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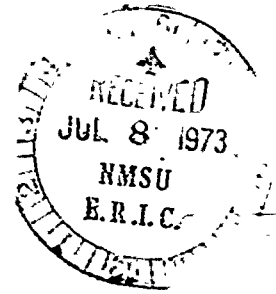
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ABSTRACT

Information presented at a workshop on current rural development in the Northeast was described in this report. The objectives of the workshop were to get an overall view of the regional rural development research conducted under the State Agricultural Experiment Station in the 12 northeastern states; to encourage interdisciplinary exchange; to identify the potential use of the current regional rural development research for policy and program purposes; and to contribute to more effective planning, management, and use of such research. Major areas were rural development, social change, economic change, natural resources, poverty, and community services. Also included in the report were technical discussions of the presented papers; user discussions; and a panel discussion on the future directions in planning, management, and use of rural development research in the Northeast. (PS)

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**PAPERS
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WORKSHOP ON CURRENT
RURAL DEVELOPMENT
REGIONAL RESEARCH
IN THE
NORTHEAST**

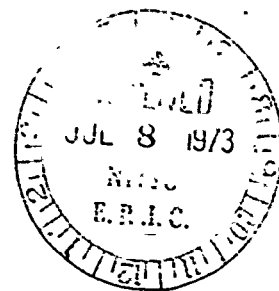
July 25-28, 1972

Northeast Regional Center for Rural Development

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July 25-28, 1972
Stratton Mountain Inn
Vermont

Arranged by the
Northeast Regional Center for Rural Development
in cooperation with the
NEC-14 Committee on Rural Development

Connecticut Delaware Maine Maryland Massachusetts New Hampshire
New Jersey New York Pennsylvania Rhode Island Vermont West Virginia

FOREWORD

This Workshop on Current Rural Development Regional Research in the Northeast was a three-way joint venture. It was a cooperative undertaking of the recently established Northeast Regional Center for Rural Development and the regional committee on rural development known as NEC-14, a committee authorized by the directors of the State Agricultural Experiment Stations in the Northeast. The members of NEC-14 are principally chairmen of departments actively participating in rural development research. The Workshop also had the active involvement of each of the station directors who serve as administrative advisers to eight regional rural development research projects under way in the Northeast.

The Workshop was planned by an ad hoc committee whose members were: George E. Brandow, Pennsylvania State University, member of Technical Committee for the Northeast Regional Center for Rural Development (alternate for Lee M. Day)

Harold R. Capener, Cooperative State Research Service, U.S.D.A.

Lee M. Day, Pennsylvania State University; Chairman, NEC-14

Eugene C. Erickson, Cornell University; Chairman, W-114 Technical Committee

Olaf F. Larson, Director, Northeast Regional Center for Rural Development

W. T. McAllister, University of Delaware; member of Technical Committee for the Northeast Regional Center for Rural Development

William E. McDaniel, University of Delaware; Administrative Adviser, NE-47 and NE-80 and member of Advisory Committee for the Northeast Regional Center for Rural Development.

The Workshop participants are listed in Appendix C.

The objectives of the Workshop were:

1) To get an overall view of the regional rural development research being conducted under State Agricultural Experiment Station auspices in the twelve northeastern states. To this end, the Technical Committee for each of eight regional projects was requested to prepare for presentation a paper which would (a) identify the research problem, (b) specify the research objectives, and (c) indicate the research design.

2) To encourage interdisciplinary exchange, on the assumption that most research questions in the rural development area concern more than one discipline. To this end, critical technical discussions of the prepared papers were invited.

3) To identify the potential use of the current regional rural development research for policy and program purposes. Accordingly, a critical look from representatives of users of research was invited.

4) To contribute to more effective planning, management, and use of rural development regional research in the Northeast in the future. The group meetings of Workshop participants, followed by the panel presentation

which included the chairmen of the group meetings, were intended to focus on future directions. In addition to looking intensively and critically at what is now being done in the Northeast, a national and comparative perspective was provided by William Erwin, Deputy Under Secretary of Agriculture for Rural Development, and by R. J. Hildreth, Managing Director of the Farm Foundation.

This Workshop was the first major undertaking of the Northeast Regional Center for Rural Development. This Center was created by action of the State Agricultural Experiment Station directors of the land-grant colleges of the twelve northeastern states. It is currently supported by funds from the Cooperative State Research Service, U.S.D.A. The Center was initiated in February, 1972.

The Center's main concerns at the present time are with research and training related to rural development. It is designed to work cooperatively with the fourteen land-grant institutions in the Northeast and with state, federal, and other agencies concerned with rural development. Its principal purpose is to bring together people who cross department, discipline, college, university, state, and agency lines to focus on research and related problems of rural development of particular relevance to the Northeast and to facilitate training of professional workers engaged in or preparing for rural development work.

Lucy M. Cunnings edited the papers for the Proceedings; Marilyn Serum typed the manuscript. The assistance of Joseph F. Metz, Jr., Administrative Adviser for NEC-14, and the counsel of Nyle C. Brady, Chairman of the Advisory Committee for the Center, are gratefully acknowledged.

Olaf F. Larson, Director
Northeast Regional Center for Rural Development

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RURAL DEVELOPMENT AND THE LAND-GRANT INSTITUTIONS

William Erwin

Deputy Under Secretary for Rural Development
United States Department of Agriculture

Coming back to Vermont, I think I owe this area an apology. The last time I was in Vermont, I mentioned that one of my staff had referred to rural Vermont being like a fished-out stream--there was nothing left but bullheads and suckers. I didn't quite agree with that, and I've been reflecting on it since. I did a little calculation, and the last three years the Erwin's have sent two kids to school in New England and have had an out-migration of finance from our family of some \$30,000 to Vermont and the adjoining states. It seems to me that the net result is that the kids are somewhat more bullheaded and the father is the sucker!

I had a little hesitancy about speaking to you people from the land-grant colleges because, I don't know what the introduction said, but there were times in my life when I was a pretty intelligent fellow. Probably the apex of this was when I was a newly elected state senator. There's some question about that--the apex might have been when I was a second lieutenant. But, at any rate, when I was a newly elected state senator, I was pretty darned intelligent! I went down to the capitol at Indianapolis and took my wife with me. She was all aflutter about being a senator's wife and so on, and she met Professor Kohlmeyer down there. I don't know how many of you know Professor Kohlmeyer at Purdue, but he's quite a great guy, and this really turned my wife on. So she went up to see Professor Kohlmeyer and said, "Oh, Professor Kohlmeyer, it's so nice to see you down here. What brings you to the Indiana General Assembly?" The Professor sort of leaned back and said, "Well, it's the preacher's responsibility to go where sin is, and it's the educator's responsibility to go where ignorance is."

With that bit of background, I approach you with some degree of anxiety. I think that it's obvious that you have a great deal of technical competence, and probably the best service that I can render this group is to get into some of the general environment in which we look at rural development, in which we participate in rural development, and in which we do research on rural development.

What about the total environment when we look at rural development, and what about this business of economics? Just the other day I picked up some information on rural America that was rather interesting to me. It said that in nonmetropolitan America, farm earnings account for 11 percent of the income; manufacturing, 26 percent of the income; government earnings, 21 percent; wholesale and retail trades, 14 percent; services, 11 percent; and mining, 3 percent. I just want to throw that in because our perspective

on the economic base of rural America tends to drift to the idea of the all-dominant agriculture. Now, agriculture carries a bigger percentage of impact than those statistics would indicate, but I think we need to look at them because other people are going to be looking at them.

What kind of an environment do we function in? We have in this room those that remember a--what would now be called--"poverty youth in rural America." The next generation has grown up in affluence. This kind of economic stress lingers in rural America. We also see that 62 percent of the farmers depend on nonfarm income for more than half of their total income.

And then we note an environment where our moral values are being questioned. I think this is typical as we looked at the conventions and saw the hippies and the yippies and other people who were camped out in the park. As I thought about that, I thought about my father. He would have gone out there and said, "Tonight we feed you, tomorrow we have a job for you." There was simply a different ethic which shows up in many ways. Certainly as you work in Washington and you are aware of these pressures, you see that it shows up in different ways.

Our social environment, of course, is one of great numbers of people and concentration of people, and you people are doing all kinds of research into this. There is a great desire to move out and to get out. Seventy-six percent of the Americans nine years old and over participate in some form of outdoor recreation. The three percentage points higher participation of metropolitan people than rural people doesn't necessarily indicate a change or a difference in the desire to get outside. Rather, it indicates that more rural people are outside and don't have that need for recreation.

In 1950, total visits to national parks were 50 million people. In 1970, 167 million, and in 1971 more than 200 million people visited these parks. So you see the jump between 1970 and 1971 is about two-thirds of the total number of people who visited in 1950. Total land area in the parks has only increased by one-third since 1950. Thus, if you think in terms of the space that you enjoyed when you visited the park in 1950, you have only one-third of that right now.

By 1965 we had two million second homes in this country. Of the two million acres of rural land that is converted to non-agricultural uses each year, half goes into parks and recreation. Since 1950, crop land productivity has increased by about 50 percent, while the population has increased by only one-third; so you see the slack in the line of the use of the land for other purposes. Each year there are about a billion visits to government-owned recreational areas and about a billion to privately-owned recreation facilities. We see the pressure for people to move out and to get out. This puts a pressure on rural development. There is more leisure, more time to think, more time for recreation.

We have witnessed a massive displacement of people since World War II. Some 25 million people have moved from rural America to urban America since that time. Comparatively, that's the same number of people that came from Europe to the U. S. and Canada between 1600 and World War II. It is a large movement of people. When we talk about displaced persons, of course,

one could argue that a lot of those people moved because they wanted to and they benefited from it. However, we also must note that reliable surveys indicate that 34 percent of the people want to live in the open country but only 12 percent of the people live there. Those people not living where they want to are displaced persons.

All this brings about this new orientation to rural development where the majority of the people in the U. S. look at the surface of the earth and they don't just think how we feed people from the surface of the earth. We say how does that surface of the earth do the most and give the most fulfillment to all the people or how does the land area serve mankind?

All this takes place in an environment where people are insecure. If we really examine the television ads, we see that they lead from insecurity. There is one T.V. ad that always bugs me because during World War II I got in the habit of flying with my shoes off and I like to do that. Everytime I get on the airplane I think about this ad where the guy is in the stagecoach and he has on elegant looking cowboy boots. The lady passenger admires them and he yanks one off and there is a whistling noise and everybody bails out of the stagecoach. Now this is an ad for Quik Pop.

The gist is that it makes you insecure. We like to think we are very mature and we don't bite on this; yet every time I get on the airplane and I start to unlace my shoes, I recall that ad. This is an example of the way that insecurity is built into our culture.

We in rural America see it all the time in the salesmen who come to see farmers. They come out and say if you don't buy our tractor or if you don't buy our irrigation system, you're not in the ballgame; and we have to admit the politicians do the same thing. They stand up and tell about all the horrible things that are going to happen if you don't vote for them. This again builds insecurity. Certainly the new issue of the environment and the dying planet, as well as the old issue of atomic bombs, generates insecurity. Add to that the decline of the traditional comfort base, the traditional satisfaction that rural America had because of the power of the farm bloc which politics did not cross. We see that goes now to 4 percent of the population, so we see more insecurity. We look at the changes taking place in rural America and we see that we are awakening to our problems and to our opportunities.

You look at this whole United States and you see that we are going to have 60 to 100 million more people by the year 2000. Now 74 percent of the people live on 2 percent of the land, one-third of the people live on 90 percent of the land area. We see that we have to face this whole issue of rural development and changes that are taking place.

Then we look internally at rural America and see that over and over we have been hit in rural America with the concept that all this tax money is going out to rural America. You look at certain areas and you see that this just is not the case, that per capita federal program expenditures favor urban areas in most major categories. On a per capita basis, the federal spending for health service is four-times greater in metropolitan areas than in rural areas. For welfare on a per capita basis, it is four

times greater; manpower training and development, three times greater. Two-thirds of the substandard housing is in rural America, but it gets 16 percent of the aid. Half of the children living in poverty are in rural America, yet they get much less than half of the federal assistance.

All of this leads then to this environment where we look at rural development. A few months ago when I came in as Deputy Under Secretary for Rural Development, I was faced with a major problem. That was, "What is Rural Development?" We asked all kinds of experts this question and got all kinds of answers. You recognize that you can't really function in this process or movement or program or whatever you want to call it, unless you have a definition that will work. So we brought in a group of people and spent hours and hours brainstorming, trying to get a definition of rural development that would work. We came up with one that was unanimously endorsed by the USDA Rural Development Committee. The definition is: Rural Development is making rural America a better place to live and work.

The reason we think this is an excellent definition is that the Ph.D.'s as well as the people who live out on the country roads will understand it and it will mean the same thing to both. So while it is somewhat platitudinous, it does serve a useful function when you get a definition that people understand.

Next, let's get into the specifics of what is rural development. It breaks down into four broad categories:

1. Community facilities--This includes housing, transportation, utilities, sewage and water systems. This is one major section of rural development.
2. Economic development--This includes a prosperous agriculture that is basic in rural America. It also includes non-agricultural economic development. So another major development is economic development.
3. People-building--This includes education, health, and those programs that help disadvantaged in rural America. Here I think it is extremely important to remember when you get to this area called poverty that we avoid thinking of poverty as purely economic. Sure there is financial poverty--people who don't have enough money. There is also a great tendency to take the easy way out and say poverty means not enough money so we'll give people money and we will cure poverty. Poverty is also a deprived education. Nothing is gained by the translocation of people who live in educational poverty; as a matter of fact, you can make a strong case that much is lost. Then there is emotional poverty. For example, those in the rural community who went to school and because of their environment as little kids, were not accepted by their classmates. They were pushed back and they felt rejected and wanted to get out of it. Then they moved back up the side road and fell into cultural poverty. I cannot overstress that the whole area of people-building is extremely important in rural development.
4. Environmental improvement--This includes conservation, recreation, land use planning, the aesthetics. Here we need to reorientate our thinking a little. We need to get the kind of research information that tells us not just the number of people per acre of water in retrospect and

today, but a good prognosis as to how many people there will be per acre of water in years to come. And we need to think about trees as not just for growing board feet of timber, but for beauty and oxygen and control of noise pollution as well.

But most important we need to recognize that the rural communities must move forward in all four categories. Over and over in rural development we fall into the trap of one group saying it is just a matter of jobs, and another group will come back and say, "No, it's a matter of helping the people and if you build the confidence of the people, the jobs will come." All four elements of rural development are important. They work together. Any community will be held back by whichever category it is weakest in.

How do we get out of this trap of competitive thinking between movements that must work together for a common goal? We see--and this is to me one of the most rewarding things in the first months of this job--that rural people are awakening to the opportunities of rural development. There will, of course, be resistance. Well, we can overcome this resistance because rural people are awakening to opportunity. I think that there is an increased awakening to the fact that change is inevitable.

We see that a lot of people in rural America are awfully tired of watching the young people migrate out. When you approach the little community with the concept of rural development and they say, "We don't want those city problems brought out here," and you say, "How about a chance to keep your young people at home?" their outlook changes. This recognition, particularly in out-migration areas, is causing a change in attitude. One of the economic realities is having a real impact on this thing, and that is that as you have out-migration, the tax base falls on those who remain. There is increased interest in rural development simply because of the high property taxes and the desire to spread the tax base.

Farmers are coming around because they recognize that if you can keep the farm-raised young fellow in the community working in a nonfarm job (in modern agriculture your peak labor demands are during the spring planting and fall harvesting), you keep that source of part-time labor available. But if you do not develop the community and he moves away, you don't have that skilled help when you want it. I can personally testify that we could not run our farm in Indiana without this kind of moonlighting.

There is a basic religious foundation in rural America. When you look at the problems of the city and the prognosis of population, rural Americans think they live in the best place and there is an attraction to let more of the population have a better place to live. There is the recognition that you have to have a certain number of facilities for a certain number of people in the community or you can't maintain the facilities you want, so you see again an awakening of rural people.

Everybody talks about the family-sized farm and what a good deal it is. You recognize that agriculture gets more and more efficient and there is more and more squeeze on the little farmer. The man who can get the job off the farm and yet stay on the farm has a chance to preserve the value system that is most important. Rural development protects, probably better than any other force, the chance to live on the family-type farm.

Specifically dealing with research, what suggestions would I have? First of all, accept your position of leadership; you are on the frontier! Someone commented about almost being thrown out of the county: well, that's what you expect when you're giving leadership. Remember twenty or thirty years ago all the planners were called Communists. I can remember in our rural county where they voted out a soil conservation district because it was communism. If you're going to be on the frontier, you're going to get shot at and kicked. So accept your position of leadership. There is an old passage in the Bible that says, "They rejoice at being counted worthy of suffering shame for His name's sake." So this is not a new problem to people who go out to work for something that they believe in.

Then I think there is a great need to reassure rural people about change. Rural people are insecure, and there is nothing that gives security like truth. As you come up with facts that people can base their thinking on, you escalate security in an area where there is much insecurity.

Then, of course, there is a great need to provide much-needed research. The only things that I can find on the economics of outdoor recreation are pretty limited, and they indicate that the private entrepreneur, particularly the farmer who tries to get into outdoor recreation, doesn't have a very good economic opportunity based on the track record that he has seen. Yet you see this pressure to move out and you see that state and federal facilities are not going to be adequate, so you recognize that we are going to have to rely on the private sector and there is a tremendous need for supportive research.

In rural health we have just scratched the surface. It's obvious that rural areas are not in some places going to have the medical facilities they need. We really haven't launched into the same kind of preventative medicine for rural people that we have for rural people's animals, and there is a huge need here.

We need prognosis on land use and people needs, how people can best use this land. We need innovative research where we simply go out and innovate. Then we can give rural people information on which to build self-confidence.

As you look at the overall picture and you see the legislation that is coming through Congress either this session or next, you recognize that the present-day limiting factors of such things as the sewer system or the water system or housing, that these tangible or hardware needs are going to be met. Yet this is not sufficient to develop rural America. Rural America will develop as the leaders in its local communities recognize that they can to a large degree control the destiny of those communities, and in order to do that, they have to have self-confidence. From you people we can get the kind of information and facts that they need to have that kind of self-confidence.

NE-80: PROCESSES OF RURAL ECONOMIC CHANGE IN THE NORTHEAST

J. Dean Jansma¹

The Pennsylvania State University

Problem Identification

The goal of rural development, according to the recent Presidential Task Force on Rural Development, is to create job opportunities, community services, a better quality of living, and an improved social and physical environment in the small cities, towns, villages, and farm communities in rural America.² Thus rural development programs are primarily concerned with providing job opportunities and an acceptable quality of life for those who wish to live in rural areas of our state and nation.

The emphasis in rural development policies is in response to a dilemma; people are leaving rural areas of the nation--the rural area that many have indicated as the preference for the location of their home. Now let us examine this dilemma a bit more closely.

The weight of the evidence clearly points up the decreasing employment opportunities in the two major economic structures of rural America, agriculture and mining. This idea is stated by D. G. Johnson as follows:

"Direct employment opportunities in agriculture will continue to decline and thus can not contribute positively to aggregate employment opportunities in rural (nonmetropolitan) areas. In consequence, the growth of employment opportunity must be based on nonagricultural pursuits. During this century I can see no possibility that the food demand supply situation would require a halt in the decline in direct farm employment."³

Tweeten stated this idea more specifically when he suggested that "it is estimated that no more than one in five farm boys in the United States can find an adequate farming opportunity during the decade of the

¹The author wishes to acknowledge the extensive use made here of a paper prepared and presented by Dennis K. Smith at the 1971 Northeast Regional Resource Economics Annual Meeting, Durham, New Hampshire.

²U.S. President's Task Force on Rural Development, A New Life for the Country (Washington, D. C.: Government Printing Office, 1970), p. 1.

³D. Gale Johnson, "Population Balance: How to Achieve a Desired Population Distribution," Toward Policies for Balanced Growth (Washington, D. C.: Graduate School Press, U.S. Dept. of Agriculture), p. 27.

1970's."⁴

The same forces were found to be in operation by Hathaway and his colleagues at Michigan State University.⁵ Additionally, Hathaway discovered that of those people in farming who took their first job outside of farming, two-thirds accepted employment within fifty miles of the county where they had previously been employed. Furthermore, of those moving from farm to non-farm employment, those located within fifty miles of a city did significantly better. One possible interpretation of this finding is that those somewhat acquainted with alternative employment opportunities found the adjustment to non-farm employment less rigorous.

Many factors contribute to the difficulty of adjusting to non-farm employment. The most important of these is probably the desire on the part of these rural people to remain in the rural areas--a situation which gives rise to the other side of our dilemma.

There have been several preference or attitude studies completed concerning people's residential preferences. A study by the Gallup Poll in 1966 found that 47 percent of the residents living on farms preferred to remain on farms, 28 percent preferred a small town of less than 2,500, 18 percent preferred the suburbs, and 6 percent preferred the city. When the residents of the cities of less than 2,500 were asked for their preference, 23 percent indicated farm, 69 percent indicated small towns, and 8 percent indicated suburbs. None, however, preferred to live in the city. As one moves up the scale of the cities to those of a population between 2,500 and 50,000, the poll indicated that 10 percent preferred farms, 62 percent preferred small towns, 23 percent preferred suburbs, and 5 percent preferred the cities. For people in cities of over 50,000 population, 6 percent preferred farm residence, 23 percent preferred small towns, 35 percent preferred the suburbs, and 36 percent preferred cities of over 50,000 people.⁶ In a more recent Gallup Poll a simple tabulation of the preferred residence of the American population showed that 24 percent preferred farm areas, 31 percent preferred small towns, 26 percent preferred suburbs, and 18 percent preferred the city.⁷ Thus we find the majority of people would prefer to live in an area with a population density less than the one in which they currently reside.

Similar conclusions were supported by a national public opinion survey conducted by the Opinion Research Corporation in 1971. Results from

⁴Luther Tweeten, "Systems Planning for Rural Development," a seminar paper presented at Kansas State University, March, 1971, p. 12.

⁵Dale Hathaway, "Improving the Search for Employment," paper presented at the Conference on Creating Opportunities for Tomorrow, May, 1968, Raleigh, North Carolina, p. 7.

⁶Gallup Poll, 1966, cited in R.P. Devine, "Citizens' Attitudes Toward Their Cities," in *Micro-City*, ed. by Edward Henry (Collegeville, Minn.: St. John's University Center for the Study of Local Government, 1970), p. 42.

⁷Ibid.

this study, conducted for the Commission on Population Growth and the American Future, indicated the following preferences as to place of residence.⁸

	Where do you live now?	Where would you prefer to live?
Open country	12%	34%
Small town or city	33%	30%
Medium sized city/suburb	28%	22%
Large city/suburb	27%	14%

Here again we note the largest difference between where people live now and where they would prefer to live is in the open country category. There seems to be a definite residential preference for the less densely populated areas.

Before interpreting these results, one must recognize the problems inherent in opinion research surveys and polls. For example, to the urbanite, the concept of living on a farm or in the open country may conjure up only beautiful visions of a herd of black angus grazing on the hillside within the white painted fences. They may be totally unaware of the disadvantages that currently go hand in hand with rural living. However, if we compare all three of these preference studies, there appears to be a fairly consistent pattern of preferences for living in areas of population concentration less than those of current residence.

This, then, is the dilemma--and a statement of our research problem. We have a population that is leaving the areas for which they have expressed a preference, although by most currently used standards the quality of living in rural areas is lower. A whole series of indicators--access to medical facilities, infant mortality, level of education, or family or personal income--all tend to come out lower for the rural residents than for their city neighbors. Yet, if we believe these preference polls, there is a large percentage of the people who prefer to live in other than the areas of high population concentration in the United States.

There are different interpretations of the possibility of reversing the trend of migration from farm to city. Clawson really sees no chance for the small rural community and suggests that our policies should be aimed at programs to help in the adjustment process for those that must be moved from the small town. He suggests that this does not mean moving people against their will, but certainly implicit in his suggested policies is that we should not provide additional infrastructure for these

⁸National public opinion survey conducted by the Opinion Research Corporation for the Commission on Population Growth and the American Future (cited in Population and the American Future, Signet Special Book, March, 1972, p. 35).

communities.⁹ Conversely, the National Goals Research Staff states that "the population distribution trends are not irreversible, . . . [but this is true] only if a well-planned and coordinated national strategy for balanced population distribution is developed and implemented."¹⁰

One of the basic questions being examined in this research endeavor is whether rural areas can provide alternative employment opportunities for the men and women no longer required in the agricultural and mining industries. Public funds might be used to ease the pain of a community in transition, but public funds cannot be relied on to continually sustain the economic health of a local community. Thus it is necessary to determine what requirements are necessary if the community is to successfully compete and become a viable economic unit.

One of the mainstays of local well-being is generally agreed to be gainful employment for local residents. In this research we are directing our efforts toward determining changes in economic structure of the rural community and its relationship to its urban counterpart. But more importantly, the research is designed to help local communities to adjust to these changes. These various components of the research design will be discussed in more detail in the following sections.

At this point, I would like to briefly discuss problem identification in rural development research from a more general perspective. One of the problems we face in this area is ourselves--the USDA and the land-grant universities. The question that needed to be asked was asked by Bishop in his Presidential address of 1967 entitled "Urbanization of Rural America: Implications for Agricultural Economics." He asked, "Why have Agricultural Economists not devoted more resources to the study of structure changes in rural communities and to the public policies relating to the location of economic activity and population?"¹¹ He suggests that part of the answer is related to our professional heritage--going back to the days of the purging of the Bureau of Agricultural Economics in the USDA. He then suggests that what we really need is a new welfare economics that provides us with a better theory of social investments and focuses on the distribution of costs and benefits of public policies.

I have written earlier on some of the problems of resource allocation within rural development research.¹² A repeat of my thoughts is not needed here, except to state that within the agricultural establishment

⁹Marion Clawson, "Resources and Technology for Balanced Growth," in Toward Policies for Balanced Growth, p. 67.

¹⁰I. P. Halpern, "Toward Balanced Growth," in ibid., p. 5.

¹¹Charles E. Bishop, "The Urbanization of Rural America: Implications for Agricultural Economics," Journal of Farm Economics, XLIX (December, 1967), p. 1001.

¹²J. Dean Jansma, "Interface of Farm Management and Resource Economics," in Selected Papers from the Northeast Farm Management Workshop, AE&RS No. 93 (University Park: Pennsylvania State University, 1970),

I think a great deal more lip service is being paid to rural development research and helping rural communities than is readily apparent from allocation of man-hours to this research area. Although I do not agree with all the findings of the recent indictment of the "agricultural complex" entitled Hard Tomatoes; Hard Times, I do think it is only the beginning shot from our non-agricultural-establishment critics.

To follow this line for just a minute more, I recently did some checking on what was being published in our professional journal, The American Journal of Agricultural Economics. Taking the four issues in 1971 and the two issues available in 1972 (excluding the proceedings of the Summer and Winter meetings), one finds there are about five hundred pages devoted to articles. Out of these some five hundred pages, there are only nine pages concerned with rural development research, and this article was a follow-up of a ranching behavior study and is a "with implications for rural development" type article.¹³

Part of the reason for the lack of rural development research is perhaps related to pronouncements of some of the men in leadership positions in the USDA. Henry Ahlgren, a former Deputy Under Secretary for Rural Development, stated, "I think it can be said these additional programs (rural development) are related to farm and farm-related industries and that the primary aim of the Department of Agriculture and the Colleges of Agriculture in our land-grant universities is still primarily that of helping the farm families."¹⁴ It is my opinion that if we restrict our rural development programs to only "helping the farm family," we are missing a large segment of that important field of research which is concerned with the rural community and its problems.

Ahlgren's position, it seems, is not supported by all those in positions of leadership in the USDA. Recent remarks by Don Paarlberg, the Director of Agricultural Economics, contain an excellent statement of the needs in rural development research. He states:

"It seems to me that in the arena of public policy we now see macro concepts emerging, along with the micro. The country is concerned with achieving a better rural-urban balance in a macro sense, rather than trying to referee the contest as to just who

pp. 3-4; and J. Dean Jansma and Lee M. Day, "Transforming Rural America: Policies for the Equitable Distribution of Benefits and Costs," in Benefits and Burdens of Rural Development (Ames: Iowa State University Press, 1970), pp. 273-285.

¹³Arthur H. Smith and William E. Martin, "The Socioeconomic Behavior of Cattle Ranchers," American Journal of Agricultural Economics, LIV (May, 1972), pp. 217-225.

¹⁴Henry L. Ahlgren, "Rural Development--Its Dimension and Scope," paper presented at 1971 annual meeting of Rural Sociological Society, Denver, Colorado, August 28, 1971, p. 8

gets the limited available help, in a micro setting. I am not at all sure that we researchers have been adequately aware of the subtlety of this change, or that we have kept ahead of it. . . The most desired thing is that researchers anticipate needs, an undertaking so difficult that if they fail they should be forgiven. What is unforgivable is failure to respond to a need after it becomes identifiable."¹⁵

It is this last quote that we propose as the banner under which we hope our research is proceeding.

Objectives of Research

The general approach of the Northeast Regional Research Project entitled "NE-80: Processes of Rural Economic Change in the Northeast" is a macro-type comparative analysis of the economic and social forces involved in the changing spatial distribution of rural economic activity. The project is basically oriented to the provision of applied research results. However, inherent in the project approach are opportunities for adding to the theoretical body of knowledge associated with regional and economic growth.

The research is principally directed toward a perceived lack of information for the formulation of policies and programs designed to shape or reshape non-metropolitan economic activity in terms of its locational intensity and income-producing activities. However, there has been a recent expansion of this policy area with increased consideration being given to types and mixes of economic activity in terms of their long-run effects on rural "quality of life." It is felt that the identification and knowledge of the major forces involved in rural economic change is essential to the "wise" formulation and evaluation of these types of policies. In addition, it should be specifically recognized that rural economic change encompasses both economic growth and decline. With respect to economically declining rural areas, the results of the project's analysis may provide valuable inputs for policies designed to allow the orderly decline of certain areas with minimum economic hardships to the residents of these areas. Also in this connection, the results may have important implications for the prevention of long-run misallocations of public investments designed to improve rural community services and quality of life. For example, it may be a long-run misallocation of resources to invest in the provision of sanitary and water facilities for a rural community which will decline in the future because of basic economic forces operating beyond the control of the local community.

¹⁵Don Paarlberg, "Decision-Making on Rural Development at the National Level--Priority Needs for Research," paper presented at the Conference on Developing Research Priorities on Problems of Rural Development, Illinois Beach State Lodge, Chicago, Illinois, May 9, 1972, p. 4.

The four specific objectives of NE-80 are listed below and then discussed in the next section.

- (1) The inventory and classification of non-metropolitan areas in the Northeast in terms of their changing level and structure of economic activity and their physical, social and economic resources.
- (2) The determination of the processes by which economic change occurs in non-metropolitan areas and the assessment of the economic viability of these areas.
- (3) The development of models which indicate the probable direction of future economic change for non-metropolitan areas as they vary in terms of location, mix of economic activity, institutional structures, and resource bases.
- (4) The evaluation of the effects of institutional changes and policy activities such as planning, taxation, industrial subsidization, and public facility investments on rural economic change.

Research Design

Inventory and Classification

The inventory and classification phase of the research effort is based on the fact that widely varying economic and social conditions exist in non-metropolitan areas and that these conditions may underlie highly differentiated economic change processes. Obviously it is infeasible to attempt to study the developmental processes of all non-metropolitan areas in the Northeast. However, it is also apparent that the limitation of the analysis to a few randomly selected rural areas may not allow the attainment of research findings with a breadth and depth which will allow their application to diverse rural development problem situations. Therefore, an attempt will be made in this initial research phase to classify non-metropolitan areas into groups based on their developmental conditions and problem situations. From these area groupings, representative areas will be selected for an in-depth study of their developmental processes in the remaining phases of the project.

It should be noted that as a by-product of this effort, the data assembled for the above classification should provide the basis for a descriptive analysis of changing rural economic conditions in the Northeast. This descriptive analysis should be valuable in either reinforcing or destroying some of the rather general notions of what is happening to the spatial size and shape of non-metropolitan economic activity.

Procedurally, the data for the inventory and classification phase will be assembled from secondary sources, with the use of the county as

the initial unit of geographic disaggregation. We recognize that the format of available secondary data has a great influence on this initial use of the county as a unit of analysis. However, the use of the county as a unit of analysis also involves a questioning of the current emphasis on multi-county geographic units in rural development research and planning.

The multi-county geographic unit does appear relevant to planning and program situations involving the existence of inter-area "spillovers" in the provision of public services and also to instances where geographically widespread environmental quality problems exist. However, in terms of area economic growth and decline, it may be questioned whether the multi-county unit is an appropriate unit of analysis, especially in the industrialized Northeast. The multi-county area concept owes its basis to the analytical findings of Fox,¹⁶ who investigated the trade and commutation ties between agricultural areas and urban nodes in the midwestern areas of the U.S. and developed the "functional economic area concept." Although this regional form may be relevant to the settlement pattern of the agriculturally oriented Midwest, some question exists as to its applicability to the industrialized Northeast, which exhibits considerably different settlement patterns, inter-area economic interactions, and topography. It should also be recognized that the use of the multi-county area in developmental analysis imparts an initial bias to the analysis, stressing the importance of the growth or decline of the area's urban node for the entire region. Therefore, if the region is not truly economically integrated, the growth possibilities of many rural areas may be ignored in the analysis.

As a result of these considerations, an attempt is being made to avoid restricting the analysis at the outset by the choice of a given geographic unit of analysis. Although the project is not centering on this question of area delineation, the research results should contribute some new insights to this question.

The data assembled for the inventory and classification of non-metropolitan areas will be based on the consideration of six broad groups of variables hypothesized to be indicative of the processes of non-metropolitan economic change. Briefly these six groups are: (1) regional population characteristics, (2) the mix and level of regional employment, (3) regional natural resource bases and private capital structure, (4) regional public infrastructure, (5) the level and distribution of regional income, and (6) regional environmental quality. In addition to encompassing the somewhat traditional measures of regional economic growth and its explanatory factors, the development of the groups of variables involved an attempt to be indicative of the multiple goals of the rural development effort. Therefore, in addition to the basic economic variables of employment, income, and population levels, which tend to reflect the material well-being of the rural populace, the above six groups include specific variables pertaining to the quality of rural life such as

¹⁶Karl A. Fox, "The Study of Interactions Between Agriculture and the Nonfarm Economy: Local, Regional, and National," Journal of Farm Economics, XLIV (February, 1962), 1-34.

land use, air and water pollution control, levels of public services, and access to recreational facilities. It is recognizable that our society's goals are broadening, with an increased emphasis on the provision of extra-market goods and services. Although this project is only touching upon the analytical area of "social reporting," it does appear that this area should be and is being developed through increased economic and social science research emphasis.

Developmental indices will be constructed on the basis of the data measuring county characteristics in terms of these six groups of variables. These developmental indices will be utilized to classify counties into homogeneous groups from which representative rural areas will be selected for in-depth analysis in the remainder of the study.

Analysis of Rural Economic Change

The second major phase of the project will involve analysis of the economic change in the selected representative regions to determine the relationships among the major variables which influence the region's paths of economic growth or decline.

In considering the project's approach to the analysis of rural economic change, it should be stressed that its approach is not limited to the aggregative-type regional analysis, where a large body of secondary data is assembled for a large number of geographic units and then some type of regression analysis is performed to test the relationships among selected economic variables. In contrast, in this project the selected representative rural areas will be analyzed in depth, using both primary and secondary data sources. The results of these analyses will be combined for comparative purposes, and then an attempt will be made to generalize the findings with respect to the rural area classifications developed in the first phase of the analysis. It is felt that the project's regional framework allows for a unique opportunity for comparative analysis and greater additivity of the findings than research efforts conducted using what might be characterized as case-study approaches.

In terms of procedural steps for the analysis of rural economic change, it is recognized that economic growth or decline is a highly complex process and is sensitive to the effects of many variables. Conceptually, four categories of variables have been hypothesized for empirical testing as to their influence on rural economic change. These groups are presented below, with recognition that they are subject to change and expansion dependent upon the operational considerations and findings which arise from the first phase of the analysis. The four categories of variables are:

1. Characteristics and availability of resources: In this category of variables we will be evaluating the relative position of a community with respect to the availability of natural and human resources. Much of the material developed in the inventory and classification stage will be used and manipulated at this point in our research. For example, one of the researchers is currently investigating the use of "cluster-analysis" techniques in delineating homogeneous groups of counties. Several alternative forms of the techniques have been tried. In a specific application

of the technique in one state, a classification system was made on the basis of eight economic variables. The data developed through this technique will be useful benchmark data and also could be used in "clustering" the Northeast counties for sampling in order to choose the counties to be included in the detailed analyses of the growth processes. An additional study is being started to develop a methodology for estimating human resource availability in a rural community. The paucity of data on employment and underemployment in rural counties emphasizes the need for developing new methods for estimating human resource availability. Although the literature on disguised unemployment tends to be more closely associated with analytical studies of less developed countries, it has important implications for the rural areas of the Northeast as well.

2. Spatial orientations: The regional position of a rural area in terms of its importance in the national economic hierarchy and its distance from metropolitan centers is also of importance. In previous work done in Pennsylvania, we found that the distance to an SMSA is an important variable in explaining changes in the growth rate of both employment and population as well as average per capita income.¹⁷ Conceptually, the models to be used in investigating this class of variables will be central place theory and gravity models. Central place theory is useful in developing a method of hierarchical categorization of population centers relative to their economic functions and interrelationships. The categories developed are not limited to an examination of the magnitude of trade between various size centers, but also include the important attributes of control and leadership. The central place model will be used in conjunction with gravity models, which are basically techniques for quantifying the interrelationships between population centers. These interrelationships are hypothesized to be dependent upon the size of the population center and upon the distance between the centers. In terms of NE-80 research, the important relationships to be derived from the gravity model will be the interrelationship of a rural area to urban population centers and other rural communities.

3. External factors: Here the major consideration will be the national and regional forces outside the direct influence of the local area. The major conceptual framework will be export base theory, which is of central importance in regional growth analysis. The export base concept is basically a method for distinguishing between industries which sell goods and services outside the local economy (basic) and industries which sell within the local economy (non-basic). The non-basic activities are dependent on the net flow of income into the region introduced by the export sales of basic activity. Therefore, the rate at which a region grows depends upon the rate at which the basic industry expands and, through the multiplier process, the rate at which the region's non-basic activities increase. The export base concept is important in emphasizing that the growth of a local economy is tied to changes in the national

¹⁷R. Gar Forsht and J. Dean Jansma, "Measurement of Economic Growth and Development of Various Sized Central Place Areas in Pennsylvania, 1960-1970," to be published by the Northeast Agricultural Economics Council.

demand for commodities. Thus the relationship of the rural economy in terms of its exports through outside markets will be crucial in the development process and therefore will be an important segment in our studies in NE-80.

4. Internal factors: The emphasis here will be on the factors which are subject to local area control and, although related to the export base concept, are more concerned with internal factors affecting the growth of the community. The development stages theory, one of the conceptual orientations for this class of variables, will be concerned with the internal regional growth relationships and their importance in the growth process.

We are again borrowing from the literature on development of underdeveloped countries, but the stages theory of development applied to the more advanced economy would seem to have important implications for understanding the growth processes which occur in the rural areas of the Northeast.

This class of variables will also include an investigation of the influence of community attitudes on rural development and a determination of local government's attitudes toward taxation, borrowing, and spending.

The consideration of these last two classes of variables--external and internal factors--is somewhat analogous to the concept of demand and supply. The external factors are related to the "demands" of the outside world on the goods and services being produced within the local community. The internal factors are more closely akin to the concept of supply--what does the community have to offer to the outside world?

The above four variable classes, plus their interactions, will be the major thrust of the research in attempting to evaluate the multi-dimensional aspects of rural development. Further, the relationships developed will be used in attempting to test the reliability of our models to describe the growth process in non-metropolitan areas. This, then, provides the heart of the analysis. In the next two sections we will discuss the specific applications of the relationships developed with regard to rural development policies.

Projection Models of Rural Economic Change

The relationships developed under the second objective will be used to indicate the probable direction of future economic change for specific non-metropolitan areas. It is hypothesized that the relationships found significant in evaluating the influences on the process of economic change will provide the probability estimate needed to make the necessary projections. The specific techniques or models to be employed have not been operationally formulated at this time. Current thinking leans toward an integrated input-output, linear programming approach. This would be useful not only in terms of interrelationships expressed in the I-O model, but also because of the constraints inherent in the linear program formulation. This formulation would provide an evaluation of the incidence of growth as well as the more traditional estimates, which are limited to measurements of the magnitude of growth. Tweeten suggests the idea of

using various categories of benefit and cost recipients with restraints on income levels in each class.¹⁸ Quantitatively, one can then show the trade-off between maximum aggregate income (an efficiency measure) and favorable distribution of income (an equity consideration). Thus the study would not be dependent on the normally used measures of change, such as per capita income, change in aggregate demand, or tax base, but rather the emphasis would be on the incidence of change within the rural community.¹⁹

In addition to providing projections for the applied use of decision-makers in the current rural development policy and planning effort, an attempt will be made to subject various projection models and techniques to comparative analysis through their application by the project's participating members in such a manner that an evaluation of the relative effectiveness of the various models can be performed. Thus, in addition to applied results, an attempt will be made to improve methodological capabilities.

Evaluation of Alternative Policy Measures

The final research phase of the analysis will involve the evaluation of alternative policy measures to effectuate changes in the regional development paths empirically determined in the preceding analysis. A comparison of regional goals and objectives to the current and projected rural development patterns will suggest types of economic changes which appear desirable for rural areas.

Based on these types of desirable changes, alternative policy measures for stimulating these changes will be evaluated. These policy measures will involve consideration of such concepts as: (a) public investments in various types of infrastructure; (b) income possibilities from new enterprises based on agricultural and natural resources bases; (c) local government planning and investment; (d) area taxation measures, including both variation in tax structure and industrial subsidies; and (e) private community group activities.

The alternative policies will be evaluated in terms of: (a) the levels of their associated costs and benefits; (b) their effects on regional income distribution; (c) their long-run effects on regional development patterns; (d) their relationships to current rural development programs; and (e) their probability of achieving success.

As with other phases of the analysis, these policies will be evaluated for the representative rural areas initially delineated. The findings from the evaluations of alternative policy measures will be combined and

¹⁸Tweeten, "Systems Planning for Rural Development."

¹⁹Daniel W. Bromley, "Rural Development for Whom: A Market Failure Approach," paper presented at annual meeting of Rural Sociological Society, Denver, Colorado, August, 1971.

subjected to comparative analysis. This pooling and comparison of analytic results should lead to implications as to appropriate policies applicable to a wide variety of rural development problems within the Northeast.

Summary

In summary, the general objective of this project is to identify and measure the basic economic and social forces involved in the complex process of rural economic change. The results of this analysis should provide valuable inputs to the formulation of public policies and programs designed to influence the locational intensity and sector mix of non-metropolitan economic activity. The analytic framework of the project may be considered unique in its attempt to bring together and comparatively analyze the research results of detailed economic change studies and policy evaluations performed in representative rural areas. It is felt that this approach will lead to implications applicable to diverse rural development problem situations in the Northeast and that this approach will allow for more valuable results than either aggregate-type regional studies or isolated case studies of rural economic growth and decline.

