	12	16	16	9	10	11	11	10	10	10	10	9	436	22
45 to 49.....	8	11	16	16	9	12	10	11	9	10	10	10	9	347	21
50 to 54.....	8	12	16	17	9	11	10	10	9	11	10	10	9	346	20
55 to 59.....	9	12	16	18	10	11	9	10	11	10	10	10	9	311	18
60 to 64.....	8	12	16	18	8	11	8	10	11	11	12	10	9	282	18
65 to 69.....	8	12	16	19	10	11	8	9	10	10	9	10	9	271	15
70 to 74.....	8	12	16	21	10	11	8	10	12	10	10	10	10	192	15
75 to 79.....	9	10	16	20	8	10	8	8	11	10	11	10	9	162	13
80 and over...	8	11	18	21	8	11	6	9	11	9	10	10	10	158	12
All banks.....	10	14	15	11	7	9	11	13	9	10	9	9	10	13,682	44

Note: In this and subsequent tables, banks in each year are classified according to their farm loan ratio at the end of that year.

sively more dependent on the farm economy. Note that deposit growth at agricultural banks was terrific during the super farm income year 1973, and was lower but still positive during a poorer income year such as 1976. Over the past five years, deposit growth at agricultural banks has been close to 10 percent each year, or about the same as at other small banks. These gains contrast sharply with the popular impression that, because such banks were "losing deposits to money-market funds," their total deposits were falling.

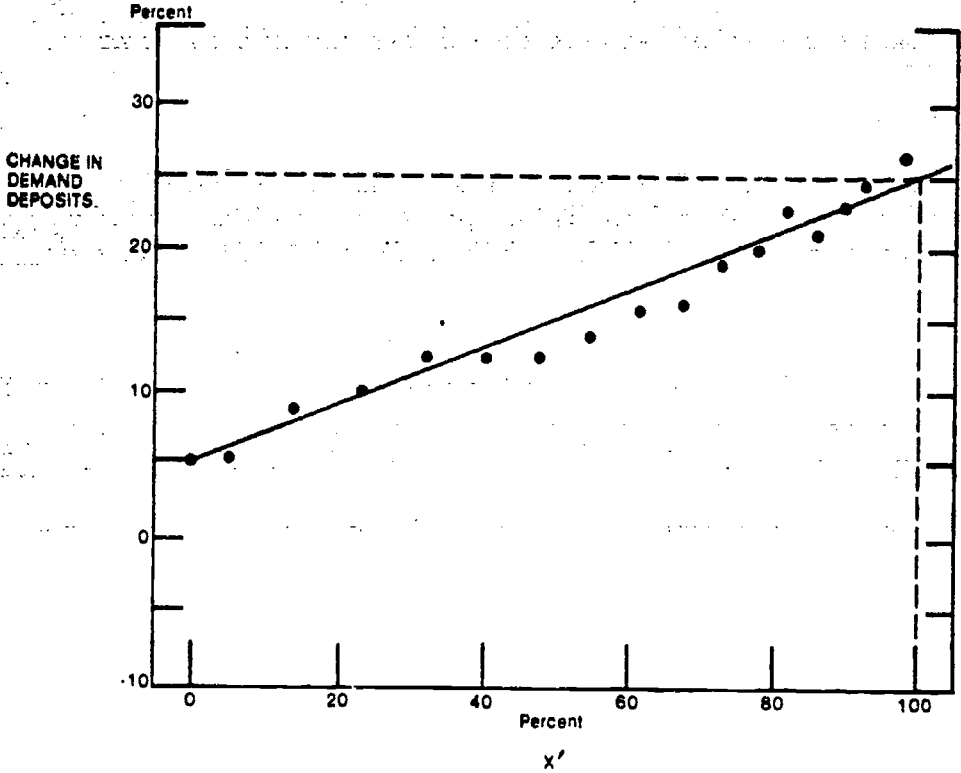
Current USDA estimates of annual growth in bank deposits of farmers are much lower than the growth of deposits at agricultural banks at which farmers are the primary clientele. Chart 3 illustrates how I have used data such as that in Table 3 to make improved estimates of annual changes in farmers' deposits. On Chart 3, a simple regression estimate indicates that if 100 percent of a bank's customers were farmers, the bank's demand deposits would have increased by 25 percent during 1973. In contrast, current USDA series show a increase of 4 percent in farmers' demand deposits that year. Table 4 shows a 20-year summary of the new and old estimates. During 1963-1982, bank deposits of farmers are estimated to have increased by 497 percent rather than by the 118 percent of the old USDA estimate. At the beginning of this year, farmers are estimated to have owned \$37 billion in bank deposits, rather than \$15 billion. Analysts who have noted the apparent pronounced decline over time in liquid asset holdings of farmers have been misled; bank deposits have remained at about 3.5 percent of total farm assets since 1960. The farming sector is correspondingly more resilient financially than these analysts have supposed.

EFFECT OF FARM FINANCIAL STRESS ON BANK LOAN LOSSES

During the 1970s, loan losses reported by agricultural banks (banks with a loan ratio of 25 percent or more) clearly reflected the favorable

Chart 3

Average Experience at 18 Classes of Small Banks
Demand Deposits, 1973



where $x' = x + x(1 - x)$
 and $x = \text{Farm loans} / \text{Total loans at bank}$

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Table 4. Estimated percentage changes in bank deposits of farmers

Year or period	Type of deposit				Bank deposits, USDA Balance Sheet series
	Demand	Savings	Time	Total	
1963.....	1	5	22	5	6
1964.....	2	8	19	6	4
1965.....	6	8	17	9	5
1966.....	1	2	15	5	4
1967.....	2	2	19	7	6
1968.....	6	0	23	11	6
1969.....	6	0	19	10	4
1970.....	-1	8	14	6	5
1971.....	6	13	16	10	6
1972.....	18	24	15	17	7
1973.....	25	26	16	21	7
1974.....	-2	24	15	8	-6
1975.....	4	27	14	11	5
1976.....	-2	25	11	7	3
1977.....	4	15	9	8	3
1978.....	12	12	9	11	3
1979.....	5	-11	21	9	2
1980.....	-4	-6	24	9	2
1981.....	8	-21	18	10	4
1982p.....	7	12	9	9	3
1963-67.....	13	26	133	36	28
1968-72.....	38	51	122	66	32
1973-77.....	30	186	84	68	12
1978-82.....	31	-17	108	58	15
1963-82.....	165	352	1884	497	118
Addendum: Amount as of December 1982, billions of dollars.....	11.5	3.3	22.2	37.0	15.3

Note: ATS and NOW accounts are included in demand deposits.

financial results of most farm borrowers and farm-related rural businesses. As shown in Table 5, loan losses averaged 0.2 percent of outstanding loan volume at agricultural banks during that decade, well below the average at other smaller banks. In addition, loan losses at agricultural banks rose little during the farm income downturns of 1970-71 and 1976-77 or the general business recession of 1974-75, whereas loan losses at nonagricultural banks rose substantially during the latter period. This favorable farm loan record, however, must be qualified to the extent that an unknown number of bank borrowers with financial problems, some of which might eventually have led to loan losses for the banks, were refinanced by the Farmers Home Administration through disaster loans (made mostly to farmers with crop losses due to drought), the Emergency Livestock Credit Act of 1974, and economic emergency loans available in 1978-81.

The loan-loss picture at agricultural banks changed significantly during 1980-82 as increasing numbers of farm borrowers experienced financial stress and farm-related rural businesses were hit by both the farm income downturn and two general business recessions. By 1982, loan losses at these banks reached 0.7 percent of outstanding loan volume, a slightly higher level than at nonagricultural banks. As in previous years, however, the distribution of banks by loan losses was highly skewed, with most banks reporting relatively low losses but the average raised by a few banks with exceptionally high losses. Thus in 1982 one-fourth of agricultural banks had no or very low loan losses--under 0.1 percent--and two-thirds of the banks were under the average of 0.7 percent. However, 5 percent of agricultural banks reported losses greater than 2.5 percent of outstanding loans--the level at which losses would begin to exceed pre-loss net income at a typical agricultural bank. In contrast, during the 1970s the percentage of agricultural banks reporting that high a level of loan losses was consistently under 1 percent.

Table 5. Loan losses charged to reserve, less recoveries credited, as a percentage of total loans.
(Banks with total assets under \$500 million)

Farm loans as percentage of total loans at bank	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Under 1.....	.4	.3	.2	.3	.4	.6	.6	.4	.3	.3	.4	.4	.6
1 to 4.....	.3	.3	.2	.2	.3	.4	.4	.3	.3	.3	.4	.4	.6
5 to 9.....	.3	.2	.2	.2	.3	.4	.3	.3	.3	.2	.4	.4	.6
10 to 14.....	.3	.3	.2	.2	.3	.3	.3	.2	.3	.3	.4	.4	.6
15 to 19.....	.2	.2	.2	.2	.3	.3	.3	.2	.2	.2	.3	.4	.7
20 to 24.....	.2	.3	.2	.2	.3	.3	.2	.2	.2	.3	.3	.4	.6
25 to 29.....	.3	.2	.2	.2	.3	.3	.2	.2	.2	.3	.3	.4	.7
30 to 34.....	.2	.2	.2	.2	.3	.2	.3	.2	.2	.2	.3	.4	.6
35 to 39.....	.2	.3	.2	.2	.2	.2	.2	.2	.2	.2	.3	.4	.6
40 to 44.....	.3	.2	.1	.2	.2	.2	.2	.2	.2	.2	.3	.4	.8
45 to 49.....	.3	.2	.2	.1	.3	.2	.2	.2	.2	.2	.3	.4	.6
50 to 54.....	.3	.3	.1	.1	.2	.2	.2	.2	.2	.1	.3	.3	.8
55 to 59.....	.2	.2	.1	.1	.2	.2	.2	.2	.2	.2	.4	.4	.8
60 to 64.....	.2	.2	.1	.1	.2	.2	.2	.2	.1	.1	.3	.5	.6
65 to 69.....	.3	.2	.1	.2	.2	.2	.2	.2	.2	.1	.3	.4	.7
70 to 74.....	.2	.1	.1	.0	.2	.1	.1	.2	.1	.1	.3	.4	.7
75 to 79.....	.1	.2	.1	.1	.2	.2	.2	.2	.1	.1	.2	.3	.9
80 and over...	.2	.2	.1	.1	.2	.1	.2	.2	.2	.1	.3	.4	.7
All banks.....	.3	.3	.2	.2	.4	.4	.4	.3	.3	.3	.4	.4	.6
Under 25.....	.3	.3	.2	.2	.4	.5	.4	.3	.3	.3	.4	.4	.6
25 and over...	.2	.2	.1	.2	.2	.2	.2	.2	.2	.2	.3	.4	.7
Addendum: Provision for loan losses as a percentage of total loans													
All banks.....	.3	.3	.2	.3	.4	.5	.5	.4	.4	.4	.5	.5	.7
Under 25.....	.3	.3	.2	.3	.4	.5	.5	.4	.4	.4	.5	.5	.7
25 and over...	.3	.2	.2	.2	.3	.2	.3	.3	.3	.3	.4	.5	.8

PROFIT EXPERIENCE OF RURAL BANKS

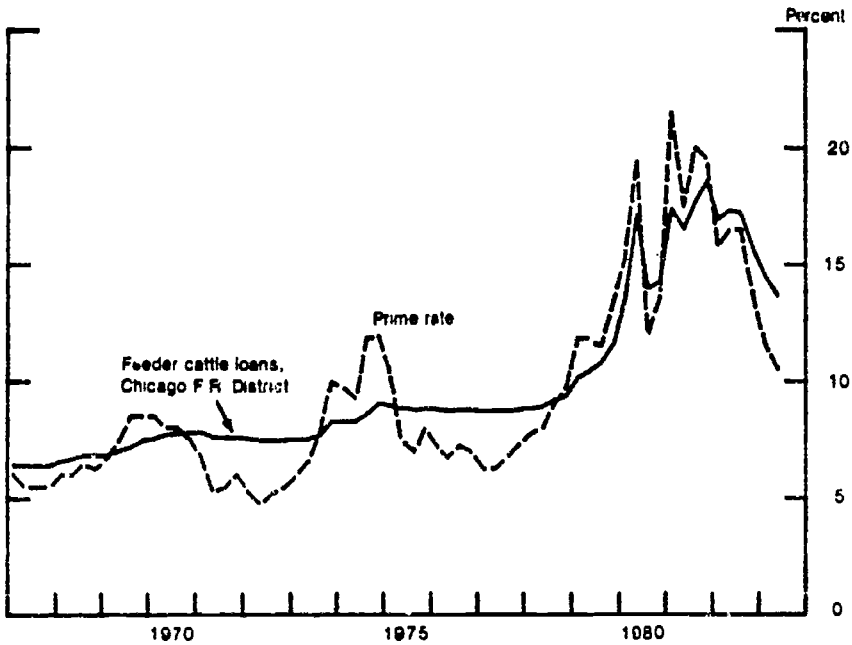
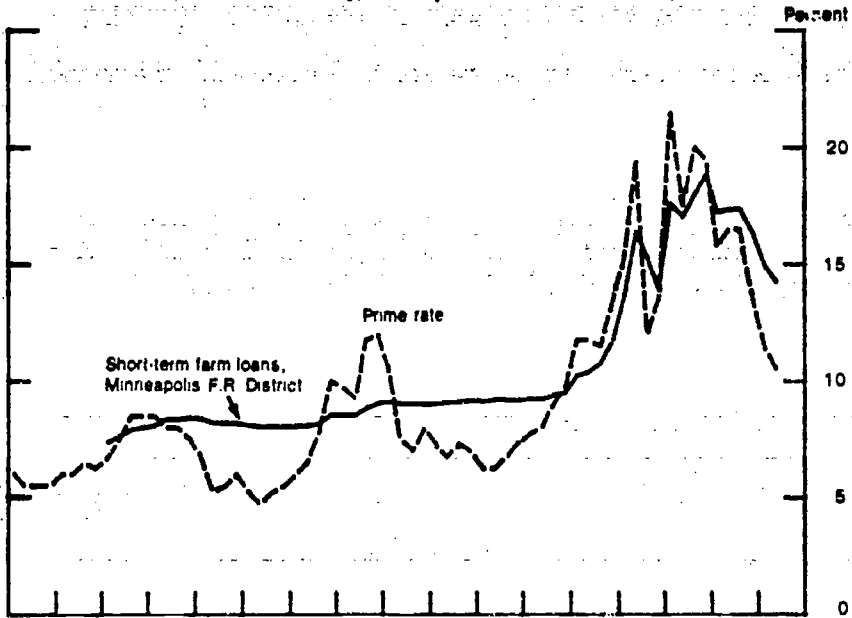
Loan losses can thus significantly affect bank profits, and, as earlier discussion of farm borrowers indicated, some loan losses can be traced to the sharp rise in interest rates to which borrowers were suddenly subjected. Except for this indirect adverse effect, however, rising and relatively high interest rates have noticeably enhanced profits of agricultural banks in 1973-74 and again in 1979-82.

Chart 4 is useful in showing how the level and behavior of interest rates at rural banks have either resembled or differed from the prime rate at large banks, which closely follows money-market rates. From data shown for the period before 1979, it is clear that the farm loan rates charged by rural banks are set with reference to the banks' internal cost of funds plus a mark-up, rather than with reference to what such funds could earn at the moment if invested in money-market securities. Prior to 1979, the internal cost of funds at rural banks was relatively stable, with perhaps a moderate upward trend as time deposits represented a gradually increasing share of total deposits. Farm loan rates were thus also relatively stable, while the national prime and money-market rates fluctuated considerably.

Interest rate patterns for depositors and borrowers at rural banks changed drastically after 1978, when banks were allowed to accept smaller and shorter-term deposits bearing market-related rates, and competitive factors led them to do so. As market rates of interest rose during 1979-81, rural depositors shifted a large proportion of their deposits into the newly authorized six-month money-market certificates, which by mid-1981 constituted about 30 percent of total resources of agricultural banks. In addition, large certificates of deposit, also bearing money-market rates, represented another 7 percent of total resources, and banks were also paying market-related rates

Chart 4

Average Farm Loan Interest Rates at Rural Banks Compared with Prime Rate
 Quarterly, First Day of Quarter



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on another category of deposits not separately itemized on their reports, the 30-month small-saver certificates. Thus, as a large proportion of the internal funds of rural banks rather quickly came to bear market-related yields, farm and other loan rates at these banks necessarily began to track market rates, as shown by Chart 4.