In addition to the general objective of the study, several related issues will be directly approached or touched upon. These include: the establishment of criteria for and the assessment of the viability of rural areas; the examination of the question of appropriate geographic units for the analysis and planning of economic development; the consideration of the multiple objectives of the rural development effort; and the consideration and testing of alternative models and methodologies.

In conclusion, although all of the project's procedures have not been operationally defined, it is felt that its conceptual outline has the potential to contribute both applied and theoretical results which should increase the body of knowledge relating to the economic developmental process in rural areas.

NE-47: CONSEQUENCES OF CHANGING SOCIAL
ORGANIZATION IN THE NORTHEAST

Paul R. Eberts

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The key to understanding NE-47 is to understand the nature of social organization--its changes, its wide-ranging effects, and its potentiality for being controlled and manipulated by its people in order to optimize (or maximize) the things they want in their lives together. The idea of different patterns of social organization producing different effects among people, in essence, is not difficult to comprehend. Just as different types of soils are more or less conducive to growing different types of plants, so different types (or forms or patterns) of social organization can be conceived and demonstrated to be conducive to different levels (or perhaps types) of quality of living together. The major obstacle to accepting this perspective appears to be that most of us have been oriented to believe that each community is the sum of the quality of each person (rather than somehow greater than the sum of each person) and that each person determines for himself his own quality (rather than being heavily conditioned by the larger social units in which he lives).

To extend the above analogy, the perspective underlying NE-47 is that people in communities are somewhat similar to plants in soil. The plants (people) are products both of their own quality and of the quality of the soil (communities) in which they are grown. People take advantage of the qualities in their communities just as plants take advantage of the qualities in their soils. If the best seeds are planted in poor soil, their growth and productivity are stunted. Likewise, poorer seeds planted in very good soil often prosper. Moreover, from time to time plants need cultivation and other "outside interference" (water, fertilizer) in order to achieve their maximum growth and productivity. Moreover, both soils and communities can be analyzed comparatively and differentiated from each other with regard to various qualities and their potential for the growth of different types of plants.

Of course, the analogy breaks down at several important points. First, different types of useful plants prosper in different types of soils, whereas such an assumption must be carefully examined in the case of people. Also, at present there is no evidence that plants can control their own growth, whereas what happens in communities is most often the result of decisions by people (although precisely how and which decisions affect the communities is still a matter of research, including our own research). In both cases, the underlying difference is that people are infinitely more adaptable and self-consciously self-adjusting to their environments than are plants.

In any case, NE-47 represents a study to specify important parts of the above analogy. It is examining the effects of different patterns of social organization in localities on things people value, as well as some of the patterns of change in these localities and the effects of these changes. From the standpoint of soil and plant science, this research may seem a little primitive, and it is. Despite its importance, for many reasons, mostly related to the complexities of massive data reduction which can now be alleviated somewhat through the use of computers, studies from perspectives similar to NE-47 have only infrequently been undertaken. Some of these complexities will be illustrated and examined below in considerable detail. In fact, because of the wide variety in levels of social science understanding for which this paper is prepared, the details will seem tedious to some while to others they may seem too scant. I have endeavored to balance the presentation but may not have succeeded. In such cases, a return to the plant-soil (people-community) analogy may permit non-social scientists to see the forest through all the trees.

The order of procedure for the more complete explication of NE-47, then, will be first to describe the underlying problem and perspective in more detailed social scientific terminology, then to present a more complete model and research design, and finally to examine the implications of the research for program planning and policy alternatives.

The Underlying Problem: Macrostructural Policy Analysis

Quite briefly, the underlying problem of NE-47 is to produce a set of policy-oriented analyses for macrostructural social units. Since each term in this formulation is somewhat complex, however, some elaboration of the assumptions behind them is necessary.

A first postulate extends the reasoning indicated in the above analogy, namely, that different forms of social structures and social organization and major correlates of these can be specified both theoretically and empirically. A further implication of this postulate is that different policy formulations and even different forms of quality of life can also be specified both theoretically and empirically. If this postulate is not accepted, at least tentatively until further arguments are heard, then all further discussion is meaningless. Some of the issues raised by these postulates may be difficult to accept, especially since measurements of social variables seldom reach levels necessary for the statistical exactness of "harder" sciences. Nominal measurements are often used where ratio scales are desirable, and several indicators of variates are possible when harder scientists seek a single indicator of a single concept.

Despite these pitfalls, even the cynic must somehow deal with demonstrable relationships between certain variates. That definite patterns appear in the relations of certain variates can hardly be denied, although the interrelations of a great many variables certainly require much more research.

A second set of postulates, again extending the above analogy, focuses on macrostructural units of analysis as major influences on people's lives. As T. B. Bottomore has recently pointed out, the "macrostructural perspective" has been heuristically valuable to various social sciences since

sociology was initially conceived (1971, Ch.1). For instance, rather than develop it into a separate discipline, sociology's "founding fathers" originally wanted to stimulate social scientists in other disciplines, particularly political science and economics, to consider variables other than those then conceived in order to examine their latent effects across these traditional disciplines. Insofar as the present study attempts to interrelate variables from political science, economics, and demography, it also stands in such a tradition. The concept of social structure (or social organization) as used in NE-47, then, is the complex of relations between those variables significant to studies in political economy.

It is possible to go beyond Bottomore, however, in that such a study is considerably more than heuristic. Indeed it can become the basis for theoretical models. Whereas many people conceive of sociology as a discipline concerned with perspectives toward people and their social psychological outlooks about a variety of phenomena, mostly of an "unusual" variety, the present study represents sociology as the study of the complex relations between different types of social groups and social categories in diachronic and causal sequences. This study is not a study of social workers and their clients, although both are recognized in it: and it is not a study of social effects on the outlooks of people, although the variables used in it certainly affect the way people behave.

NE-47 is a study of political economy and the effects of one aspect of political economy on other aspects, especially as they are patterned in regions. It is a study of patterns of both large scale and small scale economic activities, of patterns of local political activities, of patterns of demographic activities, and of their mutual interrelating effects.

The specific patterns under scrutiny are called "macrosocial" patterns. Our concern is not with single organizations but with the patterning (or structure) of organizations in geographic localities.

Sociologists recognize at least five general types of social units for analysis (Freedman et al., 1956, Ch.3). These are: societies; communities; large-scale or secondary organizations (bureaucracies); small, face-to-face organizations or primary groups; and roles and/or personalities. Using the nomenclature of economists, study of processes in the first two is often considered macrosociological analysis, and study of processes in the other three is called microsociological analysis. NE-47 stands clearly in the macrosociological tradition--it is concerned with understanding sequential processes in different types of macrosocial units, specifically counties in the northeastern United States.

The concept of "structure" is also key to the analysis. The characteristics of any social unit may be classified into at least two broad categories, structural and aggregate (Lazarsfeld, 1969; Eberts and Young, 1971). An aggregate characteristic or variable is an arithmetic function based on information obtained from each member (or sample members) of the unit under study. Such information as the proportion of the population with a college education, the proportion earning less than \$3,000 per year, or the proportion which voted in a particular election are examples of aggregate variables. In other words, aggregate variates are those derived essentially from some arithmetic manipulation of the characteristics of subunits in the more inclusive unit of analysis.

Structural variates, on the other hand, are those derived from observing patterns of relations between subunits in the unit of analysis. They depend not on aggregating the characteristics of the individual subunits but on the interaction or communication patterns between the subunits. Figure 1 illustrates these relations. It means to depict the five basic types of social groups and their fundamental structural relations. Societies are represented by octagonals, communities by triangles, large-scale associations by rectangles, primary groups by small circles, and roles or personalities by dots. The most inclusive type of group is a society--every modern (as opposed to primitive or folk) society includes all of the other types of groupings. For the most part, communities, the other macro-social unit, also include all the remaining types of social units (except the society). Not every other type of unit must appear in communities, but empirically they generally do. The macro-units are usually connected to each other by bureaucracies or their representatives. Bureaucracies exist inside communities and societies, between societies and communities, sometimes completely outside some communities (e.g., General Motors does not have a plant in every community), sometimes within other bureaucracies (conglomerates),--and rarely outside communities altogether (strictly rural bureaucracies, such as co-operatives of families, but even these usually have offices or headquarters in small rural communities or villages). Primary groups, such as families or friendship cliques, are found throughout and outside every other social unit, as are role-positions or personalities.

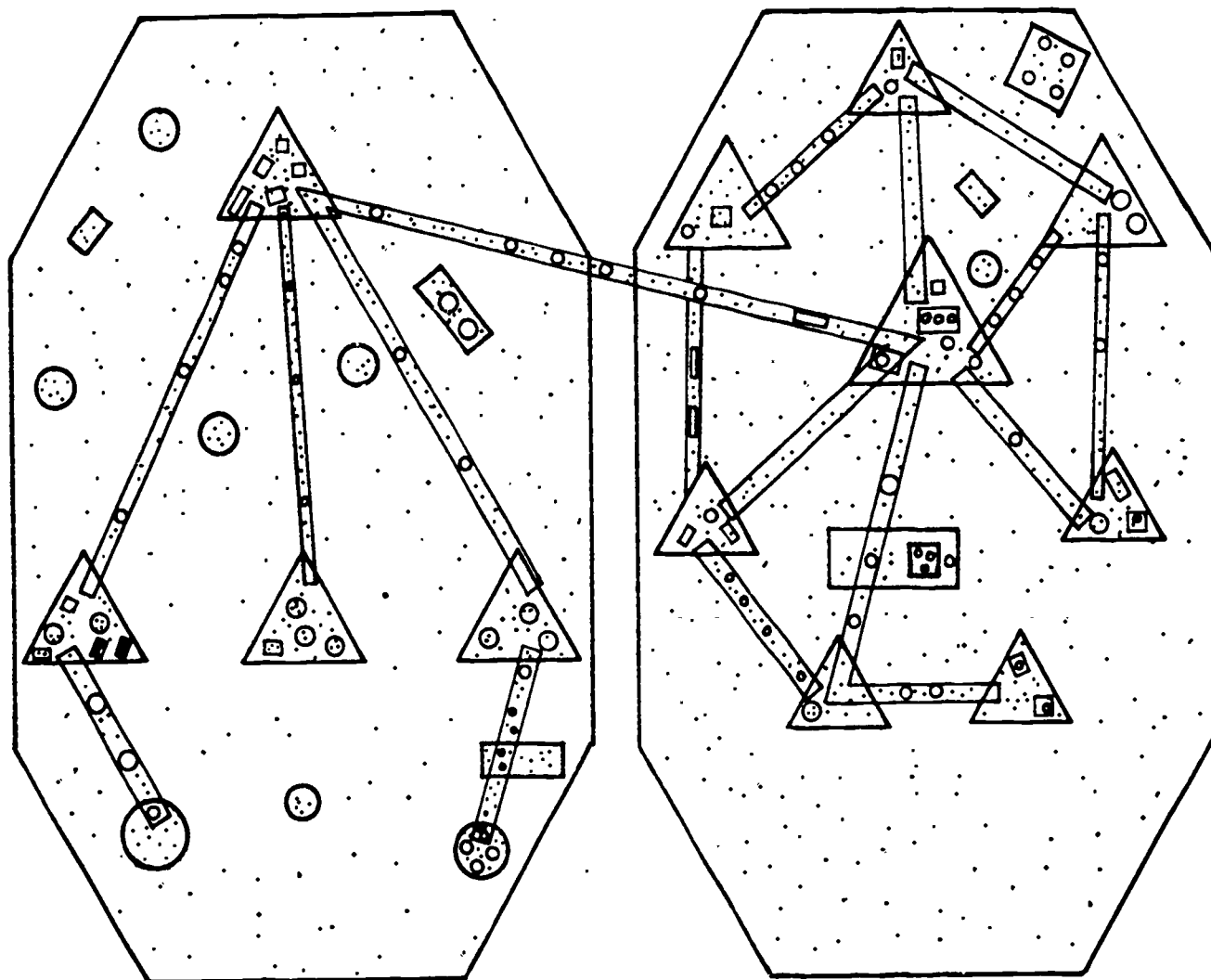
In any case, patterned relations between these various types of social units form the substance of the structure of any given social unit (Bavelas, 1953). For instance, in Figure 1 the pattern of organization in Society A is different from that of Society B. The most obvious difference is that in Society A no bureaucracies connect three of the communities independent of connections through a fourth community, whereas communities in Society B generally have at least one independent connection to other communities as well as to a central community. The pattern of Society A is the familiar one of a primate city organization, characteristic of many agrarian or "developing" nations, where all communication patterns lead to the-capital (capitol) city; the pattern of Society B is familiar as the pattern of a pluralistic modern urban-industrial society, where the patterns of relations are more decentralized.

The general idea in structural relations is that there is a kind of hierarchy of relations between the different types of social groups. And the patterned relations between the subunits, especially the interaction or communication patterns between the "next smallest" subunits, become the basis of the "structure" of the larger unit (Bavelas, 1953; Duncan, 1964). Naturally, as we shall see below in the section on the model, there are a great many structural patterns conceivable. It is the job of sociological research to specify which ones have which effects.

Since the structure of the macrosocial unit, the community, and their changes over time form the object (or objectives) of analysis in NE-47, the analyses performed on it are called macrostructural analyses.






Although it remains to be proven one way or another, it is my judgment that each basic type of social unit has its unique internal dynamics, and therefore its own theory to explain its developments over time. If this proposition is correct, a theory which explains the development of a

Fig. 1.--Basic types of social units (groups) and fundamental relations between them



Society A

Society B

-  = A society (two are depicted here)
-  = A community (twelve are depicted here)
-  = A large-scale formal association (many are depicted here)
-  = A primary or informal association (many are inferred in each type of larger grouping, as well as some outside these groupings)
-  = A role-position (innumerable are inferred in each type of larger grouping, as well as some outside these groupings)

society will be different from a theory (the set of fundamental concepts and relations of these concepts in propositional form) which is developed for any other sociological unit. It may be, however, that the society levels of analysis (or levels of abstraction) are similar enough to a community level of analysis in their fundamental operation that a general theory of macrosocial change will be possible. Both units are similar, for instance, in that they are geographically located social groupings, inclusive of other units, and concerned with the daily sustenance of their respective populations. They are different primarily in the extent of their influence and the nature of determining their boundaries.

Nevertheless, it is obligatory to start from the assumption that the theories are not similar--that there is no isomorphism in the morphogenesis of social units--so that we may more carefully examine the dynamics of any given unit.

It is also my judgment that there is a systematic relation between these social units. Although the evidence has not been conclusively cumulated, it would seem that major causal influences pass from larger, more inclusive social units down to those included within them. Thus the Constitution of the United States takes precedence over state constitutions, and state legislatures set limits on local jurisdictions. Likewise, the national system of political economy heavily influences local systems, but local systems have relatively little influence on national systems (Freedman et al., 1956).

We also assume, of course, a second set of causal influences on systems, namely those which come through a morphogenesis of the particular unit of analysis. In fact, these influences are a major concern of our research.

A final aspect of the underlying problem is that the macrostructural variates of political economy under scrutiny are those related to policy decisions. A distinguishing characteristic of social units (or groups) from social categories is that social groups have relatively clear boundaries delineating which sub-units are "members" of the more inclusive units, as well as clear policy-making bodies within them. Societies and communities have their governments, bureaucracies have their boards of directors or executive committees, primary groups have their interacting members, and personalities have minds and brains (in Freudian terms, egos). Since such social units are the bases of the structural variates which form the primary variables in the study, their policy-makers are or should be responsive to policy considerations. People decide which communities bureaucracies and businesses will locate in, and this is presumably in response to decisions by others. The extent of competition and mobilization of political parties in localities is derived from decisions by people, and whether local politicians vote for urban renewal and/or hospital facilities are decisions made by people.

Such decisions form the basis of policy considerations. The analysis of parameters in these decisions is the meaning of policy analysis. The major difference between the present study and most other sociological studies, however, is in the level of the unit of analysis and the level of the variates in the analysis. Most sociological studies use individuals as primary units of observation. The present study uses groups as the primary

units of observation. It assumes that individuals are important, but that they are considerably affected, if not truly conditioned, by the groups to which they belong and to which they relate.

The analysis of real groups which have policy decision power and their sequential processes, therefore, forms the underlying problem of this research. We assume they are the primary determinants of the way people live and consequently of the quality of life in communities, and that patterns of relations between certain of these groups form the fundamental control structures of communities.

An outcome of the research, therefore, will be insight regarding the way in which decisions by some people affect the lives of a great many people. Such understanding is the first step to more sophisticated analyses for public policy-makers. Although most policy-makers at the local level are relatively unaware of the broad social effects of such decisions, the present research will assess some of these effects so that they might more easily become part of the public domain.

Whether such analyses can become a science, a policy science at that, will also be evaluated in this research. We start from the assumption that they can. The concept of science is somewhat vague--it refers both to a method, a way of doing analyses (hence it should be a verb, as in "let's go science awhile"), and to a body of knowledge, the specific models produced by the method. At present, models in policy sciences are just being developed. Several exist in economics, the most famous of which derive from Keynes (1936), and from Leontief (1951, input-output analysis); a few have appeared in political science, notably those by Alker (1966) and by Pulsipher and Weatherby (1968). Some, including our own, are moving from the verbal to mathematical and testing phases in political economy, notably those by Clark (1968), Eby (1972), Owen (1969), and Young (1966). On the basis of such studies, we expect that models of behavior in political economy can be systematically produced and that NE-47 should play a definite role in such a process. In fact, because NE-47 is a study in the diachronic relations of variates (from 1950 to 1970) and because it uses an exhaustive universe for units of observation (the 300 counties and two largest communities in each of those counties), it should serve as a valuable data (banked) source for future as well as present comparative and trend analysis.

In summary, the underlying problem of NE-47 is to produce a set of scientific macrostructural policy analyses on the major variates of political economy with "through time" (trend) bases.

Purpose and Objectives: Description and Model-Building

The general purpose and objectives of the research outlined in the previous section are to evaluate in a number of ways the empirical validity of a macrostructural perspective in understanding changes in communities and counties in the northeastern United States. To our knowledge, no other study has so systematically undertaken such a task. There are many products on aggregate measures of population composition, including the United States Census itself, and several from regional economics, including the Department of Commerce's Census of Businesses; but none of these studies attempts to integrate political, economic, and policy variates into a single work, let alone use the Northeast's 300 counties and their largest communities as

primary units of observation.

The specific objectives are divided into two: first, to describe the major changes occurring from 1950 to 1970 for the most important variables and, second, to investigate the causal relations between the major variables.

The description of trends in the variables and their basic relations represents a large and important, although not the most difficult, part of the study. Such straightforward descriptions should be useful to several sorts of people. Some, such as planners, may want to compare changes in their communities with changes in other similar counties. They or others may simply be curious to know which perceived trends are more representative of one locality than another, and which trends are uniform for all counties.

Insofar as the variables chosen for such descriptive material will be those deemed most significant on the basis of the model-building objectives of the research, such descriptions should also be useful to other researchers. Moreover, our plan is to publish these variables by type of county (rural, urban, suburban, metropolitan) for each year (1950, 1960, 1970), so that those who wish to investigate certain subsamples from a general political-economic perspective can have easy access to data descriptions. This objective somewhat parallels that of the County and City Data Book, except that our enumerations are more limited in size (300 Northeast rather than 3,000 U. S. counties) and the variables will be more theoretically significant (since they will be based on empirically supported theoretical models). Of course, the data will also be made available to researchers and public agencies through computer tapes.

The second specific objective is to develop predictive and explanatory models relating the five major categories of variables to each other. In essence these models will examine in some detail the hypothetical model presented in the next section of this report. In all probability, multiple regression techniques will be used to accomplish this objective. Although certain statistical problems remain, some work, notably that by Eby (1972), Schmidt (1972) and Sismondo (1972), has established some generalizable analytic techniques for this sort of investigation.

The validity problem, to clarify the relation between key concepts and indicators of the concepts, also remains important, largely because of the (at present) multiple indicators of concepts. Although this problem is never really solved, several resolutions look promising, including using Guttman and factor-analytic scaling techniques (De Luca, 1972; Eby, 1972; Sismondo, 1972), and a modification of intercorrelation analysis suggested by Wallace (1969) and used in Schmidt (1972).

The other major analytic problem remaining to be resolved is how to meet all the statistical assumptions for multiple regression analysis-- multi-variate normal distributions, ratio or interval scale measurement, and so forth. At present, we have not resolved this problem so that results remain exploratory. Some efforts have been made, and other efforts will be made in the future to develop methods by which to assess the effects of analyzing data on the basis of using several different sets of statistical assumptions. In the long run, however, this problem continues to plague not just our research, but nearly all social science research.

It is on the basis of these predictive and explanatory models that the scientific aspects of the research will ultimately be evaluated, as they should be. It is overwhelmingly probable that this research will not usher in the golden age of policy science analysis, complete with sophisticated simulation techniques and definitive projections. Nevertheless, it should stand as one of the more important building blocks in assessing and hopefully stimulating future work in this important scientific direction.

A Suggested Model: Concepts, Measures, Relations

Limiting Considerations

Several limiting considerations should be noted before we approach the substance of the model. First, the following model probably does not apply to all communities for all times. It was created largely during an empirical investigation into the dynamics of 25 upstate New York communities of between 10,000 and 50,000 population for the years 1950-1960 (Eberts, Eby and Kluess, 1969 and 1972). Hence, it may not apply to suburban or metropolitan communities, although some modification of it may. Further, it may not apply to counties, our primary unit of observation and analysis in NE-47. (Since we believe that the technical reference for communities--villages, towns or cities--is too narrow for a modern geographically mobile population, we assume the concept of community can be used interchangeably with county.) We do expect the model to be applicable primarily to nonmetropolitan places, such as "independent" urban places and more rural communities and counties.

Second, the model is what may be called an "ideal type" (Weber, 1947). By this we mean that it is being described below as if it is occurring in a single community, through time, with no disturbances on the community other than those specified in the model. Naturally, such an assumption does not meet the tests of the real world, but it is useful heuristically in order to present ideas briefly and cogently. Furthermore, such an approach will be presented self-consciously so that it can be translated more easily into path analysis and/or mathematical regression equations on the more inclusive data now available (Blalock, 1969, 1971).

Third, so far only parts of the model have been tested with any degree of empirical rigor. Moreover, the hypothesized relations do not hold uniformly from one type of universe to another, although some parts stand up better than others. In the relatively brief discussion below it will be impossible to cite the various studies in detail. Instead they will be incorporated as they are relevant. In any case, the model is in a state of development. Further, we do not believe that the value of the research should be evaluated solely on the confirmation of the model. The concepts (and measures) seem valuable both for elucidating key community processes and for explaining statistically some of the variances between communities in these processes. The goal of the research, as indicated in the first section of the paper, is to specify and clarify some of the important relations in political economy, whether or not they conform to the particular expectations presented below.

Finally, five remaining technical and methodological criteria are

imposed on the model (Blalock, 1969; Eberts and Witton, 1970).

1. Concepts used in the model should be readily operational: indicators for them should be easily apparent.
2. The model should be dynamic: it should express concepts in sequential rather than simply "point" relations.
3. The model should be causal: thus, minimally, changes in some variates should precede others in time; a relatively high correlation between variables should exist, even when "controlling" for other variables; alternate "explanations" of the relations should be eliminated; and it should be demonstrable that changes in the structure of the causal concept can or do alter the structure of the effect concept.
4. Policy-relevant variates should be included in the model: some variates must be manipulable or influenceable by public and/or private agencies.
5. The model should have relative theoretical closure: (despite the statistical problems involved) initial "exogenous" variates should be probability functions of other ("lagged") variates in the model.

The Analogy Underlying the Model

Social science theory (or models) exists at several levels--one is the analogy underlying a set of concepts and propositions (Emmet, 1953, Chs. 1 and 4) creating its "perspective" or "framework" (Coser and Rosenberg, 1957); another is the typological or classificatory level, which more systematically orders a set of concepts and their distinctiveness from other concepts (Parsons, 1951; Zetterberg, 1965, Ch. 2); a third is the "propositional" level, where concepts are interrelated in terms of axioms, assumptions, and hypotheses (Zetterburg, 1965, Chs. 4 and 5); and the fourth is the mathematical and statistical level, with its formal causal models (Blalock, 1969, 1971). Although most theories in the social sciences are at the first or second level, a few strive toward the third and fourth levels. Many studies in mathematical form in recent years should contribute greatly to the process.

For clarity and economy a research study should briefly state the analogy underlying its model, especially when the analogy is not well-known. The concepts in the analogy behind NF-47 are familiar in part from a variety of other models, including human ecology, information theory, systems theory, decision theory, macrostructural gaming and/or simulation theory, economic base and/or dominance theory, input-output theory, social organization and stratification theory, demographic theory, political elitist and pluralist theory, social indication and social accounting theory, and even quality of life theory (if there is such a thing). But, whereas many of these other models seem "impersonal," almost deterministic, with parameters lying outside policy manipulation, the present formulation emphasizes that many variates have very direct policy implications and are manipulable through decisions in social units at various levels.

Such eclecticism alone might be both a strength and a weakness. Its major strength is in its breadth. Its major weakness would be that it provides no a priori reason for accepting or rejecting a given variate.

For this reason, a broad yet integrating analogy to guide the choice of variates is desirable.

One such summarizing analogy for the study of macrostructural political economy might be labeled the "System Problem Resolution" (or "POETS-FACS," as we shall see below) model. Such a model parallels decision theory in that it assumes that a deliberative body (in this case community or county legislators, whatever their official title) is attempting to understand and resolve "system problems" (FACS) through the use of a set of "system resources" (POETS) (Ackoff and Rivett, 1964, Ch. 2). The parameters posed by considering the system problems vis-à-vis available system resources are inputs used by policymakers in determining their decisions. From my rough observations, I have found, in fact, that local legislators do this quite unsystematically and without reference to complex social models. One purpose of the present research would be to define some of the parameters and document their relations so that such decisions can be shifted to a more self-conscious awareness in the effects of variables they are manipulating.

Such a model begins with the premise that every social unit (or system) must resolve a certain set of system problems (in contrast to "social problems" of "deviant" behavior) with a given set of system resources. Moreover, it assumes that the problems are fixed, but that the resources can and do vary from one setting to another. Although there is some debate on the exact nature and number of system problems, most lists seem to include "PACS" problems (Aberle et al., 1950; Hawley, 1957; Mack, 1967; Mott, 1965; and in a different form, Parsons, 1951 [AGIL], and especially Warren, 1963, Ch. 6), namely:

- a. Production of things valuable for use or exchange, whether they be physical and material or symbolic and interpersonal (e.g., skills);
- b. Allocation of these things, in order to distribute the "values" produced to a population in a systematic manner;
- c. Control structures for resolving conflicts and problematic decisions between population segments in systems and for maintaining social order;
- d. Staffing-socializing-servicing activities, in order to train people for positions in the social unit and keep them functioning effectively.

In most macrosocial units, certain institutions develop to handle primarily a single task, although tasks do overlap and each institution must also resolve each of these problems internally in order to assure its own continuance. The PACS problems are heuristically valuable, therefore, because they represent the major issues in political economies of macro-units. It is also an assumption that different macro-units use different techniques and/or different structures to resolve such problems. From studying these varying structures, it should be possible to assess the comparative effectiveness of alternate responses to the system problems.

The concept of system resources covers a wide but not infinite variety of things. The primary system resources considered by sociologists are the POETS variables (Duncan, 1964):

- a. Population, with its various qualities and/or skill levels:
- b. Organizations, bureaucracies, of all types, but also primary groups:
- c. Environment--mostly in terms of land and its productivity, but also its problems of pollution--and/or its surrogates useful to obtain land-based resources from other systems:
- d. Technology, especially in terms of hardware (things), but also including its more abstract "formulas" in the biological, social, and natural sciences as well as in engineering and other applied sciences:
- e. Symbols of all kinds, but especially those which become the bases of normative and legal behavior and/or which produce positive (or negative) emotional responses from people.

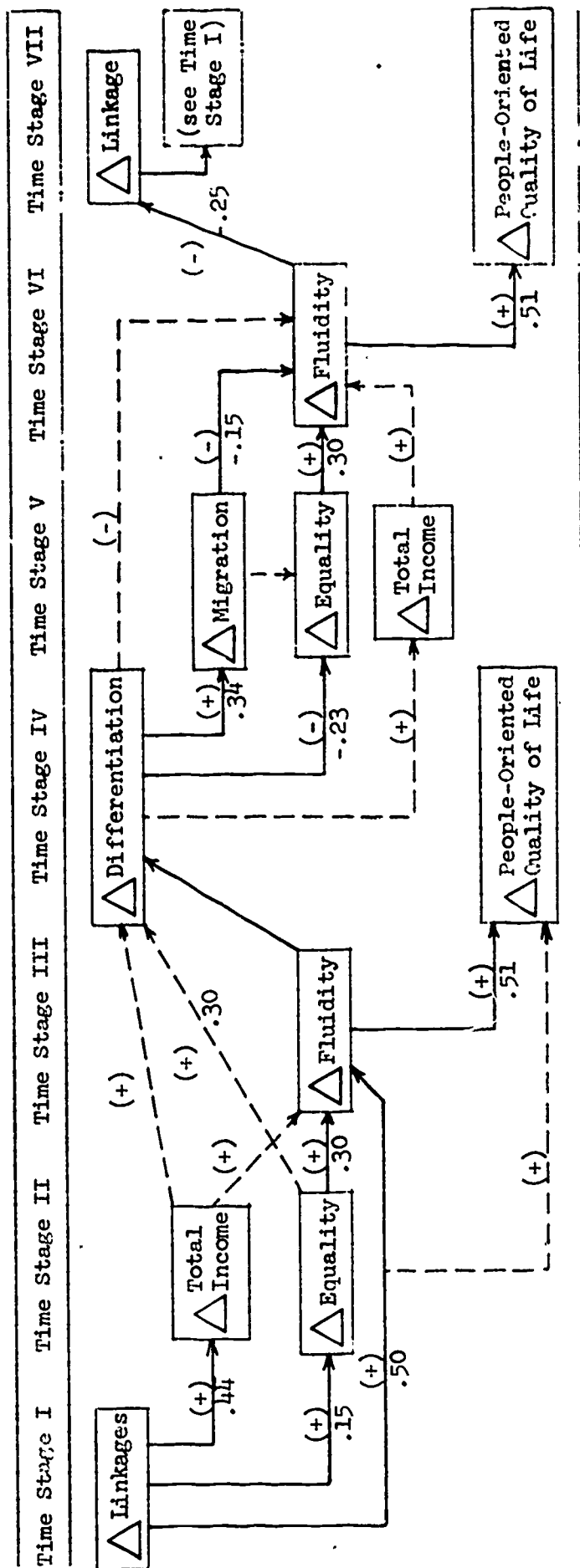
Unfortunately (or fortunately) not all of these system resources will be considered in the present research. Because of limitations on our budgets and the interests of the investigators, the study focuses primarily on the first two system resources, various dimensions of population and various types of organizations. If our assumptions about Figure 1 above are correct, however, it may be assumed that these two resources reflect, control, and/or structure the other resources, so that the final three are not completely ignored in the present research.

The resolution aspect of the framework comes in the very nature of the macrosocial units being used as the primary units of analysis and observation in the present study. In a community or county there is a specified body of decision-makers whose duty it is to consider and resolve local system problems. Although the localities in our analysis are also part of a federal government, so that many system problem resolutions are influenced by federal authorities, local officials are also autonomous and increasingly conscious of their own responsibilities in helping to resolve these problems for local areas. In addition, many federal and state programs require local responsibility in implementation if not local initiative in order to receive them. Such programs assume that local populations which have "needs" will take steps to use federal and state resources to meet the needs. They also assume that local officials are capable and are organized to apply for such programs. It is insight on problems like these which represents a prime objective of the present study. In any case, such a theoretical "analogy," which recognizes the major parameters of system problems (PACS), system resources (POETS) used in resolving the problems, and a body which makes official decisions (probably best expressed in budgets) regarding modes of resolving these problems, seems an appropriate perspective by which to integrate and focus a study in political economy.

A Summary of the Theoretical Model

Figure 2 specifies the major concepts and in a schematic way the manner in which these concepts are hypothesized to relate to each other theoretically. The following sections will examine each concept and its relations in detail. For a more adequate understanding of the directions of the paper (so that the reader does not lose the forest for the trees), however, it is important to peruse quickly the overall scheme.

Fig. 2.--A proposed general model of community macro-system change*



*The over-time data (variously 1950-1960 and 1950-1960-1970) on which the correlation coefficients are based are taken from five sources and represent the admittedly biased highest correlations available to us. With the exceptions below, the correlations are based on data from the 25 communities between 10,000 and 50,000 population in New York State (Eberts, Eby, and Klues, "Community Structure and Poverty, 1960"). The correlation of fluidity with quality of life indicator is based on data from a set of 364 communities in the Northeast on which USDA-CSRS Northeast Regional Project No. 47 (Revised) was based (Mattson, Schmidt, and Schecter, 1970). The model will be tested more thoroughly on this sample in NE-47 in the near future. The correlation between equality and fluidity is based on a sample of 300 counties in the Northeast (Schmidt, 1972). The correlation between linkages and equality is based on 152 communities in New York State, none of which are located within the New York City SMSA (Owen, 1969). The correlation between linkages and income is based on 27 communities in Kent County, New Brunswick (Sismondo, 1972). The broken arrows indicate hypotheses for which data are not yet available.

The goal is to create a more complete causal model of social change in communities than has heretofore been available. In doing this, seven major concepts, three of them structural and four aggregate, will be presented. Since the model is ultimately non-recursive, it does not matter too much at which point discussion is initiated. If we assume a set of communities with a structure in relative stability, order, or equilibrium, however, the breaking of such a state is hypothesized to be through an introduction of a new organization (or linkage), e.g., a branch of one of the top 200 industrial firms, into the community. If the linkage would be important and powerful enough, it would increase the amount of income in the community, as well as employ more fully those presently in poverty or unemployed. Hence the positive arrows from linkage to income and equality.

Such income and equality growth, as well as the introduction of the linkage itself, would affect the extent of resource and information flow (or fluidity), probably through increased participation and competition in the structure of the locality's political economy. This would make the population segments in the system more responsive to one another, and hence raise indicators of "people-oriented quality of life," as well as provide people more opportunities and ideas for innovation, and, ultimately, raise the extent of differentiation (different types of local services) in the community).

When the community became a more differentiated service center, however, it would attract poorer people from the surrounding rural areas who found themselves marginal in the local and regional economy. Such immigration, in turn, along with the lower wage scales of service industries, would increase poverty and decrease equality in localities, which would then also reduce the fluidity of the area and, ultimately, its comparative quality of life. At this point, the community would reach a new equilibrium which would be broken only by a new linkage arriving.

It is important to keep Figure 2 and the above verbal description in mind as consideration is given to each concept. The goal of NE-47 is both to clarify some important dimensions in community life and to examine how they interrelate through processes of community change and development. Without clearly recognizing both aspects of this work, it is easy for readers not to understand the way various parts of the following discussion fit into a larger perspective.

Let us now turn to a consideration of each concept, and its relation to each of the other concepts in more detail.

Major Concepts, Their Structure and Interrelations

Production and/or Economic Base as the Concept of Linkage

Due to the necessity of building two different models simultaneously, this and other sections below are divided into two parts (not always clearly): the first is to "build or construct the model of the concept" in order to show its relevance and distinctiveness in relation to previous concepts of other models; the second is to "build or construct the model of causation" (or the predictive, explanatory, or mathematical model) in order to show the relevance of a given concept to the others.

Because the model tends to meet the theoretical closure criterion stated above, it may not matter which concept receives first consideration. Still, since it has been demonstrated repeatedly that the fortunes of communities rise and fall as a function of the way they resolve their economic export base or production functions, the concept of linkages, which is a generalized version of the export base concept, makes an acceptable springboard into the model.

The nature of linkage

The export base of a community in essence represents a community or county's linkages to other places for the exchange of information and/or resources (or their symbolic equivalents). The concept of export bases, therefore, includes a wide variety of phenomena and is similar to the concept of "vertical integration" (Warren, 1963). Duncan and Reiss (1956), for example, recognize that communities specialize in such activities in addition to manufacturing, mining, and farming as the "exportation" of government functions by county seats, the "exportation" or entertainment by professional athletic teams and other recreational facilities, and the "exportation" or education by colleges and universities. Although in all three types of activities populations travel to these communities from other communities to receive the services, such functions still represent production or export base functions in a system of intercommunity networks. Moreover, it is probable that many communities will have multiple types of export bases.

The idea of linkage as export base or production function derives from an insight implicit in Figure 1--namely, that most facilities related to export bases are present in the form of secondary-association-type organizations in communities. Moreover, in a change-oriented model changes in the export base of communities can be recognized through observing changes in the number and types of organizations which enter or leave a community. Furthermore, as national and regional economies expand, local export facilities often are bought or merged into national corporations, so that observing the largest corporations and the placing of branch plants in communities is a good indicator of the organizational linkages of given communities with other communities (Turk, 1970). In fact, if some linkages are not maintained or generated over time, communities will atrophy and eventually disappear. In a complex industrial society with a market- and money-oriented economy, the self-sufficient community is an anomaly, if not impossible.

In a research project devoted to examining the present model exhaustively for a single county, Sismondo (1972) recorded every type of association in a small (20,000 population) rural county of New Brunswick, Canada, and identified six basic categories of institutionalized linkages between communities:

- a) economic linkages (financial, wholesale and retail business or manufacturing):
- b) political linkages (government offices of all kinds, administrative as well as legislative: political parties; representatives of all types elected to take office in another locality);

- c) informational linkages (mass media, religious and educational institutions):
- d) professional linkages (associations of professional people such as doctors, lawyers, and educators):
- e) commuter linkages (commuters and return migrants):
- f) communication linkages (roads, public transportation, telephones, libraries).

The first four he labels "active" linkages, because the organizations associated with them actively seek "markets" for their "products." The latter two he labels "passive linkages," since they carry resources and information but do not systematically attempt to exchange them with others. Because not all organizations engage in exporting, he found it necessary to have an interviewer visit each one regarding the extent of their operation involved in export functions. Factor analyzing (both orthogonally and obliquely) these various types of linkages for his 22 communities (in effect townships) in the county, he specified six factors and factor scores for each community. The factors were labeled Governmental Institutional Linkages, Provincial Trade Linkages (mostly to provide the things necessary for local services), National Economic Linkages, Media Involvement Linkages, Financial and Distribution Linkages, and Commuter Linkages (including road distances).

NE-47 has collected data on nearly all of Sismondo's types of linkages, except for commuters, but using different types of measures, and has added a few others, especially higher educational facilities. Since the project's concern is with changes in types of linkages and their correlates with other changes in political economy, and since the primary changes appear to be in number of plants of the 200 largest corporations and other large plants (employing over 100 persons), current investigations use these as major indicators for changes in linkages.

Effects of linkage changes: re-allocation of resources

The primary hypothesis using linkages as a concept is that the fundamental stimulus to social change in a community comes through the appearance or disappearance of new formal organization linkages between it and some other community or communities. Such changes both (a) introduce (or take away) resources in terms of people, ideas, and money and (b) tend to disturb local influence and/or power structures because of the importance of the social positions of their managers or owners. Communities experiencing such new linkages should show a comparative increase in income growth and also, in all likelihood, an increase in a more equal allocation of such income growth. The reasoning behind these two predictions is simply that larger exporting plants tend to have higher wage scales than existing service industries and, insofar as they are national corporations, often are unionized. Moreover, since new industries are increasingly "capital-intensive," their labor forces are more often at higher skill levels and therefore better compensated than other industries which may be present. Consequently, new linkages most often raise the proportion of people in the "middle" classes, comparatively reduce poverty, and produce a more equal

income distribution overall. (The reverse would be true if such industries pulled out of a community without being replaced.) There are exceptions to such a generalization, the most important being the rapid expansion of higher education and its effects on local economies between 1950 and 1960, a major outcome being to increase inequalities. Data both from Eby (1972) and Sismondo (1972) tend to support the above two generalizations.

The second major effect of new linkages (or their disappearance) is to alter existing power relations. Especially when the new linkage is a branch plant of an economically and politically powerful corporation whose managers both expect respect from local leaders consonant with their positions and have different more cosmopolitan orientations to the resolution of community problems, this linkage will influence local power structures. In order to understand the details of this influence, however, we must examine more precisely the political structure of local communities and, in the process, a concept called fluidity.

Political Economic Control Structure as the Concept of Fluidity

The structure of the concept

The underlying nature of fluidity is the extent of flow of information and resources in a community (Young and Moreno, 1965; MacCannell, 1968; Owen, 1969). It is assumed that if more information and resources flow throughout a community, its decision-makers will be better able to resolve their system's problems, and especially the control problems involved in orderly change. The concept denotes the flow not merely of any information, but of information relevant to decisions concerning the political economy--specifically those concerning resources, resource use, and resource opportunities, and/or their symbolic equivalents.

An important issue is to specify under what set of subunit relations more (or less) of such information flows, and to relate this structure to political activities in a community. There are many possible aspects of political structure, including administrative bodies, legal and judicial bodies, legislative bodies, and the many voluntary organizations (including businesses, interlocking directorates, social clubs, and political parties) from different population segments which form the bases of community power, influence, and authority. Some information passes through each of these structures, but the issue for research is to determine through what types of structures a maximum amount of relevant information is likely to flow through the entire community.

For consistency, the ideas underlying Figure 1, specifically the notion of patterned relations between subunits, should be related to the concept of variability in political economic control structures. When this is done, it is apparent that the concept of the flow of information necessary for high fluidity overlaps with the concept of political integration. A requisite for political integration in a system is that subgroups communicate with one another. Such communication establishes consensus for legitimacy of action in a population as it resolves conflicts between subunits and/or population segments (Janowitz, 1964, Ch. 1; Finkle and Gable, 1966, passim, but especially Chs. 1 [Smelser], 3 [Pye, Diamant, Almond], 6 [Lerner, Deutsch], and 16 [Weiner]; and Warren, 1963, Ch. 9 on "horizontal integration").

Two further issues raised by these ideas are to specify, first, which population segments or subunits are most significant to be communicating with each other and second, what particular patterns of relations between these units are most efficient for an optimum flow of political-economic information.

Two general patterns of information flow are most often recognized, one with a bureaucratic orientation (and its familiar "organization chart") and the other with a competitive market orientation (Weber, 1947; Schumpeter, 1942). The former assumes relatively well-defined status positions and channels of communication between subunits established through authority relations. The latter assumes each subunit has autonomy to choose its own channels of communication according to its own "best interests." Although the data are not yet conclusive, it is undoubtedly the case that one type of structure is more efficient for some purposes, while the other is more efficient for other purposes (see, among others, Blau, 1955; Bavelas, 1953; White and Lippitt, 1953; Smith, 1972). In particular, although the relation may be quite complex and "interactive," the competitive market model may be more important as people in a community come to a decision, while the bureaucratic model may be more important in implementing decisions (Smith, 1972).

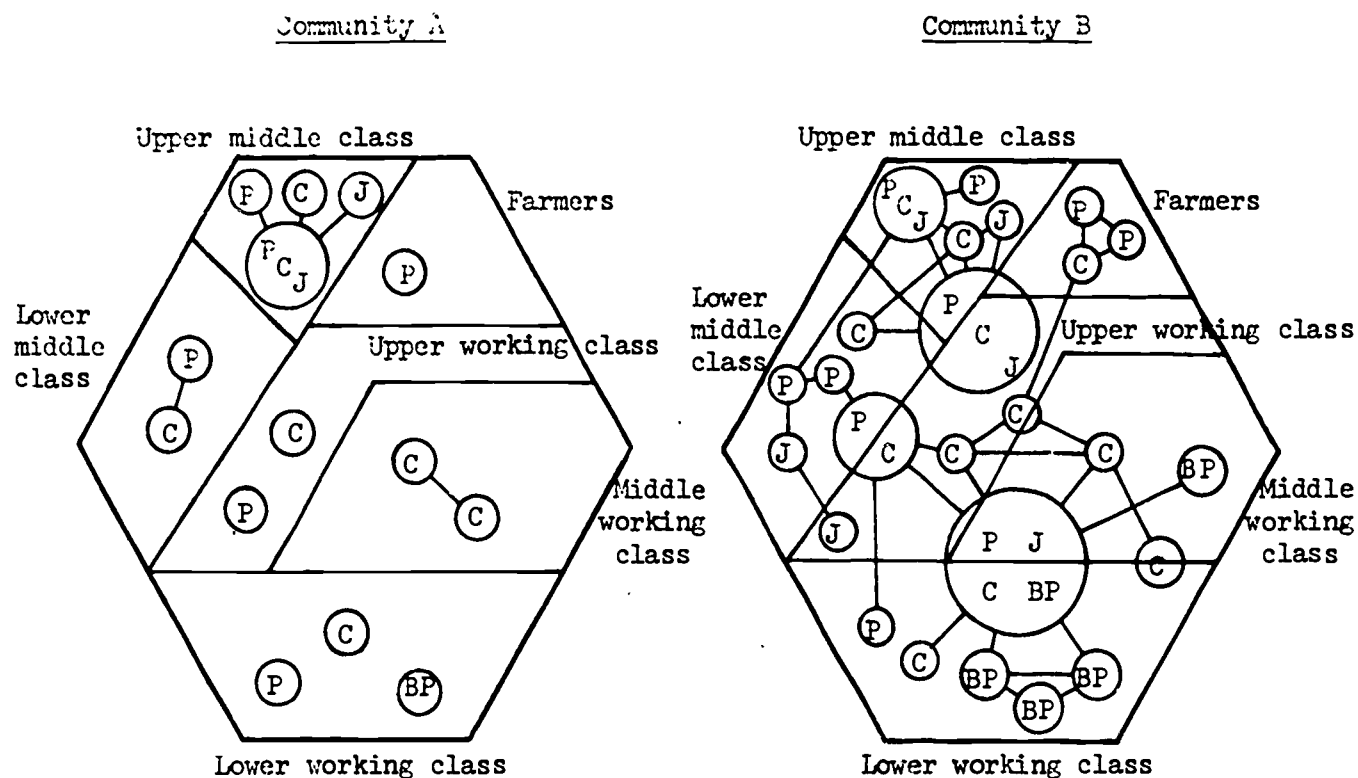
For dealing with control problems in political economies of macro-systems such as communities, the competitive market model seems decidedly important. In other words, more relevant political-economic information is assumed to flow in localities which have comparatively higher competition and higher participation in political-economic affairs. Such an assumption is quite compatible with the very heart of laissez-faire economics, namely, that "free and open competition between firms" is the best allocation mechanism for resources, just as in the university "free and open competition between ideas" is supposedly the final arbiter of ideas' worthiness.


The most significant population segments which are juxtaposed to one another probably differ from community to community. Studies by political behaviorists demonstrate that nearly every population category represents potential opposing segments. Thus, middle-aged people think and value things differently from either the old or young (Lane, 1959, Ch. 15). Protestants, Catholics, Jews, and black Protestants also differ from each other significantly on various issues (Lane, 1959, Ch. 17; Lenski, 1961). Social classes, whether based on occupational groupings or educational and income categories, also produce significantly different value orientations (Campbell *et al.*, 1964, 1966).


Figure 3 attempts to summarize these ideas. It shows two communities divided into population segments and then into segments within segments. Six class segments (on any basis, but probably on some combination of occupation, income, and education) and four socio-religious segments are observable in each community (Lenski, 1961; Laumann, 1966). The actual number varies from community to community.





The two communities differ in three major respects; namely, the extent to which people in each segment are organized (Community A has less), the extent of communication between these organizations (Community A has less), and the extent to which people through organizations can communicate freely across segment lines, i.e., that active members come from various

Fig. 3.--A simplified schematic model for the structure of fluidity in two communities



 (hexagons) = macrosocial units, in this case communities

 (circles) = organizations within the macrounit and within social classes

    = Protestant, Catholic, Jewish, and black Protestant organizations, respectively

Three immediately perceivable types of difference between patterns in Set A and Set B can be the basis of social system variables:

- 1) number of distinct subunits (more in B)
- 2 a) structure of communication patterns (subunits in B have more channels per unit for use
- b) structure for communication channels (subunits in B have more communication channels across class lines)

segments (again, Community A has less). As is typical in many communities, the organizations in Community A, even its churches (Niebuhr, 1929; Demerath, 1965), are class-based. Little interaction occurs across such lines. Moreover, not many communication channels exist between organizations even within a single social class. In such a community, except for the upper middle class, people and organizations are in a state called "isolated masses" (Kerr and Siegel, 1954). Since their information sources are truncated, people within these segments are therefore probably relatively less organized and hence probably less mobilizable for taking action to resolve their personal or collective problems. Rigidity tends to retard the occurrence of two preconditions of technological change and innovation in systems, namely, the widespread availability of new information and the identification and acceptance of innovators, their employees, customers, and so forth.

Community B has more communication channels between groups, and they also cross class lines more frequently. In fact, four groups in Community B cross segment lines (that is, where participating members and directors come from different classes and different socio-religious categories), while only one group in Community A does.

It is probable, since these groups cross class and socio-religious lines, that they are most central in communication channels and are the most influential groups politically, if they are not outright political groups. It may be they are either political parties or legislative bodies, because in such bodies people "representing" different population segments are more likely to be found. Furthermore, such bodies form the bases in which the most relevant political and economic information is passed from one population segment to another. Most nonpolitical organizations which cross segment lines actually do not raise the most important political-economic issues because of their members' sensitivities to such issues, and hence because of the potential threat to the groups' existence. Such a process is quite clear, for example, in churches with "too-liberal" ministers. In fact, even in duly constituted political bodies, especially in small towns, such issues are not raised (Vidich and Bensman, 1958). Bodies which have members from different population segments are the primary (and often only) mechanisms for publicly disseminating ideas relevant to political economy.

Community B, therefore, contains the essential preconditions for developing consensus in change processes, while Community A may be considerably disrupted when changes occur (Flora, 1970). Because of greater communication between groups, both within and between population segments, Community B would be considered to have better political organization and therefore better political integration than Community A. Community A may be better able to mobilize quickly for certain types of programs, especially those which serve the "needs" of the upper and upper-middle classes, such as urban renewal (Hawley, 1963), but, because of the relatively "isolated" character of its other population segments, people in the latter are more likely in Community A to engage in behavior considered unresponsive, irresponsible, and hence "deviant" from the standpoint of people in other segments (Kerr and Siegel, 1954; Felice, 1971). Hence, upper-middle-class people often think that people in the lower classes are "disruptive," while people in the lower classes think those in the middle classes are

"cold," "stuck-up," "unemotional," and unconcerned about "real people's" needs (see Pope, 1942, esp. Ch. 6). In contrast, when more population segments are mobilized and organized, and when they compete more effectively in the political process, programs are better developed by local officials which are more responsive to the needs of the people in a greater number of population segments than otherwise (Mulsipher and Weatherby, 1968; Neubauer, 1967; Young and Moreno, 1965; Hofferbeit, 1966; Lineberry and Fowler, 1967; Felice, 1971; Clark, 1968; Mattson, Schmidt, and Schechter, 1970; Smith, 1972; but see Crain and Rosenthal, 1967, for some partial negative evidence).

It is possible, of course, that even a great number of communication channels could be blocked by the domination of a single perspective or single set (coalition) of groups. Under these conditions fluidity would also be reduced. But this is a problem in measurement, not in the structure of the concept.

Because our measurements rely on secondary sources, it has not been possible to measure the various aspects of fluidity directly. The present study uses several approximating indicators of political fluidity. Although we would expect them to be correlated with the present political ones, it will be important in the future to develop a more economically oriented set of indicators. The first set used here is based on the organization of official public political bodies, and the second on the organization of "other" formal and informal associations.

In considering the role of "representative" political bodies for creating fluidity in localities, one indicator would be the reverse of the extent of "reform" governments. Reform government refers to the suggestions of many city planners, especially in the 1930's, for governments of "professionals" rather than of party machine "hacks." It was designed to eliminate too much "politics" and "corruption" from city administrations. Its specific characteristics include a smaller (rather than large) city council elected at large (rather than by district or ward) in non-partisan (rather than partisan) elections, and with a professional city manager and a part-time (rather than full-time) mayor.

What these reforms actually produce, however, are city governments remote, inaccessible, and often unaccountable to the needs of people in different segments. They tend to be dominated by white upper-middle-class people sensitive primarily to budget accounts rather than to the alienation and resulting apathy and "deviancy" of a number of population segments (Lineberry and Fowler, 1967; U. S. National Advisory Commission on Civil Disorders, 1968; Felice, 1971; Packtor, 1968; Mattson, Schmidt and Schechter, 1970).

Insofar as the structure of legislative bodies reduces official access by diverse population segments to them and to each other, fluidity of communication between population segments is also reduced. Such reductions, in turn, tend to increase deviancy, at least by white middle-class standards, and even by the standards of others--only a few people really want to be violent, but symbolic violence is responded to by other symbolic and sometimes physical violence.

A second indicator of fluidity is represented in Figure 4. This four-fold typology is formed by cross-classifying a dichotomy of participation in voting in elections. This indicator assumes that both competition and participation are important in determining fluidity. Because of traditional adherence to the importance of competition, we suspect it is more important than participation, but to consider either one alone would probably be an error. The two dimensions have what is known statistically as an "interaction" effect, namely, that when both are used in combination in statistical analysis they explain more of the variance in other variables than the sum of both used separately. In this case, the pluralist and fragmented cells probably explain more variance than the sum of competition and participation. In any case, a structure of competing political parties makes the governing party more "accountable" for its activities and programs than a concentrated structure.

In each of the four cells of Figure 4 are hypothesized characterizations based on previous studies. The labels of the cells are arbitrary but have had some use in the research literature. In pluralist communities, similar to Community B in Figure 3, there is much competition and much participation with many new ideas as well as resources flowing between the various subunits. With respect to attitudes of subunits to each other, as compared to other types of communities, there would be greater feelings of mutual loyalty and much less alienation.

The community type most different from the pluralist is that with low competition and low participation, the fragmented community, similar to Community A in Figure 3. As noted in Figure 4, these communities are most characterized by isolated masses. The various subunits do not communicate with each other and therefore tend to develop misconceptions about their own role in the community as well as the roles of other subunits. Thus there is probably a high degree of paranoia within and between the subunits. The underlying concept of isolated masses--as developed by Kerr (Kerr and Siegel, 1954) in an article on wildcat strikes--with their unresponsiveness to each other's interests, also characterizes the relations of the subsegments, whether in rural communities or in urban ghettos. It should also be noted that these communities are often dominated by a cohesive, strong, and concentrated "power elite."

Type III, cohesive communities, are those in which a vast majority (but not all) of the people seem to have similar norms and communicate well with each other and exchange resources with relatively little conflict. People in these communities, of which Vidich and Bensman's Small Town in Mass Society (1958) is a possible example, often do not recognize that in these one-party towns they are dominated by an entrenched, relatively inflexible, and concentrated power structure which avoids important community problems, especially the problems of the more disadvantaged minority groups in their midst. In Small Town in Mass Society, for instance, although most citizens knew poor people were living on the fringes of the town, they did not know the people personally and, in effect, psychologically obliterated them from their minds. Thus in a cohesive community everything can look very pleasant on the surface, but it may actually be, as the Old Testament prophets Amos and Micah put it, "like a basket of summer fruit." That is, things look good on the outside, but when a crisis occurs the communities can be consumed in a great deal of conflict--they are soft, squishy, and rotting inside.

Fig. 4.--A typology based on the variable model for fluidity

		<u>Competition Between Subunits in Local Political Economy</u>	
		High	Low
Subunit participation in competitive political-economic communication and resource exchange process	High	<p>Type I. <u>Pluralist</u>: <u>E pluribus unum</u>, much competition, dissent, discussion, change; highly fluid situation; but patterns of change are expected; no "unaccountable" power structure; probable equality between subunits within given unit</p> <p style="text-align: center;">Higher Fluidity</p>	<p>Type III. <u>Cohesive</u>: Subunits communicate under a "single frame of reference"; remarkable stability; dissenting minorities ineffective and resented by majority; power structure accountable to majority, but not to minority; not very fluid</p> <p style="text-align: center;">Intermediate Fluidity B</p>
	Low	<p>Type II. <u>Elitist Competitive</u>: Similar to Type I, but without extensive participation of mass subunits; somewhat fluid; elites accountable mostly to each other; perhaps large inequalities and high element mobility in and out of unit; "individuated" responses by mass of subunits; little counter-elite collective action</p> <p style="text-align: center;">Intermediate Fluidity A</p>	<p>Type IV. <u>Fragmented</u>: Subunits do not pass information; isolated "masses" of subunits, which then respond to own fears rather than objective threats; highly unstable, "flammable," "wildcat" situation, often dominated by an unrecognized power structure; least fluid--stagnant</p> <p style="text-align: center;">Least Fluidity</p>

This may be a rather harsh characterization of such towns, but it is certainly not very different from what is seen in the fundamental authoritarianism of many small communities, as demonstrated most dramatically when they are challenged by minorities seeking their democratic rights as set down in the Constitution. This is, of course, most apparent with regard to the blacks' civil rights movements in the South, the hippies' civil rights movements in the Far West, and the students' civil rights movements in the North.

The final type of community is characterized by elite competition. In this type, one set of elites competes with another set of elites, but neither enlists the rest of the population in their competition and conflicts. Consequently, a large minority, and in many cases a majority, of the population simply does not participate effectively in any aspect of the political-economic process. This might be the kind of community found when a large corporation has moved into a rural area to challenge a relatively well-organized and strong set of farm organizations for hegemony. It is probable that such a corporation would be unionized, so that many local workers not familiar with unions would feel confused over their place in the resulting competition. Such a situation would appear as somewhat unstable and would tend to change the community into either a cohesive type or a pluralist type.

In any case such considerations raise a remaining conceptual problem, namely, how the appearance of new linkages changes the fluidity level. Such changes probably occur in several ways: first, the appearances of new linkages by definition produce new organizations to be juxtaposed with existing organizations. Moreover, pressures would develop from the relatively high status groups of managers, professional staff, perhaps union stewards, and so forth to integrate them more thoroughly into existing power relations. Such a process will at least disturb existing communication patterns and perhaps through a "halo effect" encourage other segments to become more involved and competitive. Furthermore, the new resources in terms of money, personnel, and ideas brought into the community would tend to increase both the skill and financial levels of the community and probably bring about a more equitable distribution vis-à-vis previous elites. Finally, since people of more equal statuses are more likely to communicate with each other (Blau, 1955; Homans, 1950), the increased equality produced by the new linkages would also tend to encourage increased communications, and fluidity would thereby increase.

The net result of the appearance of new and relatively powerful linkages in comparatively smaller communities (our unit of analysis) should, therefore, result in an increase in fluidity. How much effect will result from which types of linkages and with what extent of lag, however, remains an empirical problem.

Additional effects of increased fluidity

In the considerations above, several effects were noted. In particular, it is hypothesized that in communities with higher fluidity, the greater availability of information and resources, as well as consideration of alternative solutions to problems, would, first, aid in keeping leaders and people in subsegments better informed and more committed so that substructures can develop to facilitate greater accountability and

responsiveness between segments, or (in the concepts of Warren [1963, Ch. 6] and Erikson [1968]) would produce greater mutuality or feelings of mutual identification and support; and second, it would help people become more innovative in resolving both their personal and their collective problems. Consequently, in communities with higher fluidity, morale among the people should be higher, "deviant" behavior (suicide, homicide, crime) should be less, and productivity and "output" should be higher, even though discussion, competition, and dissent may also be high. These results parallel those in studies of organizational bureaucracies and of small groups in the generalization that any social units with higher levels of fluidity should have greater productivity and morale, two of the basic outputs of social groups (March, 1965, passim; Cartwright and Zander, 1953, passim, but especially Ch. 33 by Bavelas).

For our causal model, then, increased fluidity in communities should result in higher people-oriented (as opposed to thing- or building-oriented) quality of life, more services to the population (because of the greater innovation by people), and higher productivity, if not income, in the population. It may seem that any social changes might create such fluidity, but this is not so, as we shall see below. In any case, it is the structure of community services, the final system problem, which must now receive attention.

Service Structure as the Concept of Differentiation

The structure of the concept

The fourth system problem is the complex one of servicing-staffing-socializing a population. Any social unit must fill the positions it has and must ensure that the people in the positions perform adequately. To train people for the positions is not only a problem of educating young people but also of retraining adults in order to meet changing modes of activities consonant with a modern political economy. That nearly all communities are now part of a regional and national economy, for example, creates demands for services of many types in local communities which may/did not exist in more isolated communities. These demands are for a wide range of services--for better health facilities; for better educational facilities; for better retail facilities, for better infrastructure in roads, water supply, and sewerage; and hence for better planning facilities, and so forth. Moreover, such facilities are important in meeting adult needs efficiently and effectively, which in turn should contribute to their morale and productivity. When mobility and "turnover" in a community's various positions are reduced, not only is the community more stable and ordered but, even as it grows and expands in its number and types of positions, it can maintain a higher quality. If people in a community do not collectively and effectively resolve local servicing problems in an increasingly expanding and regional economy, then the community will probably be considered a less attractive place to live with correlative out-migration of the most skilled from its population.

It should be noted that under this formulation the "needs" of people are still physiological, psychological, and "individual." It also views the needs of all people as constant, met more or less efficiently depending upon the manner in which a community is organized. This perspective assumes that although there may be a hierarchy of needs, as Maslow

(1954) suggests, all people have these needs at all times (and not in sequences of considerable duration, as some interpreters of Maslow believe); different communities are organized more or less effectively in meeting the various aspects of the hierarchically organized needs. Some communities, for instance, provide no public facilities for meeting certain needs, so that it would be more difficult for members of these communities to satisfy their needs (Stockdale, 1972). On the other hand, many communities have many widely dispersed public facilities which enable people from all population segments to have access to facilities by which they can meet their needs relatively efficiently and effectively. The issue of "human needs" is not that some people have a great many while others do not, but how well a community is organized so that people in all population segments have access to services in order to meet their needs. The remainder of this section will illustrate this point.

Again, for consistency, the ideas underlying Figure 1 should be related to the concept of differentiated service structure. Figure 5 is a variation of Figure 1 for local communities and intends to show that equal resources are flowing into Communities A and B but that, because Community A has both greater specialized services within it, as well as greater fluidity, there is a greater total flow of resources and information in the community. Thus people in Community A have a greater variety of alternative services than people in Community B. Moreover, the resources in Community A flow from one social unit to another--from the grocery to the hardware store, to department and clothing stores--whereas in Community B there is a relatively truncated flow of resources within the community so that some must be spent sooner in Community A than vice versa. The same initial amount of resources in the two communities, therefore, is transformed through a "multiplier" in Community A so that the final "product" of Community A is much larger than that in Community B. In other words, the greater differentiation of services within Community A enables a given amount of money not only to stay in the community longer but, in effect, to "grow" in total amount and to "support" or provide jobs for more people. The "gross community product," paralleling the concept of gross national product but at a different level, should therefore be greater in Community A than in Community B.

These differences could be measured through the techniques of input-output analysis of the exchange of resources between subunit sectors in a community system. The major variation here from more standard economic input-output analysis is that attention would be paid to the differentiation-specialization levels in the various communities being analyzed in order to determine accurately whether communities with greater differentiation do indeed have greater gross community products. If they do, then the greater differentiation would give those communities a larger "multiplier effect" or "multiplier ratio" than the less differentiated communities have. A variation on this would be to compare communities at the same differentiation levels to gauge the effects of high or low fluidity on total output.

Perhaps differentiation as a concept becomes clearer through an examination of Tables 1 through 4. The essence of these tables is that the types of differentiated specializations can be ordered into a Guttman scale. It has been shown repeatedly by central place researchers and others (Berry, 1964) that certain types of services are successful in some communities and not in others. For the most part, these researchers assume that certain

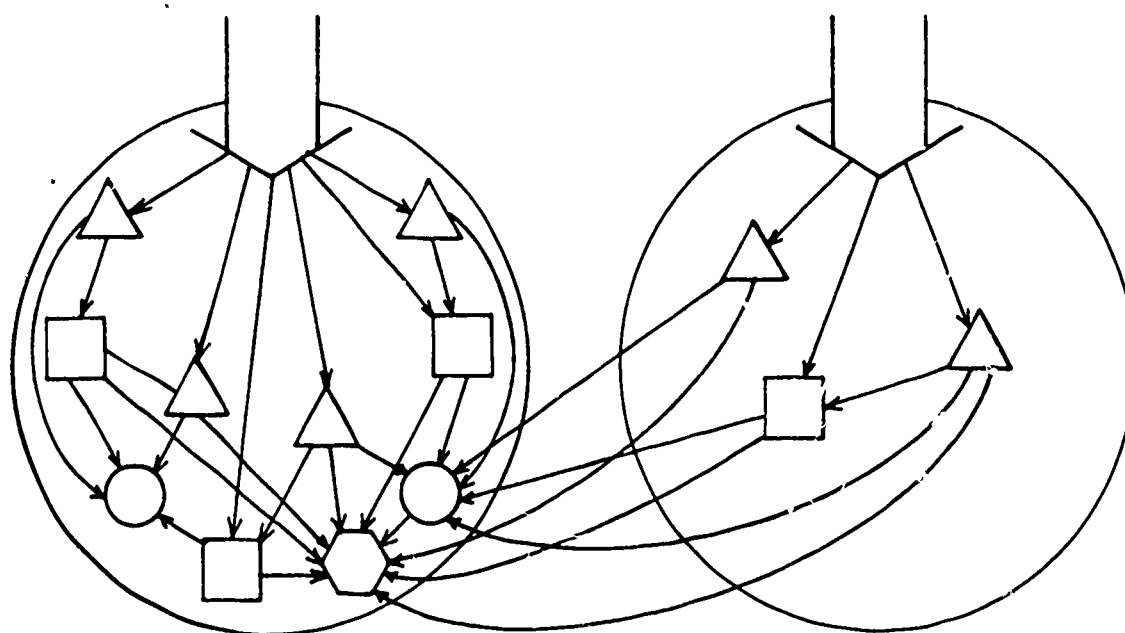
Fig. 5.--A possible pattern of relations between differentiated services in two communities

Community A

Ideas and resources
into and out of system
from exogenous sources
through linkage
organizations

Community B

Ideas and resources
flow into and out of
system from exogenous
sources through
linkage organizations



- △ = Elementary unit with a basic service, i.e. one needed by a population--e.g. a grocery store
- = Elementary unit of a second basic service, e.g. a hardware store
- = Elementary unit of a third basic service, e.g. a clothing store
- ⬡ = Elementary unit of a fourth basic service, e.g. a department store

population sizes permit the differentiated services. Wakeley and Carroll, however, found that although population plays an important role in the ordering, it does not completely determine the ordering in which services will appear.

Wakeley and Carroll examined several listings of secondary services, including Dun and Bradstreet's Directory of Businesses, a directory of hospitals, and Ayer's Directory of Newspapers in order to create a scale of the number of different types of services available in 271 communities of over 2,500 people in New York State. As shown in Table 1, they discovered that all 271 of these centers had a grocery store. But only 261 had a grocery store, a plumbing contractor, and a physician. And only 238 had a grocery store, a plumbing contractor, a physician, and a household appliance store. By examining Table 1 closely it is possible to recognize which types of services are associated with various levels of differentiation in the communities.

Lee and Clavel (1969) extended this type of scale to include a larger number of business items and hence to differentiate larger places more adequately than the Wakeley and Carroll scale. Their scale is given in Table 2. It is a 26-item scale developed from the 364 counties in Appalachia and the northeastern United States.

DeLuca (1972) extended even this scale to make it comparable from one decade to another for the 300 counties of the Northeast for the years 1950, 1960, and 1970. His scale is given in Table 3. Although it has reduced the number of items to 16, it has a great advantage for diachronic analysis because the items are comparable from one decade to the next.

Naturally, scales similar to these can be created for a wide variety of phenomena in several areas of social life. Hence, Clavel and Kluess (1971) have created a scale of planning activities, as presented in Table 4, and there is an Eberts and Young (1971) scale of different types of medical specialties, as presented in Table 5. Further scales have been produced by Schmidt (1972) for transportation linkages into communities and for cultural activities and by Owen (1969) for banking and for political differentiation.

It should be noted again that although these scales correlate highly with population size--between .40 and .70, depending upon which sample (small, medium, or large) of communities is used for the correlation--they are not invariate with population size. Nor do the scales necessarily vary together. Eberts and Young (1971) put the first differentiation scale (from Table 1), the medical specialties scale (from Table 5), population size, and certain common indicators of "quality of life" into an orthogonal varimax factor analysis for the 271 upstate communities of New York State and discovered that the two differentiation scales did not fall into the same factor, indicating that they measure separate phenomena. It is probable, therefore, that each differentiation scale is responsive to different sources or causes and would have different effects on community quality. This is, of course, an important item for future research.

Table 1

Wakeley-Carroll Guttman Scale:

271 New York State Communities of Population 2,500 or Greater, 1960

<u>Order for Scoring</u>	<u>Frequency</u>	<u>Errors</u>	<u>Description of Items</u>
1	271	0	Grocery Store
2	261	8	Plumbing Contractor
3	261	4	Physician
4	238	10	Household Appliance Store
5	214	15	Furniture Store
6	123	27	General Hospital
7	120	31	Local Newspaper
8	89	8	Chamber of Commerce
9	65	8	Wholesale Drug Company
10	9	0	Television Station

Menzel's Coefficient of Scalability .785

Source: Unpublished data from study O55 in New York State Data Bank for Social Accounting, Department of Rural Sociology, Cornell University. Scale is adaptation by Robert L. Carroll of previous work by Ray E. Wakeley.

Table 2

Lee and Clavel Guttman Scale:
364 Counties in Appalachia-Northeast from
Dun and Bradstreet Measures, 1960

<u>Order for Scoring</u>	<u>Frequency</u>	<u>Errors</u>	<u>Description of Items</u>
1	328	0	Post Office
2	328	0	Gas Station
3	325	2	Drug Store
4	322	4	Furniture Store
5	317	8	Apparel & Accessory Store
6	316	7	Printing & Publishing
7	314	7	Jewelry
8	308	16	Drycleaning & Dyeing Plant
9	300	15	Wholesale Food
10	299	8	Wholesale Auto & Auto Equipment
11	239	39	Long Distance Trucking
12	230	38	Commercial Printing
13	225	30	Photo Studios
14	208	44	Department Stores
15	207	43	Wholesale Machinery
16	195	44	Radio Broadcasting
17	187	44	Taxicabs
18	186	26	Music Store
19	142	30	Book Store
20	111	31	Wholesale Drugs
21	89	37	Used Clothes & Shoe Store
22	64	11	Clerical Services (Duplicating, address- ing, mailing, etc.)
23	65	21	T. V. Broadcasting
24	53	6	Blueprinting & Photo- copying
25	14	11	News Syndicate
26	12	0	Business Loan (Short- term credit insti- tutions)

Menzel's Coefficient of Scalability .770

Table 3. Dun and Bradstreet Differentiation Scales for 1950, 1960, and 1970 for 300 Northeast Counties

Scale Step	Item	1950		1960		1970	
		Frequency	Errors	Frequency	Errors	Frequency	Errors
1	Gas Station	300	0	300	0	300	0
2	Furniture Store	297	16	293	5	294	4
3	Jewelry	293	3	286	6	277	10
4	Wholesale Auto & Equipment	288	21	244	13	242	9
5	Wholesale Food	259	15	221	11	223	12
6	Commercial Printing	196	21	188	17	192	27
7	Music Store	149	40	135	29	119	27
8	Department Store	123	27	100	34	94	43
9	Radio Broadcasting	114	56	84	32	73	32
10	Taxicabs	73	35	64	29	56	39
11	Bookstore	62	33	50	23	47	30
12	Wholesale Drugs	52	19	39	24	34	18
13	Clerical Services	31	9	22	21	19	16
14	T. V. Broadcasting	26	5	116	11	110	15
15	Business and Loan	11	3	9	0	8	4
16	News Syndicate	5	0	7	0	3	1
		Menzel's Coefficient of Scalability .68		Menzel's Coefficient of Scalability .72		Menzel's Coefficient of Scalability .67	

Table 4
 Clavel and Kluess Guttman Scale
 Planning Activities in 364 Appalachia-
 Northeast Counties, 1960

<u>Order for Scoring</u>	<u>Frequency</u>	<u>Description of Items</u>
0	71	None
1	18	Chamber of Commerce
2	63	Development Organization
3	83	Controlled Fluoridation
4	18	Urban Renewal Project in Any Stage
5	18	Planning Board
6	25	Urban Renewal or Public Housing Agency
7	31	Member of AIDC or AIP
8	15	Professional Full-Time Planning Director
9	22	Completion of Two or More Urban Renewal Projects

Menzel's Coefficient of Scalability .68

Table 5. Medical Specialties Scale for 300 Northeast Counties

Order	Item	1950		1960		1970	
		Frequency	Errors	Frequency	Errors	Frequency	Errors
1	Hospital	264	1	274	1	271	3
2	Surgery	151	21	220	6	231	5
3	Radiology	130	19	178	22	189	18
4	Ophthalmology	129	22	164	24	169	20
5	Obstetrics	100	18	161	12	169	15
6	Urology	88	14	126	19	137	19
7	Orthopedic Surgery	83	10	125	6	137	10
8	Dermatology & Syphilology	72	9	63	15	108	17
9	Neurological Surgery	27	6	60	5	73	10
10	Plastic Surgery	23	5	43	5	55	10
11	Physical Medicine & Rehabilitation	19	12	43	16	49	12
12	Colon & Rectal Surgery	18	5	29	8	37	6
13	Therapeutic Radiology	14	10	23	12		13
14	Allergy	16	5	18	4	22	4
15	Psychiatry & Neurology	4	1	16	7	22	12
16	Pediatric Cardiology	--	*	8	2	21	7
17	Radium Therapy	2	1	7	4	10	5
18	Clinical Microbiology	--	*	7	3	8	3
19	Hematology	--	*	6	2	5	3
		Menzel's Coefficient of Scalability .82		Menzel's Coefficient of Scalability .84		Menzel's Coefficient of Scalability .84	

* Not a medical specialty in 1950

Differentiation in a causal model

Two questions are important in considering how differentiation relates to other concepts in community development, namely, what are its causes and what are its effects? It is hypothesized above that differentiation of services is positively related to fluidity (and through it to linkages, equality, and income growth). It is probable that higher fluidity is necessary in order to provide innovativeness and opportunities to produce new differentiated services. Linkages affect differentiation in two ways, then: (1) as they affect equality income (money for local investments) and fluidity levels in communities and (2) as they come into communities creating a new type of differentiated service. Certain services--insurance protection, for example--are probably best provided by organizations outside most local communities. When enough people need such protection, then large firms establish offices (linkages) in these communities to meet the needs.

Two things should be noted here. First, there is the matter of history. Before the widespread use of the automobile, most small rural communities were more differentiated than they are today. Local rural communities very often had to provide a series of services to local populations which today are not provided. Also, some complex services have been and are being adequately supplied by local organizations, but national organizations such as large retail chain establishments actually depend upon expansion (or so they perceive themselves in an expanding economy) in order to survive. Thus, "imperialistically," they move into communities, often underselling local businesses in order to establish themselves until local businessmen find it uneconomic to continue in business. Then the national chains can and do establish either monopolies or oligopolies, including monopolistic pricing, and actually take more resources from a community for use elsewhere than they put into it through investment, exchange, and wages (Victorisz and Goldsmith, 1971).

A second note, on the relation of fluidity to differentiation, is that social scientists are not really aware of the limits of differentiation in highly fluid situations. As noted above, most social scientists believe that a certain population size is needed for a given more differentiated service to appear in a local community. What we suggest here is that it may be more important to understand the amount of use which a local population makes of such facilities--how much fluidity exists in a local community--than simply to know that a certain population size exists. The correlation with more differentiated services and population sizes is high--between .40 and .70 for New York State communities--but this still leaves over half the variance in differentiated services unexplained. We suggest that a considerable proportion of this unexplained variance may be explained by the amount of fluidity found within more differentiated places. Certainly on an intuitive level it would seem more logical that if more people can be persuaded to use a given kind of service then it is more likely that such a service would survive even if population size were smaller. In an extreme, this line of reasoning asserts that if perfect fluidity existed in a system--that is, if everybody were persuaded not to do anything for themselves except their own specialties--then, but only then, the limits of specialization-differentiation in a system would depend solely on population size.

In a causal model, therefore, differentiation should result from

increases in equality, income, and/or fluidity.

Some of the consequences of greater differentiation, however, must also be noted. Although increased specialization-differentiation usually provides greater services for a population, empirical evidence shows that differentiation is unfortunately not an unalloyed good. Differentiation implies three problems. First, places with higher differentiation are generally also places which have greater poverty and/or relative inequality. One reason for the greater poverty is because many retail services included in the differentiation scale are composed of organizations which are small and have relatively many unskilled or very low-skilled role positions in them. And these essentially tertiary organizations tend to have lower wage scales than business organizations in secondary or primary industries.

Second, communities with higher levels of differentiation tend through migration to attract people who have fewer marketable skills; hence such communities are likely to have higher unemployment rates. Relatively unskilled people recognize that they cannot obtain jobs in communities where industrial organizations require skills as requisites to jobs. Thus they are more likely to migrate to places which have unskilled jobs for them to fill. In the process, and especially when there is general unemployment in the economy, more people migrate to the more highly specialized-differentiated communities than can actually find employment in them. Consequently, some migrants find that they must go on unemployment rolls (which also index poverty and inequality in these communities).

A third problem related to the differentiation-migration chain is that migration and poverty tend to reduce fluidity in a community. New migrants into communities, especially poor new migrants, do not feel confident enough to participate in political economic processes. Instead, often for good reasons (The Poor Pay More, Caplovitz, 1963), they are quite cautious in exchanging information and resources with other people. As a result, fluidity in such communities declines. But when fluidity declines in a community, the probability of a community being able to differentiate into more complex levels becomes lower. Thus these communities experience lower fluidity, with the result that they tend to become more rigid in their ideas, communications, and resource exchange patterns. We believe such a pattern persists until new linkages appear to restimulate fluidity.

A Formalized Theoretical Model of Community Change in the Model

The Model

The formal path analytic scheme relating these variables and summarizing the above discussion has been depicted in Figure 2 (on p. 32), A Proposed General Model of Community Macro-System Change. The linkages in Time State I increase income and equality in Time State II and fluidity in Time State III, which in turn increase differentiation in Time State IV, which increases migration and inequality-poverty, which then decrease fluidity in Time Stage VI, so that the system comes to a kind of equilibrium of declining fluidity or increasing rigidity. Then, except when new linkages appear, "social time" in the community stops, and it rigidifies in "equilibrium." With new linkages, however--the determination of which, as we noted earlier, is made by organizations largely beyond the control of a given community, and, according to the data, apparently to take

advantage of short-term poverty and/or rigidity conditions--fluidity will again increase, so that the system can differentiate and serve population needs more adequately.

It should be noted that as a system expands and population segments become more isolated from one another, for efficiency each segment (rural, suburban, central city, ghetto) may develop or need to develop overlapping sets of differentiated services. The number, types, locations, development, and relations of these services become key problems in contemporary city and regional planning. An optimum mix of such services can considerably increase gross community product, as well as potentiality for more investment, more jobs, and more differentiated services; a poor mix may not only leave certain population segments without certain services, it can also stultify growth, productivity, and morale in their populations.

Another important part of the general model may be noted relating to the concept of quality of life indicators. This concept raises a host of problems, not the least of which is the precise meaning of "quality of life." Without attacking the problem directly, we may say that the concept here refers to "things which at least some people think are directly good for people." This excludes indicators which might mean that people would agree they are good for business or economic growth, or for beauty, or for military purposes, or even primarily for a more advantaged population segment. Specifically, some indicators of quality of life might be: that more disadvantaged population segments obtain a better education, that they receive more adequate health care, that infant mortality goes down, that more welfare payments are available to those on welfare, that a greater proportion of those eligible for welfare are on welfare, that hospital care is available to them, and/or that their life expectancy goes up. By this usage, a "better" quality of life means that more people, and primarily more disadvantaged people, receive more adequate attention in having their needs met. In other words, people-oriented indicators imply greater mutuality by middle and working class people for disadvantaged people (Warren, 1963, Ch. 6). It is likely, however, that such mutuality promotes gains in all population segments--for example, through increased productivity and morale and through reduced levels of "deviant behavior."

Given this frame of reference, as noted above in the section on fluidity, empirical research studies, including our own, show that such people-oriented indicators vary directly and positively with the level of fluidity in a system, whereas business, "infrastructure," or thing-oriented social indicators vary inversely and/or negatively (Hawley, 1963; and Clark, 1968). Thus where people participate more, and more competitively, in the political-economic process, attention to the needs of people will be better met by the system.

With regard to the general model in Figure 2, therefore, it is hypothesized that quality of life indicators should increase faster in Time Stage III when fluidity is increasing than in Time Stage VI when fluidity is decreasing. Increasing fluidity should lead to increasing levels on people-oriented social indicators and decreasing fluidity should lead to decreasing levels or lower rates of increase on these indicators. To put it another way, when systems are more pluralistic--that is, when they have a more thorough-going democracy of participation and competition--more

adequate attention will be paid to the needs of people in those systems. Likewise, research is showing that where the system is less participatory, less pluralistic, more rigid, or more concentrated, various subgroups in the population can more easily encourage the system to serve their population needs as opposed to more general population needs (Hawley, 1963; Clark, 1968; and Crain and Rosenthal, 1967). Hawley, for instance, has shown that where relatively small groups of people dominate the political-economic process--that is, where political concentration is high and competition is low--then urban renewal, which is basically a business-oriented federal subsidy, is more likely to reach success in a community. Such a condition is also compatible with the theoretical model in Figure 1.

Theoretical adequacy of the formal model

The model presented in Figure 2 meets most of the five relatively stringent criteria established above for an adequate theory of community development. First, the concepts used have been shown here to be reasonably operational. At the very least, some indices for them can be constructed. Moreover, many of these indices have been used extensively in previous empirical analyses producing results in predicted directions.

Second, the model has been cast and examined in such a way that the concepts are employed diachronically. Figure 2 best illustrates how this criterion is met.

Third, it meets the causality criterion. Some correlations have been shown to be reasonably high even when measured in such a way that lags occur between the variables. Moreover, these concepts have been demonstrated to be interrelated on the intuitive causal level by the consistent use of demonstrating how each concept may be built and understood through examining the structural relations of the social units and subunits recognized in social science (Figure 1) and depicted in Figures 3 and 5.

Fourth, although up to this point the variables in the theoretical model have not been linked specifically to variates directly manipulable by public policy makers at several governmental levels, they are cast in terms whereby such relations are ascertainable. In fact, this aspect of the model is so important that the entire following section, on policy implications of the model, will be devoted to it.

Finally, as it stands, and if it is proved adequate in further tests, the theoretical model meets the fifth criterion of theoretical closure. The model begins with linkages, iterates through distinct stages in a lagged recursive system, reaches a kind of equilibrium in rigidity, and then begins anew with the appearance of new linkages. That the relations between the variables are lagged, by the way, reduces the statistical problems of "mutual feedback" or "resonance" between variables which are characteristic of many closed models. Nevertheless, in the "real world" various contingencies do occur to truncate the model. "All other things" are never equal. And, in particular, few systems are left alone to iterate in the heuristic sequence of Figure 2. Linkages affect fluidity, which affects differentiation, which in turn affects fluidity almost simultaneously in most empirical systems. Moreover, historical conditions of formal political structures sometimes make and keep communities unresponsive to demands from people. Still, in general the model demonstrates more

theoretical closure than other models of community development.

The model has one final attractive feature. Since it is based on a unit of analysis which has relative continuity through time, systematic data can be gathered for it from previous time-points, as well as for comparative systems. Linkages always occur in the real world regardless of the intentions of particular individuals; fluidity is the essence of local political economy; and services, at least through business records, are observable from great distances. Hence the model can be tested without the challenge of "experimental manipulation" by government officials, and data records on the model can be kept without the interference of citizens concerned about private rights and "governmental snooping." Furthermore, the use of such macrostructural units for observation and analysis avoids intricate social-psychological assumptions about value alternatives in particular individuals. In other words, by focusing on relatively objective structural conditions in systems, the model is cast so that it can be tested relatively completely and inexpensively, avoiding the necessity, problems, assumptions, and costs of survey samples of individuals. Combining these considerations with the at least partial fulfillment of the above five criteria should, therefore, make this theoretical model a useful tool for social scientists and potentially for policymakers.

Program Planning and Policy Implications

Policy considerations stemming from the above theoretical model can be derived for policymakers at several levels--the national and interstate regional, the state and intrastate regional, and the local and locality-regional. Moreover, since each concept is policy manipulable by public decision makers in each governmental level, we will review each concept to show the model's overall relation to policy at the several levels.

The relation of the model to policies of Cooperative Extension is more difficult to demonstrate without the latter's considerable reorganization. At present it is still dominated by concerns for individuals--individual farmers, individual homemakers, and individual youngsters--rather than concerned with the significant policies of well-distributed economic growth, development of and access to community services, and more general indicators of people-oriented policies. To use the above theory effectively, Cooperative Extension would have to develop some new expertise in local communities with detailed knowledge of political-economic processes on a much broader scale than that presently found, as well as ability to work with people different from those which represent its present clientele. Whereas at present Extension Agents work with decision makers most often in order to make them understand the programs of Extension, in the future they may have to work with decision makers so that the decision makers understand better the nature and implications of the decisions they are making for the quality of life in their communities as a whole.

In any case, let us review each of the concepts and show its potential relation to policy decisions at several levels.

Linkage variables have been and are being manipulated by governments at all levels. Federal, state and local incentive programs of many types have been developed to entice large businesses to locate in particular localities and hence create new linkages for these communities. In addition,

the opening of new government offices creates linkages between local communities and the larger political economy. Moreover, government programs to build infrastructures and other "passive" linkages between localities--such as through highways, airports, other public facilities and utilities (parks, libraries, and so forth) and even sewer and water systems--also create the potential for new linkages to localities. In fact, most programs affecting linkages are made through decisions outside local communities. Localities can often veto a new plant location, for example, but they can less often initiate it.