Although the set of interest-rate relationships faced by rural banks was much different after 1978, Table 6 indicates that their profits were again enhanced during this period of relatively high money-market rates, as they had been earlier during 1973-74. In addition, average relative profits of agricultural banks were distinctly higher than those of other smaller banks in each year after 1972, when the farm boom got under way, after being roughly equal during 1970-72. Average return to equity reached 16 percent in 1974 and again in 1979-80, and the decline to 14 percent in 1982 primarily reflected increased provision for larger loan losses.

In any given year, those agricultural banks reporting relatively low or negative profits have almost always experienced extraordinarily high loan losses. In 1982, for instance, 3 percent of agricultural banks reported a loss, and at these banks the provision made for loan losses averaged 4.2 percent of outstanding loan volume. The proportion of banks reporting a loss was up from an average of 1 percent during the 1970s. Nevertheless, 77 percent of agricultural banks in 1982 achieved a return of 10 percent or more on equity, which, while down from 91 percent of these banks in 1979, was a generally enviable financial result during a year of farm and business recession.

CAPITAL CONDITION AND PROGRESS OF RURAL BANKS

A considerable portion of the profits of agricultural banks--about two-thirds in 1982--are added to bank capital rather than paid out as stockholder dividends. Thus growth of these banks and their lending capability

Table 6. Net income as a percentage of equity
(Banks with total assets under \$500 million)

Farm loans as percentage of total loans at bank	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Under 1.....	13	12	12	12	11	10	10	11	12	14	14	13	12
1 to 4.....	13	13	13	13	12	12	12	13	14	14	14	12	12
5 to 9.....	13	13	13	14	13	12	13	13	14	15	14	13	12
10 to 14.....	13	13	13	14	14	13	13	14	14	14	14	12	11
15 to 19.....	13	14	14	15	15	13	14	14	14	15	14	14	12
20 to 24.....	13	12	13	15	15	13	14	14	14	15	15	14	13
25 to 29.....	13	14	13	15	15	14	14	14	14	15	15	14	13
30 to 34.....	14	13	13	15	15	14	14	14	14	15	15	14	14
35 to 39.....	13	13	13	16	16	14	14	14	14	16	16	15	13
40 to 44.....	13	13	13	15	16	15	15	14	14	15	16	15	14
45 to 49.....	12	13	13	15	16	15	15	14	14	16	16	16	16
50 to 54.....	13	12	12	15	16	14	14	14	14	16	16	16	14
55 to 59.....	13	12	12	16	16	15	15	14	14	16	16	16	15
60 to 64.....	12	13	12	16	16	14	15	13	13	16	17	17	15
65 to 69.....	12	12	12	15	16	14	15	13	14	16	18	17	15
70 to 74.....	13	12	11	15	16	14	14	14	13	16	18	18	17
75 to 79.....	14	12	12	14	16	15	15	13	13	15	18	18	15
80 and over...	12	12	11	15	16	14	14	14	13	17	19	18	16
All banks.....	13	13	13	13	13	11	12	12	13	14	14	13	12
Under 25.....	13	13	13	13	12	11	11	12	13	14	14	13	12
25 and over...	13	13	13	15	16	14	14	14	14	16	16	15	14
Addendum: Net income as a percentage of total assets													
All banks.....	.9	.9	.9	.9	.9	.8	.8	.9	.9	1.0	1.1	1.0	.9
Under 25.....	.9	.9	.8	.9	.8	.8	.8	.8	.9	1.0	1.0	1.0	.9
25 and over...	1.0	1.0	.9	1.0	1.1	1.0	1.1	1.1	1.1	1.2	1.3	1.3	1.2

is supported without need for continual sale of new stock. Over the last nine years, agricultural banks increased their equity faster than their deposits and assets were growing, and thus strengthened their relative capital position as shown in Table 7. By the end of 1982, capital and surplus at agricultural banks averaged 8.9 percent of assets, up from a cyclical low of 7.4 percent in 1973.

Table 8 summarizes the rapid growth of the equity of agricultural and other smaller banks over longer periods as well as recently. In this table, the number of banks was held constant during each period for which a percentage change was calculated, and so capital and surplus per bank also changed by the same percentage. Thus the table indicates that over the last 20 years the average percentage increase in capital and surplus of agricultural banks fell only slightly short of the increase of 591 percent in average assets of all U.S. farms. Furthermore, when one takes into account that the increase in average size of farms substantially overstates the growth of the typical farm--because smaller farms have been more prone to disappear from the count of farms, by redefinition as well as in reality--it appears likely that increases in the size of loans banks can make have kept up with increases in the average size of loans demanded by farmers, even after also allowing for a rise in typical farm debt/asset ratios. In addition, the ability of national banks to make larger loans was recently enhanced by legislation which raised the maximum amount of loans to one borrower from 10 to 15 percent of capital and surplus (a special higher limit of 25 percent continues to apply to loans secured by livestock).

Should local deposit growth be at times inadequate to meet loan demand, small banks now for the first time find themselves with an effective mechanism for obtaining funds in the national money market. When Federal

Table 7. Capital and surplus as a percentage of total assets
(Banks with total assets under \$500 million)

Farm loans as percentage of total loans at bank	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Under 1.....	7.6	7.4	7.2	7.4	7.7	7.7	7.9	7.7	7.7	7.9	8.0	8.0	7.8
1 to 4.....	7.5	7.4	7.2	7.4	7.6	7.6	7.9	7.8	7.9	7.9	8.1	8.0	7.9
5 to 9.....	7.6	7.4	7.2	7.3	7.6	7.6	8.0	7.8	7.9	8.0	8.2	8.2	8.3
10 to 14.....	7.5	7.5	7.2	7.4	7.5	7.6	7.9	7.8	8.1	8.3	8.4	8.4	8.4
15 to 19.....	7.5	7.3	7.2	7.3	7.6	7.6	7.9	8.0	8.0	8.3	8.5	8.4	8.4
20 to 24.....	7.7	7.6	7.3	7.3	7.6	7.7	8.2	8.1	8.3	8.3	8.6	8.5	8.4
25 to 29.....	7.7	7.5	7.3	7.4	7.6	7.5	7.8	7.9	8.1	8.4	8.5	8.5	8.5
30 to 34.....	7.8	7.6	7.3	7.2	7.6	7.6	8.0	8.2	8.3	8.3	8.7	8.6	8.7
35 to 39.....	7.8	7.7	7.3	7.3	7.6	7.8	8.1	8.0	8.3	8.5	8.5	8.8	8.7
40 to 44.....	8.0	7.8	7.5	7.4	7.7	7.7	8.1	8.3	8.3	8.5	8.7	8.6	8.8
45 to 49.....	8.1	7.9	7.5	7.4	7.7	7.7	8.1	8.2	8.4	8.6	8.9	8.8	9.0
50 to 54.....	8.3	7.9	7.6	7.2	7.7	7.7	8.1	8.3	8.5	8.7	8.8	9.1	9.2
55 to 59.....	8.1	8.0	7.7	7.2	7.7	7.6	8.3	8.4	8.5	8.8	9.1	9.1	9.3
60 to 64.....	8.2	8.1	7.7	7.5	7.8	7.8	8.2	8.7	8.6	8.8	9.1	9.2	9.3
65 to 69.....	8.5	8.3	7.9	7.5	7.6	7.9	8.4	8.7	8.7	9.0	9.1	9.3	9.3
70 to 74.....	8.8	8.5	8.1	7.7	8.0	8.2	8.7	8.7	8.8	8.8	9.6	9.4	9.7
75 to 79.....	7.8	8.9	8.4	7.5	8.1	8.0	8.6	9.2	9.0	9.6	9.7	10.0	10.1
80 and over...	9.6	9.3	8.5	8.1	8.6	8.6	9.4	9.6	9.6	9.8	10.0	10.5	10.6
All banks.....	7.6	7.5	7.3	7.4	7.6	7.6	8.0	7.8	7.9	8.0	8.2	8.2	8.1
Under 25.....	7.5	7.4	7.2	7.3	7.5	7.6	7.9	7.8	7.8	8.0	8.1	8.1	8.0
25 and over...	8.0	7.9	7.5	7.4	7.7	7.7	8.1	8.3	8.4	8.6	8.8	8.9	8.9

Table 8. Percentage change in capital and surplus
(Banks with total assets under \$500 million)

Farm loans as percentage of total loans at bank	1963-82	1963-67	1968-72	1973-77	1978-82	1978	1979	1980	1981	1982
Under 1.....	499	48	69	63	66	12	12	11	10	9
1 to 4.....	554	43	68	70	63	12	11	12	9	8
5 to 9.....	587	42	62	77	67	12	12	12	9	9
10 to 14.....	562	38	66	78	65	12	12	11	9	8
15 to 19.....	585	40	62	85	67	12	12	12	10	9
20 to 24.....	589	40	62	90	73	12	13	12	10	9
25 to 29.....	565	35	59	82	70	12	13	13	11	9
30 to 34.....	591	34	61	89	75	12	12	12	11	11
35 to 39.....	576	36	58	90	72	12	13	12	10	9
40 to 44.....	544	34	55	88	73	12	14	13	12	10
45 to 49.....	570	33	50	89	78	12	13	12	12	10
50 to 54.....	578	33	51	89	77	12	14	14	12	10
55 to 59.....	576	34	49	84	80	12	14	14	12	11
60 to 64.....	558	31	48	85	84	11	14	14	13	12
65 to 69.....	528	30	46	87	83	12	14	15	13	11
70 to 74.....	543	31	45	88	87	12	13	15	14	13
75 to 79.....	518	30	46	82	81	11	14	15	14	12
80 and over...	497	29	42	82	80	10	14	14	12	12
All banks.....	543	42	65	72	68	12	12	12	10	9
Addendum:										
Percentage change in average assets per farm.....	591	47	49	116	46	19	15	8	0	-2

Note: In each year or period, banks are classified according to their farm loan ratio at the end of that year or period.

insurance on individual deposits was raised to \$100,000, this had the incidental effect of making the negotiable certificates of deposit of small banks saleable to national investors in these bank instruments, through agencies that ensure that each investor holds no more than one certificate of each bank. Furthermore, because most growth in local deposits is now in accounts and certificates that bear interest related to money-market rates, there is now little difference in cost to the bank of raising additional funds through promoting local deposit growth or by selling negotiable certificates, whereas in the past the latter was a much more costly source of funds during periods of monetary restraint. Thus the ability of small banks to respond to seasonal, cyclical, or unusual changes in loan demand has been improved.

In summary, data reviewed in this paper indicate that agricultural banks have been more competitive and successful than many agricultural observers have supposed, in large part because financial results in agriculture have also been better than commonly thought. Strong capital positions of most farmers and agricultural banks, a legacy of past favorable results, are providing financial resilience during the current farm recession. Future results for these banks and farming will remain correlated. Agricultural banks now have the capital, liquidity, and access to funds that will enable them to respond vigorously to increased loan demand from farmers and other rural enterprises.

REFERENCES

The following papers that provide more detailed discussion of developments and relationships in agricultural finance are available from E. Melichar, Federal Reserve Board, Washington, D.C. 20551.

"Developments in Agricultural Finance," April 27, 1982.

"Farm Sector Financial Experience," November 6, 1981.

"Capital Gains versus Current Income in the Farming Sector," 1979.

CREDIT AS A PUBLIC POLICY TOOL

Dennis Dickstein*

Federal credit assistance comes in 4 forms:

- 1) Direct loans from the Federal Government
- 2) Federal guarantees of private lending
- 3) Loans from private Government-sponsored entities
- 4) Tax exempt credit

Over half of Federal assistance to agriculture and rural areas is in the form of credit. This Federal credit assistance has grown greatly during the past 25 years. Loans are directly provided or guaranteed by various programs under:

- the Commodity Credit Corporation,
- the Farmers Home Administration,
- the Rural Electrification Administration, and
- the Farm Credit Administration's farm credit system.

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The first three, CCC, FmHA and REA, are Government programs which use Treasury funds to assist farmers and rural areas except in the case of CCC's export credit guarantees and some FmHA guarantees of private lending. The fourth program, FCA, is a relatively autonomous quasi-government entity that obtains funds from the private credit market but with preferential treatment because of its Federal relationship. Federally-assisted credit as a percentage of total credit funds raised by the farm sector has grown from:

- about 37% in the mid-50's, to
- about 42% in the mid-60's, to
- about 56% in the mid-70's, to
- over 70% today.

Federal credit has overtaken private credit during the 70's and now accounts for almost three-fourths of all agricultural and rural development credit.

Federal credit programs change the allocation of resources and the distribution of income.

- . When used in excess, these programs begin to pre-empt private sector investment and distort the private credit market.

Federal credit also represents a subsidy.

- . Assistance is provided on terms more favorable than what would have occurred in the private market.
- . The Federal Government accepts risks that private lenders either

wouldn't accept or would only accept at higher interest rates and more restrictive terms -- hence, a subsidy.

Finally, Federal credit programs increase the Federal deficit and the national debt.

- Direct loans use Treasury funds and force additional borrowings.
- Both direct and guaranteed loans increase credit market activity, forcing interest rates up and thus increasing Treasury's cost of borrowing.

Because Federal credit activities have such substantial effect on the Federal budget and the national economy, the credit budget was created as a separate entity in the Federal budget.

- . The creation of the credit budget was a significant change in policy development.
- . The credit budget made possible, for the first time, the control of several credit programs.
- . It has provided a means of making decisions on many programs within the context of all Federal credit activity.

The credit budget comprises all direct loan obligations and loan guarantee commitments of all Federal agencies.

- . It makes no distinction between on and off budget entities.
- . Its totals are based on gross levels of activity, without offsets for repayments. This measures the current credit program levels enabling Government control over the activity itself.

Credit has been used a great deal by the Federal Government to implement agricultural and rural development policy.

- . Over the past 50 years, farm policy has been carried out basically through CCC commodity and export loan programs. Only recently have direct Government grants to individuals played a major part in Federal farm programs.
- . Rural development has been assisted by the Federal Government with FmHA and REA loan programs.

Therefore, Federal credit policy in many ways helps form farm and rural development policy and vice-versa.

- . Federal agricultural policy, guided in large part by Federal credit programs, would be shaped by decisions and changes in overall credit policy.
- . Conversely, the Federal credit budget, about one-third of which is agricultural credit, would be significantly affected by decisions and changes in agricultural policy.

Federal credit activity has grown greatly and efforts to control this growth have increased as well.

Federal assistance to farmers has also grown greatly and efforts to control its growth have also increased.

Since most of Federal farm aid is in the form of credit, these efforts coincide with each other and with the larger overall effort to control the growth in the Federal deficit.

As long as this relationship between agricultural and credit assistance remains, we will continue to see joint efforts to control both.