If governments are to optimize economic growth and well-being policies, therefore, they must estimate and coordinate costs-benefits of various kinds of incentive and investment policies much more adequately than at present. They should pay particular attention to plant locations and relocations for their likely effects on other significant variables in the model in the affected localities. It is probable that federal and state policies can no longer afford the luxury of treating business organizations as primary units to be served; businesses should be served along with the broader political-economic interests of people in localities which lose or receive them. Income growth which businesses produce is useful not only to other businesses but also as "tax base" to people in communities as they plan and actuate community level programs in their localities, as well as a source of "saving" for local private investment. Attention to this relationship, perhaps in terms of licensing plant location and relocations, can and should become part of the policy concerns for decision makers at all levels.

Equality variables are also directly manipulable by government programs at all levels, primarily in the form of taxation and redistribution programs. Policymakers are often well aware of the effects of different types of taxation programs but often not aware of the effects correlated with inequities for local systems. Most local legislators assume that inequities in taxation programs are less important considerations than efficiency and incorruptibility in tax collection. Both are important, of course, and steps should be taken to coordinate the efforts of policymakers at all levels to create equitable, efficient, and incorruptible taxation systems. Without equity, fluidity is much more difficult, and without fluidity local systems become unresponsive and hence less productive of life quality.

A particular problem with redistributive programs is that they sometimes get sidetracked from their original purposes by local administrators. Food stamp and food distribution programs, for example, are only haphazardly uniform from county to county when rural and urban programs are compared even within a single state, without attention to interregional differences (National Research Council, 1971). In fact, extreme differences in poverty needs and financial relief exist not only between states in the Northeast but also between regions within states. Similar inequities would probably be found to exist between localities within the regions if they could be measured accurately. Such inequities undoubtedly indicate that the system is operating less than efficiently from the standpoint of quality of life in those localities.

Fluidity is also open to direct manipulation by federal governmental policies as well as by local policies. The several civil liberties laws represent one such policy. The one-man one-vote reapportionment required

in local communities by federal court order and enforced by federal authorities is another type of federal policy affecting fluidity. Moreover, in reapportionment, if the formal political economic structure in localities becomes more open to participation and competition by all population segments, as for instance through instituting more "non-reform" policies--that is, larger legislative bodies, with partisan representation, by district, and with a strong elected official as head--then fluidity can well be promoted in localities. In addition, certain population segments can increase the fluidity by better intra-segment organization, and more organizations to cross segment lines. These aims are certainly consistent with "community action programs" instituted by federal policies, but also may be options of local policies, as for instance through OEO and "advocacy" planning. Furthermore, states could give localities more autonomy in resolving their own problems, including a wider variety of taxation powers, more options for local participation in budgets of the larger units, and a broader range of programs over which they would have some jurisdiction. In the latter category, more programs requiring cooperation between state and local levels, but with incentives from the state and federal agencies for such participation, might help create greater fluidity in localities.

Finally, the government at all levels could certainly increase its efforts to create mechanisms for the flow of relevant information and resources about political-economic processes. Until 1968, for example, no comprehensive compendium of federal programs for localities was available to localities. Moreover, attention to such information by local mass media, particularly newspapers and television stations, is spotty at best and often nonexistent. In particular, little attention is paid to equality of access to such information by people in various population segments. Although free access to information is a "right" of all people, the better-educated and richer always have advantages. It is hardly just that people should in effect be penalized for their entire adult lives because of parental background or educational decisions made early in their lives. Perhaps access to significant political-economic information is so critical today that it cannot be left in private hands at the risk of non-disclosure or distortion when disclosed but must be more systematically provided through competitively controlled and administered public agencies, for instance, as it is in European television.

Differentiation variables are also being manipulated by governments at all levels, although seldom as systematically as is now possible. The differentiation scales in Tables 1 through 5 are intriguing in this respect. The creation of such scales suggests at least one important policy implication for people concerned with assisting local populations to obtain better services for themselves. If the scales are correct--and we have little reason to think they are not, indeed we believe that computer analysis of Dun and Bradstreet tapes on every service in the United States community would produce even more detailed and accurate scales--then if fluidity is high enough in a particular local system, the local system should be able to support the next highest level of differentiation beyond the one in which it is currently engaged. Likewise, if a local system has "errors" in the scale, then a business which "fills in the error" should also be successful.

For instance, it is apparent that some of the 322 communities which

have furniture stores, as reported in Table 3, represent errors in the differentiation process. Either these communities have furniture stores when they do not have drug stores, gas stations, or post offices, or they do not have furniture stores when they already have apparel and accessory stores. Thus they represent errors in the scheme. Again, if our reasoning is correct, the appearance of furniture stores in communities which score more highly on the differentiation scale should be successful economic ventures, especially if the fluidity of these communities is high. On the other hand, if they are errors by being much "too high" on the differentiation scale, it is likely they are next to go out of business.

A second policy implication can also be noted from a Guttman scale such as the one in Table 2. It may be that in certain communities and with certain types of services "quantum jumps" are possible. Again, depending upon previous fluidity and differentiation levels, it may be that if certain types of services appear, other types of services will follow. A "country banker" friend has observed, for example, that the establishment of suburban branch banks will be most successful when they are erected in conjunction with a series of other services. This would follow, it would seem to me, particularly in relatively homogeneously wealthy, suburban communities where fluidity has been high but differentiation is at an abnormally low level. Of course, these are the precise conditions found in many new "suburban housing developments."

Should these "quantum jumps" or "filling in errors" be borne out by additional research on all types of communities and with more precise and extended differentiation scales in a series of community services, local investment policies could become much more rational, less chancy, and more ordered than at present. Many fewer resources would need to be wasted in either rural or urban places. Moreover, it is probable that such scales can be developed for inter-segment intrasystem analysis. If so, then such scales can become the basis of local growth policies by examining the distribution of differentiation within systems and estimating the likelihood of success of investment at the next level on the differentiation scale for a variety of segment types. In this way, both rural and urban ghetto (or segment) businesses, for example, could be coordinated more efficiently with other businesses in localities, so that business patterns would be generally consistent with the levels of income, equality, and fluidity given in a particular locality. In this way, also, perhaps some businesses could return to "neighborhoods" rather than be lost to shopping centers dominated by interregional and interstate firms.

It may be important to note in this regard that, despite DeLuca's (1972) single scale for 1950, 1960, and 1970, given in Table 3, with the advent of new technologies more detailed differentiation scales may change from decade to decade. Investments made on the basis of these scales, therefore, may depend upon continued research and development to keep the scales up to date. In any case, in a changing political economy such investment cannot be seen as a "once and for all" venture but must be seen as dynamic, with certain new businesses and activities continually replacing older ones.

It is also important to note that policymakers at all levels--private and public, local, regional, and national--should and can be

concerned with such policies, and hopefully in a coordinated fashion. It is doubtful that national or state policymakers alone would be capable of coordinating these policies because of the vast amount of accurate information which would have to be collected and processed for some very small units. Therefore, it would be necessary for considerable expertise to be developed at the several levels, but expertise which would also be coordinated in a simultaneously centralizing and decentralizing fashion. Perhaps Cooperative Extension could take the lead in developing such "packages" of expertise. Its overall organization at present is ideally supposed to operate in such a fashion, and it is one of the few nationwide organizations officially organized to perform such a task.

Migration variables are also open to policy manipulation, although in this country no coordinated and self-conscious migration policy has been developed. Nevertheless, decisions to develop more hardware technology in agriculture in order to reduce the number of people necessary in farming is in essence a migration policy. Also, decisions to permit large corporations to move into or out of rural areas without public control is in effect a migration policy, as is the decision (or non-decision, as the case may be) to centralize welfare and unemployment offices in larger urban centers, thus attracting unemployed and underemployed people from rural areas to urban centers. Furthermore, massive superhighway policies have encouraged migration out of rural areas to places near such highways, and ultimately to the urban centers which become nodes for the intersections of such highways. In addition, low income housing in urban centers encourages rural people to move from their inadequate rural housing conditions into places where better housing and job opportunities exist.

All these things demonstrate that migration policies are possible and actual at all levels of government. A major problem is that so few detailed plans are explicated for the causes and effects of such migration. Yet migration, particularly migration into central-city ghettos, but also out-migration from rural areas, has a self-fulfilling debilitating effect on both the receiving and donor communities. Unless better, more total programs for dealing with migrants are discovered and implemented, especially programs which will more easily integrate migrants into communities efficiently and effectively, such as might be possible through assistance grants to places where jobs for potential migrants would be waiting for them, then present migration policies will continue to have debilitating effects on both the receiving and donor communities. The present research does not provide many answers to the problems raised by migration, but it does provide further understanding of the dynamics of migration and its reliance and effects on other community dimensions.

In conclusion, a word should be indicated on the relation of policies (means) to goals of systems. Goals for any social unit or social system can usually be characterized in terms of end-states into which the system moves in reaching an equilibrium (such as Parsons [1951] analyzed) or as a process in the way the unit adjusts to changing conditions. It is quite clear that the writers of the U. S. Constitution conceived of the goal of the United States as a process by which systems adjust to new conditions. They recognized that new problems would arise and that their job was to create a viable structure for responding to such problems. The structure was one which may be characterized as a "thorough-going democracy." Such a democracy is the essence of the variable we have here called

fluidity. One goal of our paper is to show the dynamics by which local community systems move from conditions of low fluidity, where they resolve their internal system segment problems relatively inefficiently and less satisfactorily, to one of higher fluidity where system problems are resolved more satisfactorily. It also shows how systems move from conditions of high fluidity to conditions of low fluidity.

In any case, it must be continually kept in mind that localities are dynamic entities, yet entities with extreme differences and much influence in shaping a great many personal and social characteristics of their people. To return to our original analogy, communities are the soil in which people prosper or do not prosper. But this soil changes much more rapidly than the soil of the biological world. Careful attention to this soil and its acceptance or rejection of manipulable activities is also required, or people everywhere--in rural villages, urban slums, or suburban ghettos--are much the worse for it. We believe we have developed the initial stages of an analytic model to aid people in understanding their communities and the characteristics of those communities more effectively. We hope that our future research and the future policies which may stem from it can assist people in such communities to become more responsive to each other and to the objective conditions affecting them in the complex processes of their constant adjustment and readjustment.

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NEM-42: ECONOMIC ANALYSIS OF THE CAMPGROUND MARKET IN THE NORTHEAST

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NEM-42, as the number and title indicate, is a regional project which qualifies for marketing funds. Ten states from the region are participating in the project, in addition to a cooperator from the U.S. Forest Service at Durham, New Hampshire, and cooperators from Michigan and Alaska. The states of Delaware, West Virginia, and Massachusetts are collecting data for Maryland and Rhode Island, the only two states not represented on the Technical Committee. Because of the widespread interest and cooperation on the project, there is a great potential to compare and contrast public campground resource use policies and the private campground industry throughout the Northeast during the conduct of the project.

Research Problem

The problem as visualized by the Technical Committee is a twofold one. We are concerned both with problems of public agencies providing camping opportunities in the Northeast and with problems of private campground operators in the region. Public agencies are facing pressures from the public at large concerning use of scarce public resources in the region, especially in the more crowded areas such as those on Cape Cod and in the national parks. Public administrators are in a quandary as to how to provide the camping facilities that the public demands and at the same time insure that other recreationists have the opportunity to express their preferences. Thus a study of the methods of providing and pricing the camping opportunity is vitally needed to provide such information to public resource management agencies.

Public managers are increasingly coming under pressure from the various state legislators to provide camping opportunities while at the same time charging fees which are sufficient to cover at least the variable costs of providing the camping opportunity. On the other hand, they face pressure from the camping public to keep the fees relatively low in order that more of the population at large can enjoy a camping experience.

Side by side with the public facilities are the private campgrounds. Private entrepreneurs face problems similar to those of public agency managers. That is, they must be well aware of their pricing policies in order to attract sufficient clientele to cover the costs of providing the camping opportunity. In this case we recognize that they must cover both the fixed and variable costs in the long run, whereas the public agencies may only be required to cover the variable costs. Thus private campground operators need information on the pricing of the camping opportunity

in order to do a more efficient job of providing necessary facilities, pricing their product to hopefully insure a profit in the long run.

The camping public and society in general will benefit from more widespread knowledge of improved pricing policies, and this should lead to more efficient allocation of resources used in providing camping opportunities.

Because of the wide diversity of the natural resource base throughout the northeastern United States, the region offers an excellent opportunity to study a variety of methods of providing and pricing camping opportunities. The resource base varies from seashore to mountains, with inland lakes in some cases artificially created. Thus there is a wide selection available to the camping public. Likewise, there are numerous public resource management agencies that provide camping, including the state park management agencies, the national park system, the national forests, and county and municipal governments.

It is also recognized that with this diversity of camping opportunities there is a broad range in the rate of occupancy among the different campgrounds in the region. Numerous factors relate to occupancy rates, and these are being researched as part of the regional project. It is hoped that an end result of the project will be to recommend measures which will improve the rate of occupancy among the more remote campgrounds in the region.

Objectives

The objectives of NEM-42 are taken directly from the regional project outline and are as follows:

1. To determine the motivations, goals, and characteristics of the camping public as a guide to development of a rational pricing system for the public and private camping resource mix.
2. To determine the legal authority and policies which underlie the pricing and marketing decisions of public camping management agencies.
3. To determine the marketing and pricing practices of private firms providing camping.
4. To develop and evaluate alternative marketing and pricing systems in accordance with expressed goals of the general public, campground users, private firms, and public camping management agencies.

Research Design

To facilitate the discussion of the research design being employed, we will break it down by each objective. The regional project is being conducted over a four-year period, and the first three objectives are being either completed at the present time or projected for completion in the next year.

The approach being used for Objective 1, which deals with consumer goals and motivations, is anticipated to be a macro approach in which a household study will be conducted. Households in the nation will be sampled not only to determine motivations and goals of campers but also to get at a problem which has recently been discovered in research being done by the U.S. Forest Service on a cooperative basis with several camping organizations. This problem is that of measuring the effect of dropouts from the camping population as well as exploring the goals and motivations of the current non-camper who anticipates beginning participation in the activity within the next one to three years. We feel that it is of vital concern to both public managers and private operators to know more about the characteristics of those campers who are dropping out of the market. This would be of vital interest to the managers and operators in designing advertising and pricing policies either to keep the potential dropout active or to cause those with a high degree of interest to actually enter the market. Therefore a national study will be employed, because it is of utmost importance to attempt to get at the market from which the Northeast draws its campers. This, of course, would mean that you cannot restrict the study to each respective state, since numerous previous studies have found that campers are very mobile and travel within and outside the region on weekend and vacation trips and do not limit themselves to their own respective states.

Now, more specifically, let us look at some of the hypotheses we intend to test in the national study for Objective 1, which we anticipate will get under way in the fall of 1972. Following are some of the hypotheses we intend to test:

1. The dropout is the end of a process of change through the various stages of camping activity.
2. The inactive segment of the camping market is composed of two classes of households: (a) temporarily inactive and (b) permanently inactive.
3. The ratio of permanently inactive campers to active campers is remaining more or less constant.
4. Temporary inactivity is usually the result of one or more of the following causes:
 - a. Illness, accident, or death of a member of the household.
 - b. Limitations in financial, temporal, physical, or social ability to participate as a result of changes in spendable income, residential location, family responsibility, or job requirements.
 - c. Mild dissatisfaction with available camping opportunities and related travel conditions.
 - d. Coincidental occurrence of poor weather and available leisure time, or conflicts for the use of available leisure.
 - e. Equipment failures.
 - f. Normal cyclical variation--some households may always camp in alternate years, etc.

- g. Change in camping interest on the part of one or more family members.
 - h. Social problems; for example, a desire to change camping patterns so as to avoid having to camp with friends or neighbors, etc.
 - i. The influence and bad camping experiences of friends and associates.
6. Permanent inactivity is usually the result of one or more of the following causes:
- a. Habitual temporary inactivity.
 - b. General loss of interest or gradual substitution, i.e., acquisition of a back-yard pool or second home.
 - c. Disintegration of household or advancing age of head of household.
 - d. Conflict of desire to camp with desire to avoid contributing to pollution, resolved in favor of the latter; i.e., an ecological "backlash."
 - e. Disappointing and unsatisfactory camping experiences resulting from such factors as:
 - 1) Continued difficulty in finding available sites while on a trip, overcrowding, congestion, etc.;
 - 2) Changes in the types of people who are evident at campgrounds;
 - 3) Widespread deterioration of campground conditions;
 - 4) Rising costs of camping.
7. Permanent inactivity is usually preceded by a recognizable pattern of participation, such as:
- a. Vigorous searching for compatible campgrounds, management, or camping neighbors. This searching may include visiting many campgrounds as well as discussions of alternative styles and sites with camping associates, joining camping clubs, buying magazines and guidebooks, and otherwise attempting to increase the volume of available information.
 - b. Increased frequency of inactive periods.
 - c. Changes in camping style, such as renting one site for the season or switching to back-pack or boat camping.

As can be seen from the above list of hypotheses, we intend to explore the dropout problem, study current satisfaction rates of active campers, and explore the market group that has a high potential for entering the market.

In the course of our survey we will ask only a few questions of the segment of the market that has no intention of camping or has never been camping in order that we may very briefly determine some of the characteristics of this group. Preliminary work by LaPage indicates that about one-half of the population could be considered either active or potential campers, whereas the other one-half has no interest in participating in this particular outdoor recreational activity.

The analysis for Objective 2 is now being concluded. The field work was done for this objective during the summer of 1971. The approach for

Objective 2 was a personal interview with public resource managers in each of the respective states in the Northeast, including those two states that do not have technical cooperators. In most cases we obtained a copy of the state statutes which specifically authorize the respective management agencies to administer campgrounds in their own states, including the establishment of facilities, enlargement of existing campgrounds, and pricing of camping facilities. We explored with the administrators their past record of changing or increasing camping fees and future plans for doing so, as well as their future plans for expansion of facilities--both the number of campsites and the kinds of services offered.

Dr. Robert Bond, of the University of Massachusetts, and his subcommittee have summarized the individual state reports which were submitted to them and have prepared the first draft of a regional report. This regional report summarizes the findings of the various states, together with policy recommendations for changing marketing pricing policies among the state and national agencies which provide camping opportunities.

The recommendations from the regional subcommittee will be useful in later analysis as we go on to Objective 4 in the latter stages of the regional project.

The research for Objective 3 was also completed during the summer of 1971 and involved a regional study of private campground operators, with all states being included. A uniform regional questionnaire was employed to elicit responses from the operators, and a uniform sampling approach was used throughout the region. We concluded that the majority of the camping opportunities would be provided by the larger private campgrounds within the region, so our sampling was as follows: 10 percent of those campgrounds with 1-49 sites were sampled, 25 percent of those campgrounds with 50-99 sites were interviewed, and all campgrounds with 100 sites or more were contacted.

The private campground operators were contacted through a personal interview which took approximately two hours. During the course of the interview, detailed information was obtained on the size of the campground; the portion of the available area that was developed; facilities offered; and, in great depth, a schedule of prices being charged for site rentals by facilities within the park, such as swimming pools, trails, boat ramps, firewood, etc.

The purpose of this phase of the study was to obtain in as much detail as possible the pricing schedule by types of facilities offered in order to compare and contrast the situation within the given campground with the remainder of the Northeast. In addition to pricing schedules and facilities offered, the campground operators were also questioned about the occupancy rates for their respective campgrounds by time of the year. More specifically, the occupancy rates were separated by holiday weekends, by other weekends throughout the summer, and by months during the time in which the campground was open. A detailed business analysis was made of each campground in the sample where the owner cooperated, in order to obtain income data by type, such as site rentals, store income, etc., and expense data for such items as insurance,

repairs and maintenance, advertising, rental of equipment, depreciation, labor, etc.

As part of the marketing study, a detailed analysis was also made of the types of promotional gimmicks used by the campground operator, including such things as the use of reservations, allowing pets, the type of advertising used, and the use of special features such as movies, dances, teenage recreational halls, and other facilities or attractions which would appeal to a broad clientele.

Finally, the private operator was asked in detail about the types of attractions that his particular campground had and the advantages his particular campground might have over the nearest facility, be it public or private. Attractions included water-based activities such as swimming pools or lakes, rivers, ocean, and various other types of attractions that would appeal to a particular segment of the camping population.

Objective 4, which will include policy recommendations or changes in pricing patterns or marketing systems, will get under way during 1973 and be concluded in 1974. It is anticipated that this phase of the project will involve pulling together the conclusions from the work being done with other phases of the project. Recommendations will be made to public administrators and private operators for possible improvements in their pricing or marketing practices. In the case of the public campgrounds, these will help to increase revenue so as to more adequately cover variable costs or total costs, if deemed appropriate, within each respective state. In the case of the private operator, it is hoped that the recommendations will allow him to obtain a profit and remain in business over the long run.

Use of the Results

The Technical Committee believes that there are numerous ways in which the data being collected and now being analyzed may be used in the future to improve the efficiency of the campground market in the north-eastern United States. As was indicated earlier, public officials are faced with the situation of either having to expand their facilities or make better use of existing facilities under budget restrictions, and the overall population may be questioning the portion of funds going into campground development. Therefore all information on pricing and marketing practices will undoubtedly be of great importance to public campground managers in the next several years as they face many critical decisions.

During the earlier stages of the project, the Technical Committee made a decision to publish a handbook designed to be of use to the public or private campground operator and to the Extension Service in working with present and potential campground owners. This handbook will include the results of our research from the numerous phases of the project, including the results from Objectives 1, 2, and 3, together with recommendations relating to Objective 4.

The handbook will have segments relating to the customer: the camper, the potential camper, and the dropout. Also included will be recommendations for ways to attempt to keep the camper active and enjoying

his experience and ways by which the operator might better attract potential campers into the market, together with recommendations for improving the pricing practices so as to better insure a profit. Objective 2, now being written up, will include policy recommendations on changes in institutional arrangements and laws which would make better use of public facilities in their development. The data from Objective 3 will be of special use to private operators and public officials in better scheduling their pricing and promotional practices so as to improve the profitability of the camping business.

Thus we believe that the results of our study can be especially useful to Extension workers in working with potential campground operators and can be a useful guide to present campground operators as they expand their facilities or improve their facilities in the future to meet the needs of a more demanding clientele who are purchasing additional and more expensive camping equipment and require more extensive facilities at the campground.

NE-65: ECONOMIC ANALYSIS OF ENVIRONMENTAL QUALITY EFFECTS
ASSOCIATED WITH SEASONAL HOMES

Hays B. Gamble

The Pennsylvania State University

The primary concern of this conference should be for the people in rural northeastern United States. This being so, we cannot overlook the role that land resources--including water, forests, wildlife, and the other natural existences that are an integral part of land--play in the economic and social life of these people. For most rural people in the Northeast, the primary contribution of land is as space--a location for a home, a job. As we all know, this is a big change from the role the land played in the life of rural people many years ago. Then most rural people were directly dependent on the land resource for their livelihood. Technological changes in agriculture, mining, energy production, communications, transportation, food processing, and marketing; per capita shifts in the demand for wood and wood products; and inter-regional changes in comparative advantage for natural resource oriented activities have all contributed toward a drastic lessening of the direct dependence of rural people in our region upon the land resource for their livelihood.

But there have emerged new and increasing demands upon rural land resources. Most of these new demands originate with urban interests. Urban residents, businesses, and governments are turning more and more to rural America to satisfy the demands for housing sites, industrial sites, highways, airports, solid waste disposal, recreation, water supply, and just plain open space. The shift from rural interests to urban interests of the demand for rural land resources and the services these resources can supply has some severe implications for the people remaining in rural areas. Urban interests more and more will dictate the use to which rural land will be put. Urban interests more and more will influence the social, economic, and environmental climate of rural areas. And rural people, more and more, will have to be cognizant of these urban interests and be willing and prepared to work and cooperate with urban people if they want to retain any semblance of influence or control over their rural resources.

This urban interest in rural America is probably most evident in the use of rural land for recreation. More leisure time, more disposable income, reduced travel time, and a social ethic for outdoor recreational activities have all greatly contributed to a tremendous growth in demand for recreational space. The NE-65 project concentrates on one aspect of this demand--the seasonal home, also called the leisure home, the second home, or the vacation home.

During the past decade, national policies relating to the natural resources base of our economy have shifted from an emphasis on resource scarcity to the broad problems of resource quality. Environmental quality problems exist in rural areas as well as in urban areas. In the Northeast, one of the more pressing rural environmental quality problems is associated with the intensive use of rural lands for recreation, particularly for seasonal home developments. Most of us, I think, have seen the tar paper shacks and converted bus bodies along a pretty stream or in the middle of a scenic vista. In Pennsylvania we have rural slums as well as urban slums, and some of these rural slums are seasonal home communities. They exist along our seacoasts as well.

In some communities, homes of all sizes, shapes, ages, and appearance are crowded together with no public water or sewage disposal. The lack of public water supply and proper sewage handling methods in these rural seasonal home communities may present more of a health problem than urban slums. Even today in many rural areas there are few attempts at land use controls, building codes, or other measures to preserve or protect quality. In Pennsylvania, some lakes with extensive seasonal home development around their shores have had to be closed to public swimming because of high coliform counts as a result of improper or no sewage disposal facilities. One of our study areas is such a community. In some cases, seasonal homes are the source of pollutants which threaten the very environmental values the occupants originally sought.

At the same time, however, it must be recognized that seasonal homes can confer financial and environmental benefits upon the communities in which they are located. Tax payments, concurrent with a lesser demand for community services such as education; expenditures for construction and maintenance; and purchases of local goods and services benefit directly and indirectly rural economies. Well designed and maintained seasonal home communities, not necessarily expensive ones, can provide a stimulus for improving or maintaining rural environmental quality. But I would like to interject that I don't think outdoor recreation will provide the economic salvation for rural communities that many in the past thought it might. It is possible, too, that the expectation of financial gains from outdoor recreation has reduced the rate of outmigration of surplus rural people. When these expected gains failed to materialize, the adjustment of rural communities was made more difficult and delayed.

One of the basic premises of this research project is that a relationship exists between environmental quality and social welfare. The numerous expressions of concern for environmental quality and the widespread public support for federal, state and local legislation aimed at curbing air and water pollution and promoting scenic enhancement give strong evidence that social welfare, as it relates to environmental quality, is not being optimized.

Another central premise is that our present market system via the pricing mechanism does not capture or reflect all relevant values associated with resource use or responses of resources to changing demands. Certain social values, both positive (benefits) and negative (costs), resulting from external economies and diseconomies are not reflected in the market prices for goods and services.

A third basic premise is that as a result of the failure of the decentralized market to capture all relevant values associated with resource use, these resources are not then optimally allocated to maximize social welfare. In general, the resources that have associated diseconomies (costs) are overproduced, while resources that generate external economies (benefits) tend to be underproduced.

Institutional arrangements of different kinds have been devised by society to limit free choice so as to protect the "public interest." Insofar as the evidence indicates that social welfare as it relates to environmental quality is less than optimum, one must a priori conclude that present institutional arrangements are not achieving their desired or stated goals and objectives.

Seasonal home development in rural areas of the Northeast reflects all of the above premises and conditions. Almost all indicators point to a rapidly expanding market in the future for seasonal homes. As seasonal home development progresses, so will the magnitude of environmental quality problems, as well as the benefits accruing from this use of the land resource. The problems that are urgent today may become critical tomorrow.

Economists have not generally been successful in their attempts to identify and quantify the social values relating to resource use. This failure takes on added urgency in light of the rapidly changing demands that are being made upon rural land resources, particularly in the heavily populated northeastern region of this country. It was felt that the seasonal home demands on rural land resources and the supply response to these demands, particularly as environmental quality is concerned, offered a new and challenging opportunity to examine the nature and incidence of social values (both gains and losses), and measure, where possible, their magnitudes as they relate to the local community.

Concurrent with the need for a better assessment of the social values associated with environmental quality are ways by which the "public interest" might better be accommodated in light of the changing demands for quality environments. If through new institutional arrangements the qualities of rural environments can be improved, or at least the rate of environmental quality deterioration reduced, a higher level of social welfare should prevail. Rural residents, along with seasonal home occupants, would be the beneficiaries.

Five individuals and their respective universities are presently engaged in this research project. They are:

Malcolm Bevins of Vermont
 Gerald Cole of Delaware
 Don Derr of Rutgers
 Don Tobey of Maine
 and myself.

In the early stages of the project, David Fischer of Rhode Island also participated, but Dr. Fischer has since left that institution.

Four research objectives were specified in the original proposal.

These, together with later modifications, are:

1. Determine the environmental situations (positive and negative) associated with seasonal homes and analyze the attitudes, interests, and goals of people for a quality seasonal home environment.
2. Evaluate the social and private costs and benefits of identified environmental situations at both the regional and national levels. "National level" has since been eliminated from this objective.
3. Assess current and alternative institutional arrangements intended to correct inefficiencies and inequities in resource use in seasonal home communities.
4. Determine the total potential market for seasonal homes in the Northeast and delineate the effects of environmental factors upon this market.

The fourth objective has been dropped from this project. It was originally included to accommodate the research interests of Professor Ragatz at Cornell University, one of the original cooperators in NE-65, but Professor Ragatz has, in the interim, left Cornell University.

Within the five cooperating states, 18 seasonal home communities were selected for study, 13 of which are situated on lakes and 5 on the Atlantic seashore (ocean front or bays). These 18 communities represent a wide range of home styles, community age, density and size, income levels, institutional controls, and environmental quality. They were not selected at random from the total population of seasonal home communities, but rather were selected to represent a range of the variables mentioned. The number of homes within each community varied from 34 to 2,100 and included both seasonal homes and permanent homes. Separate questionnaires for the seasonal home occupants and the permanent residents were developed, although all attitudinal questions and many of the socio-economic background questions were the same for both. Out of the total of 8,513 homes, 2,612 were sampled for an over-all sampling rate of 31 percent. The sampling rate varied from 100 percent for small communities to 10 percent for the large communities. In all states interviewers contacted the people in the homes randomly selected, explained the purpose of the study, and asked their cooperation in completing the questionnaire. Depending upon the manpower and financial resources available, call-backs were made in some states to collect the questionnaires; in the remaining states the forms were mailed back in envelopes provided. Response rates for individual communities varied from 69 percent to 12 percent, with an over-all rate of 43 percent. This provided 1,131 usable returns.

The first part of the questionnaire contained 45 attitudinal questions to determine people's perspective of environmental conditions in their community. The second part of the questionnaire contained 14 open-ended questions and attempted to find out why people came to this particular community, what they liked and disliked about it, and what changes they had observed over time in both the natural and social environment. The last part of the questionnaire elicited background information on demographic variables, occupations, income, lot size, value of home, taxes, recreational activities, and so forth.

Water quality data were obtained from state health agencies for some of the communities and for the remaining communities from tests conducted by the individual investigators using the Hatch Coliver multiple tube coliform test. Tax data and institutional control data will be collected in the current year.

The committee saw the necessity for and became interested in devising a procedure whereby communities could be rated according to certain environmental quality criteria. After considerable time and effort, including field testing, a rating form was developed which was then applied to all 18 study sites by the full technical committee. This form treated natural environmental features, such as water, land, and scenic characteristics apart from man-made features of the environment, such as housing, community design, traffic, and so forth. In all there were 54 natural and man-made features included on the rating form. Certain features deemed especially important, such as water color among the natural features and spacing around homes among the man-made features, were accorded higher weights than other features. Each factor was given a rating of 1 (bad) to 5 (excellent). Applying the weighting factors and then summing provided a score for natural features and another score for man-made features.

The committee, generally, is not satisfied with the rating form and its application. Most features in both the natural and man-made categories are rated in a subjective manner. For example, there are no firmly established objective criteria by which one can say a certain feature merits a 4 rating rather than a 2 rating. Thus there are likely to be significant differences in rating values obtained for the same community by different people or groups of people. Most of the committee members feel that this aspect of the project merits much further work at some future date.

Considerable statistical analysis has already been performed with the data, more is presently underway, and more is planned for the coming year. In the past year the following analyses were completed: frequency counts with means and standard deviations by study sites, states, and region; chi square on attitudinal and socio-economic background data; ANOVA on attitudinal and recreational activity participation; scatterplot analysis of all study sites with several water quality variables; and cluster analysis on some of the more significant attitudinal variables.

Three M.S. theses, two at Delaware and one at Penn State, have been completed, with another M.S. thesis currently in progress at Maine. I won't attempt to comment on the theses done elsewhere, but at Penn State the student used principal component and multiple regression to explain the number of days of use per year of seasonal homes. The implication here is that the more the home is used, the more it provides opportunity for generating local income to the rural community. Water quality and certain institutional controls (number of homes and restriction of certain activities) were 3 of 15 variables significant in explaining seasonal home use.

At the present time, Delaware is constructing an input-output model for the region in which their study sites are located. This model, together with some I-O studies done at Penn State in previous years, will

give a more complete estimate of direct and indirect revenues generated by seasonal home recreationists in rural communities. New Jersey is now working with real estate data as well as soil and water quality data. Maine is preparing a descriptive publication of their study areas, and a Master's degree student is correlating attitudes with various socio-economic variables and recreation patterns.

Vermont is about to issue an Experiment Station Bulletin describing environmental quality aspects of the six seasonal home lakeshore communities they have studied.

During the coming year there will be further statistical analysis of the data already collected and to be collected. Such analysis will include in part socio-economic profiles of seasonal home occupants and correlation and regression analysis of tax and property value data. Further efforts will be made to attempt to correlate the natural and man-made quality ratings of communities with attitudinal and socio-economic variables. New technological developments in the handling of sewage and solid wastes in the single home and small community will be examined. Input-output studies will be utilized to the extent possible to determine local income generation from seasonal home activities. Information on existing and past land use controls will be collected and analyzed. Finally, we need to examine closely the differences between permanent and seasonal home owners in these communities.

There is little doubt that the demand for seasonal homes is strong and that in the future much more rural land will be devoted to this particular use. It appears that seasonal homes have become a status symbol--replacing the second car of a decade or so ago in this respect. The snowmobile has provided a new rationale for winter use of these homes. Moreover, there is a growing tendency for the seasonal home of today to become the retirement or even the permanent home of tomorrow. There has been little thought and much less effort directed toward protecting the natural attributes of seasonal home communities--the water, forests, wildlife, and scenic qualities--from the degradative effects of unplanned and uncontrolled growth. If rural communities are to retain one of their more valuable assets, environmental amenities, which long ago disappeared from urban areas, they are going to have to take a much more positive role in controlling the use to which their land resources are put. If such control is to be effective and acceptable to both the permanent members of the community as well as to the recreationists, who largely reflect urban interests, we need to know a lot more about these groups. We feel this project will contribute significantly to a better understanding of the interests and attitudes of these people and the environmental problems of seasonal home communities. In addition, we are hoping that we will be able to say something about the trade-off in costs between good environments and poor environments. Such information could provide strong incentives for rural communities to take positive action in protecting their natural and cultural amenities.

NE-78: NATURAL RESOURCE POLICIES AND PLANNING
FOR RURAL DEVELOPMENT

Carl A. Carlozzi

University of Massachusetts

Several years ago at a conference of foresters I suggested that there was some difficulty in defining the terms "urban" and "rural." The theme of my argument went something like this: Urban land is almost immediately recognized because there is a common physical character associated with urban functions; cities and suburbs are clearly dominated by high densities of structures, roads, and power transfer facilities. Rural areas, especially in the Northeast, are not so easy to identify, because traditional forms related to rural functions tend to be lost among vast amounts of open landscape. Thus anyone looking at aerial photos or maps cannot automatically define where urban ends and rural begins simply by demarking the physical extent of metropolitan entities.

The necessity to develop a strict definition, however, may or may not be important. The necessity to develop a reasonable working definition is important where one is concerned with the allocation of land and its separable resources among competitors in the political arena or the economic marketplace. My preference in developing a working definition is to rely more strenuously on functions rather than on physical form and substance. Urban, it seems to me, can be defined as an area of high energy utilization, material consumption, and waste accumulation. Rural is an area of modest energy consumption, extractive of primary resources, and low in waste accumulation. In the social sense, urban areas are highly complex and strive for intense organization in which the individuals making up the society exhibit a wide range of personal work and life styles. In rural areas, considerably more homogeneity is expressed in life styles and work patterns; and social organization, though often tight, is not necessarily complex.

If we apply these working economic and social functions to land or places, it then becomes evident that "what you see isn't necessarily what you get." Certainly throughout the Northeast a great deal of land appears physically to be rural. But sufficient studies have been made over recent years to demonstrate that much of that land really supports an extension of urban economic and social functions. The classic example is, of course, the vacation home phenomenon and, equally, the country residence occupied by people who have lived and worked or still work in the city. The insertion of urban society into the open countryside has brought about numerous changes, all of which are documented through studies over the past 20 to 25 years. These are most immediately reflected in the reassessment of land for values which are not rural in their social or economic origin. Location values for residence and visual-aesthetic character may play a

considerably more important role in determining the utility of land than its capacity to produce food or fiber or its content of mineral wealth. In addition, the values reflected in rural landscapes surrounding residential and recreational uses have minimal importance with respect to actual output of primary resources. For example, the farm on the hillside offers a visual contrast to the adjacent forest. Its value, then, is related to what people like to see, not how much they depend on the farm for something to eat. This point was brought home very dramatically at a conference held at the University of Massachusetts two years ago in which a northern New England land developer indicated he was buying working farms along with developable adjacent real estate solely for the purpose of maintaining the farms as a visual component in the landscape. He had contrived several methods for subsidizing the continuance of the farming activities in order to guarantee that purchasers of vacation homes and residences would be able to enjoy the aesthetic values of a working hillside farm.

All of this says something to me, at least, about the marketplace allocation of land in rural areas to urban uses, and that is simply that the market is sufficiently strong and affluent to be able to absorb the cost of retaining quasi-rural activities to satisfy the cultural-aesthetic values of urbanites.

This phenomenon, then, takes us a long way from the kinds of problem statements which we would probably have been making about rural development 30 to 40 years ago. Then we would have been extremely concerned with the development of policies which would ensure the continuance of the traditional rural functions for their own sake. I think it is significant that in the NE-78 Regional Research Project there is no direct research activity by any participating experiment station which conceives that a project on rural planning and policies should in some way be wholly concerned with crops, livestock, forests, or mining. This is a tacit admission on the part of the present research team that those traditional rural activities in the northeastern landscape are not targets for further development, and they would figure only in a peripheral way in the problems of future land uses and socio-economic growth in what used to be called the rural Northeast.

Several of my students have been working on an NE-78 project in Plymouth County, Massachusetts. Their findings reveal that within the institutional structure established to guide land and resource use planning, very little serious attention is being paid to questions surrounding the maintenance of the residual agricultural base which still persists in the county. Town planning agencies devote most of their thinking to and define most of their problems as how to meet the present or perceivable future onrush of urban or suburban growth in their towns. There seems to be some realization that existing agriculture is important in the community, but increasingly it is important to the New England land developer. In my own community of Amherst, Massachusetts, there has been a rising concern that the town should "preserve" agriculture in the community, once again largely for aesthetic reasons.

The NE-67 (Economic Effects of Use Value Assessment on Land-Use Patterns) research program now winding up has provided an up-to-date base of understanding of how the public and private policies, taxation, and

market pricing can influence the maintenance of certain land uses in rural areas. These findings, largely drawn from experience in existing communities, counties, and states throughout the Northeast, indicate only mixed success when public taxation policies are in fact geared toward encouraging traditional rural functions to stay on the land.

It seems to me, then, that those of us who are in some way concerned with the problems of rural development in the Northeast need to ask a very basic question before we enter the third year of the regional project. Are we primarily interested in inventorying, interpreting, and evaluating planning policies and programs for a kind of rural development which is simply an accommodation to the land market growing out of the functional expansion of urban areas, or do we establish a more varied value base in which we can study planning policies which recognize a present and future need for viable rural functions?

As most of you know, my professional field is not that of agricultural science, so the questions which enter my mind may seem somewhat naive, but they seem to be questions which land use planners outside of agriculture should be asking. In April of this year I attended the national planning conference sponsored by the American Society of Planning Officials. I made a particular point of listening to those papers which seemed immediately concerned with the problems planners foresaw in rational use of the open landscape. It is suggestive of the state of the art that the nature of the deliberations in and following the presentation of those papers centered on suburban and open land recreational growth. I cannot recall a significant remark or question regarding the importance of agriculture or other rural activities as being central or at least important to the problem of rural area development. Admittedly, the largest representation of planning professionals at the meeting emerged from urban settings, and suburbia seemed about as remote from central city problems as people wanted to get.

There is no reason to believe that anything unusual happened at that planning conference. The background of the professional attendees and the nature of their most immediate problems almost forecloses any hope that they would either be concerned at all or concerned in a sophisticated way with the problems of rural development. However, it seems strange to me that when I discuss those same questions of planning and policies affecting rural areas among people whose traditional and professional experience is rooted deeply in the rural setting, the approach to planning is almost equally non-rural. In a way, I suppose this is an indictment of some of us who are operating out of the state Agricultural Experiment Stations in the NE-78 project. But certainly we are not alone in at least a partial forsaking of our mandated responsibilities to rural functions and the people that carry them out. Several Regional Commissions, again especially in the Northeast, have also focused most of their problem interpretation and planning solutions on the growth of non-rural uses in the rural setting. In fact, in my more facetious moments, I have been given to suggest that the Regional Commissions were like auxiliaries of the Bureau of Public Roads since they have such a strong reliance on the selling of "development highways" as the infrastructural input to rural revitalization. When one pursues the question of what revitalization consists of, answers tend to revolve around recreation as a principal impetus to social and economic improvement. There seems to be considerable standing evidence

that urban-styled recreation does produce enlivened hinterland economies. In one sense this is a kind of self-fulfilling prophecy that results from allocating vast acreages of former rural land to recreation-aesthetic-residential users.

I suppose the Outdoor Recreation Resources Review Commission simply gave us a data base on which to act out the planning functions related to that prophecy. Personally, I am not prepared to offer any kind of unmitigated thanks to the Commission, because much of the interpretation of the Commission's findings has been a Madison Avenue exercise. We have sold both the American public and ourselves on the idea that recreation demand is so insufficiently supplied at any point along the demand curve that there is for at least several generations an open opportunity to allocate land resources to the enlargement of the recreation supply.

If, as I am trying to suggest, our problem priorities and interpretations have gone awry, then where should we be headed in our study of rural development planning and policies? Personally, I would like to see considerably more attention paid to a search for policy creation and policy outputs that would recognize a continuing need, nationally and globally, for the maintenance of productive rural activities. It seems almost old-hat to sing the song of "let's keep non-agricultural uses off good agricultural soils." There is an absolute quality to that kind of thinking that I know sits very uneasily in the minds of economic relativists. However, there is a certain amount of spuriousness in the argument that values are in fact relative to transient economic demand trends and supply functions.

In this regard I think there is a need for research much in the spirit of the National Environmental Policy Act which might concentrate on identifying the social and economic opportunity costs of planning policies that encourage the shift of rural lands to non-rural uses. Certainly internalizing the externalities is one of the major exercises which any planner has to go through in selecting among alternative paths to reach planning goals. Benefits accruing, if analysis and quantification of opportunity costs in the field of rural planning were possible, might add more strength to the long-argued question of what the real values in the long run might be of high-quality agricultural land. Certainly it would clarify the application of findings on why and how taxation might become more effective as a plan implementation tool in guiding the allocation and use of rural areas. In any event, it would give us a longer time perspective in which to judge the adequacy of planning policies and perhaps make it possible to avoid barely revocable decisions which are now made through the more direct and immediate workings of the marketplace.