RURAL LOCAL GOVERNMENTS:
TRENDS AND PROSPECTS

J. Norman Reid*

RURAL GOVERNMENTS; THEN AND NOW

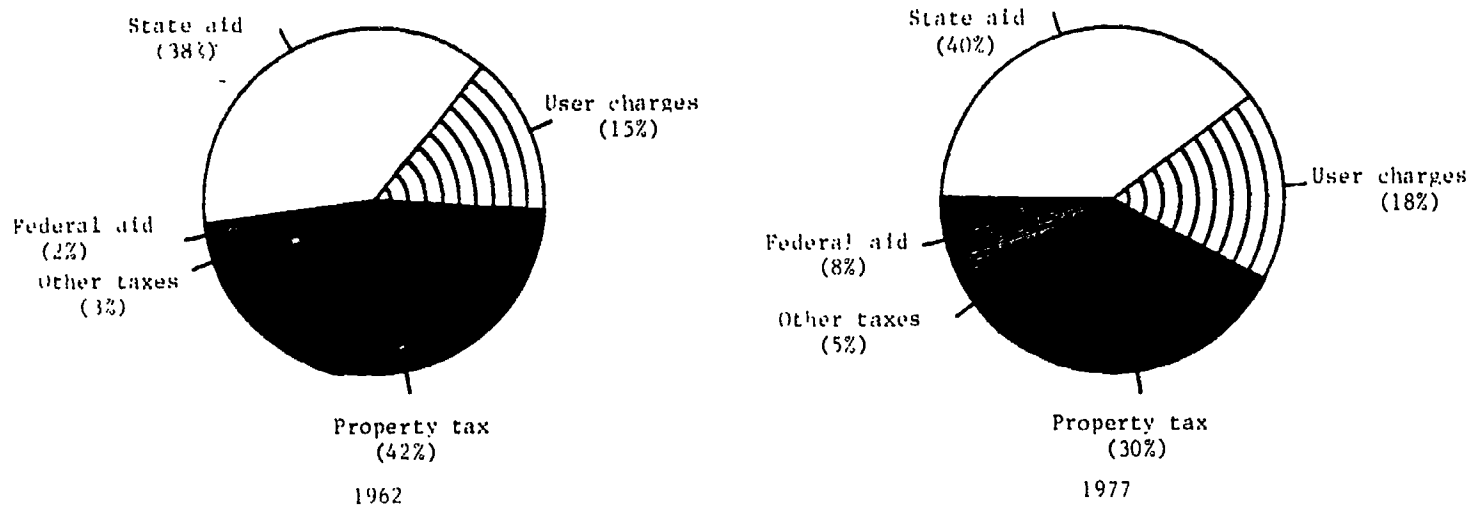
In 1962, just twenty years ago, the average rural local government raised \$175 in revenues for every man, woman, and child living within its borders (figure 1).^{1/} Over four of every ten of these dollars came from taxes, and nearly all of these from property taxes. State aid contributed a third of local budgets; direct Federal aid, which totaled less than \$3 per person, was insignificant. User fees and miscellaneous revenues made up the rest. Most local dollars went for education, by far the largest local budget item (figure 2). Highways--traditionally important to rural communities--made up 14 percent and comprised the second largest item. The remainder of local budgets were divided among a number of small functions.

Much had changed by 1977. In nominal terms, total revenues had grown to \$635, more than three and a half times their 1962 level. Most of the increase occurred in taxes and state aid, though on a percentage basis, direct Federal aid was the fastest growing local revenue source (figure 3).

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^{1/}Throughout this paper, "rural" governments are defined as those governments serving outside a Standard Metropolitan Statistical Area (SMSA), as defined in January 1974.

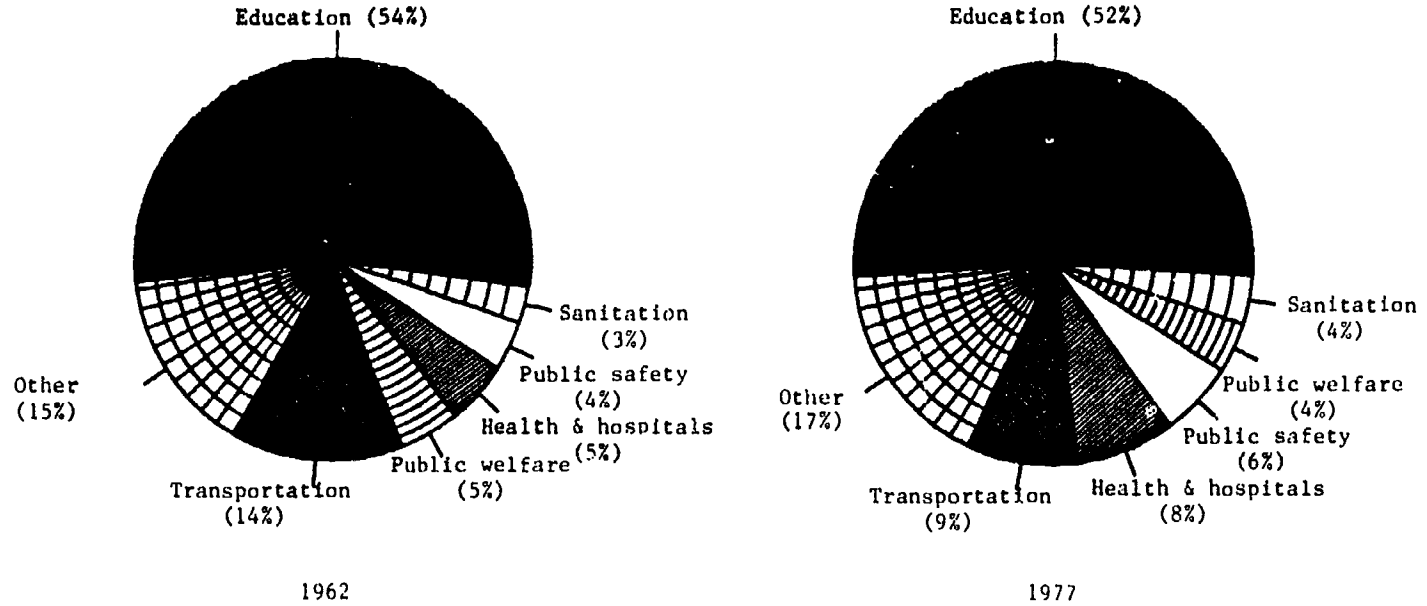
Figure 1--Nonmetro local government revenue, by source: 1962-1977



SOURCE: Census of Governments, 1962 and 1977.

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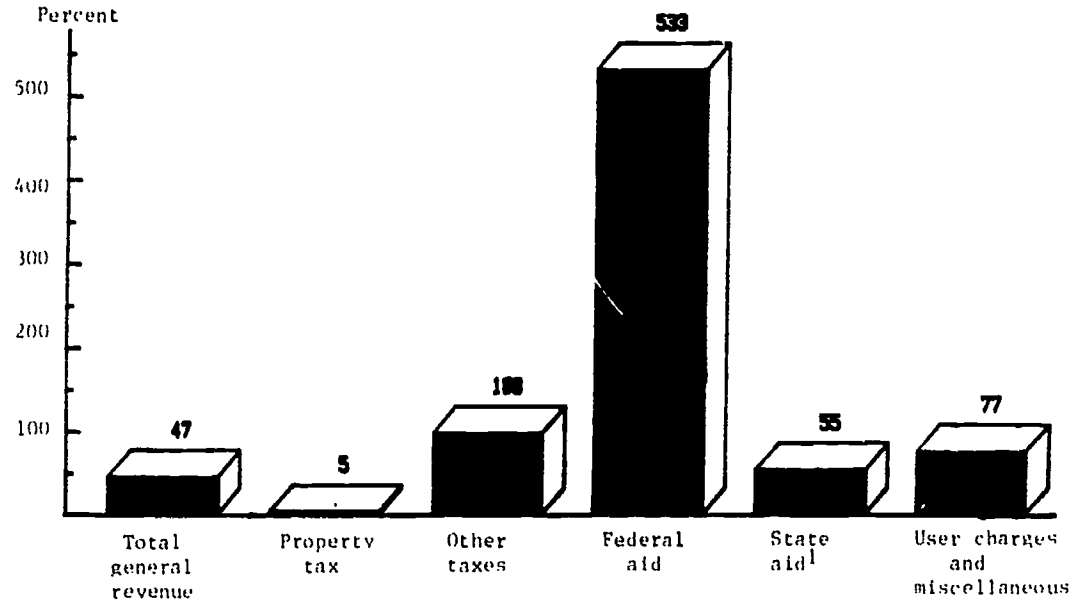
Figure 2--Nonmetro local government direct general expenditures, by function: 1962-1977



SOURCE: Census of Governments. 1962 and 1977.

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Figure 3--Percentage increases in nonmetro local government revenue, by source: 1962-1977



SOURCE: Census of Governments, 1962 and 1977

¹Indicates Federal pass-through dollars.

Reliance on the property tax dropped significantly, with the slack taken up by other taxes and Federal dollars.

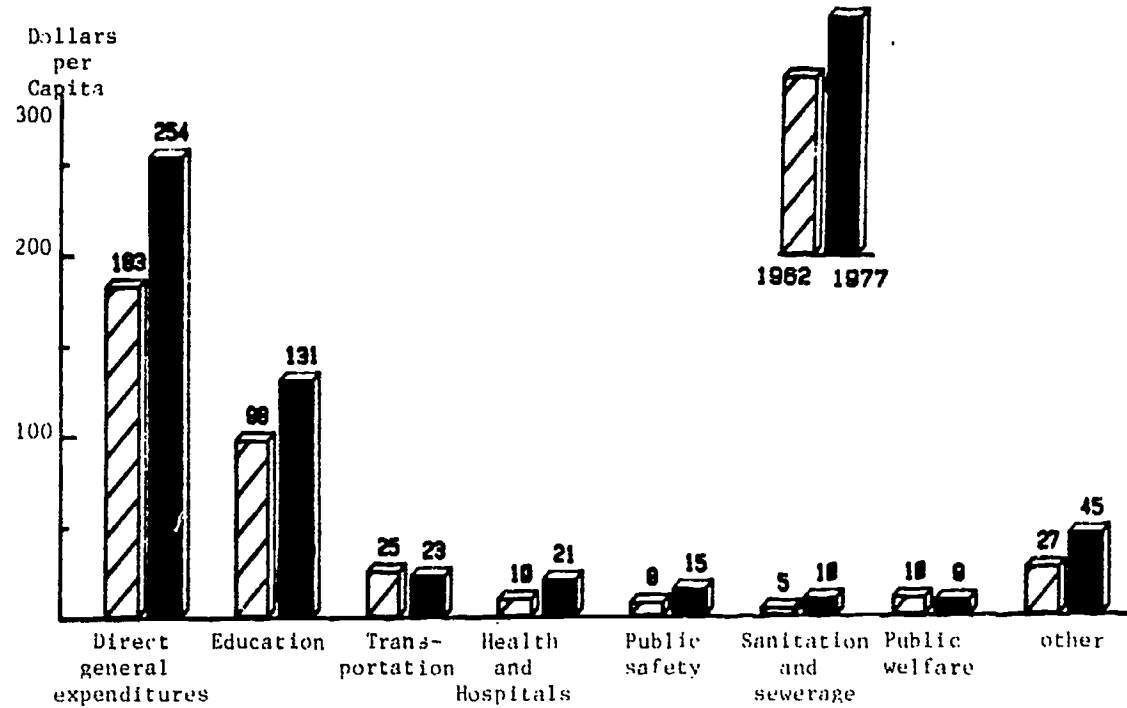
Given the rate of increase in local budgets, the reallocation of local dollars among functions was surprisingly slight. Education continued to be the major function of rural local governments. Highways declined in relative importance, while health and hospital spending, as well as police and fire protection programs, grew. The amount of attention given to other areas remained comparatively constant.

Rapid inflation was a major factor in local government finance during this period, and between 1962 and 1977 the price of local government inputs rose by nearly 150 percent (U.S. Bureau of the Census, 1979).^{2/} Even so, it is clear these rising local budgets reflect the basic fact that rural governments were simply doing more in 1977 than they did in 1962. If the 1977 expenditures are adjusted for inflation, as they are in Figure 4, it is clear that important changes in local functions occurred during the 15-year span. General revenues were up more than 47 percent, and reflecting this increase in activity, per capita local government employment (full-time equivalency) increased by 52 percent (Perkinson, 1982). On the other hand, general long-term indebtedness dropped sharply in real terms, and direct spending increased less rapidly than revenues.^{3/}

^{2/}The implicit price deflator for state and local government purchases is usually accepted as the best indication of price increases in the state and local government sector. The deflator for 1977 (with a base of 1962=100) was 246.7.

^{3/}For an excellent in-depth review of local fiscal trends during the sixties and seventies, see Thomas F. Stinson, "Fiscal Status of Local Governments," in Nonmetropolitan America in Transition, edited by Amos H. Hawley and Sara Mills Mazie (Chapel Hill, N.C.: University of North Carolina Press, 1981), pp. 736-766.

Figure 4--Nonmetro local government expenditure trends (1962 dollars)



SOURCE: Census of Governments, 1962 and 1977.

Clearly, then, this was a time of great change for rural governments. But the financial figures do not tell the whole story. A number of other changes were afoot during this period as well. Let us now turn to a consideration of some of these.

MAJOR CHANGES OF THE PAST TWO DECADES

The past two decades have witnessed a good many major changes in the American governmental system. Lest their familiarity cause them to be taken as common, let us recall some of the more significant. Starting in 1960 and continuing throughout the sixties and seventies, we initiated a major program of civil rights legislation leading to important changes in the welfare of the American people and in the functioning of its governments. In that same decade, we experienced a period of judicial activism that produced such court decisions as Baker v. Carr, the "one man-one vote" rule that ended rural domination of state legislatures, and a series of school desegregation decisions. While we waged an unpopular war that has had continuing divisive effects on our society, we undertook to build the "Great Society," providing medical care to the poor and aged, equalizing economic opportunities throughout the land, and attacking many of the ills that accompany our modern society. In the late sixties and seventies we passed landmark legislation intended to guarantee a clean and safe environment for ourselves and future generations, and we poured billions of dollars into remedial programs to meet this objective. We survived a major crisis of confidence in the presidency with our constitutional system intact. Following the economic boom of the sixties, we have faced several periods of downturn in the seventies and eighties, made more complicated by startling increases in oil prices and persistent high rates of inflation.

We have come to believe that the rapid rates of public sector expansion that characterized the sixties and seventies are not possible--and perhaps not desirable--to sustain, and we began to search for new definitions of governmental roles. The rapid rates of population growth that have been with us since the forties declined in the seventies, and that population began to redistribute itself in ways never before seen by moving out of the cities and into the countryside in greater numbers than the reverse. These are, of course, only some of the events that have helped shape the present day, but clearly if they had not caused important changes in rural government it would indeed be surprising.

In fact, rural governments themselves have changed much since the early sixties. I would like to point to three broad trends that I believe are of particular importance.

The Local Role in the Intergovernmental System

First, rural governments have become increasingly integrated into the intergovernmental system. The change in the federal system since the early sixties has been dramatic, affecting both urban and rural governments. At the heart of this change has been the rapid growth of intergovernmental aid. From 1962 to 1977, per capita Federal and state aid to nonmetro local governments grew by 75 percent in real terms and by 1977 rural governments relied on these higher governments for 48 percent of their revenues, much more than they received from property taxes, long the mainstay of local finances.

The aid increases took many forms. The massive expansion of Federal aid in the sixties led to increased direct aid in some cases, though it was not until general revenue sharing was adopted in 1972 that most rural gov-

ernments received their first funds directly from Washington. Most Federal aid to smaller governments was "passed through" state agencies and thus shows up as state aid in the Census Bureau's statistics. But Federal dollars do not account for all the increases, as many states adopted their own revenue sharing programs in the sixties and seventies.

There are several consequences of this change. Clearly the increased funding has helped rural governments meet their service needs and has produced some dramatic improvements in their performance. However, these improvements have not come without a price. Increased dependence on Federal dollars has left rural governments more vulnerable to fluctuations in the Federal budget process. And the aid has been accompanied by increased complexity in the intergovernmental system, as rural governments have become subject to new regulations, standards, and increased paperwork. To obtain funds, rural governments have had to gain expertise in applying for grants, accounting for intergovernmental aid expenditures, and other technical matters. More communication between local governments and other institutions, public and private, has also been required to meet the demands of all parties involved in the intergovernmental system. In addition, local governments have picked up new responsibilities, such as conforming to Federal environmental protection regulations and to state mandates.

How have rural governments fared under these changed conditions? For small governments in rural areas, gaining the expertise to handle these new responsibilities has not been easy. Their efforts certainly have been helped by the expanding role of national organizations, such as the National Association of Towns and Townships, the National Association of Counties, and other groups that have represented rural government interests in Washington.

The rising rural share of Federal funds may be attributed in part to the success of these groups. Nevertheless, there are still complaints that the voice of rural governments is not adequately heard on Federal policy matters, and that these policies consequently do not fit rural conditions as well as they might (Highlights, 1982).

Quantity and Quality of Local Services

At the same time, rural governments have made much progress in improving their public services. Expenditure levels are crude measures of local government performance, but they do give a general indication about major trends that may be taking place. The real per capita expenditures of rural governments grew by about forty percent between 1962 and 1977, the most recent year for which data are available. Most of the increase in real spending came between 1962 and 1972; though local budgets swelled in nominal terms between 1972 and 1977, nearly all of this increase resulted from inflation alone.

This increase in local spending reflects both improvements in local service quality and a broadening of local programs to more nearly match the range of amenities customary in urban areas. Still, rural governments in 1977 spent 25 percent less per capita than urban governments, with most of the difference resulting from lower spending for noneducational programs in such areas as welfare, public safety, environmental protection, and housing.

Federal aid--especially remedial programs--are a major reason for this progress, of course. But local tax bases have strengthened as well, and rising income levels have allowed locally-raised revenues to increase in per capita terms but still decline slightly in relation to local income.

As a result there has been an overall improvement in rural fiscal conditions--higher levels of local services and mild relief in local revenue efforts.

Not all localities have participated equally in these service improvements, however. While a recent study (Stinson, 1982) found a significant reduction between 1962 and 1977 in the number of county areas below a "government services poverty line" (figure 5), a significant number of counties remain below minimum national standards for per capita local expenditures. Most of these counties are nonmetropolitan, relatively poor, predominantly Black, and concentrated in the South.

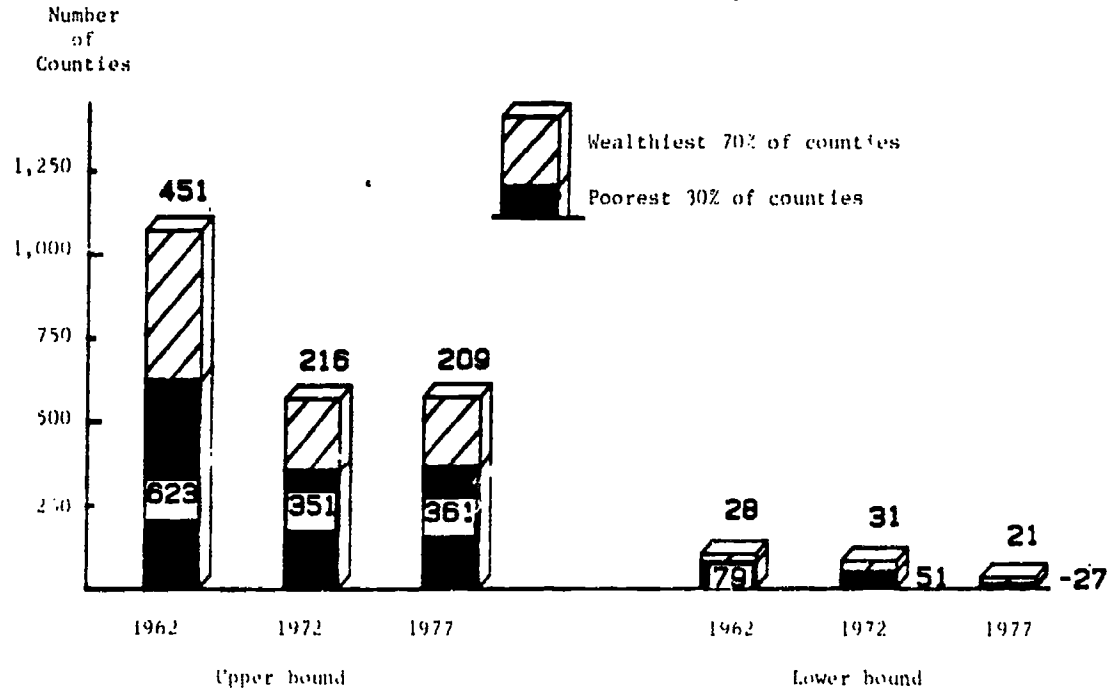
In addition, some have experienced rapidly rising local revenue efforts, a comparatively new problem for nonmetropolitan areas. Between 1972 and 1977, local revenue raising efforts increased in many nonmetro areas, but most rapidly in the most highly rural counties (figure 6). The resulting fiscal strain has been most intense in totally rural counties not adjacent to metro areas--places already at high levels of local revenue effort.

The Structure of the Service Delivery System

The system for delivering local services is also much changed. This has affected both the quality of local services and the way they are provided.

Major structural changes in local governments have occurred during the past two decades. Some have merely extended longstanding trends. The number of independent school districts declined by more than half during the sixties, continuing a movement to consolidate small school districts, though during the seventies this decline slowed considerably. At the same

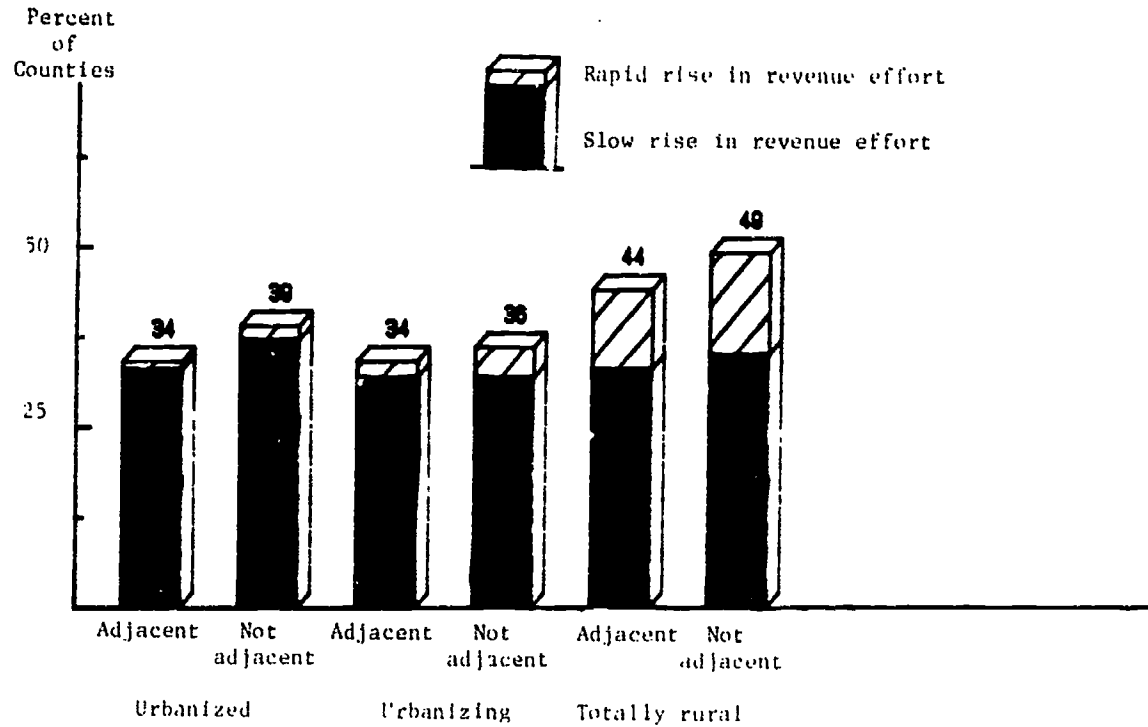
Figure 5--Counties below government services poverty line: 1962-1977



SOURCE: Computed from Thomas F. Scinson, "Public Services in Rural Areas," in *Outlook '81: Proceedings of the 39th Annual Agricultural Outlook Conference* (Washington: U.S. Department of Agriculture, 1982), p. 603.

NOTE: Government services poverty lines are defined by reference to local spending levels in counties with average levels of fiscal resources. Counties are below the "upper bound" poverty line if they spent less than was spent by 85 percent of counties with average resources. Counties are below the "lower bound" if they spent less than was spent by 95 percent of counties with average resources. Data include all U.S. counties.

Figure 6--Nonmetropolitan counties with rising local revenue effort, 1972-1977.



SOURCE: Richard J. Reeder, "Fiscal Pressure in Rural Areas," unpublished manuscript.

NOTE: Revenue effort is local government own source revenues per dollar of personal income. Counties in the "rapid increase" category are those whose increased effort is larger than one standard deviation of the change in effort for all nonmetro counties.

time, special districts, which typically perform limited functions within a specially defined area, continued to grow in both numbers and their share of local government spending. Counties, the major providers of local services in most parts of the rural U.S., also have been revitalized, taking responsibility for an even larger portion of local expenditures. Municipal governments, the most prominent form of local government in urban areas, declined slightly in their share of local government spending. Township governments, once nearly withering away in some areas, have now acquired new duties and found new funding sources, and some are again becoming a vital part of the local government system.

At the same time, state governments have assumed larger roles in both financing and directly providing local public services. A strong and continuing shift of duties from local to state levels of government occurred during the sixties. The trend has continued, but at a slower rate, with the growth in direct Federal aid to local governments.

Possibly the most dramatic structural change in the last two decades was the formation of a national network of substate regional agencies. The creation of these bodies introduced a new layer of government serving larger areas than traditional local governments. Substate regional agencies are unique products of the sixties and seventies, usually the result of encouragement from Federal programs (Stam and Reid, 1980). Although most operate with sanction of state law, substate agencies seldom exercise full governmental powers. They have considerable local planning and coordinating duties, but few have the right to tax or provide direct services to the public. Many are in a position to influence local policies, though this most often comes informally, by persuasion or example.

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Although the regional approach has been helpful, it was just starting to be established when Federal budget constraints forced the termination of many programs supporting these agencies (Reid and Stam, 1982; McDowell, 1983). Exact figures are not available, but since 1980 a number of regional agencies have gone out of business, while others have had to curtail their programs. Informal evidence suggests that rural areas may have been the hardest hit.

Other less dramatic but potentially significant changes have occurred in the way services are provided at the local level. Some services previously supplied by private firms have been taken over by municipal governments; public transportation and the operation of sanitary landfills are leading examples. In other instances, cities--while retaining responsibility for the quality of services--are contracting for service delivery from other governments or private firms to reduce their costs. Further innovations in local service delivery are likely as local governments seek ways to cope with tightening budgets.

Internal improvements in local government organization have occurred as well. Rural leaders--more prone to be part-time, citizen officials--have made use of the greater number of training opportunities available through the Cooperative Extension Service, state community affairs agencies, associations of governments, community colleges, and the like. These have led to general improvements in the capacity of rural governments to anticipate, influence, and direct change in their communities through more effective policy development and program administration. Federal funds have provided incentives to hire professional managers, and many communities have done so, sometimes on a shared basis with other communities.

While there has been much progress in professionalizing rural governments, the improvements have been spotty and the management of many small places leaves something to be desired. Paid, professional managers are still uncommon in rural areas. Rural officials cite the need for more trained people and more in-service training to keep skills up-to-date (Highlights, 1982). A key area of concern for many is financial administration, which holds promise for helping rural officials to use their resources more efficiently. Other officials seek enhanced service efficiency through improved management of volunteers, more effective service contracts, and improved intergovernmental cooperation. Strengthened long-term planning in the area of capital finance, zoning, natural resource use, and business development has the potential to help rural communities avoid costly mistakes.

TODAY'S CHALLENGES

While evolution in the governmental system has left rural governments in a much better position than just twenty years ago, that evolution has not stopped. The change goes on. And so rural governments will face a number of important challenges in the eighties. I would like to point to three of these.

Population Change

It has been widely reported that rural areas have undergone a major reversal in population trend during the past decade (e.g., Beale and Fuguitt, 1978). While most rural counties were losing population in the sixties due to continued movements away from the countryside and small towns and into urban areas, in the seventies many of these same areas experienced growth for the first time in decades. Most rural communities

grew during this period, some very rapidly, though some areas--especially in the Great Plains region--continued to face stable or even declining populations. Despite some signs that the rates of rural population growth may be abating (Bluestone, 1982), population growth continues to be a major factor in determining the future of many rural places.

This population growth presents enormous pressures on rural communities and, as a result, their governments. New populations present new demands for public services--water, waste disposal, police protection, education--that must be met by raising expenditures to higher levels (Stinson, 1982). This in turn means that new revenues must be found to meet these added costs. Many communities find themselves under considerable fiscal strain as they try to meet these expanded needs before the new residents and businesses begin contributing tax dollars to support local programs. Planning for increased services can also present headaches for local officials, who must exercise care if they are to avoid costly mistakes. The influx of new residents can often upset the social structures of rural communities, adding the pressure of community conflict over goals to the inevitable financial challenges.

Intergovernmental Changes

Even a casual reading of the press accounts during the past two years should convince the most hardboiled observer that the federal system is undergoing important changes. Both the reductions in aid levels proposed by the current Administration and the decentralization in the organization of those aid programs promise an intergovernmental system that differs in significant ways from the one to which we have become accustomed. Even if the proposals of the Reagan Administration should fail to be adopted,

observers are agreed that major changes are on the horizon. The levels of financial aid to state and local governments peaked in 1978, two years before the Reagan Administration took office, demonstrating that the current reductions are part of a long-term trend, and not merely the product of a particular political philosophy (DeGrove and Stroud, 1981). Whatever the fate of this Administration's proposals, it seems clear that the federal system of the future will be different in important ways. As one observer has noted, "the nation is approaching, but has yet to cross, an historic threshold in the continuing evolution of federalism" (Colman, 1981). Just how the system will change, and how much, remains to be seen, of course. But the central role that is proposed for states in the block grant initiatives makes it clear that their response will be critical in shaping the system of the eighties and nineties. Two things seem likely as a result. First, the locus of decisionmaking for many critical intergovernmental issues will be shifted away from the Congress and into the halls of state legislatures. And second, for this reason, a multiplicity of intergovernmental approaches, rather than a unified one, will be the result as each state decides to define its own programs in its own way.

Due to their involvement with intergovernmental relations, rural governments are now more vulnerable to changes to the federal system than they were just ten short years ago. Thus, the transition from the federal system of the past to the one of the future will require much care if rural communities are to receive fair and effective treatment. Under the old system, rural governments often labored under rules designed for much larger and more diversified governments, with greater fiscal and management capacity and therefore a much greater ability to respond to federal program requirements. Consultation with rural officials and their representatives

can help avoid policies that treat rural governments unfairly. A key challenge to policymakers at the federal and state levels will be to avoid the temptation to institutionalize policy decisions taken during this time of transition, thus locking into place programs that may be inappropriate for the new state of affairs that is yet to emerge.

Revenue Constraints

Meeting growing service demands during a time of declining intergovernmental help will pose important challenges for rural governments. Many experts expect the eighties to be a time of fiscal austerity for all governments, but especially those at the local level. While population growth will put new pressures on many localities, it is the cutbacks in aid levels that will force rural governments to make some very tough decisions about whether to raise taxes or cut services and, if the latter, where these cuts are to be made. A number of other factors will complicate local responses. Local governments--especially the smaller ones that predominate in rural areas--continue to labor under restrictive, state-imposed tax and debt limits that inhibit many creative local responses to these financial pressures. Privatization of public services, advanced in some quarters as a response to fiscal pressures, is not seen by local officials as providing a likely solution to their problems. Inflation, which plagued local governments throughout the seventies, now seems to be abating, and this may provide some relief to local governments. Still, rational choices about where to cut services--if cuts be needed--will not come easily.

CONCLUSION

In light of these conditions, what can we say about the rural policy agenda for the eighties? Two questions seem likely to dominate the formation of such a policy. The first relates to the level of public services we want to maintain, whether we can sustain it, and how we want to organize to provide it. While it now seems almost certain that a major reallocation of functions among levels of government, and between the public and private sectors, is inevitable, the resulting shape of the federal system is by no means set. Many experts agree, however, that we will surely not return to a system we had in an earlier time; rather, we are on the verge of developing a new set of relationships among governments, and with the private sector, that are more appropriate to our changed society.

Second, while many of the changes have been beneficial and appear to have led to significant improvements in local public services and in the fiscal position of local governments in rural areas, not all rural communities have found themselves in more favorable circumstances. Some face a substantially deteriorated position; others have failed to share in the more general improvements that have characterized nonmetropolitan local governments as a whole. And some observers have argued that these general improvements are merely illusions created by feeding program operating costs by deferring needed capital investments (Choate and Walter, 1981). Thus, despite these changes, many rural governments must grapple with new or continued challenges during the remainder of the eighties.

The need to solve old problems at the same time as we are rethinking the configuration of our system provides a difficult environment in which to make policy. There is much that we do not know about either the old environment or the new one. While our picture of where we have been is

probably accurate in its major outlines, it remains both incomplete and out-of-date. We need to understand much better than we do the full effects of the institutional and financial changes of the last 20 years on the quality of rural services, and we need to be sure that the advances we had made through 1977 have not come unstuck during the fiscal austerity of the late seventies.