A secondary area of research that seems to me in need of attention is that of examining the potentials and the effectiveness to date of regional bases for carrying out planning and plan implementation functions. One of our own NE-78 projects--looking at the performance records of Conservation Commissions in seven northeastern states--has raised a number of issues with regard to the potentials of a regional framework for commissions. Judging from my first reading of that study's results, this is a very complex issue, and in the next round of Conservation Commission study we will be undertaking a more intensive look at the potentialities of evolving a regional operating framework for carrying out such

commissions' activities. I certainly think this is a useful topic for exploration, but I believe it is in itself too narrow a question simply because of the rather restricted nature of the environmental interests reflected throughout the Conservation Commission program. Almost every state has attempted to establish regional planning offices in one form or another, and indeed some have fairly active state planning offices, at least for the purpose of advising on policy formulation at the level of state executive administration.

Typical of most planning agency activities to date, regional planning activities have centered quite strongly on urban centers. When they expand their area of concern to the surrounding countryside, there is a tendency once again to view the problem as one of the extension of metropolitan needs into growth in rural areas. I have, at least in New England, seen very little effective planning for rural development emanating from the regional planning district offices. I suspect that one would be hard pressed to find a truly qualified rural land planner or economic development specialist working in most of the regional planning district offices.

A third area of research which relates to NE-78's interest in data and information retrieval systems would be to examine the present manpower capability and future manpower needs at professional and sub-professional levels with respect to rural planning. There is no reason to assume that planners who have their professional training and experience close to urban physical and social problems would be effective in making constructive inputs into problems of rural areas. If we assume planning capabilities in the professional person as a kind of information bank, the surely the constraints of the embodied information alone play a significant role in how any planning professional is going to perform in the face of the stated problems. In both Massachusetts and New Jersey NE-78 investigators have undertaken a careful look at the kinds of data which planners need and use. But no one, to my knowledge, is looking at the planner himself as an operational instrument.

A fourth area of research for which I see opportunity is that of examining the efficiency with which land is used for outdoor recreation. The behavior of most recreation planners has been to develop inventories of potential recreation areas based on criteria that, when applied, can qualify a rather large percentage of open countryside and land as suitable for recreation. In this context the free operation of the marketplace has been a widely used mechanism for allocating lands to recreation purposes. We assume that we can accept the marketplace actions as all right simply because qualified recreational land has gone to recreation. I perceive in all of this an analogue to suburban sprawl in the form of a kind of recreation sprawl in rural and open areas. Some examination of this aspect of planning and policies development is called for to see whether or not regional and subregional systems of recreation can be developed more rationally. I believe such a critical analysis might reveal a considerable wastage of land which is considered suitable for recreation under the prevailing planning criteria. We might also reveal that the deployment of developed recreation areas has preempted resources or made more costly the rational use of other rural resources either in the present or the future.

Finally, I am concerned that insufficient effort is being applied to the problem of integrating the mass of existing research information and data which has accumulated over several decades in regard to rural development problems. The Northeastern Forest Experiment Station at Amherst is attempting to organize and interpret the state of knowledge about changing land ownership patterns in rural areas, with particular reference to second homes and rural residences. To the extent that the New England and Appalachia Regional Commissions are mandated to develop programs and activities directed towards economic and social improvement in much of the rural areas of the northeastern states, a critical analysis of their operations in the light of information already known and research needs not yet met would be a logical extension of integrating already established research bases. I believe that the whole spectrum of agency coordination in the planning field is also open to inspection. The state, federal, and, most importantly, local activities as they are currently carried out seem to ignore one another. Benefits from their respective operations might be better guaranteed, indeed even enlarged, where inter-agency programming can more effectively occur. Inter-agency coordination is hardly a new or simple problem, but it does seem necessary to initiate the task of finding ways to do it if there are expectations that planning policies at any level can be carried out with a minimum of distortion to the application of policies from other governmental levels. I could foresee a series of critical path programs emerging from such studies of existing data, agency operations, and coordination characteristics. Such programs might be useful in expediting not only the way in which agencies relate to each other but also the implementation of their programs.

The above questions which I have suggested for research are, of course, representative of only one person's thinking. Some of those elements represent general or specific tasks which were not foreseen by the original drafters of the NE-78 proposal. However, it seems to me that in our five-year NE-78 program the umbrella of work required is so broad that there should be no reason to limit the potential research topics to those conceived by the original proposal committee.

NE-68: PATHS OUT OF POVERTY--
PAST RESULTS, FUTURE PLANS,
AND ANTICIPATED RESULTS

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Purpose and Plan of this Paper

During the first three years of its existence, the NE-68 Regional Project has accomplished, to some degree, some of its original objectives. We are now faced with a need to revise, extend, or terminate the project by June 30, 1973. Termination does not seem to be a desirable course of action because the objectives have not been completely met, and there does seem to be a reasonable expectation that future work will lead to a substantial degree of progress along these lines. A major purpose of the present paper is to review the past work and to preview our future plans. Briefly, we intend to finish some work now under way, to extend some lines of work, to terminate a few others, and to start out in some new directions. Because of the interdisciplinary nature of this research project, it is very difficult to articulate the underlying theoretical framework. However, I have bravely attempted to set down part of the theoretical framework in this paper. I have asked Jerry Stockdale to help in this effort by writing a separate paper which also will be presented here today.

Finally, I wish to explore with you the question that should always be raised in regard to any research project in its formative stages, "So what?" Even if we succeed in accomplishing all of our objectives, what will be their implications? Will we have extended the bounds of knowledge within our respective disciplines by a significant amount in a relative direction? Will we have provided research users (policymakers, extension staff, and other researchers) with any new insights into poverty? Will our research results help policymakers to better establish priorities and develop program strategies for coping with poverty? Can our findings be implemented to provide more effective "paths out of poverty?" These are hard questions, and their answers are sometimes gratifying, sometimes embarrassing. I am convinced that the questions must be asked, preferably before the research gets seriously under way. We have attempted to ask these questions at every stage of the development and implementation of the NE-68 project. I think you will agree that we have earned a fairly good score but that there is still room for improvement.

In drawing up the original NE-68 project outline, a number of different people with different professional backgrounds and research interests were brought together. As a result of our diversity, we found it necessary to frame the objectives rather broadly. The original objectives are as follows:

1. Examine the relationships between impoverished families and community and governmental services to find out why they have not enabled families to climb out of impoverishment.
2. Analyze the social and economic benefits and costs of various direct action programs.
3. Use the results of prior analyses to improve existing programs, and design other programs so that they may more effectively meet the needs of the impoverished.
4. Synthesize the results of the project research into a general theoretical framework and body of knowledge as a guide to implementation of more effective socioeconomic intervention programs.

In our revised project outline, we intend to sharpen the focus of the project and write the objectives much more explicitly than we did in the original project outline. We hope that the discussion of the present paper and the other theoretical papers on this project, plus the discussion of the other regional projects related to our subject matter, will enable us to develop an optimum set of research objectives for the continuation of this project.

Definition of Key Terms: "Poverty" and "Paths"

Poverty is widely recognized as consisting of many forms of deprivation or impoverishment. Wilber defines poverty as "a multi-dimensional object with measurable properties."¹ He recognizes that most poverty properties are represented on a continuum rather than in "all or nothing" qualitative terms. He recognizes the difference between individual poverty and area poverty and goes on to list five general kinds of poverty properties: (1) health, (2) capability, (3) motivation, (4) personality, and (5) socioeconomic status. The latter includes a consideration of income, occupation, and education.

Emphasis in NE-68 has been on low-income people, in the belief that here is where the deprivation (in the various dimensions of poverty) is the greatest and most urgent. We have not restricted our attention entirely to families below the official poverty line (about \$4,000 for a family of four, for example). Rather, our purpose has been to seek a greater understanding of the problems and prospects of a wider group of impoverished people, many of whom are in serious need, even though they may be somewhat above the official poverty level.²

We also recognize the conceptual and practical differences between the

¹George L. Wilber, ed., Anticipating the Poverities of the Poor, Social Welfare Research Institute Monograph No. 1 (Lexington, Ky.: Social Welfare Research Institute, 1971), pp. 2-24.

²J. Patrick Madden, "Poverty Measures as Indicators of Social Welfare," in ibid.

concepts of absolute deprivation and relative deprivation. For example, the official poverty line is an absolute standard of deprivation. It is used to count the number of families below a constant level of purchasing power. This level is held constant over time by application of the Consumer Price Index.³ Over a period of time, as the rest of society becomes more and more affluent, people with a constant level of purchasing power tend to feel relatively more and more severely deprived. A relative standard of income deprivation that has been suggested is one-half of the median family income. Trends in the number of "poor" vary considerably, depending upon which of these two standards is used. In a relative sense, the percent of the U.S. population in poverty has remained virtually constant over the past decade, whereas there has been a general downward trend in the number and percent of the population in poverty according to the official (absolute) standard. Relative and absolute standards also apply to the various other non-income dimensions of deprivation. Our emphasis in this project has been primarily, though not exclusively, on the target population of the poor as defined by the official poverty standard.

Conceptually, we consider poverty (or deprivation) as being a function of individual characteristics and social and economic conditions. Part of our conceptual model is laid out in more detail later in this paper.

"Paths" out of poverty are conceptualized as referring to changes in the various determinants of poverty. This would include, for example, changes in individual characteristics (such as improvement of job skills, education, or location), changes in the social structure (such as development of new organizations to cope with poverty), and economic changes such as in the unemployment rate or other aspects of the economic environment. Included within this conceptualization of "paths" out of poverty are such things as intervention programs designed to directly improve education, job skills, or income of the individuals, as well as organizational strategies for delivery of important services. This would include strategies such as the use of paraprofessional aides and the use of a team approach to delivery services.

Past and Continuing Lines of Research

Work is currently being conducted on various lines of research within NE-68 in eight states: Connecticut, Maine, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, and Vermont. In the case of New York and Pennsylvania, more than one line of research is being conducted at each location. In some lines of research, exactly the same work is being replicated in more than one state. Other lines of research are being conducted entirely within a given state, with no replication or counterpart in other states.

Paraprofessional Aide Programs

Four states (Pennsylvania, Maine, Maryland, and Vermont) have been involved in the analysis of the Expanded Nutrition Education Program (ENEP) and the Expanded Youth Nutrition Program (EYNP). For example, Daryl Heasley has used data from all four of these states in his study of the role strain

³Ibid., pp. 38-39.

expressed by Extension agents as a result of introduction of EYNP into their Extension programs. Respondents showed less need for role redefinition in urban than in rural areas, in agents who work with youth than in those who do not. These and other findings are relevant to the effects of introducing a new program into an existing bureaucracy. Such findings may be useful in the future for planning other such programs. Nelda Nolan used longitudinal data from aides in Pennsylvania to analyze changes in self-esteem among the aides as they started into the role as paraprofessionals. The findings showed, for example, that a greater increase in self-esteem was associated with aides who initially had low self-esteem, those for whom the program represented an increase in income, and those who viewed the program as a stepping stone to further roles rather than as a dead-end job. These findings are significant, as self-esteem is one of the important sociological dimensions of poverty, and it is useful to know the extent and conditions under which approaches such as paraprofessional aide positions can be counted on to enhance the self-esteem of low-income people.

Jim Longest in Maryland is analyzing data from interviews with nutrition aides in an attempt to isolate factors associated with their success or failure in the program. He is using data from Maryland, Delaware, Maine and Pennsylvania for this purpose. The theoretical base for this research is a six-function model based on a four-factor model developed earlier by Bowers and Seashore.

Effectiveness of Service-Delivery Systems

Two studies are being conducted more or less independently dealing with a similar topic, namely the factors associated with delivery of services. In Connecticut, Bill Groff has collected data from 535 interviews in a small urban service center called Windham. The sample was split into three subgroups: upper class, middle class, and lower class. The latter group was 95 percent low-income. The lower class respondents were much more likely to respond "unsure" as to the adequacy of various social services such as public housing, Vista, family planning programs, health clinic programs, Red Cross, and day care centers. Also, the lower class respondents were much less likely to indicate that these services were doing a good job.⁴ Other tabulations showed that "Forty-one percent of the poor feel that poverty is a result of a lack of job opportunity, compared with about 18 percent of the higher income groups. Only 19 percent of the poor feel it is because they lack the necessary skills for acquiring good jobs, compared to 47 percent of the middle income people and 57 percent of the high income people."⁵ The low-income respondents were more likely to feel they were the victims of an economic situation and the high cost of living, whereas the higher-income people generally feel that poverty is due to personal problems of the poor, such as lack of motivation to get an adequate

⁴William H. Groff and Donald P. Tomashek, "Paths Out of Poverty: Poverty and Assimilation in a Small Urban Service Center," Working Paper NE-68: W.P. 1 (Storrs, Conn.: University of Connecticut, 1972).

⁵Ibid.

education and stay on the job, or laziness.⁶ These findings are similar to those of Goodwin.⁷ These findings have considerable policy relevance. As pointed out by Goodwin, the kind of policies prescribed by the power elite will depend very strongly upon their conceptual model as to the causes of deprivation. If the model is not congruent with reality, then the prescribed policies will more than likely be ineffective or inadequate.

Groff intends to continue this analysis, extending the number of variables considered and performing some more sophisticated computations beyond the two-way tabulations presented in the report cited.⁸ Other findings related to the socioeconomic characteristics of the sample were also presented in this report.

Stockdale and others at Cornell have done a study which has several things in common with the work done by Groff in Connecticut. This is the Chenango Development Project, an experimental program in social and economic development of a rural area. It is designed to improve the lines of communication between and within organizations related to public services and programs. This study is in effect a pilot study, in which change agents were hired and sent into the area to expedite the social and economic development of the area. Stockdale will report briefly on the results of that project. A manuscript containing their findings is being prepared for publication.

The Rural and Farm Family Rehabilitation Project in Vermont

This study is being conducted on the basis of a three-year, \$650,000 project funded by the Department of Health, Education, and Welfare. The pilot study was scheduled to terminate in February, 1972. Analysis of the findings of this study are still under way, and a manuscript of the results is now being reviewed for publication. A brief summary by Niederfrank describes the way the project worked and the general findings.⁹ Data were taken at the beginning of the project. The program involves paraprofessional aides who visit the family, assess their problem situations, arrange for referral to appropriate agencies, enlist the assistance of an Extension Specialist (such as one in Farm Management), and make sure the family receives the needed assistance. A major contribution of the project was

⁶William H. Groff and Donald P. Tomashek, "Windham: The Town Next Door," manuscript prepared for publication in Milestones May 22, 1972.

⁷Leonard Goodwin, "How Suburban Families View the Work Orientations of the Welfare Poor: Problems in Social Stratification and Social Policy," Social Problems, XIX (Winter, 1972), 337-348; and Leonard Goodwin, "Toward Developing Experimental Social Research That Constructively Criticizes Public Policies and Programs," a seminar paper to be delivered to the American Sociological Association annual meeting in New Orleans, August, 1972.

⁸Groff and Tomashek, "Paths Out of Poverty."

⁹E. J. Niederfrank, "Bolstering Up Rural Families in Vermont" (Washington, D. C.: Extension Service, U.S. Department of Agriculture, 1972).

the part it played in getting a training program (MDTA) established and getting persons from among the client families to participate in courses for improving job skills and ultimately incomes. A total of 1,228 families with 4,826 members were enrolled and were served by the project during the course of its three years duration. Many kinds of assistance were given, ranging from "physical restoration" services, such as obtaining new eyeglasses, to obtaining a refinancing loan for a farm to prevent foreclosure.

One of the contributions of this study will be to increase public awareness of the nature and extent of the various problems prevalent among rural poor families. Another contribution will be to reveal the effectiveness of this type of program for providing outreach of services in rural areas. Other researchers who have contributed to this study include Nelson LeRay, Enoch Tompkins, and Fred Schmidt. A comprehensive report of their findings is being reviewed for publication.

The Real-Income-Generating Capability of a Self-Help Housing Project

Daymon Thatch at Rutgers University is conducting a study of self-help housing. He is examining the potential hourly earnings that a person can earn by participating in a self-help housing project. The earnings are calculated in terms of the number of hours spent in relation to the value added to the dwelling. As soon as his analysis is completed, he will present the findings in a manuscript. No further replications of this kind of study are being planned for NE-68 at the present time.

Relative Cost-Effectiveness of Cash Payments versus Income-In-Kind for Increasing the Dietary Adequacy of Low-Income Families

One of the key issues associated with income maintenance programs is the question as to the relative cost-effectiveness of cash payments versus income-in-kind programs such as Medicare, public housing, food stamps, and commodity distribution. It has been the contention of some public officials that unless the aid is channeled into specific consumption categories, the low-income recipient is likely to make unwise use of the funds and fail to obtain the intended benefit. The purpose of this study has been to question that contention. A theoretical framework was developed relating the dietary adequacy of low-income families to factors such as income, education, age, family size, home-produced food, and other factors.¹⁰ Hypotheses were developed from this theoretical framework and were tested using longitudinal data from repeated surveys of a panel of

¹⁰J. Patrick Madden and Marion D. Yoder, Program Evaluation: Food Stamps and Commodity Distribution in Rural Areas of Central Pennsylvania, Agricultural Experiment Station Bulletin 780 (University Park, Pa.: Pennsylvania State University Agriculture Experiment Station, 1972); and Marion D. Yoder and J. Patrick Madden, "Income-in-Kind vs. Cash Payments as Means of Improving the Diets of the Poor: Comparison of Food Stamps and Negative Income Tax in Selected Areas," preliminary draft of a bulletin manuscript, Department of Agricultural Economics and Rural Sociology, Pennsylvania State University, University Park, Pennsylvania, 1972.

low-income families in Central Pennsylvania. The families were interviewed before and after key changes in programs. In total, more than 1,000 interviews were taken, and the results were used in multiple regression analysis to determine the effects of program participation, holding other factors constant. The results showed, for example, that there was no nutritional benefit from the commodity distribution program, and that there was no significant benefit from the food stamp program except under rather special circumstances (more than two weeks since receipt of income, and less than two weeks since purchase of the food stamps).

A follow-up study was conducted in cooperation with the Institute for Research on Poverty at the University of Wisconsin. Arrangements were made with the researchers in charge of the Rural Negative Income Tax Experiment being conducted in Iowa and North Carolina¹¹ to include in the interview of these families specific questions dealing with dietary adequacy. This segment of the interview alone requires 20-30 minutes for completion. The method is the same as that used in the National Nutrition Survey. A similar multiple regression analysis was conducted on these data, and the results were compared with those obtained from the Pennsylvania study.

Cost-effectiveness ratios were computed on the basis of the regression results. The cost-effectiveness ratio is calculated as the federal cost of the program divided by the number of percentage points of increase in nutritional score (according to a special index designed for this purpose) attributable to participation in the NIT program. The results varied considerably, depending upon the source of income (from farm or business sources versus other sources of income) as well as from one state to the next. However, the families in Iowa that did not report farm or business income were shown to have a considerably lower cost-effectiveness ratio than was found in the food stamp program analyzed in the Pennsylvania study. In other words, if the objective is to increase the adequacy of dietary intake of low-income families, the study suggests that this cannot be accomplished at lower public cost using food stamps than with a direct cash program.

The manuscript reporting these results is now in the review process, so these findings must be viewed as tentative and subject to correction. Furthermore, the manuscript is very explicit in pointing out that national policy recommendations cannot be made wisely on the basis of studies of such limited scope as this one. However, the study shows clearly that a key premise underlying income-in-kind programs needs to be questioned rather carefully.¹²

Another follow-up study of this same type is anticipated beginning in the fall of 1972. The Institute for Research on Poverty has again

¹¹D. Lee Bawden, "The Rural Negative Income Tax Experiment," in Income Maintenance: Interdisciplinary Approaches to Research, ed. by Larry L. Orr, Robinson G. Hollister, and Myron J. Lefcowitz (Chicago: Markham Publishing Co., 1971).

¹²Yoder and Madden, "Income-in-Kind vs. Cash Payments."

introduced the dietary questions into the longitudinal survey questionnaire for use in the fall 1972 quarterly interview. The data from this survey will be analyzed by a method similar to that used in the two earlier studies. I have made several suggestions for improving the method of obtaining the data so that additional variables may be collected in a manner similar to that of the Pennsylvania study. Results of all of these studies will be published in technical research reports, journal articles, and non-technical information pamphlets, as well as discussed in television interviews. The findings of the food stamp and commodity distribution study, including suggestions for modification of the programs, have been presented in Washington to the authorities in charge of those programs. Some of the suggestions have been implemented, though it is not possible to determine for certain whether the suggestions flowing from this NE-68 study had any direct impact on those decisions. For example, a pilot study has been conducted in which food stamps were made available through local post offices. In another pilot study, the food stamps were made available through the mail, with direct deduction of the cost of the stamps from the welfare checks. The variable purchase provision has also been implemented, in which the families are allowed to purchase any fraction of their food stamp allotment with no threat of loss of eligibility. These and other suggestions, some of which were not accepted, were delivered to the Food and Nutrition Service of the U.S. Department of Agriculture, based on early analysis of the Pennsylvania study on food stamps and commodity distribution.

Socioeconomic Factors Associated with Low Income

Two studies are being conducted in this general area. The study by Louis Ploch in Maine is examining the social-psychological factors related to emergence from poverty. He has examined the relationships between four different social-psychological scales used in the study. A Master's thesis has been written on this topic, and the results are being written up for publication. Ploch is also preparing a bulletin which will present the results of his attempts to operationalize Objective 1, dealing with the relationships between impoverished families and community and government services, as a guide to reasons why families have been unable to climb out of impoverishment.

Another study is being conducted by Madden and Plato in Pennsylvania, using nationwide data from the Michigan Income Dynamics Survey. This data file contains detailed socioeconomic information for a panel of more than 4,800 families. The same families are interviewed each year, and information is obtained with regard to their wage rates, hours worked, and income and other factors related to their economic well-being. A rather detailed theoretical model has been developed for this study. It is presented later in this paper. This study is now in the findings stage, and a Ph.D. dissertation is being written to report the results. We anticipate that this thesis will be boiled down to a technical bulletin and/or journal article. The findings should prove useful for policy purposes.

What do we mean by policy usefulness? This question will be examined in detail in a later section of this paper.

Specifically, the results of this study will be useful in

delineating the effects of human capital variables, such as education and training, as contrasted with structural variables associated with the labor market in which the individual is operating, as well as the variables associated with the economic environment (recession versus prosperity, etc.). We are finding, for example, that the payoff for investment in human capital varies considerably from one race-sex combination to another.

Methods of Effective Communication with the Poor

Colle at Cornell is investigating various methods of communicating information with low-income persons. He has tried a number of gadgets, such as cassette recordings, as means of getting the information across to the target audience. Results from this analysis are forthcoming. It is hoped that the relationships developed in this study will provide a clearer understanding of the problems and prospects of communicating with the low-income population.

No counterpart replication of this line of research is anticipated in other locations.

Evaluation of the AFDC Program

Bowring and LeRay have initiated a study of the AFDC (Aid to Families with Dependent Children) program in New Hampshire. Caseworkers were interviewed regarding their observations about the AFDC program, and their opinions and recommendations for modification of the program were presented in a report to the State Department of Health and Welfare.¹³ It is not known what impact these recommendations may have on the program.

Further analysis is now under way to determine family characteristics and other factors associated with emergence from welfare dependency. A questionnaire has been used to obtain data from welfare records. These factors will be associated with changes in program participation status over time, using multiple regression analysis. The results should be useful in pinpointing the types of families and individuals that are most likely to remain on welfare, versus those most likely to emerge from welfare dependency status.

This is one general area of work which is being considered as a possibility for expansion into other states as part of the NE-68 research activity over the next three years. Officials in the Pennsylvania Department of Welfare, for example, have been contacted regarding their interest in participating in such a study. Interest has been quite favorable. However, the necessary data for a thorough analysis of factors associated with emergence from welfare dependency are not currently being

¹³James R. Bowring and Nelson L. LeRay, "AFDC Caseworkers and Their Observations about the AFDC Program in New Hampshire," report to the New Hampshire Department of Health and Welfare (Durham, N. H.: Institute of National and Environmental Resources, University of New Hampshire, 1971).

collected. If resources become available, and if the decision is made to expand this as one of the future lines of work under NE-68, then a comprehensive, theoretical framework and a series of research hypotheses will be developed, and a data collection instrument will be developed so that the appropriate information will be obtained for a longitudinal record of program participants.

Evaluation of the Team Approach in the WIN Program

Another possible line of work for expansion of the NE-68 project is proposed by Barry Gordon and Joe Miller of Pennsylvania State University. Their proposal calls for an evaluation of the team approach used in the WIN (Work Incentive Program) and CEP (Concentrated Employment Program).

This line of work, if resources become available to support it, will focus on the team as the unit of analysis. The study will examine the interrelationships and interdependence between the various agencies associated with anti-poverty programs and the effectiveness with which the agencies collectively and individually operate in attempting to help the individual to emerge from poverty. This line of research is very important from a policy standpoint for two reasons. First, it is apparent that future social legislation associated with income maintenance will place heavy emphasis on employment. Furthermore, it is also clear that the team approach is likely to be used in this and other kinds of service delivery systems. Information is needed with regard to the factors associated with success or failure with the team approach in delivering services of this kind.

Policy Problems, Policy Research, and Disciplinary Research

In reviewing the progress of NE-68 up to the present time, we have used the term "relevant to policy" a number of times. Does this term really have any concrete meaning, or is it just a vague shibboleth used to justify doing what we really wanted to do in the first place? What is "policy" and what are policy problems? What is the distinction between policy research and disciplinary research, and how do each of these relate to solution of policy problems?

Ranney defines "public policy" as containing five main components:

1. A target population. This is a particular object or set of objects, some designated part of the population or environment that is intended to be affected.
2. A socially desirable outcome. A desired course of events or sequence of behavior in the target population.
3. A selected line of action deliberately chosen by the policy-makers to bring about the desired outcome.
4. A declaration of intent. This may be overt or covert. Sometimes the effective declaration of intent, made behind the scenes, is not congruent with the declaration of intent as displayed to the public. This

is known as a "credibility gap."

5. A program or strategy designed to implement the declaration of intent. This would include actions undertaken with regard to the target population in pursuit of the socially desired outcome and the declaration of intent.¹⁴

Ranney goes on to describe the "policy process" as including such elements as (1) intelligence-gathering information, assessing relative desirability of conflicting values, setting goals; (2) recommending a particular ordering of values and a course of action; (3) application of the prescribed action; and (4) appraisal of the effectiveness and social costs of the prescription. (Other elements are also mentioned.) He goes on to point out that the consequences of a policy may be wholly or partially unintended by the authorities and that assessment of both the intended and unintended outcomes plays an important part in the appraisal stage of the policy process.

Goodwin provides valuable insight into the social-psychological process through which problems are defined and solutions are proposed and implemented.¹⁵ He points out that events in society, such as rising welfare rolls, are not automatically defined as "problems." They become defined as problems as they are perceived by influential persons to threaten their goals and beliefs. Similarly, "solutions" are based on goals and beliefs of influential persons. The focus of a relevant, scientific model of the welfare issue should be on the problem-solving process, on how important persons in important social systems are defining and attempting to meet what they have defined as a problem.

Goodwin has shown that policies and their resultant programs sometimes fly in the face of knowledge already available. He documents ten years of experience with programs similar to the Work Incentive Program (WIN) in the context of pronouncements by the influential persons in the executive and legislative branches of the federal government to the effect that such programs must be a part of welfare reform. He shows that the early experience is completely in agreement with his more recent experience, indicating that the WIN Program is a failure.¹⁶

In a more general context, Goodwin shows how misperceptions of the poor are built into middle-class culture through information obtained from newspapers and other media, limited personal contact, and hearsay evidence. Both the middle-class citizen; and the political leaders and administrators tend to feel that the poor regard welfare as another "hustle." Goodwin has found in his research, however, that the welfare

¹⁴Austin Ranney, "The Study of Policy Content: A Framework for Choice," Social Science Research Council Items, XXII (September, 1968), p. 26.

¹⁵Goodwin, "Toward Developing Experimental Social Research."

¹⁶Ibid. and Goodwin, "How Suburban Families View the Work Orientations of the Welfare Poor."

recipients typically do not hold this view. Based on their rather limited experience, middle-class persons become aware that lower-class poor people do not work regularly and are heavily involved in what they consider illegal or illicit activities. These perceived behaviours reinforce the already well-entrenched middle-class beliefs regarding the negative work orientations of the poor. "That is, middle-class persons see a consonance between behavior and orientations, deducing the latter from the former."¹⁷ Findings from Goodwin's study clearly indicate a "lack of consonance between behavior and orientations. Lack of work activity among welfare recipients occurs in spite of the maintenance of strong work ethic."¹⁸ He points out that the inability of middle-class suburbanite people to understand the orientations of the poor stems largely from the stratified nature of our society, in which power and communication primarily flow downward. "There is little opportunity for middle-class persons to be confronted with data challenging their projections about the psychology of the poor, much less to be confronted with poor people who can indicate how institutional blockages are preventing them from fulfilling their positive orientations."¹⁹

It is little wonder that the welfare system is such a widely acclaimed failure. Based on faulty information and inaccurate conceptual models of the nature of the poor, the policies and programs have little hope of succeeding.

What can policy research do to alleviate this situation? In his article "Studying the Impacts of Public Policies," Austin Ranney says,

"The most difficult of the many problems in studying policy impacts is that of isolating any particular policy's independent impacts from those of all the various economic, social, physical, and other forces affecting the course of events. What we seek to discover in every case is just what happens after a policy is promulgated that would not have happened in the absence of that policy--or, conversely, what did not happen that would have happened in the policy's absence."²⁰

Ranney draws on the work of James Coleman in pointing out an important distinction between disciplinary research and policy research. There are basic differences between these two kinds of research in terms of (1) the target audience, (2) the time pressure for completion, and (3) the quality control mechanisms used. Policy research is different from disciplinary research in that the object is to provide information immediately useful to policy-makers. The problems approached in policy

¹⁷Goodwin, "How Suburban Families View the Work Orientations of the Welfare Poor," p. 347.

¹⁸Ibid.

¹⁹Ibid.

²⁰Austin Ranney, "Studying the Impacts of Public Policies," Social Science Research Council Items, XXVI (March, 1972), p. 4.

research are spawned outside an academic discipline, with a social problem defined by a decision-maker. The intended audience is a decision-maker, rather than scholarly journals or groups of professional peers. Typically, the quality of the review process for policy research is much more cursory and less objective and critical than that used in disciplinary research.²¹

Hopefully, the research of NE-68 will combine the desirable aspects of both of these seemingly mutually exclusive types of research. We seek to do disciplinary quality research on problems that will be relevant to policy decisions regarding paths out of poverty. We could refer to this hybrid type of research as disciplinary policy research. For discussion purposes, I find it useful to draw the distinction between two subsets of disciplinary policy research: reactive versus initiatory. In the former, the social scientist is sometimes cast in the role of "servant, merely evaluating the results of programs instituted by the government, and hoping that appropriate officials will take note of the research findings."²² This is not to deny the very high value of reactive research.

The initiatory variety of disciplinary policy research, on the other hand, takes the initiative in designing and proposing fresh new approaches to the solution of social problems, rather than simply reacting to the characteristics of existing or already proposed programs and policy strategies. It is well established that existing programs are sometimes predicated on a false model of the causal relations associated with the target population. We must actively and objectively seek a more realistic model of the universe, and design programs and strategies which will have a greater likelihood of success. This is an awesome challenge to disciplinary researchers seeking to make a social contribution.

John Brewster has challenged researchers to develop results such that "public policy-makers will feel they are shortchanging themselves unless they seek you out and take serious account of your findings in reaching their decisions on what rules people should follow for the sake of improving their welfare."²³ He argues for the development of theoretical models and empirical data which will enable researchers to predict more accurately the outcome of alternative policies and programs. Furthermore, he argues that the researcher's role should include the construction of policy alternatives for consideration by policy-makers. He clearly draws the distinction between (1) the formation of value judgments as to the desirability of alternative courses of action and (2) the articulation of the choices and the presentation of clear and objective information as to the implications of the alternatives. He contends that the researcher has a particular talent for the latter.

²¹Ibid., p. 2.

²²Goodwin, "Toward Developing Experimental Social Research," p. 32.

²³John M. Brewster, A Philosopher Among Economists (Philadelphia: J. T. Murphy Co., 1970), p. 209.

How are researchers supposed to meet the challenges? An important part of the job is the development of adequate theoretical frameworks.

Theoretical Frameworks

Because of the interdisciplinary nature of the research on poverty, it is difficult, if not impossible, to spell out a single unified theoretical framework that will adequately encompass all of the various lines of research being done or anticipated in the near future. I have asked two other researchers to lay out significant parts of the theoretical framework, and they will present their findings separately. The purpose of this section of the paper is simply to spell out the general philosophical position with regard to theoretical and empirical efforts, and to lay out what appears to be a significant body of theory related to the research on paths out of poverty.

Mehlberg defines a theory as a "deductive system of law-like statements."²⁴ He lists five empirical aspects of a theory:

1. The summarizing function of a theory. A theory can provide a concise and orderly way of classifying events in the universe.
2. The predictive function of a theory. This is the aspect of a theory to which Brewster gives the strongest emphasis.²⁵
3. The controlling function of a theory. This has to do with the use of theory in controlling our environment.
4. The explanatory function of a theory. Theories can help us to understand events in our universe, aside from mere summarization. Frequently theories can help us to explain why things are the way they are, even if we are still unable to predict events with certainty, due to the lack of data needed to plug into the model.
5. The informational function of a theory. Theories can provide us with "socially relevant and dependable information about objects which are observable by man." The assumed dependability of information associated with or interpreted through theories is due to its "being backed up by the outcome of other observations carried out by human investigators."²⁶

Much has been written on the interconnection between empirical data and theoretical models. Data collected in the absence of a conceptual model are frequently pointless and are almost never interpretable in

²⁴Henryk Mehlberg, "The Theoretical and Empirical Aspects of Science," in Logic, Methodology and Philosophy of Science, ed. by Ernest Nagel, Patrick Suppes, and Alfred Tarski (Stanford, Calif.: Stanford University Press, 1962), p. 275.

²⁵Brewster, A Philosopher Among Economists.

²⁶Mehlberg, "The Theoretical and Empirical Aspects of Science," p. 278.

a socially relevant context. Conversely, theories must constantly be purged and modified through the application of real-world evidence. As Popper has stated, "What I have in mind when I speak of the growth of scientific knowledge is the repeated overthrow of scientific theories and their replacement by better ones--rather than the accumulation of observations or of 'data'."²⁷

Brewster clarifies the contribution of deductive and inductive reasoning to the scientific method.²⁸ Deductive reasoning is essential to the process of formulating logical propositions and stating testable hypotheses,²⁹ whereas inductive reasoning is involved in the process of forming general rules from specific observations. Brewster says the scientific method is, in its entirety, far more than merely deduction and induction. He points out that the development of strategic hypotheses which will lead to fruitful analysis is more of an art than a science. "The logic we can teach; the art we cannot."³⁰ Brewster argues strongly for a dynamic view rather than a static view of theory, in agreement with the contention of Popper that there must be a continual revision of theory, through hypotheses tested with empirical data.

The Saturday Review recently carried an article by Amitai Etzioni entitled, "Human Beings Are Not Very Easy to Change After All."³¹ He cites examples ranging from the inability to stop people from smoking cigarettes to the widespread failure of the prison system to reform convicts. He concludes, "One of the few effective and efficient ways in which people can be basically remade lies in a total and voluntary reconstruction of their social environment."³²

He gives examples of changed behavior associated with Jews emigrating from Eastern Europe to an Israeli kibbutz and with therapeutic communities for alcoholics and mental patients. He emphasizes, however, that effective total change groups will work only for those who join voluntarily. Another example that could be cited is the difficulty of getting low-income families to change their dietary behavior, even with paraprofessional nutrition aides.³³

John Kunkel has provided a behavioral model of man which is

²⁷K. R. Popper, "Some Comments on Truth and the Growth of Knowledge," in Logic, Methodology and Philosophy of Science, ed. by Nagel, p. 285.

²⁸Brewster, A Philosopher Among Economists, p. 231

²⁹John H. Kunkel, Society and Economic Growth: A Behavioral Perspective of Social Change (New York: Oxford University Press, 1970).

³⁰Brewster, A Philosopher Among Economists, p. 235.

³¹Saturday Review, June 3, 1972, pp. 45-47.

³²Ibid., p. 47.

³³Madden and Yoder, Program Evaluation, p. 13.

extremely useful in understanding some of the failures to change man's behavior through various programs and other stimuli.³⁴ I commend this model to the reading of all economists and sociologists who are interested in program evaluation involving human behavior. Kunkel postulates that behavior is a function of various contingent stimuli which may be either reinforcing or aversive. He contends that the schedule of presentation of these contingencies will affect the behavior patterns and the likelihood of change in behavior. If reinforcement stimuli are presented intermittently, for example, then behavior will be well maintained, and after the termination of the rewards, behavior patterns will tend to be more resistant to extinction than would be the case with a continuous and predictable reinforcement pattern. He further postulates that the effectiveness of the various reinforcing stimuli for shaping and maintaining behavior patterns will depend largely on "state variables" under conditions of satiation; for example, momentary deprivation is likely to be ineffective. Men attempt to maximize the expected value of their total contingencies, but they seldom exceed in perfect maximization. A time period is taken into account in the maximization period, and the decision-maker will apply a stronger or weaker discount rate to anticipated future rewards, depending on his expectation of the certainty of the outcome. The individual's behavior will depend strongly upon his awareness of the contingencies and their schedules. Also very important is the individual's knowledge of the relationship between action and various contingencies (the causal relations). In addition, the individual must have the ability to predict, evaluate, and combine all of the relevant contingencies of an action, and he must have the ability to behave in a manner consistent with his judgment of the best choice. Many low-income people lack the kind of conceptual ability, emotional stability, and freedom from fear and anxiety needed to think in these abstract terms, partly because of cultural deprivation, partly because of physical deprivation, including malnutrition which can lead to brain damage. Furthermore, many low-income people are subject to discrimination and various forms of coercion which inhibit their ability to behave in a manner dictated by their judgment of the ideal combination of contingencies.

Kunkel points out that the learning process associated with changing behavior need not be a first-person experience in every case. In other words, "vicarious reinforcement" may occur through observing the experiences of other individuals. This happens, for example, in the discouraged workers syndrome, in which people tend to drop out of the labor force and stop seeking employment when they are surrounded by high rates of unemployment and many of their friends and neighbors are unable to obtain employment.

In applying this theoretical model to various cultural contexts, Kunkel points out that the definitions of rewards and punishments of a man's behavior are determined largely by the social context within which he operates. "An activity rewarded by 'society,' for example, may be punished by the individual's subculture."³⁵ Furthermore, the most effective

³⁴Kunkel, Society and Economic Growth, pp. 26-61.

³⁵Ibid., p. 43.

providers of reinforcing stimuli and aversive stimuli are the "significant others." These people are defined, of course, by the person's subculture, or society's values and norms. This is a brief capsule summary of Kunkel's behavioral model of man. The model contains a number of other features not mentioned here, plus a very clear and meaningful discussion of the various concepts and relationships.

Now we would like to present the theoretical model underlying one of the lines of research mentioned earlier, namely the study at The Pennsylvania State University involving myself and Jerry Plato. The purpose of this study is to determine the effects of certain disadvantaging characteristics on the hourly earnings (wage rates) and labor force participation of low-income heads of households. The theoretical model underlying this line of research is as follows:

Conceptual Model of Low Hourly Earnings³⁶

There are many disadvantaging social and economic characteristics that are associated with the low hourly earnings of household heads. However, before a particular disadvantaging characteristic can be hypothesized to be a determinant of hourly earnings, it must be incorporated into a conceptual framework or model that depicts how hourly earnings is determined.

Neoclassical Model

The neoclassical approach to the determination of hourly earnings provides a theoretical background for the proposed model. Therefore, a brief explanation of the neoclassical model is given.

In the neoclassical model, hourly earnings is determined by the interaction between the forces of demand for labor, expressed in a demand schedule, and the forces of supply for labor, expressed in a supply schedule. That is, hourly earnings is determined simultaneously with hours worked. The naive or simplistic form of this model is:

$$S = a_1 + b_1 W$$

$$D = a_2 - b_2 W$$

Where:

S and D are the hours of labor supplied and the hours of labor demanded, respectively; W is the wage rate, or hourly earnings, and b_1 and b_2 represent the effect of a unit change in hourly earnings on the hours of labor supplied and demanded; a_1 and a_2

³⁶This is a chapter in the preliminary draft of the Ph.D. dissertation by Gerald E. Plato, "Effects of Selected Disadvantaging Characteristics on Hourly Earnings and Labor Force Participation of Household Heads." Plato is a student of J. Patrick Madden at the Pennsylvania State University. This chapter is used here with the author's permission.

represent all workers and all labor markets, respectively (i.e., no distinctions are made among workers or among labor markets).

Neoclassical theory gives primary emphasis to the effect of changes in the wage rate (e.g., hourly earnings) on the quantity of labor supplied and demanded. That is, emphasis is placed on the effects of b_1 and b_2 .

The effect of hourly earnings on the labor supply (i.e., b_1) is conceptualized, in the neoclassical model, as dependent upon workers' preference between income and leisure. Increases in hourly earnings allow workers to enjoy both additional income and additional leisure, so a trade-off is made between additional potential income and additional potential leisure in a manner that maximizes their satisfaction or utility. The effect of these income-leisure decisions on hours worked is measured by b_1 .

The effect of hourly earnings (b_2) on the quantity of labor demanded is conceptualized as being dependent upon the contribution of an additional unit of labor to the value of the additional output produced (i.e., marginal productivity of labor times the value of an additional unit of output).

Expanded Model

In general, neoclassical theory has abstracted from or assumed away the influences of the differences among workers and among labor markets. At best, a_1 and a_2 were disaggregated into broad classifications of workers and labor markets. However, in reality a_1 and a_2 represent the effects of many factors that shift the supply and demand schedules for labor. Also, a_1 and a_2 influence the slopes of the supply and demand schedules for the various types of labor and for the various labor markets. This implies interaction between a_1 and b_1 and between a_2 and b_2 .

Included in a_1 are the differences in the quality of labor services offered among workers, differences in attitudes toward income and leisure among workers, and the degree of unionization in each labor market.

The quality of labor services offered is measured by variables such as the education, additional training, and job experiences of individuals (i.e., human capital variables). These variables represent human capital investments which are direct and opportunity cost capital investments that workers have made in themselves in hope of making a return.

Differences in the quality of labor services affect the supply of labor in two ways. First, there are fewer individuals with the requisite human capital (i.e., labor services) in the labor markets requiring larger amounts of human capital. Second, individuals with different qualities of labor services will have different income-leisure preference structures. Wachtel and Betsey hypothesized that "with increased human capital and its attendant potential higher earnings, leisure will now have a higher value relative to income due to changes in household

expectations."³⁷ In other words, with an expected higher hourly earnings, workers will tend to value leisure more, relative to income. Thus differences in the quality of labor services influence the level and slope of the labor supply schedule.