We know even less about where we are headed and will need to carefully monitor the new system as it evolves. During the transition period, special care will be needed in shaping policies. Policymakers must act cautiously as they respond to new and pressing needs to assure that new policies fit within the emerging governmental structure in a constructive way that does not prematurely foreclose other options for the longer run. It will not be easy.

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AGRICULTURAL COMMUNITIES: CAPACITY TO GOVERN

Robert J. Paolocco*

INTRODUCTORY REMARKS

Let us begin our presentation by saying that rural America is facing its biggest challenge today than at any other time in our nation's history. We could be very pessimistic and say that we "ruralites" are in deep trouble and may not survive; however, we do not believe that's the case. Instead let us say that we are in a situation that will require the very best we have to offer.

In general, local rural governing bodies, whether in fast growth or slow growth areas, will be faced with serious financial and programmatic changes that will make them very unpopular with many of the citizens. Taxes may have to be increased significantly and programs may have to be cut severely to cope with the decreases we will experience as a result of new federalism. And we do not mean to imply that the President's economic program is bad, not at all. In fact, it may well be the very stimulant we need to stop the galloping inflation that has overwhelmed us in these last several decades.

Adding to the severity of the situation are the vast numbers of rural governing bodies involved. In Virginia, for example, we have 325 cities, counties, and towns. Of these, 92.3% or 300 would be classified as "rural" by federal standards, i.e. less than 50,000 population. Looking at the national scene, we find more than 40,000 units of government of which 72% contain less than 2,500 population.

So, while our urban friends are expounding their plight and their high population figures, we in rural America are just as concerned, and rightly so,

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because the capacity to govern is being threatened in many areas both from without and within. And it's these threats that we would like to touch on first.

After dealing with threats, we want to discuss some of the local government functions as they relate to the theme of this paper. These functions include education, health and welfare, utilities, housing, transportation, recreation, law enforcement, and fire and rescue services.

THREATS TO LOCAL GOVERNMENT

As we present the "threats" please do not assume that we are being negative or that we have an "axe to grind". Some of these threats are accidental while some may be deliberate; some may be unavoidable and some are certainly selfimposed.

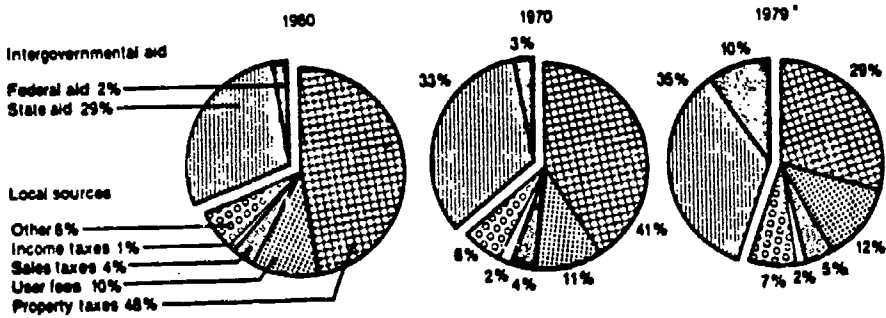
External Threats

We see three basic external threats; however, we're sure there are others.

The first has to do with federal and state funding for local governments. Local funding sources from 1960 to 1980 have decreased about 20% while reliance on federal and state revenues have increased by 45% for the same period (Figure 1). It doesn't take a genius to see what problems have arisen because of this trend. Adding to the woes of rural areas is the fact that in 1967 we received 20.4% of federal and state funds distributed, but 10 years later that percentage had dropped to 17.5 - a 16.6% decrease (Table 1).

A decrease in funding will result in the local governing bodies being forced to change their general operating procedures. This means we will have to learn to adapt, to decrease, and even to eliminate some of our programs, capital improvements and general governmental functions. Surely the raising of taxes to bridge the gap is not the only solution! No doubt we can learn to innovate; or find new sources of funding; or learn better ways to do the same things we have been doing. It will force us to determine what our priorities really are; who gets what; who gets cutback; who gets cut out?

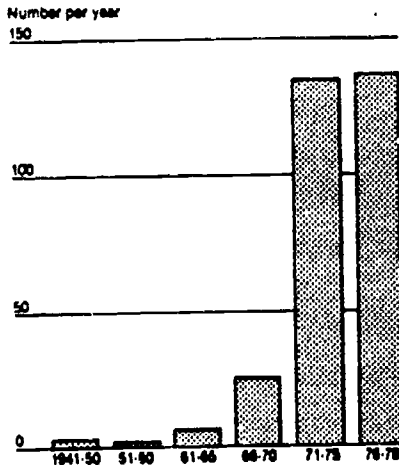
Figure 1
Local Government Revenue Sources Changed



State aid includes Federal pass-through funds.
 Other includes taxes on solicited products, license fees, and interest earnings.
 Source: U.S. Census Bureau.

A second external threat has to do with the increased number of federal and state mandates, and the increasing number of regulations that make administrative procedures far more complex than most rural localities ever imagined (Figure 2).

Federal Mandates Exploded in the Seventies



Source: Lovell, Catherine H. and others. Federal and State Mandating on Local Governments: An Examination of Issues and Impacts. Grad. Sch. of Admin., Univ. of Calif. (Pover-1985 1975)

TABLE 1
Sources of Local Government Revenue as a Percent of Total Revenue, by SMSA Status: 1967 and 1977

Source of Revenue:	1967			1977		
	All governments	Inside SMSA's	Outside SMSA's	All governments	Inside SMSA's	Outside SMSA's
	ALL GOVERNMENTS					
Intergovernmental	30.8	29.1	35.5	39.2	38.3	42.6
Property Taxes	39.0	40.1	36.0	30.7	31.3	28.2
Other Taxes*	6.0	7.1	3.1	7.4	8.4	4.0
Current Charges	9.7	9.3	10.9	9.7	9.2	11.6
Utility Revenue	8.1	8.0	8.4	7.4	7.0	8.9
All Other**	6.4	6.4	6.2	5.6	5.8	4.7
	North East					
Intergovernmental	31.1	30.2	35.6	39.0	38.6	42.3
Property Taxes	41.8	40.9	47.1	35.0	34.6	38.1
Other Taxes	8.7	9.6	4.0	9.8	10.4	5.1
Current Charges	7.7	7.9	6.6	7.1	7.1	6.8
Utility Revenue	5.7	6.0	3.7	4.0	4.1	3.4
All Other	5.0	5.4	3.0	5.1	5.2	4.3
	South					
Intergovernmental	33.0	29.3	38.6	40.6	38.4	45.8
Property Taxes	29.7	32.9	25.0	22.8	24.2	19.3
Other Taxes	6.5	8.3	3.7	8.2	9.5	5.0
Current Charges	12.8	12.6	13.2	12.6	12.3	13.5
Utility Revenue	10.2	10.1	10.3	10.9	10.6	11.7
All Other	7.8	6.8	9.2	4.9	5.0	4.7
	North Central					
Intergovernmental	27.9	26.1	31.6	39.0	38.7	39.8
Property Taxes	44.3	44.8	43.3	32.5	32.6	32.1
Other Taxes	3.5	4.6	1.5	5.0	6.1	2.3
Current Charges	9.8	9.5	10.4	10.2	9.4	12.0
Utility Revenue	8.2	8.0	8.4	7.0	6.2	9.2
All Other	6.3	7.0	4.8	6.3	7.0	4.6
	West					
Intergovernmental	31.7	30.4	36.6	38.1	37.3	41.5
Property Taxes	38.8	40.0	34.3	32.5	33.0	30.3
Other Taxes	5.0	5.4	3.2	6.2	6.6	4.3
Current Charges	9.0	8.4	11.3	9.1	8.7	11.4
Utility Revenue	9.0	9.0	9.1	8.1	8.3	7.2
All Other	6.5	6.8	5.5	6.0	6.1	5.3

* Includes sales and income taxes and motor vehicle licenses

**Includes interest earnings, special assessments, and insurance trust revenue

Source: U.S. Department of Commerce, Bureau of the Census. Census of Governments, Vol. 4: Governmental Finances, No. 5: Compendium of Government Finances, 1967 and 1977.

While these mandates increase, local governments find their funding decreasing. Therefore, the cry being heard all over the country from locals to state and federal agencies is simple - don't mandate programs unless you fund them completely, and not just the start-up phase! Some local governing bodies say they have been misled by federal programs that began with 100% funding only to find that each successive year brings a lesser percentage of funding and the expectation that local sources will assume the balance. Such programs as those found in CETA, Chapter X of mental health and mental retardation, and Section 18 of UMTA are examples. In each of these, intergovernmental financial aid at the beginning was at or near 100%; however, each program also contained a procedure for less involvement each year of operation.

The President's first state-of-the-union message seemed to favor more state and local control over programs with the means to fund such programs. If this proves to be the case, it will be one of the greatest aids local governments can hope for.

When we take into consideration the complexity of administration, we run into another problem. Many local rural governing bodies have very small staffs. These may or may not be professionally trained. We once served an area of better than 350 square miles inhabited by 16,500 people. Our staff included one trained person - me! If you came to our place and asked to see the finance officer that was me; the purchasing officer that was me; the personnel officer, me again; what about the public works officer and the subdivision administrator, that's right, me again; plus the civil defense coordinator, the budget officer and the county planner. While our situation may be a little extreme for some localities, it is the norm for many others.

Many other local rural governing bodies will have no staff at all, or only a part-time staff, at best. Therefore, little or no coordination among elected officials takes place. With today's administrative demands, this latter situation is impossible. In Virginia there are still five or six counties and several towns that have no administrator or manager.

This situation places even more responsibility on the elected official who must then do his own information gathering and report preparation before he can

study the issues, and who must personally oversee the work of the community. We know of a county of about 8,000 with a three member board of supervisors. In this county the board members meet at the courthouse daily to conduct county business normally done by an administrator.

The job of planning for future needs and development, as well as administering all the federal, state and local programs is overwhelming and growing every day. Can a county or town operate efficiently and effectively without a capable staff? Is it really the job of the elected officials to do the work "in the trenches" or to set policy and make decisions?

The last external threat which we will touch on briefly relates to population trends. Many rural areas are experiencing a tremendous growth rate - perhaps 20% or more annually. These communities must struggle with questions of how to provide for the new people and who will pick up the tab for new facilities, utilities and programs. The seemingly simple solution of raising taxes to pay for needed expansions or additions is usually not adequate for at least two reasons. One is that the population growth may not be enough to generate the amount of revenue needed to pay for the services; and, second, the time frame between the influx of people and the receipt of tax revenue could be several years when you consider the time for required action by the governing body, the planning and constructing, and the reassessment schedule.

While the slow growth communities may not face the issues just mentioned, theirs is the issue of maintaining what they have and replacing the antiquated. The problem here is simply one of inflation outrunning the revenues. While inflation may be increasing at a rate of more than 10% per year, the revenues will probably be less.

At the same time the areas that are still experiencing decline in population, and there are many of these, must deal with the question of providing or continuing services with a reduced tax base. In this case it may be necessary for these communities to either eliminate certain programs, or turn them over to the private sector. In some cases, it may be possible to enter into multi-jurisdictional agreements, or perhaps even look to volunteers to assist in continuing a service.

Internal Threats

While the external threats discussed are severe, perhaps the internal threats are more so because they are more difficult to deal with. These threats relate to more emotional and personal relationships and ought not be a problem at all, but, human nature being what it is, the issues are serious.

We will begin with the population threat. We already discussed population trends; however, here we want to talk about population composition. It is almost always a certainty that when new people move into a rural community, a clash of ideals, philosophies and demands will surface. While the natives will attempt to maintain the status quo, the "come inners" will want to break with tradition and do things differently. One newcomer described the "old-timers" by saying they were bound by a strange motto "we never did it that way before!".

If the newcomers are young couples, their demands will include such things as schools, utilities, and recreational facilities. If, on the other hand, a rural community experiences a growth of older, retired folks, the demands will be more for health and welfare programs, transportation and housing.

Local elected officials must balance the needs/demands from the higher tax producing young couples with those of the less tax producing, but more populous, senior citizens.

The second internal threat deals with what we call "professionalism" for lack of a better term. By professionalism we mean to imply a degree of expertise on the part of the elected officials and appointed officials alike, that will include such things as common sense as well as intelligence, honesty as well as diplomacy, friendliness as well as firmness and the willingness to represent all the citizens of the community regardless of race, financial status or social standing.

Today's elected official must be ready to spend many hours every week attending meetings, studying issues, reading reports, attending more meetings,

talking to citizens, deciding important issues, setting policy and attending even more meetings. And all this, with very little pay, and a major disruption to his or her normal occupation.

The recent influx of people back to rural areas only intensifies the need for professional officials. We believe certain skills are now a requirement for local officials. Such skills include the ability to comprehend the budget process and to analyze financial statements; the ability to deal with employees and constitutional officers and to manage the affairs of the courthouse or municipal building as well as the county or town. In fact, we feel so strongly about this that we would almost be willing to lobby for legislation that required prospective officials to pass a test or take some kind of training before they could assume their office.

Lastly, we want to touch on an internal threat that has really hindered more localities than we'll ever know about - turf battles! The time has come when we can no longer afford to fight turf battles with surrounding governing bodies. The economics of the day make it mandatory that cooperative ventures between and among governing bodies be explored in order to bring about economies of scale, and cost efficient practices. There are any number of services that can be provided by one governing body for other governing bodies with very little more expense and a net savings to all concerned. Such services may include utilities, bulk purchasing, cooperative use of a computer and other technologies, law enforcement, recreation, vocational education, health services, assistance for the handicapped and elderly, transportation, and others.

Honadle lists three types of interlocal cooperation that may be possible (Honadle, 1980). The first is the joint operation of a facility. This method is particularly good in cases where capital investments may be prohibitively high for a single locality. Examples of this type of cooperation may be the joint operation of a sanitary landfill, a recreational site, a police/emergency dispatching system, or even the use of a computer.

A mutual aid pact or agreement is another type of cooperative venture possible. These pacts may be informal or very detailed; however, they usually

cover only one particular service. Fire fighting and police protection are two of the most common examples of such pacts. Inasmuch as fire and crime are no respectors of political boundaries, these services seem to be most compatible to mutual agreements.

The last type of interlocal cooperation possible is the purchase of services. This has been done for many years in metropolitan areas, and is increasing in rural areas as well. Solid waste pick-up and handling may well be one area where a locality can purchase the services from another locality, thus saving the capital outlay plus operation and maintenance expenses.

Figure 3 lists some of the benefits and some of the barriers to increased interlocal cooperation.

What must happen is for governing bodies to first admit there are barriers. Then an honest effort must be made to remove the barriers and to explore simple ventures where a cooperative approach will succeed. Once this has been accomplished, the door will be open for many other ventures.

In order for the above to take place, we must be acutely aware of the fiercely independent nature of rural citizens in general which usually causes them to be somewhat suspicious of federal and state programs, and even a bit unsure of neighboring governing bodies. There always seems to be the fear that someone will try to usurp some of the authority of the locals. If this is the case, officials need to learn to overcome such an attitude or they could well "drown in their own juices".

LOCAL GOVERNMENT FUNCTIONS

Education

In some respects, education is probably the biggest issue with which many rural communities must deal. This is especially the case in those states where

Figure 3
BENEFITS AND BARRIERS TO
INCREASED INTERLOCAL COOPERATION

Some Possible Benefits

- Reduced costs resulting from larger scale of production, or discounts from volume purchasing
- Improved services where problems cross governmental boundaries
- More politically acceptable than consolidation
- May resolve local administrative problems
- Preserves more local control than consolidation
- Is temporary and can be ended when necessary

Barriers to Greater Use of Agreements

- Political rivalry or personal conflicts
- Difficulty of allocating costs among participants
- Can lead to double taxation in some cases
- Lack of supervision and control can occur
- Lack of legal authority to enter agreements
- Administrative problems involving billing arrangements, incompatible personnel systems

the cost of education is a function of local government. In all states however, the cost of education still takes on enormous proportions when seen in light of fiscal distribution. To be sure, those states that include education in their budgets find that rural budgets may allot as much as 75% or more of their funds for education. By way of comparison, education usually accounts for less than 25% of urban budgets in those same states. In Virginia, of 15 rural counties surveyed to determine the percentage of their budget that went for educational purposes, it was found that anywhere from 53.3% to 83.6% was allocated.