In addition, a_1 may also include differences in attitudes toward work among social groups. These differences, if they exist, would also influence the level and slope of the supply schedule for labor.

Labor unions influence the supply of labor by restricting the supply of labor in certain labor markets. This also increases the supply of workers employed in non-unionized labor markets. Therefore, the effect of labor unions should be included in a_1 .

The demand for labor in the neoclassical model is influenced by the contribution of an additional unit of labor to output (i.e., marginal productivity). However, the simple neoclassical model does not take into account that the value of this additional output for labor with identical human capital characteristics (i.e., similar inherent productivity) may differ among industries and occupations. Therefore, the effect of industry and occupation should be included as a demand shift variable in a_2 . Also, the slope of the demand schedule will differ among "identical" workers in different industries and occupations.

Bluestone has emphasized the influence of industry on the wage rate.³⁸

"The low absolute productivity of labor in low-wage industry, no matter whether the cause is too little complementary capital or inefficient management, partly explains the low level of wages in the poverty industries. But the productivity gains in low-wage industry are not reflected in the relative wage rate changes in low-wage industry. Rather than contributing to higher wages, productivity increases are either being absorbed into broader profit margins or otherwise into lower prices due to raging competition. Productivity, then, cannot alone explain the plight of the low-wage industry and its poverty-stricken workforce."³⁹

Differences in hourly earnings among workers with the same human

³⁷Howard M. Wachtel and Charles Betsey, "Employment at Low Wages," appendix to "Low Wages and the Working Poor," by Barry Bluestone, William M. Murphy, and Mary Stevenson, unpublished report to U.S. Department of Labor, October, 1971, Institute of Labor and Industrial Relations, University of Michigan.

³⁸Barry Bluestone, "Lower-Income Workers and Marginal Industries," in *Poverty in America*, ed. by Louis A. Ferman, Joyce L. Kornbluh, and Alan Haber (rev. ed.; Ann Arbor: The University of Michigan Press, 1968), pp. 273-302; and Bluestone, Murphy, and Stevenson, "Employment at Low Wages."

³⁹Bluestone, "Lower-Income Workers and Marginal Industries," p. 293.

capital characteristics can continue to exist due to rigidities that prevent workers from moving to higher-paying industries and occupations.

Discrimination on the basis of race and sex also influences the demand for labor. Nonwhites and white females with the same human capital characteristics as white males often have a lower level of demand for their labor services. Thus race and sex should also be included as a demand shift variable.

Other demand shifters include the economic state of the economy and the economic state of local labor markets. Both low levels of aggregate demand and low levels of demand for the products produced in local labor markets shift the demand schedule for labor to the left. Variables that measure the economic environment, therefore, should be included in a_2 .

Reduced-Form Model

The expanded neoclassical model is more realistic. However, serious statistical problems arise when the intercept and slope shifter variables are included. First, both the supply and demand schedules (i.e., the structural equations) are overidentified because a large number of exogenous or predetermined variables are excluded from the equation. This means that unique parameters for the supply and demand schedules cannot be estimated from the reduced-form equations on hourly earnings and on annual hours worked (the independent variables for the reduced-form equations are the intercept and slope shifters, which are the predetermined variables in the model). Therefore, a simultaneous technique for estimating overidentified equations would have to be used to estimate the parameters of the structural equations. However, estimates of the parameters for overidentified structural equations are biased for small samples. Second, the variance of estimates based upon structural equations tends to be larger than for estimates based upon reduced-form equations.

Fox, Shepard, and other authors have recognized the appropriateness of using reduced-form equations in empirical investigation. Fox states:

"If the investigator does not require estimates of the structural coefficients but is content to obtain forecasts of the endogenous [dependent] variables on the basis of given values of the predetermined variables, a least squares estimating equation using a specified endogenous variable in the dependent position is indicated. Such an equation gives the best linear unbiased estimate of this variable given the specified values of all predetermined variables."⁴⁰

Shepherd also states that

"the reduced-form equations may be extremely useful for making

⁴⁰Karl A. Fox, Econometric Analysis for Public Policy (Ames: Iowa State College Press, 1958), p. 30.

predictions or determining policy. This is because they imply a "cause and effect" relation and, when properly fitted, enable one to estimate the degree of change in the dependent variable associated with changes in the independent variables."⁴¹

Structural equations would be required for determining price (i.e., wage rate) elasticities of demand and supply for labor. However, the emphasis of this study is on determining the influence of disadvantaging social and economic determinants on hourly earnings and not on estimating price elasticities of supply and demand. Therefore it was decided to use a reduced-form equation for identifying and estimating the effects of disadvantaging determinants on hourly earnings. The independent variables to be included in this model will include variables that measure "human capital" factors related to the quality of labor services and variables that measure the influence of the economic and social environment.

Summary of Plato's Paper

Multiple regression analysis has been used on this study, including a number of simple and complex interactions. Because income and wage rate data are thought to be log normal, a log transformation was performed prior to the regression analysis, as suggested by Hill,⁴² Adams,⁴³ and Cramer.⁴⁴ Details of the analytical procedures and the findings are presented in Plato's dissertation. As soon as it is completed and approved, we hope to publish the study. We feel that the theoretical model is extremely valuable to this study, in that it has provided a basis for understanding the mass of data involved, and it has led to the development of several strategic hypotheses regarding the effects of selected variables on the wage rate and labor force variables. Furthermore, the theoretical model is essential for the proper interpretation of the findings for policy purposes, and it clearly provides a starting place for further research which should further modify and refine the theoretical model as presented here.

Other Theoretical Models

Other theoretical models have been developed for other lines of research within NE-68. Stockdale will be presenting some of these. A few of the other lines of work within this project have proceeded apparently without any theoretical framework, with a direct collection of data. While the importance of data for testing hypotheses and enhancing

⁴¹Geoffrey S. Shepherd, Agricultural Price Analysis (5th ed.; Ames: Iowa State University Press, 1963), p. 163.

⁴²T. P. Hill, "An Analysis of the Distribution of Wages and Salaries in Great Britain," Econometrica, XXVII (July, 1959), pp. 355-381.

⁴³F. Gerard Adams, "The Size of Individual Incomes: Socioeconomic Variables and Chance Variation," Review of Economics and Statistics, XL (November, 1958), pp. 390-398.

⁴⁴Jan S. Cramer, Empirical Econometrics (London: North-Holland Publishing Co., 1969).

the maturity of theoretical models is clearly recognized, the importance of having a solid theoretical framework at the beginning of a research study is not to be denied. As new lines of research are initiated within NE-68, the researchers involved will be asked to develop and specify their theoretical framework as early as possible, and certainly prior to the initiation of field work.

Strategy for Future Research and Implementation of the Findings

The Technical Committee of NE-68 is currently working on a revised outline for the project, including a specification of lines of work to be initiated and old lines of work to be continued. Since these plans are still in the formative stage, it would be presumptuous of me to try to specify the precise strategy we will be using. In general, I think I correctly sense a feeling of the Technical Committee that we should strive for closer cooperation between more states on a smaller number of clearly defined problems. One line of work that has been mentioned favorably is an analysis of factors associated with graduation from dependency and deprivation. This would include emergence from welfare program participation, growth and increased financial independence of low-income farmers, and an analysis of the team approach in anti-poverty programs. I can make no commitments at the present time as to the exact nature and extent of the research we will be undertaking in the foreseeable future. It is important, in fact essential, that we have enough financial and personnel resources allocated to this project to achieve the critical mass necessary for real progress.⁴⁵ In other words, we do not intend to "start any vast projects with half-vast resources."

Obviously, much of the work done up to now in NE-68 has been of the "umbrella" variety--a loose confederation of independent studies. A few of our studies are truly "regional," but they lack adequate replications to provide defensible policy inferences. Our work during the next few years can have a policy impact in providing effective "paths out of poverty." We must tool up to do a significant amount of both the reactive and the initiatory types of disciplinary policy research.

⁴⁵ Currently the professional personnel working on NE-68 amount to about 3.5 SMY (Scientific Man Years).

NE-68: PATHS OUT OF POVERTY-¹
 POVERTY AND CHANGE STRATEGIES¹

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Poverty and Inequality

Poverty exists in a social system when some system members suffer deprivation of basic needs. Thus, a complete analysis of poverty must consider variables at both the social-structural and individual levels. Poor persons² are deprived (in an absolute sense and in a relative sense) of goods, services, opportunities, and dignity. In the absolute sense of deprivation, the poor are unable to obtain adequate housing, health care, food, recreation, access to respected roles, or other goods and services necessary for physiological and psychological health. In a relative sense the poor have less of what is valued in a social system than do other members of that system; such a system (whether a society or a community) is characterized by inequality, with the poor at the bottom.³

In a capitalistic society, money provides access to goods and services and also to power and status. In such a society, economic well-being, while only one aspect of poverty, is the best predictor of other characteristics associated with poverty. However, among persons classified as poor by economic measures, we do find great diversity in circumstances and characteristics. We also find patterns of inequality and, sometimes, similarities in adjustment to poverty.

Patterns of Inequality

In 1970 more than one out of every eight persons in the United States

*Editor's note: Professor Madden indicated in the preceding paper that because of the interdisciplinary nature of NE-68, Professor Stockdale, a member of the Technical Committee, was requested to also write a paper dealing with the theoretical framework for the project. Stockdale's paper was prepared in collaboration with Judi Schubmehl, Human Resource Development Specialist, New York State Cooperative Extension.

¹Professor J. Patrick Madden, Pennsylvania State University, read an earlier draft and made important contributions to this paper.

²For purposes of this paper the terms "low-income," "below poverty level," and "poor" are used interchangeably.

³S. M. Miller and Pamela A. Roby, The Future of Inequality (New York: Basic Books, 1970), p. 12.

was poor (see Table 1).⁴ Of these low-income persons, nearly one-fifth were over 65 years of age and over one-third were children under 14. Over two-thirds were white. (But less than one-tenth of all whites were poor, compared with slightly over one-third of all blacks and approximately one-sixth of all persons in "other races.")

One in every ten American families was below the poverty level (see Table 2).⁵ Of these, more than seven out of ten poor families were white, nearly one-third had five or more members, and over three-fifths had a male head. (Less than one in fourteen male-headed families were poor, however, compared with nearly one-third of female-headed families.)

Approximately half of all low-income families lived in metropolitan areas and approximately one in twelve lived on farms. Less than one in twelve families in metropolitan areas had incomes below the poverty level, however, compared with nearly one-fifth of the farm families.

⁴The data in Tables 1-3 are from the March 1971 Current Population Survey as reported in U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 81, "Characteristics of Low-Income Population, 1970" (Washington, D.C.: Government Printing Office, 1971). According to footnote 1, page 1:

"Families and unrelated individuals are classified as being above or below the low-income level, using the poverty index adopted by a Federal Interagency Committee in 1969. This index is based on a sliding scale of income, adjusted for such factors as family size, sex and age of the family head, the number of children, and farm-nonfarm residence. In order to keep the poverty standard constant over time, the thresholds are updated annually based on changes in the Consumer Price Index. The low-income threshold for a nonfarm family of four was \$3,968 in 1970, \$3,743 in 1969, and \$2,973 in 1959." These criteria and other definitions are discussed more fully in pages 16 through 28 of the census report. Under these criteria, approximately 5 million families (10 percent of all families) and 5 million unrelated individuals (one-third of all unrelated individuals) were in the low-income category in 1970.

⁵Many families above the official low-income level are also subject to deprivation of basic needs. According to the U.S. Bureau of the Census (ibid., p. 14),

"In 1970, there were 2.2 million families and 1.3 million unrelated individuals, comprising a total of 10.2 million persons, with incomes which fell between 100 percent and 125 percent of their respective low-income thresholds . . . Households with incomes slightly above the low-income level (near poor) are of particular interest because a slight reduction in their incomes, unemployment, illness, change in family size, or some other factor, could drop these households below the low-income level.

"The near-poor represented about four percent of all families and eight percent of all unrelated individuals in 1970. Adding their numbers to the low-income population would raise the number of low-income persons to 35.8 million, a 40 percent increase, and would raise the poverty rate for persons to about 18 percent."

TABLE 1
SELECTED CHARACTERISTICS OF LOW-INCOME PERSONS, UNITED STATES, 1970

Characteristic	Low-Income Persons with Characteristic		Percent of All Persons with Characteristic Who Have Low Incomes
	Number (millions)	Percent	
All persons	25.5	100.0	12.6
Under 14 years	8.5	33.5	15.7
Over 65 years	4.7	18.5	24.5
White	17.5	68.5	9.9
Black	7.6	30.0	33.6
Other races	0.4	1.5	16.3

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 81, "Characteristics of the Low-Income Population, 1970" (Washington, D.C.: Government Printing Office, 1971), Tables B and C.

Note: The table should be read as follows, using white persons as an example: In 1970, 17,500,000 white persons had low incomes (below poverty level), 68.5 percent of all low-income persons were white, and 9.9 percent of all white persons had low incomes.

TABLE 2
SELECTED CHARACTERISTICS OF LOW-INCOME FAMILIES, UNITED STATES, 1970

Characteristic	Low-Income Families with Characteristic		Percent of All Families with Characteristic Which Have Low Incomes
	Number (thousands)	Percent	
All low-income families	5,214	100.0	10.0
With 5 or more members	1,677	32.2	
With 7 or more members	713	13.7	22.8
White	3,701	71.0 ^a	8.0
Black	1,445	27.7 ^a	29.3
Other races	68 ^b	1.3 ^a	
With male head	3,280	62.9 ^a	7.1
With female head	1,934	37.1 ^a	32.5
With head over 65	1,166	22.4 ^a	
Receiving Social Security or Government Railroad Retirement income		29.7	15.0
Receiving public assistance		29.5	49.2
Living on farms	435	8.3	18.5
Living in metropolitan areas	2,654	50.9	7.9
Living in the South ^c	2,376	45.6 ^a	14.8

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 81, "Characteristics of the Low-Income Population, 1970" (Washington, D.C.: Government Printing Office, 1971), Tables C, D, E, H, and I.

Note: The table should be read as follows, using white families as an example: In 1970, 3,701,000 white families had low incomes (below poverty level), 71 percent of all low-income families were white, and 8.0 percent of white families had low incomes.

^aThese figures calculated from figures in number column.

^bThe figure for other races was calculated by adding white and black and subtracting from total.

^cThe "South" includes the following states: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.

TABLE 3

WORK-FORCE PARTICIPATION BY HEADS OF LOW-INCOME FAMILIES, UNITED STATES, 1970

Characteristic	Total		Worked at Some Time in 1970		Worked 50-52 Weeks in 1970	
	Number (thousands)	Number (thousands)	Number (thousands)	Percent	Number (thousands)	Percent
All heads of low-income families	5,214 ^a	2,861 ^a	54.9 ^a	25.0 ^a	1,302 ^a	25.0 ^a
Male heads of low-income families	3,280	2,026 ^b	61.8	32.6	1,069	32.6
Female heads of low-income families	1,934	835	43.2	12.0	233	12.0

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 81, "Characteristics of Low-Income Population, 1970" (Washington, D.C.: Government Printing Office, 1971), Table G.

Note: The table should be read as follows, using male heads as an example: 61.8 percent of all male heads of low-income families worked at some time in 1970; 32.6 percent (nearly one-third) of all male heads of low-income families worked 50 weeks or more and still did not receive incomes adequate to lift them above the poverty level.

^aCalculated from other figures in this table.

^bOf all male heads of low-income families who worked in 1970, 25.3 percent were farm workers.

Over three-fifths of all male heads of low-income families and over two-fifths of female heads had worked at some time in 1970 (Table 3). Almost one out of every three male heads and approximately one out of eight female heads had worked 50-52 weeks in 1970 (but were still poor). "Of the low-income male heads who did not work in 1970, about 61 percent were aged, and another 26 percent were ill or disabled."⁶ Of the low-income female heads who did not work in 1970, more than two-thirds mentioned family and home responsibilities as their major reason for not working. According to the Bureau of the Census, "For female family heads below the low-income level, those who did not work because of family responsibilities, illness, or disability comprised about 91 percent of all those who did not work."⁷ Less than three out of every ten low-income families received public assistance in 1970.

Economic Characteristics

A major aspect of inequality in American society is, clearly, the exclusion of the poor from adequate wages or other sources of income. The figures reveal patterns of inequality--low-paying jobs, inability to work, discrimination against minorities and women--which support analysis of social-structural rather than individual factors for understanding poverty.

The actual performance of the American economy and political system guarantees the existence of deprivation for millions of Americans. The low cost and abundant supply of food products; the availability of low-cost clothing and fuel; and the low percentage, relative to other industrialized nations, of personal income which is paid in taxes insure an affluent level of living for the majority at the expense of the poor.⁸ The availability of a pool of minority persons, women, and the unskilled to supply cheap labor in basic industries and as service workers results in low costs for producers, low prices for consumers, and low wages for workers.

Values

Attempts have been made to characterize the poor in terms of attitudes, values, self-images, and feelings of powerlessness, apathy, and alienation. Although some systematic differences between class levels on selected personality characteristics have been found, in general these are differences of degree rather than kind, and they tend to represent adaptations or reactions to situations rather than fixed personality traits.⁹

⁶ Ibid., p. 8.

⁷ Ibid.

⁸ Frances Fox Piven and Richard A. Cloward, Regulating the Poor, Vintage Books (New York: Random House, 1971).

⁹ See, for example, Peter H. Rossi and Zahava D. Blum, "Appendix: Social Class Research and Images of the Poor: A Bibliographic Review" in On Understanding Poverty, ed. by Daniel P. Moynihan (New York: Basic Books, 1969); Leonard Goodwin, "How Suburban Families View the Work Orientations of the Welfare Poor: Problems in Social Stratification and Social Policy," Social Problems, XIX (Winter, 1972) 337-348; Milton Rokeach and Seymour

According to Goodwin, "The poor . . . differ from the non-poor only on those orientations that are likely to be strongly influenced by current experiences, but are similar to the non-poor in basic work ethic and rejection of illegal sources of income."¹⁰

Rokeach and Parker suggest that although they found systematic differences in values across class levels, "it is not correct to speak of a 'culture of poverty' and a 'culture of affluence.' It would be more accurate to speak of variations of value systems associated with variations of status."¹¹

It can be concluded from these and other studies that when differences between class levels are associated with differences in values, the values result from the social situation rather than vice versa.

Participation

Research has repeatedly demonstrated an inverse relationship between social class level and rates of social and political participation.¹² The poor not only tend to participate less; there are also differences in the types of organizations and activities in which they participate.¹³ Low-income persons have seldom been meaningfully involved in decision-making and policy-setting in community and societal level organizations and governmental bodies (including those with a mandate to serve the poor).

The reasons for these differential patterns of social and political participation have not been adequately examined. Attempts to develop explanations have usually focused on the lower educational levels of the poor¹⁴ and feelings of hopelessness, alienation and apathy. In the political area it has been found that "lower-status persons have a lower sense of 'political efficacy,' that is, they feel that their efforts directed toward influencing the outcome of political decision-making would not have any appreciable effect."¹⁵ This is undoubtedly a realistic assessment of the situation when applied to individual rather than organized participation.

Parker, "Values as Social Indicators of Poverty and Race Relations in America," *Annals of the American Academy of Political and Social Science*, V. 388 (March, 1970), 97-111; and William Ryan, *Blaming the Victim* (New York: Pantheon Books, 1971).

¹⁰ Goodwin, *op. cit.*, pp. 343-344.

¹¹ Rokeach and Parker, *op. cit.*, p. 106.

¹² Rossi and Blum, *op. cit.*, pp. 356-359.

¹³ *Ibid.*, p. 358.

¹⁴ In 1970, "about one-half of the low-income family heads had completed less than 1 year of high school, and almost three fourths (73 percent) did not finish high school. The comparable figures for family heads above the low-income level were about 23 percent and 40 percent, respectively." (U.S. Bureau of the Census, *op. cit.*, p. 4).

¹⁵ Rossi and Blum, *op. cit.*, p. 359.

As individuals, poor persons have few resources for power, and for the most part they know it. Feelings of powerlessness are common among the very poor.¹⁶

Contact with low-income families in rural areas has revealed other, very pragmatic, reasons for the low rates of participation. These include such factors as transportation problems, cost or unavailability of babysitting, night work, and fatigue as a result of health problems or hard physical work. In addition, due to differential communication skills and lack of certain status objects, low-income persons have often not experienced personal satisfaction in their efforts at social and political participation. Many, in fact, have experienced rejection.

This is not to suggest, however, that low-income persons will not participate. Organizations such as the Southern Christian Leadership Conference, Operation Breadbasket, the United Farm Workers Organizing Committee, the Industrial Areas Foundation, and the National Welfare Rights Organization show that under certain conditions not only urban but also rural poor persons can be mobilized.¹⁷ Probably the key condition is perception of efficacy--a feeling that change is possible and can be attained through participation in organized activity.

However, the limitations on effective organizing for influence on policies and programs which affect the poor were best illustrated by the community action strategies of the 1960's. The basic strategy of the "War on Poverty" was to organize the poor to force local agencies and governments to respond to their needs.¹⁸ While this action was successfully carried out in many areas, a major outcome was to make clear how powerless the poor really are--for it became obvious that the decisions which really affect the poor are not made at the local level and that organizing which led to real change usually caused federal support to be withdrawn. Once again, alleged "characteristics" of the poor--their indifference and inability to function--proved to be less of a force for the status quo than did the structured inequality of the American political system.

System Levels

If it is the chosen task of social scientists and change agents to understand poverty and to develop change strategies which will result in a reduction of the deprivations associated with poverty, poverty must be analyzed primarily from the perspective of the structural variables which perpetuate low incomes. Further, destructive effects of deprivation on

¹⁶ Warren Haggstrom, "The Power of the Poor," in Poverty in America, ed. by Louis A. Ferman, Joyce L. Kornbluh, and Alan Haber (2nd ed.; Ann Arbor: University of Michigan Press, 1968).

¹⁷ In some cases the names of the leaders are better known than the organizations. Martin Luther King was leader of the Southern Christian Leadership Conference; Ralph Abernathy is the current leader. Jesse Jackson heads Operation Breadbasket, Cesar Chavez is leader of the United Farm Workers, George Wiley leads NWRO, and until his death Saul Alinsky led the Industrial Areas Foundation.

¹⁸ See Piven and Cloward, op. cit.

individuals must be understood. Only then will effective strategies be developed. Because the causes of poverty are complex and the power and resources of the change-oriented social scientists varied, it is useful to consider possible anti-poverty research and activities at various levels.

TABLE 4

SYSTEM LEVELS FOR CONSIDERATION OF ANTI-POVERTY PROGRAMS AND STRATEGIES

Society

Region, Area

Locality (County, Population Center)

Family and Individual

Societal Level

Focusing on the societal level calls attention to the importance of the national economic system, to the relationship between the economic and political systems, and to patterns of inequality in the allocation of goods, services, power, prestige, and opportunities. The following example suggests the importance of societal level factors. Between 1959 and 1970 the number of low-income persons in the U.S. decreased by 14 million (by 35 percent). Much of this was due to economic growth. Between 1969 and 1970, however, the number of low-income persons increased by 1.2 million (by 5.1 percent).¹⁹ This dramatic increase in poverty numbers cannot be explained by individual factors, nor can it be explained by variables at the local, state, or regional levels; it is clearly a result of changes in the national economy (and ultimately of political decisions).

The chief sources of income for American families are wages and salaries, profits, rent and interest, and transfer payments, such as Social Security and public assistance. As has already been shown, the workings of the occupational structure keep many families from earning adequate incomes. Because incomes from profits, rents, and interest depend on money for investment, they are not realistic sources of money for the poor. Approximately 30 percent of all low-income families in 1970 received Social Security, and a similar number received income from public assistance (Table 2). In 1970 the average difference between the incomes of low-income families and their respective poverty thresholds was \$1,420; and 174,000 families had no income at all.²⁰

¹⁹U.S. Bureau of Census, op. cit., p. 1.

²⁰Ibid., pp. 11 and 93. By supplementing incomes and providing access to selected services, chiefly medical, both Social Security and Veterans Administration benefits have improved the lives of many families and individuals, both poor and non-poor. In 1965, Social Security benefits lifted the

A national income maintenance program and changes in the employment and wage structures are clearly essential to reducing poverty. In 1970, "It would have taken about 11.4 billion dollars to raise the incomes of all poor families and unrelated individuals above the low-income level."²¹ In a society with a GNP of over a trillion dollars the cost is clearly not prohibitive.

As long as necessities such as housing and medical care are in short supply, however, some families will be deprived, regardless of income levels. Because production decisions are made in the economic market, increasing the buying power of families through transfer payments or higher wages could eventually increase the supply of housing and medical care. A short-run effect, however, would undoubtedly be to increase the cost of scarce necessities. Incomes would increase but deprivations would continue.²²

Region and Area Levels

There are also geographic patterns of inequality and deprivation. Analysis of areas which are relatively poorer than others reveals problems of availability and quality of services. The South, where 46 percent of the poor families live (Table 2), is characterized by lower per pupil expenditures for education, lower wage rates, and lower levels of public assistance payments than other regions of the country.²³ A common characteristic of poor rural regions is an abundance of low-skilled workers and a lack of sufficient numbers of high-paying jobs. Some of these areas are in situations of dependency not unlike those of third world nations. Much of the mineral

incomes of over one-third of aged households above the poverty line. Social Security also serves as a negative example, however, since in 1965 over three million aged households which received benefits still fell below the poverty line. (U.S. President's Commission on Income Maintenance Programs, Poverty Amid Plenty [Washington, D.C.: Government Printing Office, 1969], p. 106). In 1970 over one and a half million families received Social Security or Railroad Retirement benefits which were insufficient to lift them above the poverty level (based on figures in Table 2 of 5,214,000 poverty-level families, 29.7 percent of which received Social Security or Railroad Retirement benefits).

²¹U.S. Bureau of Census, ibid., p. 13.

²²Since elimination of poverty requires massive changes on the societal level, ultimately whether poverty is eliminated or not is a matter of national priorities and political processes. To date the American people and their political leaders have shown little commitment to the elimination of poverty. In general, they give lip service to elimination of poverty but refuse to pay the price.

²³According to Ryan, op. cit., p. 107, as of April 1968, average per-person monthly AFDC grants were \$8.45 in Mississippi, \$15.10 in Alabama, \$15.15 in Florida, and \$18.50 in South Carolina, compared with a national average of \$40.45 and average per-person grants in New York, New Jersey, Connecticut, and Massachusetts of \$65.05, \$58.45, \$56.80, and \$55.20, respectively.

resources of Appalachia, for example, are owned by companies with headquarters outside the region. As they extract resources, they return relatively little to the area in wages and taxes.

An important characteristic of most areas and regions is the lack of area- or region-wide political systems to plan for development and to initiate and coordinate anti-poverty activities. In addition, the Federal Government has not taken leadership in economic planning, which could influence both development and avoidance of deprivations caused by market and political decisions. The TVA and the Appalachian Regional Commission are exceptions to the lack of regional development efforts. Among the most popular regional development activities are economic development activities and the provision of facilities (including roads) and services.

Locality Level (County, Population Center)

Looking at low-income counties, we find they typically have an insufficient number of high-paying jobs to support all or even most of the population above the poverty level, a low tax base relative to other areas, a shortage of quality housing, and a paucity of services.²⁴ Because of a long process of selective outmigration, those who remain are often persons whose employment alternatives and leadership skills are limited.

Discrimination and differential access to goods, services, and various opportunities are also important aspects of poverty at the local level. The poor are often defined as failures, misfits, and incompetents. Many are victims of racial, sexual, ethnic, or other prejudice. The result is blocked and unequal opportunities, especially in employment, housing, education, and the judicial system.²⁵ In addition, local government and public agencies serving the poor usually include little or no representation of the poor and are often unresponsive to their needs.

The vast majority of anti-poverty strategies and programs have been conducted at the locality level. As we have already suggested, the root causes of poverty are not at this level; hence these strategies frequently tend either to emphasize the characteristics of the poor or to set localities in competition for scarce resources and expertise. A number of types of locally initiated and conducted poverty-related programs and strategies are possible. In general, the goals of these approaches include: (1) increasing the income of local residents through expanded employment, higher wage scales, and transfer payments; (2) improving the supply and quality of goods and services; and (3) increasing the openness and responsiveness of local institutions and agencies.

Although most programs which affect poverty focus on income transfers or on delivery of specific goods and services, the locality level has also been the focus of a variety of development or "purposive social change" approaches. The most prominent of these approaches include: (1) organizing,

²⁴J. D. Stockdale, "Services for the Rural Poor," Department of Rural Sociology, Cornell University, Ithaca, New York, 1972. (Mimeographed.)

²⁵Stockdale, *ibid.*, and Ryan, *op. cit.*

(2) locality development, (3) local planning, (4) leadership development, and (5) organization development.²⁶

The organizing approach essentially involves increasing the responsiveness of local institutions and agencies by mobilizing poverty groups (and often supporting middle and upper income groups). Possible tactics used by poverty organizations have been classified by Warren²⁷ as collaborative, campaign, and contest strategies. Collaborative tactics are employed when there is agreement on ends and means and community members can work harmoniously together. Campaign tactics are used when some segment of the population needs to be convinced, usually through persuasion, of the advantages of the change being sought. Contest strategies involve the use of social power, such as demonstrations and confrontation. The use of contest strategies by poor people's organizations is based on the assumptions that problems of the poor result chiefly from structural causes and that decision-making bodies are generally unresponsive to the needs of the poor. It is further assumed that since they lack other resources, the most effective power base for the poor is their numbers, their ability to embarrass local leaders and agency personnel, and their ability to disrupt "business as usual." The classic example of the organizing model is, of course, the labor union which has been successful in influencing national policies. This suggests that organization of the poor may be a necessary first step toward structural changes at the societal level.

The locality development approach is often referred to as "community development." A basic assumption is that "community change may be pursued optimally through broad participation of a wide spectrum of people at the local community level in goal determination and action."²⁸ Proponents of locality development tend to assume that the interests of most population segments coincide on important development issues, and they emphasize local initiative, broad-based citizen participation, cooperation, education, and development of skills as means of change. Collaborative and, occasionally, campaign tactics prevail in the locality development approach. Contest tactics are avoided, since they threaten community unity, one of the goals of locality development. The recent concern for developing linkages between local service agencies so they can more effectively coordinate their activities and fill gaps in service delivery is consistent with the locality development perspective, as is concern for developing local economies by attracting industry or developing recreation areas.

²⁶ Three of these five categories are roughly analogous to those presented in Jack Rothman, "Three Models of Community Organization Practice," in Strategies of Community Organization, ed. by Fred M. Cox et. al. (Itasca, Ill.: F. E. Peacock Publishers, Inc., 1970). The organizing approach is similar to his Model C, which he labels social action; the locality development is his Model A, which he also calls locality development; local planning is analogous to his Model B, social planning. The leadership and organization development approaches are not included in Rothman's framework.

²⁷ Ch. 1. "Types of Purposive Social Change at the Community Level." in Truth, Love and Social Change by Roland L. Warren (Chicago: Rand McNally, 1971).

²⁸ Rothman, loc. cit.

In the local planning approach the participation of the general population, and especially the poor, receives considerably less attention than in either the organizing or the locality-development approach. According to Rothman this approach

"emphasizes a technical process of problem-solving with regard to substantive social problems, such as delinquency, housing, and mental health. Rational, deliberately planned, and controlled change has a central place in this model. . . . The approach presupposes that change in a complex industrial environment requires expert planners who, through the exercise of technical abilities, including the ability to manipulate large bureaucratic organizations, can skillfully guide complex change processes."²⁹

A recent well-known example of the application of the local planning approach is urban renewal. This is an especially interesting example, since in some cities planned urban renewal has run into strong opposition from poor peoples' organizations. In many of these cases, housing, participation in decision-making, and employment were crucial issues for the poor.³⁰

Leadership development is a component of the locality development and local planning approaches, but it is not uncommon for programs to be concerned specifically and only with leadership development. This approach is based on the premise that if local leaders had more information on problems and possible solutions and a higher level of skills, they would be more effective in solving the problems of local development. Use of leadership development as an anti-poverty strategy requires the assumption that the interests of local leaders are consistent with the needs of the poor, that where interests conflict the leaders will do what is best for the poor out of altruism, or that leaders can be convinced that certain changes which will help the poor are also in their own best interests. The governmental agency most likely to employ this approach at the local level is Cooperative Extension. Leadership development has also been used as a component of community organizing, to impart skills to potential leaders recruited from the poor.

Organization development includes both assisting to set up new organizations and agencies and restructuring existing agencies to make them more effective and responsive. If organization development is done as an anti-poverty activity, it usually involves working with: (1) agencies seeking to mobilize the poor, such as Community Action Agencies; (2) agencies which provide goods, services, or income needed by the poor, such as social service departments; and (3) organizations which raise funds and coordinate services, such as the United Fund. Organization development is a complex process which usually includes analysis and evaluation of organizational

²⁹Ibid., p. 22.

³⁰Probably the best known example of this was the conflict between the Woodlawn Organization (organized by Saul Alinsky) and the city of Chicago. See Charles E. Silberman, Crisis in Black and White (New York: Random House, 1964), Ch. 10.

goals and the factors influencing organizational effectiveness. While organization development holds no promise of bringing the kinds of structural changes necessary to eliminate poverty, if it is successful in increasing the effectiveness of service delivery agencies, it can help reduce deprivations.

Individual and Family Levels

While we recognize that the causes of poverty are structural (since social systems can be organized so that extreme forms of deprivation are eliminated--e.g., the Israeli Kibbutz),³¹ a complete analysis of poverty in American society necessarily includes individual factors also. While it fails to tell us why poverty exists in the first place, analysis at the individual or family level reveals which individuals and families are apt to be poor--the characteristics of the victims. Many researchers, however, fall into the trap of defining some characteristics of the poor as being the causes of poverty. It is attractive and easy to make this mistake.

To repeat what was mentioned earlier, the most common characteristic of the poor is their difficulty in obtaining adequate incomes. At the individual level, factors related to this characteristic include age, sex, disabilities, and low levels of education and job skills. Some of the poor also have personal problems developed as a reaction to the poverty situation. Victim-blaming attitudes of many workers who "serve" the poor frequently increase the personality problems of their clients.

Most educational and job training programs seemingly are aimed at increasing the ability of the poor to participate in the occupation system. A basic assumption of most of these programs is that if poor persons change not only their skills but also their attitudes and motivation their deprivations will be eliminated or reduced. In a December 14, 1970, article "On Family Assistance" in the Washington Post, Eliot Richardson (Secretary of Health, Education, and Welfare) suggested that it was the policy of the Nixon administration to encourage welfare recipients to accept jobs paying as little as \$1.20 per hour. According to Richardson, "There are presently over 7,000,000 jobs in our economy at less than \$1.60 per hour, and we feel that the experience and skills to be gained from work . . . justify this position."³² In addition to undermining respect for the law and questioning the purpose of a minimum wage, this kind of reasoning both exacerbates the structural causes of poverty and serves to perpetuate myths about the poor. Job training can be effective as an anti-poverty strategy only if it prepares workers for available jobs at adequate pay rates. All too often, such jobs are simply not available.

Programs not directed toward providing income usually provide goods and services or attempt to assist families and individuals in managing resources and coping with problems. These include housing and housing credit programs; medical programs; food programs, including Food Stamps and

³¹Melford E. Spiro, Kibbutz: Venture in Utopia (New York: Schocken Books, 1963).

³²Cited in Goodwin, op. cit., p. 346.

Supplemental Foods; nutrition education; and both public and private case-work and counseling. The goals of certain locality-development and organizing projects include increasing participation, increasing communication and leadership skills, and improving self-images of the poor. Other programs such as Head Start and Title I are directed toward working with children and youth in order to stimulate them and to provide learning experiences which facilitate personality and skill development.

The basic assumption behind most education, training, and counseling programs is that certain skills and personality traits are needed for effective functioning in American society and that the poor lack these. Too often, a concomitant assumption is that the poor are in some way deviant and they, rather than the structure of social systems, must be changed.³³

The structural nature of poverty and research in personality and behavior would seem to indicate that for the poor to be effective in reducing deprivations they must realize that they are not individually responsible for poverty but that they are victims of systematic processes of economic, political, and social inequality and exclusion. Only then will they be freed from assumptions of personal inadequacy and able to change the systems which victimize them.³⁴

Summary

We have now considered the nature of poverty and characteristics of the poor. Causes of poverty and possible anti-poverty approaches have been viewed from the perspectives of the societal, regional, locality, and family and individual levels of analysis.

It was suggested that from the social system perspective, poverty is an aspect of social inequality in which goods, services, power, prestige, and opportunities are unequally distributed among system members. From the individual or family perspective, the poor are characterized by low income-earning ability, deprivation (of health care, housing, education, balanced diet, clothing and other consumer goods), low levels of information, and low levels of social and political participation. Some are also characterized by low levels of self-esteem and feelings of powerlessness.

³³Considering the preparedness of poor children for school and the preparedness of schools for poor children, Ryan states, "Middle class kids are better able to distinguish between words that sound alike, are better able to perceive colors and shapes, and, in imitating their parent's speech, have learned to talk in a style similar to that of most teachers. Thus the middle class child is somewhat better prepared for the school experience than is the lower class child. But it would not be unreasonable to present this proposition in its reversed form: The school is better prepared for the middle class child than for the lower class child." (Ryan, *op. cit.*, p. 35, emphasis added).

³⁴Paulo Freire, Pedagogy of the Oppressed, translated by Myra Bergman Ramos (New York: Herder and Herder, Inc., 1970).

A wide range of anti-poverty approaches or strategies is possible. Those considered in this paper include: economic development (with prime concern for employment), income-maintenance programs, provision of specific goods and services (e.g., housing, health care, legal services), locality development, local planning, organizing, leadership development, organization development, and various one-to-one education and counseling activities. Some of these activities, such as economic growth and organization development, are appropriate at all levels, while income-maintenance programs require either societal or state support.

The major causes of poverty can be summarized as follows:

1. Occupational Structure--A supply of jobs providing incomes sufficient to raise all families above the poverty level is not available in the United States.
2. Insufficient Supply and High Cost of Goods and Services--Needed goods and services, such as housing and medical care, are in short supply and are relatively expensive.
3. Discrimination and Blocked Opportunities--As a result of racial, sexual, ethnic, and class labeling, the access of some people to employment, housing, and other goods, services, and opportunities is restricted.
4. Personal Characteristics--Various individual characteristics make economic, social, and political participation difficult or impossible for some persons. In the absence of programs providing access to needed goods and services as a right, various combinations of these characteristics result in deprivation.

In defining areas for research and potential for change strategies, both the structural causes of poverty by levels of analysis and emphasis on the interaction between levels must be considered. As Ryan suggests:

"The crucial criterion by which to judge analyses of social problems is the extent to which they apply themselves to the interaction between the victim population and the surrounding environment and society, and, conversely, the extent to which they eschew exclusive attention to the victims themselves--no matter how feeling and sympathetic that attention might appear to be. Universalistic analysis will focus on income distribution as the basic cause of poverty. . . . It will focus, not on problem families, but on family problems; not on motivation, but on opportunity; not on symptoms, but on causes . . . not on adjustment, but on change."³⁵

³⁵Ryan, op. cit., p. 248.

APPENDIX

In Analyzing Anti-poverty Approaches It Is Useful to Consider:

- A. The goals which the approach is attempting to attain.
Income, services, information, participation, power?
Does it meet basic needs?
- B. The system level on which change is to take place.
Society, region, locality?
- C. The characteristics of the change agents and the sponsoring agency.
Class level, ideology?
Assumptions about causes of poverty?
- D. The nature of the anti-poverty approach itself.
Economic growth, income maintenance, goods or services, locality
development, local planning, organizing, leadership development,
organization development, one-to-one education or counseling?
- E. The operating style of the approach and the change agents.
Consensus, campaign, or contest strategies?
Involvement of the poor in the program--for the poor, with the poor?
- F. The actual effectiveness of the approach in attaining goals.
Overall?
Differential effectiveness for segments of the poverty population?

W-114: INSTITUTIONAL STRUCTURES FOR
IMPROVING RURAL COMMUNITY SERVICES¹

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Garrey E. Carruthers, New Mexico State University

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The W-114 project design is based in part on the findings of W-105, its Western Regional predecessor project which focused on the description of existing multi-county development areas and structures. The results of W-105 indicated an array of forms of regional development. More specifically, the findings showed such structures varied in purpose (from single purpose organizations such as water districts to multipurpose structures like the Economic Development Districts), local decision-making autonomy (from local membership to professional experts), resources (from privately financed to funded entirely by federal agencies), and staffing (from volunteer to professional).

Prior Research

Two general observations which derive from the work on W-105 have had relevance for W-114 in particular and regional research on the delivery of services in general. Though W-105 was concerned with the delineation of development areas and structures rather than with service delivery, its researchers soon realized (1) that there was a wide array of regional (i.e., multi-county) "development" areas and structures² and (2) that there was a wide variation in the provision of services emanating from them.

¹A word of explanation for the inclusion of a non-Northeastern Regional project in the Workshop review is appropriate. Regional projects must be approved by a committee of experiment station directors from one of the four administrative regions in the United States. Two or more states must be involved in the proposal. The states involved need not be limited to those states that are in the region authorizing the study. Thus, though W-114 was approved as a regional project by the western directors, its membership includes states from each of the other regions: South, North Central, and Northeast. New York is the participating state from the Northeast.

²For a discussion of a suggested definition of development see Wayne Oberle, "A Sociological View of Development," paper prepared for presentation at the Third World Congress of Rural Sociology, New Orleans, Louisiana, August, 1972.

Area and Structural Variation

The first broad observation documented during work on W-105 was the wide array of regional development areas and structures. The stimulus for multi-county, metropolitan, and regional development programs and their implementing structures has been clear for some time. But, with the possible exception of Economic Development districts, the choice of territory to include in the area, the nature of the goals and purposes of the organizations, and even, to a degree, the formal structure of the organizations has been a no-man's land of trial and error.

The interrelatedness of the problems that lead to regional development structures has been recognized but often ignored. Even now, school districts seldom develop occupational training to fit their areas. Some hospitals still vie for levels of care beyond their needs. (Still, there is apparently a great deal more rationality in the medical field than most others. Regional health planning organizations, stimulated by federal funding, have begun planning programs to service whole areas.) However, many regional planning and development programs have also been built on a realistic assumption that there are "levels of service" that ought to be specified. The "levels of care" concept in the medical area is an illustration. Overcoming the criticism of uneconomic duplication of services is but one basis of this form of planning.

Variation in Services

The literature supports the second observation that the delivery of services varies from one service to another, from one geographic area to another, and from one point in time to another. There has been little hard research on the precise nature of various personal or organizational factors related to intra- or inter-regional variation in the delivery of various types of services. Nevertheless, the literature does suggest that ethnicity and income are important factors. It also suggests that rural residents have more difficulty obtaining access to health or medical services--often administered in large urban centers--than do their urban counterparts. The ability of small-town or rural residents to obtain even primitive health or medical services cannot be presumed.