Tweeten and Brinkman (Tweeten, 1976) state that, on the average in 1972, schools "were supported 50 percent from local taxes, 40 percent from state sources, and 10 percent from federal sources." These percentages take on greater significance when we realize that our school budgets for the coming fiscal year will show a substantial increase in local funding. In one rural county in Virginia, for instance, the average budget increase for the school for the next fiscal year is only 10% over the current year. However, the local share of funding will amount to an increase of 25%. In another rural county the school budget reflects a request for local funds to increase for the first time in seven years. Both of these situations reflect the changing trend of less federal money for educational purposes.

This issue is compounded when we examine the genesis of local funds. In almost all cases, the majority of local revenue is generated from local property tax. Tweeten and Brinkman (Tweeten, 1976) estimate that such a tax "provides 84 percent of locally financed school revenues." And because state tax laws usually limit a county's taxing ability, there are few alternatives for relief. This is indeed unfortunate because the taxing mechanism is not equitable in its present form in rural areas. It is usually the farmer who is hit the hardest. In fact, it is not unusual to find that less than 25% of the landowners are paying at least 50% of the property taxes. Research shows that, locally, many of our farmers are paying three to five times more tax than their residential neighbors. The inequity may even be greater when we realize that 1) many of our farmers are at the age when their children have already graduated from school, and 2) that many of the parents of the school are children who cannot afford to own a home or land and pay no real estate tax at

all. Tweeten (Tweeten, 1976) suggests that "an obvious answer is full State and Federal funding of schools, drawing especially from income taxes."

Consolidation has been offered as a means of reducing school capital project needs and administrative costs. Studies indicate that consolidation has both positive and negative impacts on a community. A positive factor has to do with size economies of the schools or school districts to be consolidated. Fox (Fox, 1980) reports that certain "economies do seem to be associated with large-scale education." The minimum high school cost-size comes somewhere in the area of 1,500 students. This figure decreases substantially for elementary schools where the ideal number, economy-wise, seems to be about 500 pupils. Fox's study further shows support for "the existence of economies in the provision of district-level administrative services."

Negative impacts of consolidation have to do with transportation, quality of education, and breakdown of community identity. A study by Holland and Baritelle on nine school districts in Lincoln County, Washington, concluded that consolidation would only save 1.3 percent of total costs (Fox, 1980). This minor savings was due, in part, to the large transportation costs involved. Their study further noted "that as no value had been placed on childrens' time (while being transported to and from school), their estimate is an upper limit." An issue still being studied has to do with the quality of education resulting from consolidation. Although the results are inconclusive, there are proponents for both sides of the question. It appears that many factors impact on the answer. Such things as the degree and spirit of cooperation among the various geographic areas being thrown together; the support given the school administration by parents and their respective governing bodies; the support given the teachers by the school administration and parents; and the local political situation. Another negative impact related to consolidation is the breakdown of community identity. Many have argued that the community school must be preserved because it offers the best form of education. Others hold that present day society has breached the boundaries of local community and the citizens are now more cosmopolitan. This may be true in some areas; however, these are probably large urban areas and not rural areas. In most rural communities there is still a very strong community identity. Sher and Tompkins conducted a study in the mid-1970's which

concluded that for rural areas, the loss of a school's community identity may result in adverse effects on community life (Fox, 1980).

Other related issues have to do with educational facilities and school bus fleets. Many of the facilities and vehicles are in excellent shape and well equipped, yet they may be idle for two or three months every year, as well as in the evenings, at night, and during weekends throughout the year. It appears that some form of multiple use for these buildings and vehicles may be the solution to other problems which local governing bodies are trying to solve. Such problems as trying to provide recreational programs and space, senior citizens' activities, adult education and skills improvement classes to mention just a few. The benefit-cost ratio for such multiple uses will outweigh the added administrative responsibility required.

Health and Welfare Programs

Inasmuch as state and federal regulations dictate the major portion of these programs, there is very little local governing bodies can do except to pay their share. There are, however, several issues involved with providing these services that indicate the rural areas are under a greater financial burden than urban areas. One such issue has to do with the percentage of health and welfare recipients found in rural America compared to urban. According to Census data for 1975 and 1980, the percentage of welfare recipients for rural and urban areas were about the same for 1975, 5.6% for urban compared to 4.0% for rural areas. The 1980 Census figures, however, show a decrease in the number of welfare recipients in urban areas of 0.8% while rural areas show only a 0.2% decrease. Health recipients, on the other hand, made up 25.3% of the total rural population in 1978 as compared to urban areas where such recipients made up 20.0% of the population. A second issue relates to the percentage of elderly in rural areas as compared to urban. Census data for 1980 shows a total of 8,658,000 elderly (65 and over) in rural areas, or 14.7% of the total rural population. In urban areas; however, we see a total of 15,085,000 elderly accounting for 9.0% of their total population. To be sure, not all elderly require health and welfare assistance; however, many do and this constitutes a heavier burden than our urban cousins have to bear. A third issue revolves around the fact that the rural standard of living is far below

the urban level. These issues all work together to provide local rural governing bodies with less tax revenue and more service demands.

The results of the impacts of all the above can be seen by the local per capita expenditure for health and welfare programs between those localities within a Standard Metropolitan Statistical Area (SMSA) and those outside such an area. According to the 1977 Census of Governments based on 1975 population estimates, rural areas spent \$8.08 per capita on health programs and \$23.48 per capita on welfare programs (U.S. Bureau of the Census, 1980). This compares to urban areas spending of \$15.75 per capita and \$67.85 per capita on health and welfare programs respectively. A further comparison showing federal outlays, on a per capita basis, for fiscal 1978 indicates that same trend (Handler, 1980). Metropolitan areas received \$39 for health services and \$6 for social (or welfare) services. In comparison, rural areas received \$19 and \$2 respectively for such services.

In summary, what rural America is facing, with regard to health and welfare programs, is the responsibility of providing more services, percentage-wise, with less tax revenue, and with decreasing federal and state agencies.

Utilities

Concern over the delivery of utility services comes about when we learn that (U.S. The White House, 1978):

- "- 1.5 million rural Americans do not have running water in their homes;
- 7.2 million rural people have dug wells or other water resources which do not meet safe drinking water standards;
- another 6.5 million rural residents are served by community water systems which do not meet safe drinking water standards; and
- more than 2.4 million rural Americans do not have adequate sewage disposal facilities."

Added to the above are other issues such as the cost of providing or updating utility services; the economies of scale related to these services; alternatives for such services; and services over which local governing bodies have no control.

The construction of water and sewage treatment facilities is usually far more than most rural communities can afford. The addition of several miles of pipelines, pumping stations and auxiliary facilities only adds to the problem. The result is that such costs cannot be met without extremely high taxes or assistance from state and/or federal sources. With most rural communities expending about 75% of their budgets now for education, plus the fact that utility services are not usually provided for the whole rural county or area being taxed, local governing bodies cannot undertake a capital project of this magnitude that will serve only a segment of the population. The picture also looks darker when we look for assistance from state or federal sources. The President's economic plan seems to be moving in the direction of less federal aid through grants. The current budget proposes the decrease or total elimination of programs that formerly financed a large part of a community's utility project.

Those demanding utility services usually point to the concept of economies of size - the idea that bigger is not only better, but less expensive as well.

Coelen (Coelen, 1981) points out that "what these analysts forget is that low population density in most rural areas contributes diseconomies that often offset economies from large scale production." The cost, per gallon, of treating safe drinking water may decrease if production is doubled in order to serve a greater number of customers. However, if the new customers are located in widely dispersed areas, the required amount of new pipeline may more than offset the savings of treating the added amount of water. Hitzhusen and Napier (Hitzhusen, 1978) reference several studies showing the problems of economies of size in rural areas.

In general, one of the only utilities where economies may be realized is in the area of solid waste disposal. Fox (Fox, 1981) has pointed out that economies of size "are limited in the collection process, although per capita

costs may be somewhat lower in larger, more densely populated communities." He further states that greater economies "may be possible in refuse disposal because initial capital investment can be dispersed over the larger population served."

Alternative systems may be the only viable solution open to rural communities if utility services are going to be provided. It is becoming more of a necessity for rural leadership to be innovative and willing to experiment with new technologies if affordable services are to be provided. This spirit of innovation and experimentation, however, is foreign to many rural communities that would rather remain conservative, move slowly, and not be the first to try new ideas.

Federal agencies, such as EPA, have begun to relax some of their regulations allowing for innovations. In fact, some of these agencies are now producing guidelines and other publications telling about some of the new small-scale technology that may offer a viable alternative for rural communities. One such publication is EPA's FRD-10, listing 21 alternative wastewater private systems for small communities and rural areas. Many private companies are also providing low cost, small scale systems that claim to be cost efficient in sparsely populated areas.

Technology, in the area of water treatment facilities, is not yet as promising as with sewage treatment. Some small scale treatment packages are available, and more are sure to be developed in the future. Until then, the most viable solution for the provision of water may be the utilization of cluster wells to serve dispersed population settlements. Such wells can be more easily monitored and maintained. The greatest expense, after the drilling has been done, is the laying of pipeline. There is very little operational and maintenance cost.

Solid waste services can be provided in a variety of ways. Some areas utilize the door-to-door pick up system; others provide small or large "green box" containers at several locations throughout the community; and others maintain a central sanitary landfill to which citizens must bring their trash. While none of these systems are as expensive as water and sewer facilities,

they still make up a sizeable expense. Modern technology is attempting to make use of solid waste by recycling most of it or converting it for energy use. These plants and processes may be cost efficient in large urban areas; however, they are still not within the price range that make them attractive for rural areas. Some small cities, that are able to generate about 25 tons or more of refuse daily, are having success with recycling plants; however, such volume as that requires a population of about 20,000. One small town in New Hampshire found that even with their population of only 6,400 they could afford to build a recycling plant that could handle 21 tons of refuse per day and, by converting it to steam and selling this to a local industry, make the project cost efficient.

Perhaps the greatest incentive for a community to find an effective alternative method of handling and disposing of their solid waste has to do with the increasing problem of finding land suitable, available, and reasonable for sanitary landfill operations.

The two utility services with which local governing bodies usually have no direct control are those dealing with electrical service and telephonic communications. Most rural areas are served by large electric companies, or smaller electric cooperatives that began operations in the 1930's specifically to serve such rural areas. Electric "coops" have, for the most part, been very successful and effective, and continue to play a large role in rural America.

Telephone service, on the other hand, is still antiquated and inefficient in many rural areas of our nation. For example, there are counties in Virginia with as many as four or five different exchanges within a single county. This means that calls are subject to long distance charges even though the distances are minimal. Another disadvantage lies in the fact that more than one telephone company may operate in many counties, again requiring long distance calling over short distances. A third problem that rural areas experience is the fact that they usually are not served by the newer, and less expensive, telephonic services available in urban centers.

Housing

While housing may not be a large budget item, or even a budget item at all, it nevertheless represents one of the major issues in rural America. The magnitude of the issue can be seen by Census data that reveals that while rural areas contain a third of the nation's population, they also contain 50% of the substandard housing, and receive only 20% of housing support funding by federal agencies. Rural housing deficiencies are two to five times greater than those of urban housing. Nor is rural housing the bargain that many would make it out to be. Data shows rural housing, on the average, is smaller than urban housing, 1,440 square feet as compared to 1,705 square feet; more costly to build, \$25.10 per square foot as compared to \$24.70 per square foot; and more costly to finance. The average rural single-family homeowner pays 0.9% higher interest rate, with 3.1 years shorter term to maturity, and 0.5% higher downpayment.

A report published by the General Accounting Office (U.S. General Accounting Office, 1980) in March 1980 listed the following five problems related to rural housing:

1. A lack of mortgage credit. This is due to several factors. Rural banks have a limited capability unless they are a branch of a stronger urban-based organization. Rural areas have a scarcity of savings and loan associations. Finally, there is a low level of activity in rural areas by mortgage companies.
2. Homeownership is often unaffordable for moderate-income families. In 1979, a new home cost \$57,600 with interest rates in the midteens. With 40% of all rural households having incomes of less than \$10,000 per year, there is no way these individuals can own a home unless some type of subsidy is given.
3. The poor condition of existing units. As noted earlier, 50% of the housing stock in rural areas is substandard. With fewer new homes being built each year to replace the needed units, and with more new residents coming to rural areas to live, this means the situation is deteriorating annually.

4. A shortage of affordable building sites. The fastest rising component of the cost of a new home is the cost of the land, even in rural areas. In rural America, inexpensive and suitable land is virtually non-existent.
5. The difficulty on the part of federal agencies to serve rural areas. Farmers Home Administration is the only agency with offices in nearly every rural county, and still their staff is behind with their workload. Other agencies just do not give much priority to rural areas insofar as housing is concerned.

Other studies have revealed still more problems in the areas of rural housing: the delivery of HUD programs and the capacity of rural governing bodies to handle HUD requirements and paperwork; local capital resources are scarce; local developers believe the paperwork is not worth the small profit to be made; local governing bodies are not willing to get involved with government subsidized housing; a severe lack of housing choice at affordable prices; and a lack of rental units at any price.

A national survey, conducted by the Department of Housing and Urban Development, for the years 1970 through 1974 shows that the median value of a rural house increased 88%. According to the same study, the median value of an urban house increased 55% during the same period of time. The median value of a rural house in 1974 was \$24,000 as compared to \$28,100 for an urban house. Using a straight line projection methodology, we can estimate that by 1977 the median value of a rural house would have been \$43,943 as compared to only \$41,358 for the urban house. The result of this trend, and the current economic situation, may well mean that the most viable housing solution for many rural families is the purchase of a mobile home.

Mobile home sales have continued to stay stable even with the housing market being severely hit by high interest rates. In comparing the sale of mobile homes with site-built homes valued at \$40,000 or less, data shows that mobile homes captured 62% of the market in 1976 and have increased that lead to 82% in 1980 with 58% of all mobile homes being located in rural areas (Manufactured Housing Institute, 1981).

Transportation

Transportation is one function of local government that few rural localities seem willing to get involved in although the statistics bear out the great need that exists.

"Approximately 34% of the U.S. population (c. 85 million) and 52% of the nation's poor live outside metropolitan areas. Many of these rural residents - especially the poor, elderly, handicapped, and young - are isolated and immobile, and face extreme difficulties in gaining access to jobs, health care, social services, shopping, recreation, and friends. The rural mobility problem is compounded by the simple fact of long distances and, consequently, high travel costs" (U.S. The White House, 1979).

Other statistical data that help describe the problems related to transportation in rural areas include the following:

- 15% of rural households do not own an auto and 52% own only one car which is usually used for work;
- 57% of the rural poor and 45% of the rural elderly own no car;
- fewer than one third of the nation's smallest towns (population less than 5,000) are served by a public transit system;
- less than 1% of rural persons have access to public transportation to get to and from work;
- about two thirds of all places with less than 2,500 population have no taxi service; and
- rural residents must travel further than urban residents for medical and social services.

Causal factors for this situation include population dispersal, low family incomes, a high number of one-car families, and the cost for setting up, operating and maintaining a public transit system.

Data reveals the mode of travel in rural America and the trend since 1962 (Saltzman, 1981):

<u>Mode</u>	<u>1962*</u>	<u>1967*</u>	<u>1972*</u>
Passenger auto	736	890	1,129
Commercial air carrier	35	80	123
Commercial bus	22	25	25.6
General aviation	3	7	10
Rail	20	15	8.6

*Given in billions of miles

Every study we have read shows the great need for mass transit systems in rural areas; however, in almost every case, population dispersal makes such systems cost inefficient unless the fares are high or local governing bodies are willing to subsidize the system. Inasmuch as the major ridership potential is among the elderly, poor, handicapped and young, high fares could not be afforded, thus defeating the purpose for such a system in the first place. In the past, Federal subsidization has been adequate; however, such assistance is being greatly reduced or eliminated altogether. Business Week, October 26, 1981 issue, stated that due to "the Administration's proposed elimination of operating subsidies and other pressures, up to one quarter of the country's 300 metropolitan transit systems might have to cease operation by 1985." This is the situation in urban areas where the ridership load is far better than it would be in rural areas, and where the amount of mileage driven is far less.