Current arguments over the bussing of school children illuminate two other sources of intra- or inter-regional variation in the delivery of regional services. One is the variation in the ability (even apart from willingness) of local service organizations to provide adequate services. For example, the quantity of economic resources available in the public and private sectors of an area directly affects the ability of the structures within the area to provide various kinds of services.

Another source of intra- and inter-regional variation in the provision or delivery of services is structural. That is, the differences in social organization are also significant. The configuration of horizontal and vertical linkages is related to structural differentiation in general and to the occupational and other role specializations of the individual in particular. Accordingly, some current W-114 related research efforts are based on the proposition that as a community obtains greater

diversity in its economic, social and political life and as this diversity is used to increase the sharing of knowledge and information, there will be a marked increase in the ability of local structures to provide and deliver a wider array of goods and services. In turn, the structural "maturity" of the community is likely to be related to such factors as the extent to which different population segments participate in the affairs of the community, the form (qua structure) of the leadership system, and the degree of homogeneity of the area--as measured by the diversity of ages, ethnic and nationality groups, etc.

Taken together, the mix of economic, social, political, and demographic characteristics are what we call the "institutional"³ patterns that underlie the ability of the locality to provide services. The population characteristics, the economic base, and social organization are to a large extent "given" for a specific locality but vary from one locality to another.

As was mentioned at the outset, there are also characteristics of the formal organizations to be considered. Presumably, these latter attributes are much more malleable--i.e., capable of being changed. Examples include the nature or the purpose of the organization, the size and expertise of its staff, the level and source of resources available to it, the form of local control, the "mix" of public and private sector representation, and control within the organization.

The Research Problem of W-114

It is out of this background that the objectives of the W-114 project were derived. In their formal statement, the five objectives of the research were stated as:

1. To identify the configurations of institutional structures, including the elements of the economic, demographic, and social organization which affect the provision and delivery of community services: governmental, health, educational, welfare, planning, and others.
2. To define objective measures (indices) of adequacy for several community services.
3. To determine the existence and adequacy of community services provided in the selected rural development areas.
4. To determine the relationship between the configurations of institutional structures, as determined in Objective 1, and the existence and adequacy of community services, as determined in Objective 3, especially those relationships which enhance or impede the provision of these services.

³We use the word "institutional" here in its usual sense to refer to the patterned set of relationships that characterize some system. We specifically do not wish to get into the political argument which infers any necessary virtue from these persistent patterns. To determine their existence is important; their continuity may not be.

5. To identify the policies, alternative patterns of organization, and conditions which are requisite for effective planning and coordination for the delivery of community services.

Diagrammatically, Figure 1 shows the main variables. Three dimensions of the institutional patterns are shown, together with the elements seen as their essential components. The more "dynamic" organization variables are also depicted, as well as the final outcome, the adequacy of services.

The research process is also depicted in components, though of course we recognize that if we are to reach any of these goals, extensive methodological refinements are necessary.

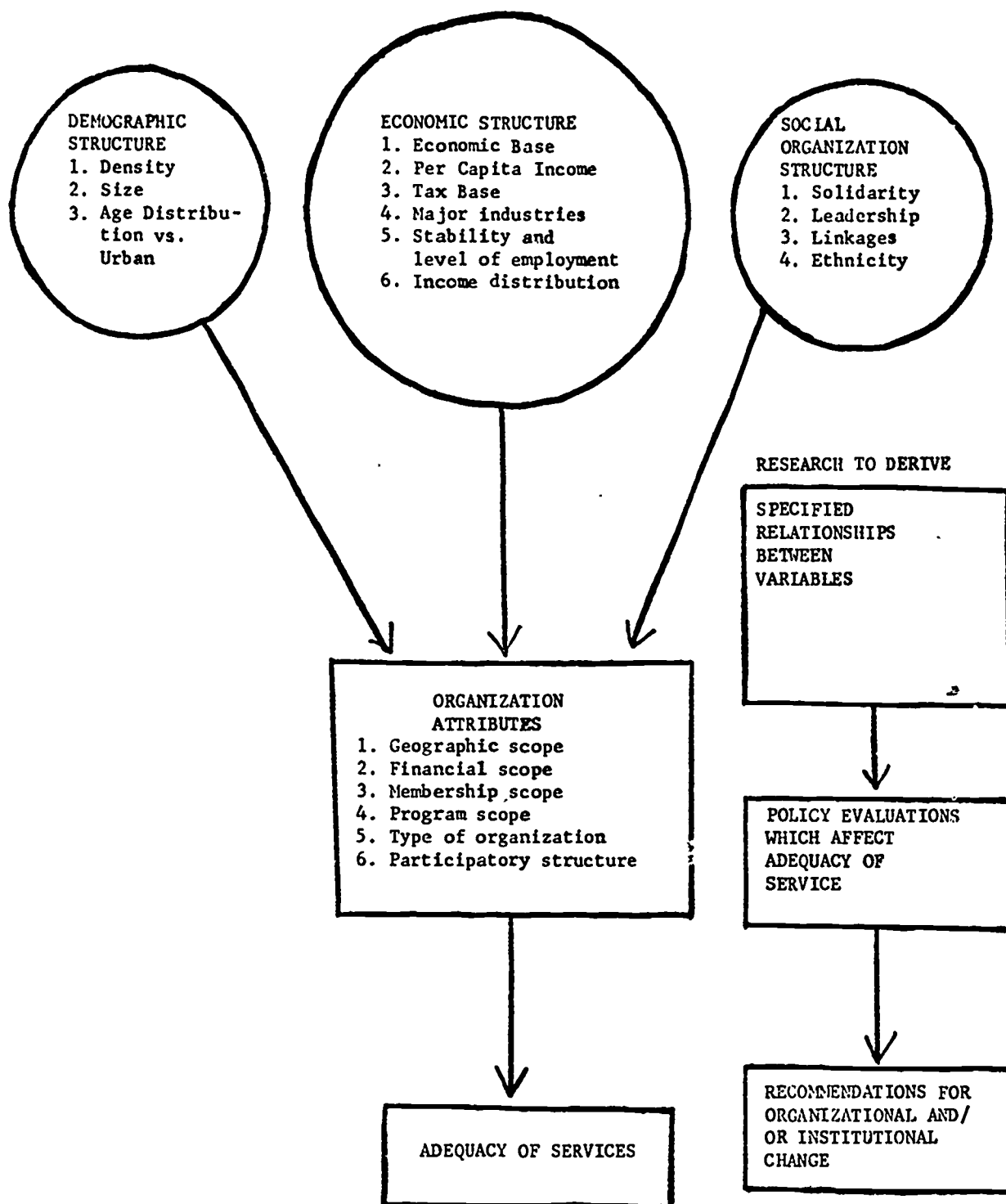
Within these five objectives there are four types of research concerns. These are:

1. The methodological issues of specifying and obtaining adequate data on the institutional configuration variables. These include the demographic structure, the economic base, and the social organizational structure of an area.
2. The methodology of obtaining parsimonious information on the dynamics of service delivery, especially the organizational characteristics that are associated with certain service delivery situations.
3. The methodological problems associated with definition and measurement of the adequacy of services.
4. The evaluation of the relationships of the above variables and of the policy implications of certain inter-relationships.

The Research Procedures

As is so often the case with the regional research process, there are two broad types of difficulties that face the researcher. First, there is the problem of delineating a neat, well-integrated conceptual design when several people from different disciplines, or even from the same discipline, are involved. Second, there is the difficulty of management of regional research. By "management" is meant the entire set of facilities that make a research project succeed: funding, organization, inter-scientist communication, decision-making regarding the conceptual delineation (e.g., comparative vs. case study research designs, etc.) and others.

W-114, like most other regional research projects, has problems of both these types. Not having sufficient time to fully achieve an integrated conceptual design, the project members divided into three main subgroups. One is concentrating on the adequacy-of-service problem. This group is working on the measurement of the delivery of one service to the household unit. They will follow this with the analysis of the total "mix" of health services at the community level. The second subgroup is concerned with two issues: (1) the measurement of organizational structures and (2) the determination of leadership structures in rural areas. The way in which problems are defined and solved will also be analyzed.



Key:
 circles--represent
 the institutional,
 i.e., more persis-
 tent patterns
 boxes--depict the
 more manipulatable
 patterns and activities

Figure 1. W-114, "Institutional Structures for Improving Rural Community Services."

The third subgroup is using social indicator techniques as a means of grouping the many units of data in a more efficient fashion.

Each of the tasks is individually justifiable. They are also conceptually interrelated, as we illustrate in Figure 2. The current researches we are about to describe are pilot studies, and our interests are mainly in the methodological and conceptual problems that need to be overcome. Our immediate research objective is to develop an analytical framework for evaluating the provision of rural community services. At the same time, the research will explore the institutional conditions under which hypotheses will be upheld, modified, or rejected.

Current Research Efforts

Adequacy and Rural Health Care

An interdisciplinary team is currently involved in a rural health care study. This study uses a proxy for adequacy of medical services (A_K in Figure 2) which is based on the difference between the utilization measure of services (U_K) and the need for services (N_K). It is hypothesized that adequacy of health service will be influenced by certain characteristics of the household units within the community, by the number and type (when considered together--the mix) of medical services available in the local community, and by the number and type of medical services available in neighboring communities.

The variations in the household unit which are being considered include size of family, age of family members, educational achievement, incidence of chronic health problems, ethnicity, income, access to medical alternatives through transportation, distance from the medical services, and place of residence (rural or urban).

The other two independent variables--the two "mix" of medical service variables--are also posited to have a relationship to adequacy of service. Thus the higher the order of medical services (the greater the number, the wider the diversity, etc.) in or nearby a community, the more likely it is that a family in that community will have adequate services.

The mix of medical services will also be treated as a dependent variable related to various sets of institutional and organizational variables. This relationship is being researched more directly in other projects this summer.

Types of Organizations

Studies of the types of organizations which are active in the provision of selected services are also being conducted. The following is a list of the organizational attributes and of the public-private linkages being enumerated in that study.

Organizational Variables

1. Geographical scope (e.g., number of counties, areas, etc. covered)
2. Financial scope

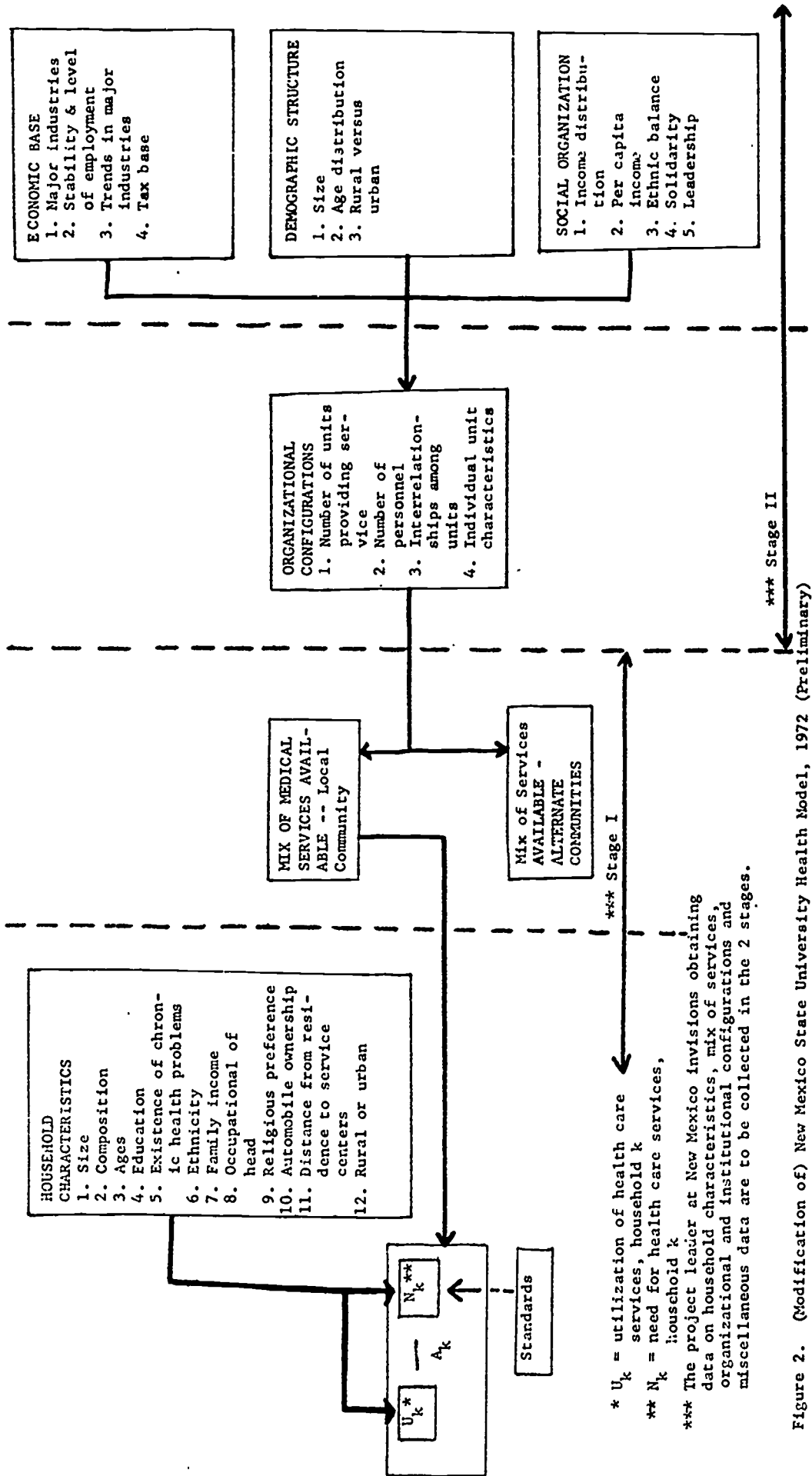


Figure 2. (Modification of) New Mexico State University Health Model, 1972 (Preliminary)

- a. Size of annual budget
 - b. Source of finding: amount and percent of support that is local, state, or federal
 - c. Description of how funds are obtained
 - 1) Fledges
 - 2) Solicited contributions
 - 3) Payroll deductions
 - 4) Fund-raising events
 - 5) Other methods
3. Membership scope
- a. Number of members
 - b. Names of members
 - c. Elected vs. appointed type of membership
 - d. Financial condition of various members
 - e. Representativeness: Who does the top positional leader represent?
4. Program or project scope
- a. Exact names
 - b. Years of existence
 - c. Number of people (i.e., clients) helped or served
 - d. Geographical scope (e.g., community, county, multi-county, etc.)
 - e. Recent innovative programs or projects
 - f. Type of service or aid provided
5. Type of organization
- a. Private
 - b. Public
6. Decision-making structures
- a. What individuals or structures recommend?
 - b. What individuals or structures decide?
 - c. What non-member groups in the community or area have regular inputs?
 - d. What members serve on the board or executive council?
7. Organizational attributes
- a. Size of staff
 - b. Existence of planning unity
 - c. Linkages
 - 1) Vertical
 - 2) Horizontal
 - d. Goals
 - 1) Instrumental
 - 2) Expressive

The guiding hypothesis is that the greater the number of local voluntary (private) linkages between and among organizations and the greater the number of extralocal linkages between and among individuals and organizations, the more likely it is that programs will be initiated and implemented to provide needed services. Stated in the conceptual terms of Roland Warren: the greater the number and strength of horizontal and vertical linkages, the greater is the likelihood that more adequate services will be delivered.

Note that this relationship is the second order one, or a macro one, of the design drawn in Figure 2.

Leadership Structure

The third research task being undertaken currently is that of leadership structure. Here three different stations are observing the personal and organizational attributes of individual leaders. In addition, they will attempt to determine the basis upon which leadership is attributed, the longevity of leaders, and the role of leaders in relation to one another and the organizations of which they are a part. The end result should be a determination of the leadership structure in three different institutional settings. All observations of decision-makers are being made in the context of specific decisions which have led to some level of service provision in the area.

There are significant structural features of rural America that need to be documented. The current leadership research is but one illustration of a phenomenon that very much affects the provision of services. Many strategies of change are built upon the assumption that increasing linkages among the system units--for example, by increasing participation of formerly non-participating groups in decision making--will substantially increase and improve the quality of those decisions. Persons presently participating are certainly not characterized by a consistent structure from one locality to another. That is, leadership systems are not always characterized as monolithic elites. Nor are they always characterized as pluralistic, or competing sets. In addition to these structural components, the issue of the basis upon which participation in a decision takes place also varies. It includes, surely, the position an occupant holds in the structure--either economic or political--as well as the reservoir of influence he may have accumulated from other sources.

What is needed is comparative documentation of these structural variations and their implications for the decision-making process. We do need to know the conditions under which the quality of services which are provided in a locality setting is changed.

Social Indicators

National Income Accounting is one method of measuring the effectiveness of allocating scarce resources so as to best satisfy people's wants. Useful as it is in determining economic policy, it describes only economic relationships and does not account for social needs and objectives. There is no social accounting method which is equivalent to, for example, the Gross National Product. The New York State Data Bank Project is one of the pilot attempts to integrate social data beyond the gross economic level.

One of the W-114 researchers is currently exploring the use of social indicators for purposes of our research objectives. Sharing his argument, and this phase of our work, is quite appropriate.⁴

⁴The following is selected from a May 1972 paper by T. Tjersland, "Social Indicators: Measures for Establishing Goals and Priorities of Social Needs (A Third Working Paper)."

"Only a small fraction of existing national statistics tell us anything about social conditions, and those that do often point in different directions. With the current emphasis on environmental and human problems the need arises to incorporate social considerations into decision making.

"We need social indicators . . . because of their value in adding a new dimension of national life to our policymakers' decisions. By providing insight into how different measures of national well-being are changing, policymakers might ultimately provide a better evaluation of what public programs are accomplishing and hence aid in establishing better goals for the future. A social indicator may be defined as a 'statistic of direct, normative interest which facilitates concise, comprehensive, and balanced judgments about the conditions of major aspects of a society.' It is in all cases a direct measure of welfare and is subject to the interpretation that if it changes in the 'right' direction, while other things remain equal, things have gotten better, or people are 'better off.' (Taken from 'Toward a Social Report,' U. S. Department of Health, Education and Welfare, 1969.)

"One of the difficulties with social indicators is that there are no objective weights equivalent to prices that we can use, e.g., to compare the importance of an improvement in health with an increase in social mobility. Hence, we must proceed by intuition, working in each area where the need to improve the quality of life seems obvious.

"Finally, social indicators could bring many of these issues into sharper focus and provide the information and analysis needed to foster action. Once the extent of the problems is known, the social indicators and the recommended social goals could serve as the basis for discussion for the establishment of national priorities. There will always be a scarcity of the resources needed to solve all the nation's ills. A clear statement of the social problems and the social goals could point the way for the differential emphasis of needs on a range of competing demands. . .

"Format of the Social Indicators

"Many of the problems and issues with which social indicators must deal are difficult to quantify. Because of these difficulties, the specific indicators and modes of analysis must, at the onset, be considered experimental. They must remain so until we can be assured that we have found the indices which truly reflect the social state of the nation.

"There are, however, separate but interrelated steps which may be followed in the development of social indices. There must be a continuing process of (1) developing the indicators, (2) analyzing the relevant factors, and (3) establishing social goals. Once the appropriate social indicator has been developed, the data must be analyzed both in terms of the factors which explain why a societal factor is at its current level and in terms of the requirements for improving the conditions.

"The final component of Social Indices and probably their greatest contribution is the recommendation of goals and objectives. While considerable work has been done in developing separate indicators and analyzing the reasons for their being at a particular level, little attention has been paid to the establishment of national goals. . . .

- "Construction of the indicators requires the following steps:
- 1) specification of the areas of concern for which the indicator is to be developed;
 - 2) selection of the unit of analysis;
 - 3) collection of the relevant basic statistics with which to construct the summary statistic;
 - 4) construction of the indicator by aggregating the basic statistics."

A pilot effort utilizing data on nearly 200 variables on each of the 350 counties in the 11 northeastern states (source, the New York State Data Bank) is being undertaken. With this data some methodological procedures for aggregating the basic statistics will be tried.

Summary

By the end of this summer the research committee will have the following data in hand:

1. Data on the relationship of selected household characteristics to adequacy of services at the household unit, and data on the "mix" of health services in each community.
2. Data on community organization and/or programs that deliver selected services.
3. Comparative data on leadership structures.
4. The results of the pilot study of social indicators.

In addition, there are plans for this fall to use secondary sources to obtain estimates of the institutional configurations. When this research phase has been completed, similar data can be obtained at other sites.

The plans are, after this initial emphasis on methodology, to select 6 to 10 carefully chosen multi-county areas--enlarged from the county unit, incidentally--within the participating states, probably utilizing the social indicator data, and conduct fully integrated field research for careful comparative analysis.

Ultimately, we would hope that from these comparative observations we can say something about the chance of success or failure of some organizational configurations as they exist in the context of other structural conditions of communities.

NE-77: COMMUNITY SERVICES FOR NONMETROPOLITAN
PEOPLE IN THE NORTHEAST

Samuel M. Leadley

The Pennsylvania State University

Research Problem and Objectives

Rural Development and Community Services

"The purpose of rural development is to create job opportunities, community services, a better quality of living, and an improved social and physical environment in the small cities, towns, villages, and farm communities in rural America."² One component of rural development is the continuing improvement of community services for nonmetropolitan people. It is on this component that NE-77, as this project is known, focuses.³ The concentration of our attention on community services does not mean, however, that we are afflicted with a peculiar type of tunnel vision. Quite the contrary is true. We view rural development as a broad and complex set of processes involving all of the factors represented here at this conference, as well as others we have yet to identify.⁴

¹The author wishes to acknowledge the support of the NE-77 Technical Committee members. Charles Crawford, Eugene Engel, Nelson LeRay, and Robert Sinclair provided invaluable assistance in both editorial and substantive revision of earlier drafts of the paper. Other committee members provided assistance with a critical review of the paper in the later process of its development; where appropriate, their suggestions are noted in the body of the paper. Although the paper attempts to reflect the project participants' thinking in a collective sense, the errors of omission and commission are solely those of the author.

²U.S. President's Task Force on Rural Development, A New Life for the Country (Washington, D.C.: Government Printing Office, 1970), p. 1.

³Rural development is seen as a set of processes one of which is the improvement of community services. Community services development, if it may be referred to as a process, includes not only the upgrading of physical facilities but the development of more complex social structures and the addition of requisite human resources to make the service-delivery systems function effectively.

⁴The factors represented at this conference include industrialization, intervention programs for solving the problems of the poor, natural resource use, population characteristics, institutional structures and community attitudes, and environmental protection.

Also, we recognize as important the interaction of those variables which hinder or facilitate the improvement of the quality of rural living. Operationally speaking, the complexity of the processes and the interaction of variables of which I have just spoken mandate a cooperative interdisciplinary approach to rural development research. It is within this orientation of cooperation with other regional research projects that we have chosen to turn our attention to the community services sector of the larger rural development arena.

Philosophy of Research Management

Before considering specific objectives, let me explore with you several of our ideas about research management. Our first concern is that we include variables that can be changed or managed. For example, rather than focus solely on age and bemoan the fact that people grow older, we want to include analysis of institutional changes in communities that would better serve the needs of the aging.

Another concern was that we examine both short- and long-term alternatives. On one hand, at times in the past we have responded to crises with stop-gap research and recommendations that too frequently have been a new source of crises. On the other hand, the temptations of theoretical analyses have diverted some of us into work with extremely long payoff expectations. Too great an emphasis on either short- or long-term alternatives for improving community services would be an error.⁵ Perhaps the solutions we seek will be found only in an integration of more immediate remedies (1-2 years) with those requiring a decade or more for their implementation.⁶

It was also a concern that the research audiences be identified carefully and specifically in both the public and private sectors. We were aware of the need for selling our research output. That is, building ties in both the private and public sectors before we are locked into an irreversible research design allows us to not only identify the information most needed but also see that it gets to those who would be most likely to use it. For example, Dr. Crawford will be participating later this year in the rural health services conference sponsored by the National Center for Health Services Research and Development of HEW. Through maintaining contacts such as these we hope to increase access to both needs for research and action growing out of research findings.

Further, we reject a fragmental approach to research. Just as was noted earlier with our concern for cooperation among regional rural development projects and for interdisciplinary involvement, community services research must at some point focus on the whole thing, the entire community. The total package of services, or one might call this "the community service mix," is, therefore, a continuing focus of attention for NE-77.

⁵Personal communication with Christopher Babb.

⁶Personal communication with James Longest.

Objectives

This research philosophy suggests that in some way we wish to apply the methods of science in order to improve the services element of rural living. Knowing of our commitment to the scientific method does not, however, assist greatly in building an understanding of our specific research design. So let me first take the role of a community and resource development agent in evaluating our objectives. He might say that in order to improve community services we don't need more high-sounding goals; rather, we need some priorities and workable change strategies. The change agent might raise questions like:⁷ "Which services ought to be upgraded first?" "Which improvements will result in stagnation or decline in other services?" "What changes are possible?" "What levels of development are we going to need in one service to enable us to move ahead in other services?" "What is the balance of positive and negative consequences for a proposed change?" "How might the change be initiated in the community?" These questions are provocative and difficult to answer. They, along with the research philosophy stated earlier, are the antecedents to the project objectives set out as the NE-77 working framework.

The specific objectives for NE-77 are:

1. To determine and evaluate the type, location, distribution, accessibility, and organizational, financial and quality variation in services for people of the nonmetropolitan Northeast;
2. To determine interrelationships and explanatory factors with respect to the delivery of these services; and
3. To identify alternative institutional arrangements for the delivery of community services and to estimate the political, social, and economic consequences of these alternatives now and in the future.

Cast in the language of research methodology,⁸ the first objective relates to the description of dependent and control variables. The second is concerned with identifying explanatory variables and the coefficients by which they are related to the effect or dependent variables. The final objective calls for estimating values of these dependent variables under conditions of alternative institutional arrangements.

Let me digress at this point to mention several connotations implicit in the project's objectives. Although the first objective is clearly descriptive in nature, the string of seven characteristics contained in it tends to overshadow other concerns. We are interested in the effectiveness and methods of service delivery. An alternative wording for the first

⁷Personal communication with J. Patrick Madden.

⁸Ibid.

objective might sound like this: to describe how services are delivered and to whom they are delivered and to estimate the effectiveness of the institutions presently delivering these services.

The second objective does not openly declare itself as a model-building step, but it is essentially just that. If our informal observations of variations in both adequacy of service and effectiveness of delivery across the twelve-state region are empirically confirmed, our subsequent search for explanatory factors will involve the use and refinement of conceptual and statistical models.

The implicit meaning of the third objective may not be immediately apparent either. Our emphasis on the phrase "now and in the future" was meant to convey our interest in synthesized systems. Such systems will be constructed from present economic and sociological theory as well as futurist literature.⁹ Special attention is to be paid to institutional arrangements for financing the services and representational and legal relations between consumers and providers. That is, our thinking is not to be limited to existing forms of organizing people and resources to deliver services. Further, we indicated that we hope to estimate the consequences of the adoption of different institutional arrangements, including both direct effects and indirect political, social, and economic effects. We see each potential institutional arrangement being analyzed in terms of the distribution of costs and benefits, its efficiency of delivery, and representation of various groups of citizens and efficacy in reconciling their conflicting views and values. These consequences should sound familiar to you because they are part of the larger goals of rural development.

Let me summarize what has been said so far. In NE-77 we started with a particular research philosophy and a number of development-oriented questions: They helped define the area of work. With the specific objectives we set out to describe variations in community services, explain variations therein, and thence to estimate the consequences of adopting alternative institutional arrangements. We believe the improvement of community services is part of a larger rural development process. Both action and research need to fit together to accelerate the process. As another researcher recently quipped, "Action without research into needs is folly and . . . research into human problems without action is stupidity."¹⁰

Project Structure and Progress

Present Project Structure

Ten Northeast experiment stations are participating with approximately six total scientific-man-years (SMY) committed to NE-77. Services

⁹See, for example, Alvin Toffler, Future Shock (New York: Random House, 1970); Donald N. Michael, The Unprepared Society: Planning for a Precarious Future (New York: Harper, 1968); and Donald N. Michael (ed.), The Future Society (New York: Aldine, 1970).

¹⁰Marvin B. Sussman, "Family Systems in the 1970's: Analysis,

considered for inclusion for description and analysis (Objective 1) were housing, transportation, employment opportunities, education, medical and health services, welfare, protective services, recreation, and planning. It was clear that only a small number of services could be at all adequately dealt with within the project's SMY commitment. Taking into consideration criteria such as interests and abilities of participating researchers, activities of other Northeast Regional Research Projects, and the apparent need for new answers to current problems, four areas were tentatively selected: education, health, housing, and welfare. Standing committees were set up to work in these four areas. Each group was charged with the initial responsibility of preparing a summary of secondary data on their service in light of the project's first objective. We have committees currently working in three of these four areas: education, health, and housing. After preliminary work, our initial thrust into the welfare area has been temporarily sidetracked in favor of resources going to NE-68. Further, a standing procedures subcommittee was established. The committee was charged with providing overall direction for the project when coordination is necessary.

Project Progress

The procedures subcommittee wrestled with defining for this project "the nonmetropolitan population" in the Northeast. After considering the consequences of alternative definitions, the committee adopted for the criterion of "nonmetropolitan" a 30 percent level of nonurbanized population in a county. An additional concern was with the collection of secondary and primary data. Recognizing the advantages of abstracting secondary data at the lowest level of aggregation possible, the committee recommended collection at this level. We have discovered that units for which educational, health, and housing data are reported vary, including towns, villages, counties, and multi-county areas.

Also, the procedures subcommittee studied several ways of tabulating and presenting descriptive data. The committee recommended that two kinds of frequency distributions be compiled. The first were distributions of service units by such characteristics as size of unit, number of clients served, dollar input, number of employees, number of potential clients within the unit's service area, expenditure per client, clients per professional staff, and proportion of potential clients receiving this service. The second frequency distribution was of political units. In this case we were looking at characteristics such as number of nursing homes per thousand of population over 65 years of age and proportion of households living in substandard housing. The format for presentation is to take two forms. While all the secondary summaries will be published in tabular form, only selected characteristics will be presented on maps.

The committee has also proposed a sampling strategy for the collection of primary data. Identified were three dimensions for site selection: (1) direction of population change; (2) direction of family income

Policies, and Programs," The Annals of the American Academy of Political and Social Science, CCCXCVI (July, 1971), p. 51.

change; and (3) adequacy of educational, health and housing services. The first two dimensions have three classes each and the third has two classes. We have, therefore, a 3 x 3 x 2 (18-cell) framework for the selection of communities for primary data collection. Unresolved is the problem of selecting research sites such that the data collected for this project is cumulative with work on other projects, thereby providing a more adequate base for subsequent local planning and action. I might note here that the primary data collection activity is aimed at the second project objective; namely, to determine interrelationships and explanatory factors with respect to the delivery of community services.

Planning an integrated effort in primary data collection for the entire project is another procedure subcommittee responsibility. Thus far subcommittee input has been received, but, unfortunately, little progress has been made by the committee toward a core instrument for the project.

The education subcommittee selected six variables by which they wish to describe public elementary and secondary educational delivery-systems; these are type, location, accessibility, organization, financing, and quality. Using three time periods--1959-60, 1964-65, and 1969-70--several of the states represented on this committee are presently engaged in tabulating these data. In addition, the subcommittee has drawn up an extensive list of hypotheses appropriate for evaluation prior to model building. The problem of assessing quality or adequacy of educational services has been of continuing concern for the committee. Some progress in identifying literature has been made, and the committee will share a preliminary paper with the total Technical Committee on this subject. Also, this committee is tackling a methodical study using a multiple regression technique for developing something similar to a production function, except that it will be for education rather than in the context of a firm.¹¹

The health subcommittee selected three areas for description; namely, emergency health care systems, physical secondary health care facilities, and health manpower. Concerning emergency health care systems, the committee chose to emphasize the variables of manpower, transportation, communication, and care facilities. These data have been gathered by several states represented on the health subcommittee. Not only will these data be reported for the 245 nonmetropolitan counties of the region, but also for health planning regions. The committee's intent in using these multi-county regions is to tie this reporting of secondary data to ongoing planning efforts. In this case the data are aggregated by social systems that are in action, are moving, trying to improve health care delivery systems. Also, because the boundaries of health care systems tend to cross county lines, health planning regions often include sets of counties with

¹¹Personal communication with Eugene Engel, May 30, 1972; and Lonnie L. Jones, "Organization of Public Service Delivery Systems for Rural Areas: Concepts and Measures," in Working Papers on Rural Community Services, compiled by S. M. Leadley (University Park, Pa.: The Pennsylvania State University, Department of Agricultural Economics and Rural Sociology, 1972), pp. 3-4.

wide variations in facilities and manpower. Reporting by these regions will, therefore, give a more accurate picture of the operating system.

Further, a draft paper analyzing dimensions of health care quality has been prepared and circulated among the committee.¹²

The housing subcommittee chose to focus first on those data available from the 1960 and 1970 Censuses of Housing. Since these data were available for all counties for the twelve-state region, they were processed at one location and will be the project's initial regional publication this fall. Also prepared were two papers on the topic of housing quality;¹³ the committee is continuing to work on this problem.

Further, this committee has taken the lead in the project for developing a primary data collection. Their instrument was circulated among the committee and has received preliminary evaluation by the procedures subcommittee. Secondary data sources other than the Census of Housing are also being evaluated.

Continuing work on a stock-flow model of the housing market¹⁴ may result in a capability to simulate changes brought about by policy shifts.

Future Directions

In the past sixteen months we have been over a rough, sometimes frustrating, and yet challenging road. Now where are we going? Several committee members have suggested titles for this section of the paper including, "Some Problem Areas in the Systems Maze," "A Mixture of Accumulated Research Concerns, Observations, Limitations, and Problem Areas," and "Ideas, Concerns and Viewpoints."¹⁵ Regardless of its title, let me plunge into a discussion of ideas that relate to our use of the concepts "rural development," "service-delivery systems," "adequacy," and "community."

Concepts

First, let us consider rural development defined as a process rather than a point at which one arrives. This emphasis on process has special meaning. With this orientation we are more inclined to think of development

¹²C. O. Crawford, "Working Paper on Evaluation of Quality of Health Services," April 6, 1972.

¹³Christopher Babb, "Housing Quality: Measurement and Assessment," in Working Papers on Rural Community Services; and Christopher Babb, "A Working Paper: Measuring the Adequacy of Housing," May, 1972 (Xeroxed).

¹⁴Babb, "Housing Quality"; and Christopher Babb, "Research Objectives of the Housing Subcommittee in NE-77" (Xeroxed), pp. 4-7.

¹⁵Personal communication with Christopher Babb, Harry Mapp, and Peggy Nims.

in terms of dynamic models rather than static models or more in the sense of a recursive programming mode rather than a single pass.¹⁶ This means that we should anticipate repetitive data collection and that time-series work or longitudinal studies will be emphasized. Further, we are more inclined to collect and analyze data concerning how institutions provide services rather than to pay attention solely to the obvious outputs of the institutions. Perhaps another way of saying this is that we want to be especially sensitive to the by-products or latent forms of output from institutions. With the current emphasis in large-scale organizations toward means of "humanizing" their relationships with consumers, our concern with process is timely.

In addition, this wider orientation which includes process as well as traditional end-product leads us into community decision-making regarding the allocation of social, economic, and physical resources to an array of public demands for more and better services. How these services will be provided, and how representation of consumers as well as providers will be structured are currently unanswered questions.

Further, the setting of goals in the context of the larger community service mix (a package of services available in the community) is a necessary element in rural development. Goals are needed for establishing a desirable community service mix. There are both direct and indirect components of the community that influence the goal-setting process, such as the characteristics of the population and their needs, agency activities, institutional constraints, existing personnel and agencies, and extra-community legislative pressures. We need to more clearly explicate, however, the nature of this goal-setting process and its role in establishing service mix goals.

Second, let us consider the idea of community service delivery systems. While this phrase is tossed around lightly in conversation, it is heavily weighted down with conceptual freight. That is, if our substantive committees on education, health, and housing set out to describe service delivery systems in each of these three areas, they must recognize a number of definitional limits: (1) each of these systems is identifiable and has at least social if not biological and physical boundaries; (2) each of these systems is comprised of a set of interrelated parts that are sensitive to each others' action; (3) each of these systems is in part an open system exchanging resources actively with its environment; and (4) each system must have some adaptive capacity to respond to changes in its environment. These definitional elements from systems theory may result in a number of strong constraints on the nature of data collected and the forms of analysis attempted.

One of the interesting aspects of systems analysis is a comparison of system characteristics for three areas--education, health and housing. In education we are familiar with public school systems and their relatively clear attendance boundaries from within which they draw their clients.

¹⁶This is not to suggest that we either have such dynamic models in hand or are experts in their construction. Like other pragmatists, we probably will end up using static models more often than dynamic ones.

Further, we know that if the chief school administrator is effective, the many parts of that system are sufficiently well integrated into a whole so that what happens in one building or one section has its effect on the rest of the system. In health we are familiar with the hospital as a functioning organization. The client boundaries in this case, however, are not as well defined as in education. Further, the hospital provides only a part of the medical services needed by the population. Primary health-care services, typically provided through clinics, nursing services, and physicians in private practice, are also parts of the delivery package. One might raise the question, therefore, "In what ways do we have a system in the health-delivery area or do we have systems?" Where are the boundaries? And to what extent are the several systems responsive to each other? Perhaps the condition of interdependence is in part violated here. Certainly from the point of view of data transfer we can see sharp differences in interdependence between education and health. When a child transfers from one school to another, administrators seem to go out of their way to transfer complete school records from one school to another. In contrast, if any of you have changed physicians within the last few years, you may recall the experience of going through a diagnostic workup more than once because your previous physician did not see fit to transfer your records to your new one.

Finally, in the housing arena it is especially difficult to identify system boundaries, interdependence of system parts, and the system's capacity to respond adaptively to changes in its environment. Fragmentation within the construction, finance, and real estate brokerage business is the root of considerable boundary ambiguity. While the level of integration within these various sectors of the housing industry might suggest the presence of a non-system, the alternative of a market system may be a viable element for analysis.

Increasing the lack of clarity in this area is our awareness that system boundaries appear to vary depending on one's point of view when beginning the analysis. One may start with the consumers and find that they see no system at all. Whereas, using the same service, if one starts with the provider one finds that the provider views the service as relatively well organized, with clearly defined boundaries, and having a moderately high level of interdependence among its parts.

A final complexity dealing with system boundaries is that they tend to be dynamic. Systems are continually involved not only in the process of boundary maintenance but also in contraction and expansion. Certain classes of consumers may be excluded or included, depending on how they affect the system's goal achievement. For example, in cases where efficiency has been stressed and effectiveness of service to a client group de-emphasized, systems have screened clients to increase their desired output at the expense of certain members of the client group. In vocational rehabilitation, one's efficiency rate depends on the patients with whom one starts. If the difficult cases are excluded from treatment, the investment per case in order to achieve successful rehabilitation is reduced and efficiency is enhanced.¹⁷ Further, and perhaps closer to

¹⁷To be fair, however, it is important to note that in some instances vocational rehabilitation has moved to a point system. That is,

home, you may recall that the loss ratio for the Farmers Home Administration has been criticized as being too low. If this agency makes loans to people under especially difficult financial conditions, all other factors being equal, their loss ratio ought to be higher than commercial banks. The agency's poor risks may have been screened out too rigorously if the loss ratio is low. These examples point toward the general proposition that the goal receiving strongest administrative support will have an effect on boundary activities of the system.

Giving rise to further head scratching is the idea of a community service delivery system. We know that systems are linked. These systemic linkages occur between systems in the same service area and across service boundaries. It is hypothesized, for example, that premature residential subdivision in a community tends to divert resources from other services in order to meet needs created by new residents. In this case heavy investments are made in new sewer and water systems or in school buildings rather than in programs of health, education, and social services for the original residents.¹⁸

Going on now to our ideas regarding adequacy,¹⁹ we found that one's point of view makes a considerable difference. A mobile home, for example, may be viewed by the consumer as an adequate form of housing. My secretary, who is recently married, prefers the privacy of a mobile home to that of an apartment of equal cost. Those who provide these homes also have a positive assessment of them. They say that mobile units meet the housing needs of a substantial population segment. On the other hand, many communities view mobile homes as debits. That is, these homes are supposed to generate little real estate tax revenue and create high service demands. More than one community has adopted legislation excluding the use of mobile homes within its boundaries. The definition of adequacy depends in part on one's choice of data source.

There is also concern about the distributional aspects of adequacy definition. That is, while the total supply of a service may be great enough to meet the basic needs of the total population, the equity of this distribution may be such that there are serious unmet needs. In fact, parts of the population may not receive the service at all.

the more difficult the case you start with, the more points you are given. (Personal communication from C. O. Crawford, July, 1972.)

¹⁸Our comments on systemic linkage are not meant to suggest that all consequences are negative. It is quite clear that through both formal and informal linkage in private and public sectors economies of size have been achieved. Many questions concerning system autonomy accompany these systemic linkages. In some areas these issues have been resolved, while in others they continue to be the source of intersystem conflict. In part, this is a reflection of our fragmented approach to community building.

¹⁹The reader is referred here to the papers on service adequacy by C. Babb, G. Carruthers and N. S. Urquhart, P. H. Gessaman and G. D. Rose, P. F. Hernandez, and A. S. Williams in Working Papers on Rural Community Services.

Probably one of the most difficult aspects in adequacy definition for which we have yet to arrive at a satisfying answer is the combination of individual services into a service delivery mix. A community may have a number of adequate services, but because of a lack on the part of one or two critical services may be perceived, either from the outside or the inside, as having an inadequate service base.

Finally, we recognize that definitions of adequacy vary from one segment of the population to another. For example, adequacy definitions for housing vary widely by socioeconomic status because the functions performed by housing vary. Housing for the working class mainly provides shelter; for the middle class it provides not only shelter but recreation in terms of backyards and family rooms; and for upper-class families the home provides shelter, recreation, and prestige. We also know that adequacy definitions in the health area vary by stages of health care. That is, adequacy in the preventive stage is defined by different criteria than adequacy in the stages of diagnosis, treatment, rehabilitation, and terminal care.

The final concept is "community." When we think of community as an arena within which services are delivered, we immediately face the fact that functioning communities are dynamic and refuse to be bounded by political decisions of the past. Old political boundaries continually get in the way of the systems' attempts to adapt to environmental changes. As systems move toward an equilibrium state after environmental change, increasing pressures are brought to bear on existing political boundaries. While at one point in American history communities may have been the arena within which goal-setting for community service delivery systems took place, informal observation and evaluation suggest that goal-setting with regard to the service delivery mix is now a complex interaction between forces within and outside the community.

On another tack, one may use community to define a public for whom access is mandatory for certain services. That is, choice is forgone with regard to certain public services. The fee-for-use system of payment is abandoned in favor of financing through the public sector. While this may not seem to be immediately relevant, we find, for example, that an overemphasis on college preparation of secondary students in the United States may represent a case in point. Choice has been eliminated on the part of many students based on decisions made in the tax-supported public sector by educational administrators. Another illustration growing out of our experience in the Northeast is the environmental control act passed in Vermont, which takes out of the hands of the individual landowner decisions regarding maintenance of certain environmental qualities. Further, if Congressmen Mills and Kennedy are successful in their quest for a national health insurance program, we may well see a stronger federal hand in this area at the expense of individual decision-making.