Among the greatest increase in transportation usage is air travel. Data shows an increase of about 250% in commercial air travel between 1962 and 1972. This increase took place in spite of the fact that regulated carriers dropped service to 250 communities. The service dropped, however, was picked up by newly created commuter carriers. A total of 200 such airlines began operations within the past 15 years.

Rail service, although declining by 133% between 1962 and 1972, still plays a big and growing role for much of rural America. Most bulk materials still depend heavily on rail (70% of coal and 60% of grain). Even with inter-city hauling on the increase, more ton-mile traffic in 1977 was done by rail than by truck or pipeline. Passenger rail service, although a very small part of the total passenger transportation picture, has also shown a slight increase with the advent of Amtrak in the early 1970's.

One aspect of rural transportation that is becoming more of a problem is the construction and maintenance of highways and bridges. The same Business Week issue stated: "more than 8,000 miles of the interstate system's 42,500 miles, and 13% of its bridges are now beyond their desired life and must be rebuilt." They further estimate "just to maintain current service levels on the roads and highways outside urban areas that are not a part of the interstate system will require more funds for rehabilitation and reconstruction during the 1980's - over \$500 billion - than all levels of government spent on all public works investments during the 1970's."

Recreation

Perhaps the most interesting commentary has to do with studies that show the importance of recreation and recreational facilities among rural residents and urban residents wanting to relocate to rural areas. At the same time, a quick glance at most rural budgets will show that very little is being put in these budgets for recreational purposes. Fuguitt and Zuickes (Baldassare, 1981) conducted a study in 1975 that revealed the place recreation held for so many wanting to move to the country. It appears that although the people give high priority to recreational needs, governing bodies do not. According to the 1977 Census of Governments (page 299), urban areas are spending about three times more than rural areas on recreation. To be sure, recreation is one of the merit goods and, as such, will find itself being among the first to be cut when funding becomes scarce. In many communities recreational services are being kept alive mainly through the charge of user fees. This practice is apparently more prevalent in urban areas. The 1977 Census of Governments (page 298) again shows that urban revenues from parks and recreation are about four times higher than rural revenues.

Law Enforcement

In many rural communities the law enforcement organization may consist of a Sheriff's Department and a Police Department. The first is responsible to the courts to serve warrants and to operate a detention facility. The sheriff is an elected official. The Police Department has the responsibility of keeping the peace and enforcing the laws of the locality. The chief of police is hired by the local governing body or the manager. Within rural counties are also State Police troopers who have usually been assigned to serve in a one-county area. Their purpose is to patrol the highways and roads, and to assist the local law enforcement officials when requested.

Until recently, the rural crime rate has been one of the major reasons listed by many for moving from urban to rural locations. Unfortunately, with the rapid increase in population, there has also been an increase in crime rate. In Virginia, according to State Police data, the number of crimes committed, per capita, in rural areas for 1975, was 1:41. This number increased to 1:38 by 1981. In our urban centers the numbers for the same two years were 1:18 and 1:17 respectively.

Fire and Rescue Services

The local volunteer rescue squad and volunteer fire department represent one of the most remarkable services available to rural citizens. These men and women give of their own time to train and serve as well as to expose themselves to all types of dangers. For the most part, these organizations receive only a small portion of their financial needs from the local governing bodies; therefore, they must conduct their own fund raising campaigns. Some counties may provide the necessary vehicles and equipment, but others do not. Most counties do not realize the amount of local funding that is saved through these volunteer services. A study conducted by one rural county in Virginia shows that volunteer firemen contribute almost \$5,000 per member per year in services. For this county, that is a total savings of about \$700,000 annually.

FUTURE TRENDS

The bottom line, of course, is simple. Agricultural communities' capacity to govern will directly relate to their ability to deal with the threats we discussed earlier.

We believe the future will show that rural America successfully survived the 80's because it did, in fact, deal with the threats. And how will it be done? We believe future trends for rural citizens will include such things as:

1. A willingness to change and to allow change. This is a major step, but we believe it will occur. This new attitude will manifest itself in much innovation. Ideas will come forth and be adopted that will revolutionize rural government.
2. Along these same lines, we believe we will witness a great deal of cooperative ventures between and among localities. Multi-jurisdictional projects and programs will be more common place. Volunteerism will become a major influence in rural communities.
3. Lastly, and most dramatically, we believe the innovation and cooperation will eventually lead to the consolidation of many jurisdictions. Once the door is open and new ideas result in greater savings, more localities will see the wisdom in consolidation as a means of eliminating duplication and easing citizens' tax burdens. Although an unpopular and emotional issue in many areas, and not always the most cost effective action, consolidation is still a viable course and many localities are even now investigating the possibility.

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THE RURAL DEVELOPMENT POLICY OF
THE CARTER ADMINISTRATION

Lynn M. Daft *

INTRODUCTION

My assignment, as I understand it, is to provide an historical context for consideration of rural development policy at the national level. Primary attention will be given to examining the rural development policy of the Carter Administration, announced in late 1979. The conditions giving rise to that policy, its components, and implications for future rural development policy are examined. This will serve as a basis of comparison against which more recent rural policies, to be discussed by other speakers, can be judged.

THE POLITICAL ECONOMY OF AGRICULTURAL COMMUNITIES

Before turning to this assignment, however, I would like to exercise the prerogative of an invited speaker and offer a general observation on the central topic of this conference -- agricultural communities. Communities are generally defined in terms of common geographic boundaries and a common set of social interactions that occur within this space. Against this standard, the visual images that come to mind when one thinks of agricultural communities are the small towns and villages that exist in rural parts of the United States. But are these really agricultural communities?

There are two principal reasons for answering: "not necessarily." First, in contrast to earlier times, most small towns and communities in the U.S. are now primarily dependent on non-agricultural economic activities. Though some of this activity is in support of agriculture, directly or indirectly, much of it is not. Thus, for many rural economies, agricultural employment and income accounts for a relatively modest share of the total.

* Vice President, Abel, Daft & Earley

A second and related point stems from the dramatic transformation of the structure of the agricultural system. This has been an evolutionary change, occurring over the past several decades. This transformation has now reached the point that, viewed from the standpoint of political economy, agricultural communities and communities in agricultural areas are now two quite different things. The community of interest that we call agriculture has lost much of its geographic dimension, largely because agriculture is no longer synonymous with farming. Not only has farming become a smaller and smaller share of the overall system -- whether measured in terms of value added or employment -- but the growth elements in the system are not geographically tied to farmland in the same way they once were (see Table 1). Thus, the worker on the John Deere

Table 1

The Food and Fiber System, 1980

	<u>Employment</u> ^{1/} -- millions --	<u>Gross national product originating by activity</u> -- \$ billions --
Farm production	3.3	66.8
Nonfarm activities	20.4	466.0
Food processing	1.7	66.9
Resources and services	2.5	95.6
Manufacturing	5.1	98.6
Transportation, trade, and retailing	7.7	165.5
Eating establishments	3.4	39.4
Total food and fiber system	23.7	532.8 ^{2/}
Total domestic economy	104.7 ^{3/}	2,626.1
	percent	percent
Food and fiber system as a percent of the U.S. economy	22.6	20.3

^{1/} Figures for 1980.

^{2/} Results in a gross business multiplier of \$2.30 per dollar of consumer purchases and exports.

^{3/} Represents the available work force.

Source: USDA, ERS, Agricultural Outlook, January/February 1982.

assembly line in Moline or the bulk grain handler at the Port of New Orleans often has a more direct and more vital stake in the economic health of agriculture than do many of the farmers' nearby village neighbors.

The important point to be made here is not so much that farming has become relatively less important (which it has) or that the food and agriculture sector has become less important (which it probably has not), but that the scope and configuration of this sector -- its dimensions as a community of interest -- have been dramatically altered. The political and economic relationships that exist within this community have been fundamentally altered by this transformation . . . to the point that some would even question whether an agricultural community of interest still remains.

Dave Hickey, writing for the Texas Observer once observed that "Home in the 20th Century, is less where the heart is than where you understand the sons-of-bitches."^{1/} For most members of the agricultural community, this understanding has little to do with contemporary settlement patterns.

NATIONAL RURAL DEVELOPMENT POLICY IN HISTORICAL CONTEXT

National policy toward the development of rural parts of the U.S. has gone through many phases. In the earliest days of this nation, when agriculture was the dominant economic force and most of the population was found in small settlements, national policy and rural development policy were practically one and the same. In that era, there was heavy emphasis on settling the land and building the infrastructure of a young nation. One could also go back to the early part of this century and the Country Life Commission and the programs of Roosevelt's New Deal. Although industrialization was well underway, there remained a considerable emphasis on the growth and development of rural people and their communities.

^{1/} Joel Garreau, The Nine Nations of North America, Houghton Mifflin Co., Boston: 1981.

However, rural development as it is known today is most directly traceable to federal activities that began in the 1950's. In the 1950's, the transition of American farms to larger, more specialized and more capital intensive units was in full stride. The outmigration from agriculture was of such magnitude as to have noticeable effect on the economic and population base of many rural communities in farm areas. As a result, a set of issues generally defined as "rural development" were formed around the problems associated with high rates of outmigration from these rural areas. It was not a large scale effort. It consisted mainly of redirecting some agricultural research and extension resources toward the issue.

Then, in the 1960's, national public policy attention turned toward issues of poverty and civil rights. This resulted in a significant recasting of rural development programs and purposes. Attention shifted from the Midwest and the Plains to the South, Appalachia, and other pockets of economic stagnation. Programmatically, attention shifted toward the economic necessities of food, shelter, and a minimum income.

Although poverty remained on the national agenda in the 1970's, rural development attention refocused on the areas suffering from outmigration and the absence of employment opportunities. The economic and industrial development of regions suffering from outmigration gained primary policy attention. Reform of the welfare system was considered, but shelved. With the sharp increase in farm prices and incomes in the mid-1970's and the resulting slowdown in outmigration from farms, there was somewhat less pressure and justification for promoting economic development in primary agriculture areas. Development efforts also became somewhat more dispersed during this period as program agencies broadened the scope of their attention.

RURAL DEVELOPMENT IN THE 1980'S

The Rural Policy Environment

In many respects, the context within which the Carter rural development policy was developed contrasted sharply with that prevailing in earlier times. It contrasted in the sense that a very wide diversity of circumstance prevailed in different parts of rural America. There was no one central theme or common set of circumstances around which to fashion a policy. For example, migration patterns had altered dramatically during the 1970's with many rural areas experiencing a turnaround in migration trends. In fact, overall, rural areas experienced more rapid population growth due to immigration than did urban areas during this period. And, as a result of such phenomena as the all-out effort to develop new energy sources in the West, the growing attractiveness of the Sunbelt, and the springing-up of retirement communities, excessive population growth became a problem common to a number of rural areas. Nevertheless, there remained some important exceptions to this trend. Some areas continued to experience high rates of outmigration and, as a result, all the economic and social problems that accompany a dwindling population base. About 500 counties, most of them in the Upper Plains and the Midwest, remained in this category.

Though agriculture remained a dominant economic influence in many rural areas, non-farm economic activity became dominant in many others, as has already been noted. Thus, many rural economies were no longer tied to the traditional forms of natural resource based employment. This was particularly evident for those rural areas with large pools of relatively well trained labor with convenient access to large metropolitan markets, and a pleasant living environment. Those regions not sharing these characteristics remained in the backwater.

Not only had there evolved a split between those areas that remained highly agricultural and those that had shifted toward non-farm economic activity, but there also had evolved a significant division within the farming sector itself. Due to a combination of circumstances, American agriculture has gradually assumed a dualistic structure. On the one hand, there exists a relatively small number of large, commercial farms representing only about 12 percent of the total number of farms but producing

over two-thirds of total output. At the other extreme is a very large number of very small farming units. Farms with sales of less than \$10,000 in 1981 accounted for nearly half (48 percent) of all farms but accounted for less than 4 percent of total sales. As a group, the farms in this small sales category were operated on a part-time basis by families that experienced a negative net income from farming. In other words, income from off-farm sources were used to subsidize the farm operations. On average, the subsidy amounted to about \$1,000 per unit or about 5 to 6 percent of off-farm income. Needless to say, although all are classified as farm operators, these two groups have little in common including their viewpoints on the role of government in agriculture.

A similarly diverse picture emerged when rural areas were examined from the standpoint of income and economic growth. The severe economic stagnation and widespread poverty of the 1960's that was documented by the Rural Poverty Commission's report, The People Left Behind, had been replaced by a much more robust rural economy. Many of those rural areas experiencing population growth during the 1970's had also enjoyed a high rate of growth in employment and income. In the midst of this economic growth, however, there remained significant pockets of rural poverty. The incidence of poverty in rural areas, though declining, remained higher than in urban areas. Nearly two-thirds of the rural poor lived in the South where over 20 percent of the rural population lived on incomes below the poverty level in 1975.

Finally, there existed a wide divergence in the capacity to govern local rural areas. In earlier times, the near total absence of governmental capacity at this level had often been used as justification for federal involvement. While this case could still be made for many rural areas, it could not be made uniformly. Both state and local governments had taken steps toward building their capacity to govern more efficiently and more effectively. This was augmented by the establishment of community based organizations in many rural areas.

This was the general environment within which the Carter Administration approached the task of designing a rural development policy. It pictured rural America not as a homogenous section of the nation that could be easily isolated and treated with its own unique set of public policies, but as an extremely heterogeneous network of areas, some of which were highly integrated into the economic and social fabric of

adjoining urban centers and some of which remained largely isolated from such influence. This recognition, above all others, set the tone and direction for this policy.

Two additional factors helped round out the setting within which this policy was formulated. First was the existence of a vast array of federal programs designed to treat most of the problems that were known to exist in rural areas. This is not to say that these programs were functioning well (or, in some cases, at all) in rural settings, or that they were adequately staffed and funded, or, that the programs were well conceived. In fact, there was ample evidence that many of the program efforts that could be of greatest value to rural people were largely designed and operated for an urban clientele. Thus, the problem was not seen as a lack of programs or legislative authority so much as the need for review and redirection of those already on the books.

Finally, there was the ever present constraint of budget. The slowing rate of national economic growth was forcing a reconsideration of all elements of fiscal policy. The discipline of fiscal austerity all but eliminated the opportunity for new expenditures, unless of course they could be made possible by a reduction elsewhere in the budget.

These three factors then -- a wide diversity of circumstance, the existence of relevant program authority, and the lack of additional funds -- determined the central thrust of this policy.

The Carter Administration Rural Development Policy

The rural development policy developed by the Carter Administration had two central aims:

- o (A) to develop a general framework of goals and principles that could be used in guiding specific program actions; and
- o (B) to actively work within the confines of existing programs and institutions, with the advice and counsel of all affected interests, to take actions on a continuing basis consistent with these goals and principles.

Though simple in concept, this approach offered a unique and potentially fruitful means of redirecting domestic programs. Redirection of public policy is generally accomplished through a major change in funding, adoption of new legislative authority, or reorganization. As a result, the primary emphasis is too often placed on program means rather than results. Furthermore, the effort is generally undertaken on a scale of sufficient size as to cause many of the details to be controlled by the big picture decisions rather than at a level where the tradeoffs can be more intelligently judged. In contrast, the approach followed by this policy was to concentrate on objectives and the detailed actions required for the realization of these objectives.

Components of the Policy. There were two principal components of the policy: (1) a statement of policy objectives and principles; (2) an action agenda. The first was as extreme in its breadth and generality as the latter was in its specificity. The policy objectives focused on satisfying:

- o Basic human needs;
- o The need for employment opportunities and a favorable economic climate for economic development;
- o Those special needs associated with distance and scale in rural areas; and

- o Natural resource and environmental problems.

Supplementing these objectives were six administrative principles. They directed the administrators of Federal programs to:

1. Recognize local priorities and facilitate local decisionmaking;
2. Direct expenditures in support of state and local development plans and priorities;
3. Use Federal assistance to leverage private sector investments;
4. Attach high priority to the targeting of assistance to disadvantaged persons and distressed communities;
5. Generally increase the accessibility and relevance of Federal programs to rural people; and
6. Make special efforts to provide local citizens and leaders with the help required for effective community decisionmaking and development efforts.

As will be noted, these principles give heavy weight to the way in which people at the local level define their problems and propose to solve them. Sometimes they act through units of local government, though the principles were designed in recognition that some community-based action occurred outside government. The principles also suggest that federal monies should be linked to the allocation of private funds, whenever possible. Thus, market forces were to help point the way toward public investments. Finally, the principles highlighted the need to attach priority to dealing with the problems of "the people left behind."

As a means of translating these goals and principles into tangible results, the Carter policy provided for an action agenda. This agenda was to contain specific programmatic actions that the Administration had agreed to pursue, on the basis of

extensive consultation with the many affected interests. The agenda was to be in a state of near continuous change, with some items being dropped as they were accomplished or abandoned and others being added as they were identified. At the time the policy was announced in late 1979, a list of about 200 agenda items was identified. The following examples are illustrative:

- o Further expand the delegation of Farmers Home Administration mortgage processing by local savings and loan associations to additional states.
- o Target HEW and FMHA loan funds for medical facilities on 125 identified rural communities by the end of 1980.
- o FMHA to agree to give priority to applications for loan and/or grant assistance from communities identified by EPA as failing to meet safe water standards.
- o The adoption of EPA's cost-effectiveness criteria for wastewater systems by HUD and FMHA.
- o Implementation of a TVA demonstration project in three counties in Tennessee to develop unconventional gas resources.

To oversee the maintenance and implementation of this agenda, the President established an interagency coordinating group (co-chaired by the White House and the Department of Agriculture), directed that an advisory council be formed, invited the Governors to establish companion organizations at the state level, and directed the Secretary of Agriculture to report annually to him on progress made in achieving the purposes of the policy.

Summary and Evaluation. The enormous diversity of circumstance and need that characterizes rural America in the 1980's calls for a much different national policy than we have witnessed in the past. Past policies have too frequently fastened-on to the issue of the day, whether it was economic development or poverty or capacity building. While Federal activities addressing these and other topics has served a useful purpose, they

have also resulted in partial and oversimplified policies. Any national policy that attempts to force all of rural America into one mold is doomed from the start. For a political system that is accustomed to designing policy around simplified views of the political economy, this poses a special challenge.

Past policies toward rural America have also suffered from severe institutional constraints. Historically, rural development activities at the Federal level have been the province of the Department of Agriculture. Yet, many of the Federal functions having greatest relevance to rural needs reside in other agencies and departments. Although the Department of Agriculture has sought over the past twenty years or so to broaden its program responsibilities in the developmental field, its efforts have met with only mixed success. Aside from the housing, community facility, and economic development loans of the Farmers Home Administration, USDA's involvement is decidedly agricultural. Although rural needs are not ignored by other agencies and departments, neither is their uniqueness given much special attention. And, to the extent the rural situation deviates substantially from the national, urban-dominated norm, this lack of attention represents a significant impediment to effective program administration in rural areas.

Within this policy environment, the rural policy of 1979 offered a unique approach to redefining the role of the Federal government in the field of rural development. It began from the premise that the existing set of relevant program authorities came into being in response to perceived problems and a consensus among publicly elected representatives on how to deal with them. Rather than striking the books clean by eliminating programs or disbanding agencies or transferring responsibilities to another level of government, this policy proposed to achieve program reform through negotiation over an extended period of time between the relevant interests and government. Although limited to this relatively narrow issue, the approach would seem to offer applicability to a wider range of governmental activities.

How well did the policy perform? Unfortunately, this question is probably unanswerable. By its nature, pursuit of this policy required the continuing attention of several dozen individuals throughout the Federal government, in addition to a far larger number outside the government. It was also highly dependent on the personalities and energies of a few key individuals involved in its original design. With the change in

Administration in January 1981, most of these individuals left government. As a result, key aspects of the process were abandoned at that time. Thus, the record is insufficient to support any definitive judgment as to the policy's performance.

On the surface, it would appear to have gotten off to a good start. It was well received by non-governmental interests and was receiving a fairly high degree of cooperation by Federal agencies at the time of its discontinuance. Furthermore, a significant share of those items on the initial action agenda had been partially or completely accomplished by early 1981. On the negative side, it must be said that the initial agenda had too much the appearance of a "wish list." The process by which items were considered for inclusion on the action agenda had not become sufficiently rigorous to support decisions on some of the difficult decisions that would have been encountered. Neither was the process sufficiently well established to have credibility within some of the most important decisionmaking councils. In particular, it was not taken seriously within the budget-making process, a condition important to its eventual success. Still, these are shortcomings of the type that can be expected in the early stages of an effort as complex as this. Overall, I believe it fair to say that this approach to the realization of a more rationale, more effective national policy toward rural areas demonstrated uncommonly high promise. Perhaps one day it will be given another opportunity to prove its worth.

**United States
Department of
Agriculture**

**Office of
Rural Development
Policy**

Better Country:

A Strategy for Rural Development in the 1980's

John R. Block
Secretary of Agriculture

Frank W. Naylor, Jr.
Under Secretary for Small
Community and Rural Development

Willard (Bill) Phillips, Jr.
Director
Office of Rural Development Policy

FEBRUARY 1983

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Executive Summary

After a century of decline, many areas of rural America have experienced remarkable revitalization in the last decade. The population of rural and small town America grew more than 50 percent faster than that of urban America in the 1970's, and more than 80 million people (including more than 20 million within statistical areas officially designated "metropolitan") now call rural America home. Rural employment growth outpaced urban job growth by one-third in the last decade. The rural economy continued to diversify far beyond its traditional base in agriculture, with major expansions in manufacturing, services, and trades. Significant advances in health, housing, education, and other living standards also came to much of rural America over the past 10 years. At the same time, rural local governments and communities benefited from greater intergovernmental assistance, active voluntary involvement in community improvement, many technical and professional innovations, the rise of multijurisdictional authorities, and more effective rural organizations.

But the decade's progress does not tell the whole story of rural America. All is not well and, in accordance with the Rural Development Policy Act of 1980, a strategy has been devised to deal more effectively with rural America's problems and potentials.

To define rural needs and to fashion the most practical responses to them, this Administration has consulted those who are best qualified to comment on such topics—rural Americans. In a very extensive consultation process, the Department of Agriculture solicited the views and recommendations of hundreds of individuals and organizations representing millions of rural citizens. The Secretary of Agriculture appointed a 25-member National Advisory Council on Rural Development to help shape a new rural strategy.

Rural Americans have made it clear that, despite the encouraging statistics, progress has not visited every rural region and growth has generated new problems. Many rural areas continue to suffer poverty, isolation, and decay of facilities. On the average, rural America still lags behind urban America in measurable indicators of income, education, and housing conditions, though some argue that lower costs of living may offset part of the rural disadvantage.

Where growth has been rapid, there are often new problems of overburdened facilities and services, and the danger of losing a distinctive and highly valued rural way of life has also arisen.

The historical economic distinctions between rural and urban America, to some extent, already have been blurred by rural economic diversification and population growth. Except for agriculture and "extractive" industries such as mining, in which rural America predominates, rural and urban economies are strikingly similar.

A policy confined to purely "rural" measures, then, would fail to address the true nature of many of rural America's modern needs. For that reason not all the initiatives outlined in this strategy are focused on rural America exclusively. Many have a wider national application and are intended to benefit urban and rural areas alike. Too often in the past, however, the characteristics which help define "rural" America—sparsely and distantly settled population centers, small-scale institutions, limited revenue bases, and widely dispersed channels of communication—have hampered the application of largely urban-oriented national policies in the rural setting.

In addition to proposing specific responses to specific rural concerns, this strategy is designed to see that rural Americans are fully considered in the many programs in which they have a very significant interest.

The most often cited concerns of rural Americans—those with which the strategy deals in detail—are these:

- Improved rural facilities and services
- More effective application of national policies in programs serving rural America
- Better housing
- More private sector jobs and higher income

The governing philosophy for addressing these concerns is one both strongly suggested by rural Americans and consistently espoused by this Administration. It is a philosophy which attaches a high value to local leadership—as embodied in the New Federalism initiative—and joint public and private efforts to deal with community problems. The four basic principles of this governing philosophy are: to restore political authority and flexibility at the levels of government most accountable to the people; to streamline the Federal establishment to make it more responsive to local and state priorities, rather than the other way around; to exploit the ability of private enterprise as well as government programs to benefit the public; and to build more effective partnerships between

public and private efforts toward both rural and national progress.

Substantial progress in the rural condition has already been made through the efforts of rural Americans themselves and through the achievements of this Administration during the past 2 years. These achievements, which form a foundation for greater rural progress, include substantially lowered inflation and interest rates, major tax relief and Federal spending restraint, regulatory reform, new job training programs, a strong emphasis on international trade, and the consolidation of certain categorical aid programs into block grants offering greater flexibility to local governments.

Building on this foundation, the Administration proposes the following additional steps.

Improvements in Facilities and Services

New Federalism in Rural America

As part of the Administration's New Federalism initiative, certain community development programs will be incorporated into a Federal-State Block Grant program. Rural areas will be guaranteed the funds from programs now specified by law to serve small cities and rural communities.

Assistance to Rural Governments

Rural Regulatory Relief

While the transition is made from categorical aid to block grants for rural development, the President's Task Force on Regulatory Relief will address specific ways in which reporting and regulatory requirements of rural development assistance programs may be significantly reduced through administrative means.

Technical Rural Assistance Information Network (TRAIN)

Under the joint sponsorship of local, State, regional, and national authorities—including educational, commercial, philanthropic, and advocacy organizations as well as governments—the creation of State-level Technical Rural Assistance Information Networks will be supported. State TRAINS would link technical assistance services with local rural development leaders.

Rural Resources Guide

To help facilitate equitable rural access to public and private development assistance, a *Rural Resources Guide* will be published by the U.S. Department of Agriculture and furnished to rural leaders. The guide will catalog the nature and scope of both private and public rural assistance

activities, and identify effective means of access to them.

Rural Data Collection

To help insure that statistical gaps do not impede rural America's access to Federal resources, the U.S. Bureau of the Census, Bureau of Labor Statistics, and Bureau of Economic Analysis will improve the quality and specificity of information collected and reported on rural areas. This data collection should include information on rural housing, health, education, transportation, demographics, physical facilities, employment profiles, and other categories.

Rural Housing

Rural Housing Block Grant

To increase the availability of adequate housing in rural America, a rural housing block grant program will be established by the Federal government and administered by the States. State governments will thus lead in creating safe and sanitary housing for low income rural people.

Private Sector Job Creation

Rural Enterprise Zones

The Administration has already proposed legislation to create 75 enterprise zones over a three year period throughout the country to encourage job producers to locate in economically disadvantaged areas. The Administration further proposes the following:

- One third of the total number of these enterprise zones be designated in rural areas; and
- Local and State officials initiate the application for Federal zone designation.

Trade Expansion and Reform

Having restored more normal agricultural trade relations with the Soviet Union, having challenged the unfair trade practices of the European Community and Japan, having signed the Export Trading Company Act into law, and having implemented the blended credit programs for agricultural exports, the Administration has made significant progress in increasing rural America's trading opportunities. The Administration further pledges to

- Encourage the formation of export trading companies to increase the export of agricultural and other rural products, and
- More systematically disseminate Government-sponsored foreign market research and other trade assistance to public and private rural trade interests.

Rural Credit

To help insure that rural areas have the full range of financial and financially related services necessary to meet community development needs, the Administration will:

- Implement provisions of the Garn-St Germain Depository Institutions Act of 1982 to encourage financial institutions to provide a full range of such services in rural areas;
- Examine the current delivery systems of Federal housing guarantee programs in rural areas to determine the feasibility of using U.S. Department of Agriculture, Farmers Home Administration field offices, to improve both access and delivery; and
- Instruct Farmers Home Administration's field offices to provide support and technical assistance to rural communities seeking to undertake community facility projects.

APPENDIX A: PRESENTERS AND PARTICIPANTS

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LIBRARY OF CONGRESS
MAY 19-20, 1983
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APPENDIX B: AGENDA

AGRICULTURAL COMMUNITIES: THE INTERRELATIONSHIP OF AGRICULTURE,
BUSINESS, INDUSTRY, AND GOVERNMENT IN THE RURAL ECONOMY

A SYMPOSIUM

The Mumford Room
Madison Building
Library of Congress

THURSDAY, MAY 19

- 8:30-9:00 Mumford Room. Greetings from Gilbert Gude, Director,
Congressional Research Service. Overview of symposium,
outline of procedures.
- 9:00-9:45 The Future of Agricultural Communities
Dr. Edward J. Blakely
Department of City and Regional Planning
University of California at Berkeley
Director, Rural Development Policy Project
- 10:00-12:00 Panel A: The Rural Setting Director's Conference Room
Dennis Little, Moderator
Charlotte Breckenridge, Rapporteur
Jeff Zinn, Rapporteur
- Panel B: Credit Mumford Room
Jean Wells, Moderator
Jim Bickley, Rapporteur
Remy Juremas, Rapporteur
- 2:00-4:00 Panel C: Agricultural Sector Mumford Room
Barry Carr, Moderator
Remy Juremas, Rapporteur
Nancy Millar, Rapporteur
- Panel D: Local Governance Dining Room A
Sandra S. Osbourn, Moderator
Stacy Kean, Rapporteur
Eugene Boyd, Rapporteur

FRIDAY, MAY 20

- 9:00-10:00 Farm Structure and Rural Development Mumford Room
Frederick H. Buttel
Department of Rural Sociology
Cornell University
- 10:00-12:00 Panel Reports and General Discussion Mumford Room

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Panel A: The Rural Setting

Dennis Little, Moderator

1. The Changing Nature of Agricultural Communities

Daryl J. Hobbs
 Professor of Rural Sociology
 University of Missouri-Columbia

2. Agricultural Communities: Economic and Social Setting

Calvin L. Beale
 Head, Population Studies Section
 Economic Development Division/Economic Research Service
 U.S. Department of Agriculture

3. Natural Resources and Agricultural Communities

Kenneth Farrell
 Director, Food and Agricultural Policy Program
 Resources for the Future

4. Rural Data Needs for Improved Policy Design and Implementation

Glenn Nelson
 Senior Staff Economist for Food and Agricultural Policy
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Panel B. Credit

Jean Wells, Moderator

1. Credit and Credit Institutions in Agricultural Communities

James J. Mikesell
 Rural Business and Credit Section
 Economic Development Division/Economic Research Service
 U.S. Department of Agriculture

2. Trends Affecting Private Credit Institutions

Emanuel Melicher
 Senior Economist
 Division of Research and Statistics
 Federal Reserve Board

3. Credit as a Public Policy Tool

Dennis Dickstein
 Budget Examiner
 Agricultural Branch
 U.S. Office of Management and Budget

4. Diminished Federal Credit Activity: Impacts on Agricultural Communities

James Swiderski
 Business Development Representative
 Rural Ventures, Incorporated

Panel C. The Agricultural Sector

1. Agriculture as a Factor in Rural Areas

J. Dean Jansma
 Professor of Agricultural Economics
 Penn State University

2. Change in Agriculture: Implications for Agricultural Communities

Luther Twesten
 Regents Professor
 Department of Agricultural Economics
 Oklahoma State University

3. The Family Farm and Agricultural Communities

Catherine Lerzs
 Associate Director
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4. Rural Communities and Agriculture: A Constructive or Destructive Relationship?

Bruce Hawley
 Assistant Director, Washington Office
 American Farm Bureau Federation

Panel D. Local Governance

1. Agricultural Communities: Capacity to Govern

Robert J. Paciocco
 Former County Administrator,
 Prince Edward County, Virginia
 CACI, Inc.

2. Agricultural Communities: Fiscal Capacity

J. Norman Reid
 Head, State and Local Section
 Economic Development Division/Economic Research Service
 U.S. Department of Agriculture

3. Rural Development Program to Small Town and Rural Development Policy:
1955-1980

Lynn Daft
Schnittker Associates
(Formerly Associate Director,
White House Domestic Policy Staff)

4. The New Federalism and Agricultural Communities

Robert B. Carleson
Special Assistant to the President
for Policy Development