Finally, at the community level the degree of formality of systemic linkages is extremely ill-defined. If the community is going to be defined as a system, then what are its boundaries, and which of the multitude of its parts are involved in intra-system relations? Alternatively, we might look at systems of communities rather than focusing on isolated communities. Well, let us turn from these individual concepts to several models under current consideration by one or more of the project's subcommittees.

Models²⁰

One conceptual model for community services research comes from social systems theory as applied to community systems. This theory postulates that all systems must deal with four classes of problems in order to survive: adaptation, goal attainment, integration, and latency.

The adaptation of a system is to its physical, biological, psychological, cultural, and social environments. Adaptation is often assigned to the economic sector for solution. Goal attainment deals with the setting of goals and the allocation of the system's resources for their attainment. This is usually delegated to the political arena. Integration is the problem of keeping the new recruits to the system filled in on the roles, rules, and relationships of the system. Since this is the process of socialization, for the young the schools play an important part, while mass media and occupational contacts are important for adults. Finally, latency problems refer to the maintenance kinds of activities needed by individuals, groups, organizations, and communities. The responsibility for the solution for these problems is spread diffusely across many different kinds of systems in our society, including the family, fraternal organizations, counselling services, religious institutions, and others.

Using this four-problem approach, we might ask the question, "How do the service delivery systems under study contribute to the solution of these four problems in a community?" The rows in the accompanying figure represent social systems; each system provides a kind of service to community residents. Each of the columns represents one of the four systemic problems.

The cells in Figure 1 may be filled in with estimates of each system's resource allocation to the four problems. For example, while most of an education service delivery system's resources are devoted to integration problems, there would be a small fraction of that system's resources allocated to goal attainment as well. Perhaps very little of that system's resources would be used in solving the problems of adaptation and latency. These estimates direct our attention to different data sets embedded in varying community situations.

Further, the system property of interdependence is highlighted here. Several service delivery systems may be making allocations to a single systemic problem. We should collect data on systemic linkages among these service systems.²¹ We also should direct our attention to some measure of an adequate allocation of resources to each of the problems in an aggregate sense. This is where the concept of service mix is essential. Within the

²⁰No claim is made here that these models are of a uniform nature with regard to levels of generality, abstractness, and applicability. Or, to put this disclaimer another way, this section is clearly a mixed bag of goods.

²¹Of considerable potential here may be the work of Harry Mapp, "Proposed NE-77 Research--Financing Community Services," May, 1972 (Xeroxed). In this proposal he suggests the utility of (a) determining the level and purposes of expenditures, as well as the levels and sources of revenues, for public entities providing community services in the Northeast; (b) determining the fiscal capacity and effort of the various public entities providing

Service Delivery System	System Problem			
	Goal Attainment	Adaptation	Integration	Latency
Education				
Health				
Housing				
Others				

Figure 1. Service Delivery Systems by Systemic Problems

community setting we have a hunch that the nature of the mix may be the most significant characteristic valued by individuals, families, and organizations. That is, while the quality level of individual services is certainly of concern to all of us, it is the combination of all of these services together that defines the opportunity for services over a wide range of variations and needs that result from differences in life style, family life cycles, age, and sex.

In addition, we have been searching for possible commonalities that would allow us to estimate the consequences of transfers from one service delivery system to another. One suggestion has been to look at alternative financial arrangements under which community services are being provided. Since we know that aspirations for services are nearly certain to exceed the payment ability of the community, the balancing of one service against another in a financial sense may be one approach to mix analysis.²² Other variables considered as potential common denominators are program, personnel, and physical facilities.

Let me turn to another model that is again quite abstract and comes out of an alternative source of theory--welfare economics. This model attempts to estimate the trade-off between quality/adequacy of a service or the total service package and how much the individual/family/organization is ready to pay or sacrifice in order to consume (use) that service. Note in Figure 2 that AB represents the transformation curve between services and numeraire (e.g., real money income), I_0 represents the individuals'/families'/organizations' preferences for services and numeraire.²³ $L_e N_e$ is the equilibrium level of consumption/use of services for the individual/family/organization and indicates for that unit and specific level of resources where adequacy is optimized. It is significant to note here that with regard to real population, the greater their income and the greater the numeraire. This model highlights the challenges of defining quality or adequacy. One such challenge is developing a methodology that accommodates differences among individuals or families in the level of services desired. That is, a level of a service that seems completely inadequate to a professional panel of judges may be perceived as an optimum level by the families actually using the service.

Also significant is adequacy of service mix. If one looks at adequacy of service mix rather than adequacy of a single service, it is possible to think, for example, about the trade-offs that might be made between health services for improved adequacy of services in the housing area.

services; and (c) identifying social and economic characteristics of the community which may be used to explain disparities in levels and purposes of expenditures and in sources of revenue across the study area.

²²On the other hand, we recognize the need to think more widely than the boundaries of one community when analyzing community resources. This analysis format takes into account the cases where the area from which the resources are drawn is not the same as the base of control (personal communication with James Longest, July, 1972).

²³The AB transformation curve may be complimentary at one or both ends.

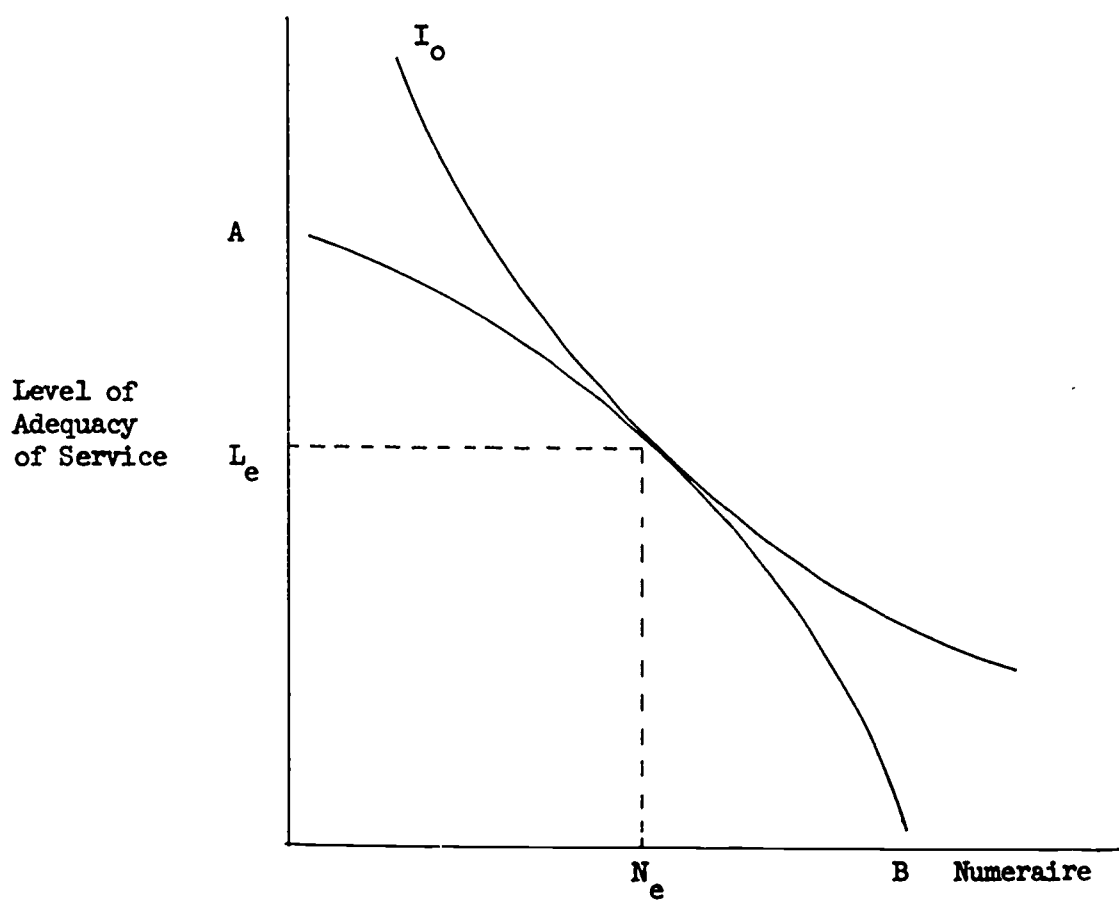


Figure 2. Service Adequacy Optimizing Model

Another possible model that is being considered is a housing stock flow model. This construct assumes that housing quality has two independent dimensions, style and physical condition. Set within the context of the total housing market, it assumes that there is a filtering-up process that occurs as new housing becomes available. Taking into consideration style obsolescence and maintenance expenditures, the model estimates stock flows over time. While present simulation experiments with this model are limited to stable communities by the assumptions of the model, modifications are under way in order to accommodate more complex situations. Even before it was used empirically in the housing subcommittee's work to simulate the impacts of alternative housing policies, this model was productive in the conceptualization of the housing delivery process. For example, it has brought more sharply into focus the fact that we must consider multi-function housing, depending upon the nature of the population under analysis. Also, it highlighted the nonlinearity of dimensions such as style obsolescence. As long as everything old had a low value and everything new had a high value, we were okay with a linear assumption. With the nostalgia movement of the late 1960's we find old houses as well as collectables rising in price, a nonlinear trend.

Another model which is more of a typology than anything else emphasizes dimensions of provision inputs. As illustrated in Figure 3, the dimensions of provision inputs include organization, finance, manpower, and facilities. In this case the facilities category is broken into three of the more important factors: transportation, communication, and buildings. Note that the rows in this figure represent the service delivery systems. This input typology is especially relevant for our work because provision inputs are one of the major categories of variables subject to manipulation. Omission of significant elements in the total input model can be reduced to a minimum by systematic application of the typology for each of the service delivery systems. It is hypothesized that all of the types of provision inputs are involved for all systems, with the reservation that the degree of importance for any single input will vary from system to system.

Finally, how will we combine empirical data and our explanatory models? The second and third project objectives call for (1) establishing coefficients that describe the relationships between the dependent variables (e.g. adequacy measures) and the independent variables and (2) estimating new values for the dependent or service variables which will result from new inputs, clients, and/or other constraints. First, we may write functional statements similar to the following one:

$$\text{Adequacy of community service} = f(\text{economic resource base, demographic characteristics, community location} \mid \text{statutory constraints, governmental administrative policy, organization of inputs, and other input variations}).$$

While this statement attempts to estimate the adequacy for a single rural community service, one may recall our earlier emphasis on the question of community service mix. Therefore it may make sense to think in terms of a series of equations of the following form:

$$A_t = f(I_1, I_2, I_3, \dots, I_n, B_{t-1}, C_{t-1})$$

$$B_t = f(I_1, I_2, I_3, \dots, I_n, A_{t-1}, C_{t-1})$$

Service Delivery Systems	Dimensions of Provision Inputs				
	Organization	Finance	Manpower	Significant Facilities	
				Transportation	Communication Buildings
Health					
Education					
Housing					

Figure 3. Service Delivery Systems by Dimensions of Provision Inputs

$$C_t = f(I_1, I_2, I_3, \dots, I_n, A_{t-1}, B_{t-1})$$

Where: A_t = level of adequacy of educational services
 B_t = level of adequacy of health services
 C_t = level of adequacy of housing services
 I_n = an independent variable
 t = a subscript representing a given point in time;
 therefore, $t-1$ represents a prior estimate of
 adequacy

Of special significance here is the explicit recognition of the interdependence of the several services over time in the community setting. This methodology for putting our conceptual models to work may require, however, a quality of data not presently available. Thus we are back to the present concerns of the substantive and procedures subcommittees with data collection.

Conclusion

On one hand, an observer might conclude that we have high aspirations but a discouragingly fuzzy road map. On the other hand, I would rather conclude that we are forging into an area where the roads are few, tested models for research are more scarce than the proverbial hens' teeth, and our progress as a multidisciplinary research team has been most encouraging. The opportunities for innovative thinking are sometimes overwhelming; our tempers have flared and relationships have been put to difficult tests. We have built, nevertheless, a substantial base of thinking upon which to further refine our procedures for data collection, analysis, and interpretation.

A LOOK TO THE FUTURE IN RURAL DEVELOPMENT
RESEARCH AND EXTENSION:
THE NORTHEAST IN NATIONAL AND REGIONAL PERSPECTIVE

R. J. Hildreth

Farm Foundation

I am appreciative of being here. I have learned much. I have been forced to think about new ideas and in new ways. In a number of areas I have been educated, that is, I have moved from cocksure ignorance to thoughtful uncertainty. The interaction of researchers between projects and between researchers and users of the results has been instructive.

I am impressed with the quality and quantity of regional research on rural development. The Northeast has more regional projects by far than any other region. Regional research has lost much of its legitimacy among social science researchers nationwide. The evidence presented here is quite encouraging to one who supports regional research. I commend the social science researchers and administrators of these regional projects.

The magnitude of rural development programs is large. For example, consider one part of one area--health care services. It would be interesting to compare the number of people employed in farming and the health care industry. I am not up to date on my data, but I suspect that there are fewer farmers than health care workers. Compare the social science resources devoted to developing information for these two industries so vital to the well-being of the nation. Also it is my judgment that the economic, social, and political complexities are greater in the delivery of health care than in farming.

This discussion will come in two parts. First I want to give you some thoughts about community development that come from a paper Neill Schaller and I have prepared for an AAEA seminar this summer. I hope the ideas will be useful to you, although they are rather simple and elementary. Many of the sociological ideas presented here are more elegant, but I hope our approach will provide a framework or skeleton which can hold the flesh of your elegant models.

Second, I want to make some comments about the research process. These ideas are even less elegant and complete than those in our prepared paper.

A Framework for Community Development

There is much confusion surrounding the term "community development."

Professionals involved in community development work seem to agree on what it is, but at times we suspect that they have only declared a truce. Even if there is agreement among professionals, a lack of understanding persists between professionals and their administrators, between professionals and policy-makers, between researchers and extension workers, and quite possibly between individual communities and many outside agencies that are trying to further community development.

One means of reducing confusion would be the acceptance of Will Erwin's classification of rural development subject matter: (1) economic development, (2) community facilities, (3) people building, and (4) environmental development. His classification appears reasonable, and its use by research, extension, and agencies would help them think more clearly and constructively.

Oddly enough, there is general agreement that the major reason for the confusion is that the goals of community development are abstract and intangible. But progress toward understanding and articulating community development is stymied at that point for two reasons. First, "outsiders" faced with the lack of concrete goals of community development tend to insert what they think are or could be the goals. Second, outsiders who look for quantifiable goals tend to limit their perception of community development goals to those that can be measured.

What is unfortunate about these responses is not the desire to translate community development into specific operational goals, for that must be done. Rather, it is the failure to verify whether those imposed operational goals are the goals of the community. Different outsiders talk about different goals. If there is no effort to prove or disprove the validity of any particular goal, discussions about community development become subtle contests which no one can win.

This goal dilemma should come as no surprise. Community development is a normative term. It is not a scientific term nor a single theoretical concept. It is not a research problem, but rather a policy objective and a process that people--but not necessarily all people--have labeled "good."

Clearly some kind of framework for thinking about community development is essential if a way is to be found out of this dilemma. We are not thinking of a sophisticated model, but rather a scaffolding that can give order and meaning to the complexities of community development. We are not certain what framework would help the most, but one possibility is the means-ends framework. It is one that perhaps, has been overlooked because it is elementary or lacking in elegance.

The means-end framework is "old hat" to economists in the policy field. In his textbook on agricultural policy, Rainer Schickele used it to sort out and evaluate policy alternatives.¹ He treats ends and means

¹Rainer Schickele, Agricultural Policy: Farm Programs and National Welfare (New York: McGraw-Hill, 1954).

as two elements of an action system (Figure 1). Action systems typically involve a continuum of means-and-ends. For example, a job is a means to income (end), which serves as a means for buying a car (end), which may be used for recreation (end), and so on.

The system included two other elements, actors and conditions. The actor may be an individual or some aggregation of individuals from an organization or community to the U.S. government. The conditions are the "givens" or the setting within which the system operates. The givens include institutions, rules, and customs. They may also be requirements imposed by or on the actor, such as limiting means to those that are politically and economically acceptable.

While application of the means-ends framework to community development will not erase all misunderstanding about this subject, it should at least show why misunderstanding exists and help to put the issues into more useful perspective. With that hope in mind, we shall now discuss a few community development issues in a means-ends framework.

The Means-Ends Setting for Community Development

Community development can be viewed as an interaction of action systems. The elements interacting in community development include the individual citizen action system, the community action system (which may include a number of systems or organizations), and outside action systems such as federal and state government agencies and private national and state organizations. We take the position that the community action system should be the major focus for community development.

Different actors do not see the conditions, ends, and means in the same light. A sewer system may be a means to an agency which has as its end the improvement of water quality nationally, but for the community it can be a means of a different order for improving citizen well-being. A federal funding program may be one of several alternative means to the community. The local tax structure may be viewed by the citizen as a condition but as a means by the community.

Thus confusion and sometimes conflict abound. For example, assume the end of improving income in nonmetropolitan areas. Community development can be a means to that end; but alternative means exist, such as direct transfer payments and programs to promote rural industrialization and migration to jobs. The latter means would involve national or regional programs rather than community-initiated programs. The means may be competitive, supplementary, or complementary. This is the case for a single action system. It is also the case when different action systems are involved. Here there is a greater chance that the relationships will be competitive because of differences in ends. Thus community development does not precisely equal rural development, and rural development does not precisely equal national development.

Confusion about these distinctions may help to explain the lack of clear-cut development policies at the federal level. Lynn Daft suggests that we really have no development "policies," only development "programs,"

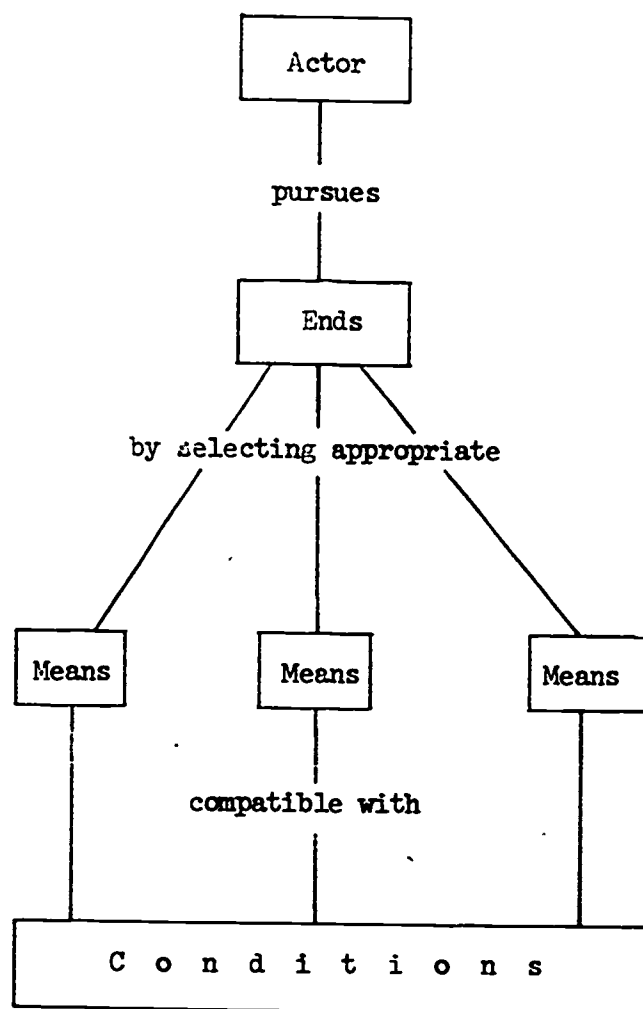


Figure 1. Diagram of an action system.

each having its own self-contained target population.²

The ideal, of course, is to develop programs which recognize the means-ends interrelationships and to form a coherent policy as viewed by the citizen, the community, the state, and the nation. Although this task may be impossible, the least we can do is to try to understand who the actors are and what effects different programs may have on the achievement of the different ends for different population segments.

The Problems of Choosing Community Ends and Means

Because community development is normative, the question of who selects the ends is quite important. According to our set of values, the people in the community should decide. Ends for the community may be set by the larger society, but unless they are accepted by the people in the community, they cannot be attained.

A possible community action system of means and ends--partial to be sure--is presented in Figure 2. Improved well-being is assumed to be the highest end (a real community may or may not choose this end). Figure 2 suggests that the well-being of individuals is influenced by many factors. An increase in the consumption of goods and services usually improves well-being. Increases in income and employment provide means for increasing consumption of goods and services. But other factors often put under the heading of "quality of life," such as enjoyment of the environment and citizen participation, also improve well-being.

Citizen participation may appear at different levels in the means-ends continuum. It may appear at a lower level as a means for generating action to increase employment and income, which are means for purchasing goods and services, which are means for improving well-being. In other situations, well-being may be directly affected by citizen participation. For example, if the individual or group of individuals feels disenfranchised or discriminated against, participation in the community development process may be an important contribution to their well-being. The continuing concern about "participatory democracy" is evidence that many people consider the process a major end. In contrast, some professionals are inclined to view participation in the process as a lower order means, one that does not fit neatly into a framework like Figure 2. Yet, if having more of a say in one's destiny--or at least knowing what is going on--is as desired today as some observers now believe, it would be unfortunate if this factor received only passing attention.

The process of choosing community ends and means typically involves the solution of numerous trade-off problems. To give some order to these problems, it is helpful to distinguish between two general cases. In one case, we view the community as a single actor. In the other, the community is treated as a collection of individuals.

²Lynn M. Daft, "Framework for Rural Development Policies and Programs: Is This the Real Thing?" paper presented to the Southern Agricultural Economics Association, Richmond, Virginia, February, 1972.

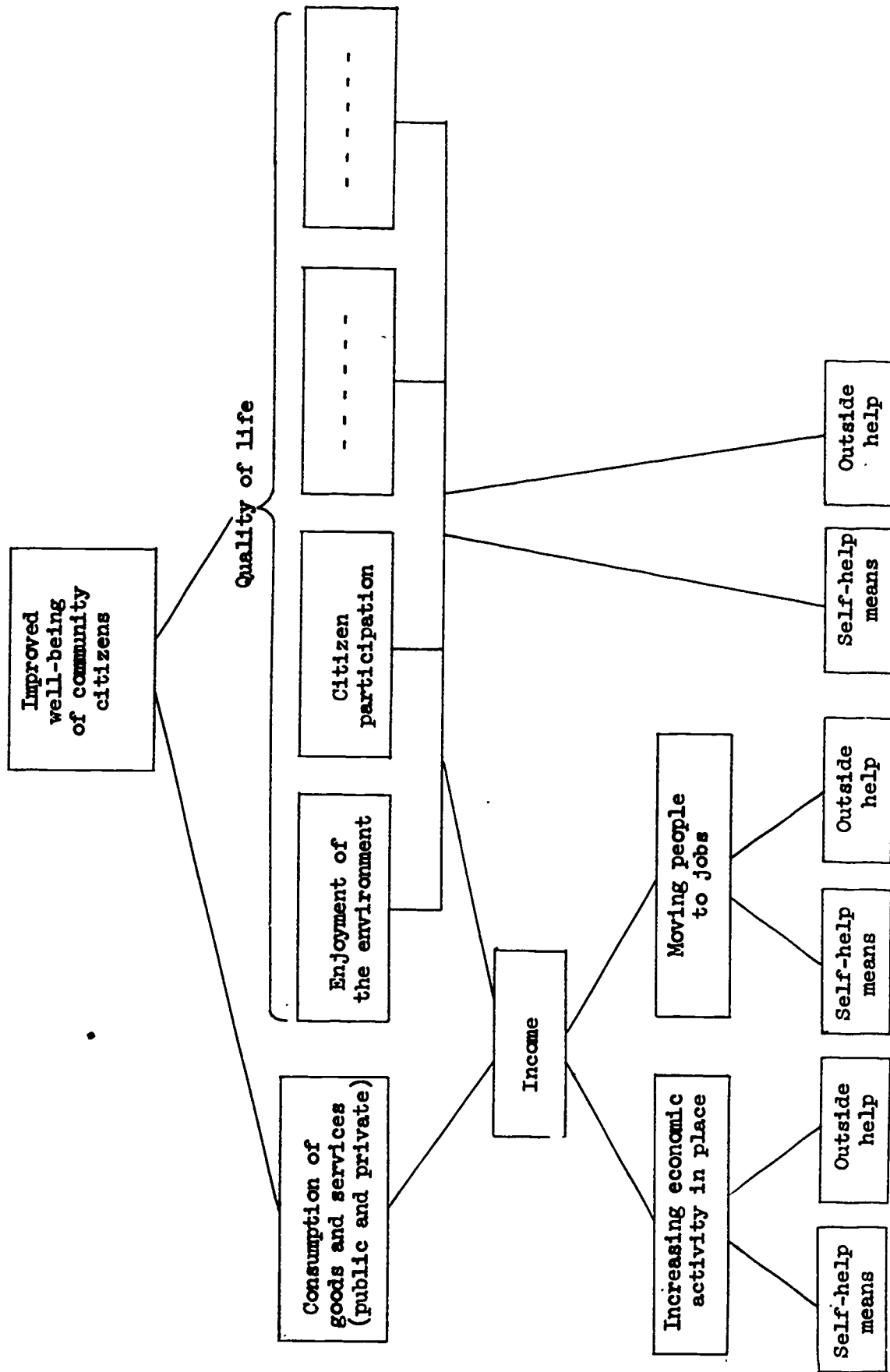


Figure 2. Action system to improve well-being of community citizens.

The Community as a Single Actor³

It is seldom possible for a community to make choices that will improve every component of its well-being. Helping the community understand the conflicts between ends can be a major contribution of the professional. Figure 3 illustrates the nature of this problem. For simplification, the figure is limited to two likely contributors to well-being. The consumption of goods and services is measured on the vertical axis, and enjoyment of the environment on the horizontal axis. The figure assumes that a given community is now located at point O. Changes could take place that would move the community from point O into quadrant A, where it would enjoy an increase in both consumption of goods and services and a better environment. It is perhaps more likely that an increase in one would be accompanied by a decrease in the other, a movement into quadrant B or quadrant D.

These possibilities are more easily recognized by economists if they are shown in terms of hypothetical indifference curves. In Figure 3, the overall well-being of individuals in the community would be the same at all points on the indifference curve I_0 . The well-being of the community would increase when the curve shifts to the right from I_0 to I_1 .

Figure 3 captures only the static side of the choice problem. Time is also an important factor. For example, a community may decide to encourage industrialization, even though that may mean an initial sacrifice in the enjoyment of environment. However, such a choice might mean higher eventual incomes, which would then enable the community to afford better public services.

The Community as a Collection of Individuals

The choice problems facing a community go well beyond those just described. They also include the problems of differential effects of community action on individuals in the community. The relationship between the community and individual citizens can be illustrated in Figure 4.

Suppose that a particular community is now at point O. This point represents an average of some kind for individuals in the community. Suppose the community consists of four people, numbered 1 through 4 in Figure 4. If increase in well-being means moving into quadrants A, B, or D, increases in well-being for each individual involve moving into the smaller quadrants a, b, or d. But here we see that there are a great many possible movements of individuals leading to a single change for the community. Movement into quadrant A with one person made better off and no other person made worse off would be recognized by the economist as a

³We assume the community has methods of reaching agreement. This is a difficult problem for a real community. Economists are not of much help. They usually assume the problem away (as we have) or hold a community utility function exists (which assumes the problem away).

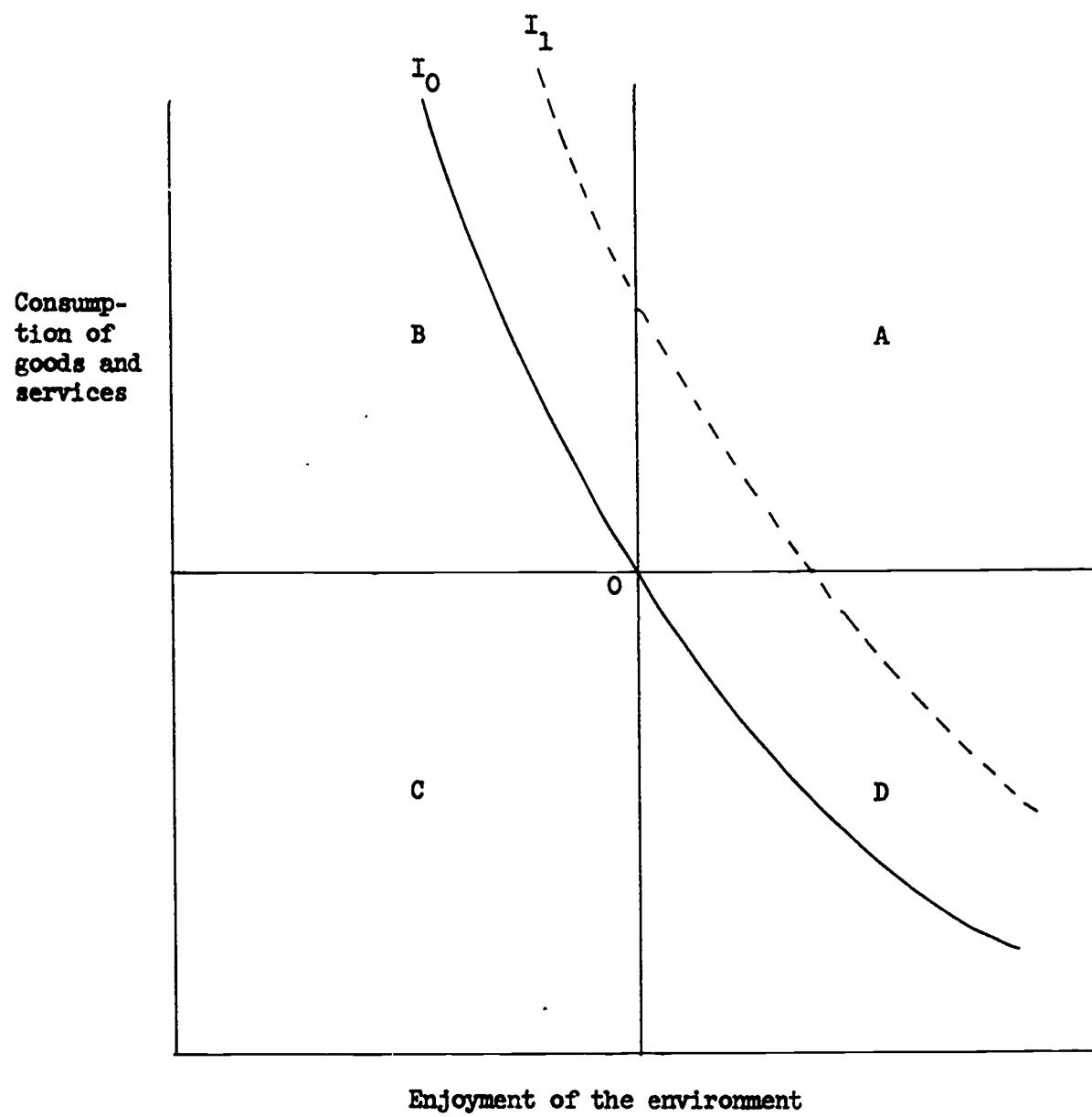
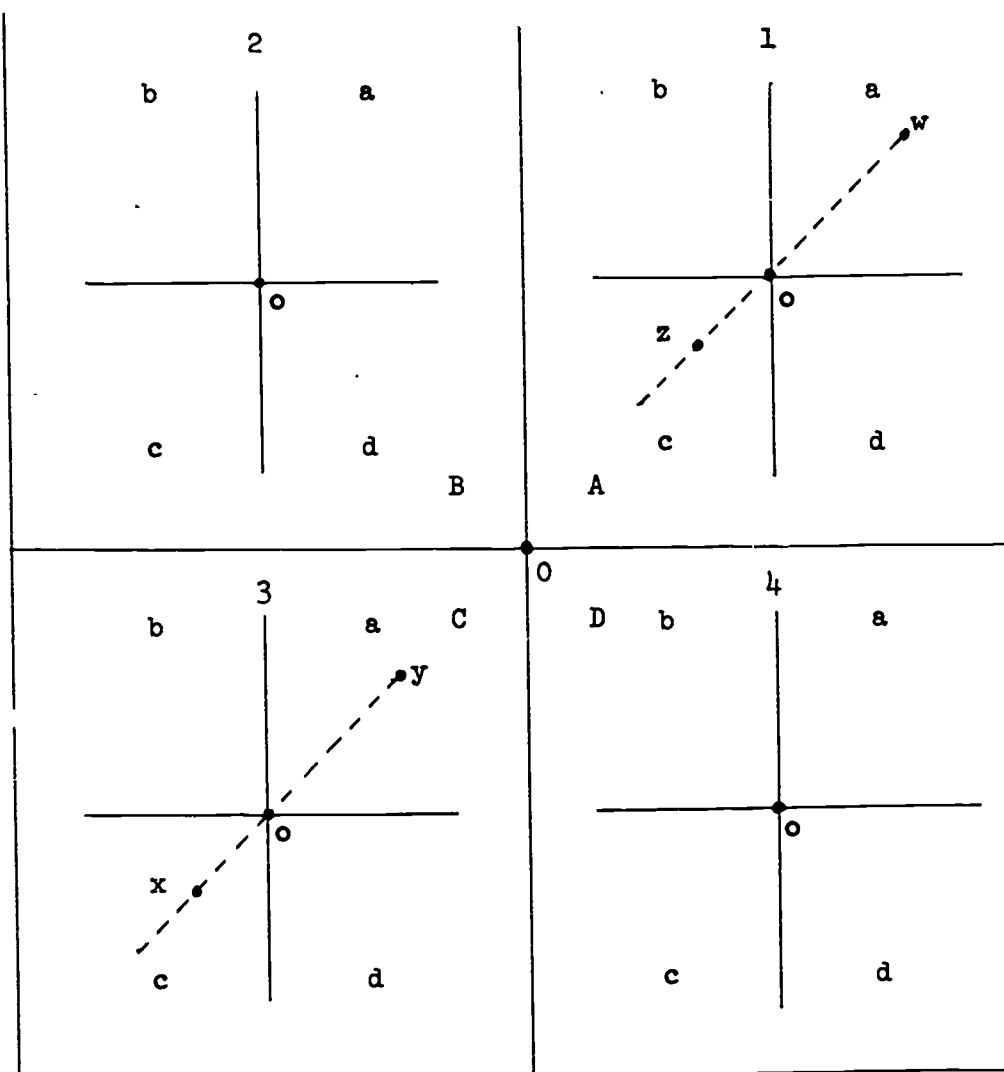


Figure 3

Consumption of goods and services



Enjoyment of the environment

Figure 4

Pareto optimum solution. In real life, few such situations are found.

Suppose the community takes an action which moves individual 1 to point w and individual 3 to point x. Or, suppose the community takes an action which moves individual 3 to point y and individual 1 to point z. The net result in both cases would be a movement into quadrant A for the community. The question then arises, are the two actions equally desirable? A person whose value system is oriented toward a more equal distribution of the fruits of development would argue that the second action would be preferred. A person who is not concerned about the distribution of benefits and costs would give equal weight to either action by the community.

The distribution problem is illustrated by a study of industries located in the Ozark region of eastern Oklahoma since 1960.⁴ The study measured the benefits in the form of payroll and secondary effects as well as costs in terms of additional utilities and school services required for new residents. The results indicated the community could subsidize industry by \$3,800 annually per new job created and just break even. While many people benefited from the new jobs, not all sectors gained. In several instances the school and municipal government sectors incurred a net loss despite large gains to the private sector because additional taxes did not cover costs of the added services required. Those people who paid higher taxes for added services but did not benefit from the new jobs were made worse off.

Farmers often have questions about development efforts for similar reasons. Many do not see how they would benefit from new jobs although they would pay a large share of the cost of added services through the property tax.

Self-Help Versus Outside Help

At the bottom of Figure 2 is a set of means which, for lack of better terms, we call "self-help means" and "outside help." They might also be called the "bootstrap" and "sky hook" approaches, two basic ways in which higher means or ends are reached.

What criteria can be used to determine the appropriateness of these different means? The answer is that it depends on the constraints to attainment of desired ends. This is the case whether we are talking about an individual or a community. The constraints generally fall into two categories: (1) those over which the individual or group has relatively little control, such as lack of jobs, inflation, inadequate resources, and discrimination; and (2) those over which the individual or group has somewhat greater control--lack of interest or motivation, for example.

⁴Luther Tweeten, "Toward a Normative Framework for Allocating Research Priorities in Land-Grant Universities to Micropolitan Development Problems," paper presented at a conference on research priorities, Zion, Illinois, May, 1972.

The self-help approach is based on the assumption that the well-being of people will be improved if the people really want improvement and will take the initiative. This approach assumes that people can pull themselves up by their own bootstraps. The constraints preventing a higher well-being are believed to be those over which people have considerable control. In contrast, the outside help strategy rests on the notion that financial and other assistance is needed because the constraints are those over which the people have relatively little control.

Tweeten argues that self-help efforts have largely failed, citing studies on agricultural development by Back and Hurt and Schultz.⁵ He suggests that the per capita income of a community can be extremely low even after that community has achieved the optimum use of its resources. Self-help efforts have brought community improvement but little increase in incomes. Outside technology, expertise, and capital as well as national rural development policy are, therefore, essential.

The point is that neither the self-help nor the outside help approach alone is likely to improve the well-being of people very much. We have had enough experience with welfare and development programs at home and abroad to appreciate this point. Hopefully, that experience will not be forgotten in our community development efforts.

Some Comments about Research Process

We have had discussion about who is the audience of research. Some say policy-makers, others individuals, and still others the community. I do not think we are dealing with discrete populations but with an overlapping complex continuous set. Let me attempt to make my point by looking at research from several angles.

First, policy-makers can be and are public or private. They are located at various levels. Consider the following framework:

<u>Level</u>	<u>Policy-Makers</u>
National	Public: Congress and executive branch Private: National organizations and firms
State	Public: Legislators and government officials Private: State organizations and firms
Community	Public: Local government Private: Local organizations and firms - Individuals and families

Information developed by research can be used directly by public or private policy-makers. However, there is also an indirect route. Information about a national problem can be useful to individual citizens who then communicate their judgments about issues to the policy-maker. Policy extension education in agriculture is an example of this process.

⁵Ibid.

Let me move to another perspective. Reporters for both NE-68 and NE-77 properly, in my judgment, put emphasis on designing research with specific audiences in mind. Put in normative terms, they know for what group of policy-makers and for what questions of the policy-makers the research will provide illumination. (Note: In rural development we are not as ready to "solve" problems as we are in agriculture after 75 years of research, e.g. on corn blight; we can only hope to illuminate and make the situation better, not best.)

If you think about the means-ends framework, you come to the conclusion that decisions are relatively specific and constrained. Each policy-maker has limited means and is subject to conditions of the action system.

There is much slippage in the system of problem observation in the real world, problem definition by extension, problem reformulation by research, communication of findings to educators, and education of policy-makers. Too often extension workers are asking questions which no one appears to be trying to answer, and researchers are answering questions which no one appears to be asking.

How are we to move toward a solution? Changes in both the research and extension bureaucracies likely will be required. Researchers need to be more involved in the real world for better problem definition and dissemination of research findings. Extension workers need to participate in the research process if they are to understand the subtleties behind research results. One logical approach is for the researcher and extension person to be the same individual. Even with a large number of joint appointments in the Northeast, a problem still remains. One reason I can think of for the failure of such appointments to reach their potential is that the research-extension worker reports to and is administered by two different bureaucracies in the university and the USDA. With or without joint appointments, joint planning and execution of rural development programs and projects by research and extension are needed.

It is possible that some of the research reported here in projects NE-47, NE-77, and W-114 may be useful for the new knowledge and education system. This research attempts to relate organization and community structure to performance, especially in delivery of services. What would be the effect of increasing fluidity and linkages within and between the organizations comprising the new knowledge and education system? How can the system be more closely linked with the "real world," and what would be the effect? Would an increase in fluidity between the system and other parts of the university as well as centers of private expertise be useful? If one of you does not write a paper exploring this area in the not too distant future, I may.

TECHNICAL DISCUSSIONS OF THE PAPERS ON THE
RURAL DEVELOPMENT REGIONAL RESEARCH PROJECTS
IN THE NORTHEAST

TECHNICAL DISCUSSION
 NE-80: PROCESSES OF RURAL ECONOMIC CHANGE
 IN THE NORTHEAST

Frederick E. Schmidt

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Dr. Jansma has outlined the broad parameters guiding a new project, NE-80, in its formative stages. In light of this project's infancy stage, a full technical review, focusing upon problem identification, procedure, and policy import, is somewhat premature. My comments, then, will be heavily biased by experience in NE-47, which is in the relatively mature stage of final data analysis. I will seek to emphasize problems and contributions to policy that the two projects have in common and, in conclusion, will comment briefly upon the proposed procedure of NE-80.

We note, in the first place, the many common reference points shared by the two projects. (There is much to recommend close cooperation between these two technical committees.) Project titles, although sometimes deceptive, provide an excellent example of these commonalities. Dominated by sociologists, NE-47 has been appropriately titled, "Consequences of Changing Social Organization in the Northeast." NE-80, proposed by economists, is titled "Processes of Rural Economic Change in the Northeast." The macrostructural approach utilized by NE-47 sociologists treats changing social organization as encompassing both quantitative and qualitative aspects of the political economy, in addition to more traditional foci upon socio-cultural organization. Here we have conceptualized institutional structure as emerging from the resolution of four basic societal problems. These problems are summarized as production (the economy), allocation (the political sector), control (religious, military, and legal bodies), and staffing (education and family). Thus the project with the more general focus--NE-47's concern for macrostructural organization of the political economy--precedes the project with a more specific focus upon particular issues concerning the rural economy.

However, more important than a rare example of chronological order in regional research, both projects share a common unit of analysis, the county, and a common dependent or outcome variable, life quality. Let us consider these two commonalities in greater depth.

Dr. Jansma has indicated caution in the selection of the analytic unit; we in NE-47 also spent considerable time investigating appropriate analytic units before settling on the county. While NE-47 was also concerned with the rural areas, we concur wholeheartedly with Jansma's suggestion that rural-urban interaction is important in terms of both the flow of economic goods and political decisions. I believe all of us would agree that in contemporary America the pursuit of what is "rural" to the exclusion

of dominant urban centers is misleading. In the Northeast it would be disastrous. While we will focus more specifically upon the county as the unit of analysis in our technical comments concerning procedure below, suffice it to note here that the county does provide a systematic socio-political unit with relative consistency throughout the Northeast. Thus it can be seen that NE-80's focus upon county units has validity in both practical matters of data availability and, more importantly, has potential for comparability across rural and urban dimensions in the Northeast.

Of far greater concern and interest to all assembled here is the shared common focus upon life quality as a dependent or outcome dimension. Both projects make extensive reference to "impact" and "consequences" of organizational structure as it affects the illusive conceptual area of citizen quality of life. This similarity of focus is made all the more exciting when we recognize that the older project, NE-47, reflects a sociological perspective. Thus, in the context of these two projects, sociologists may have established a rare event by preceding economists into an area of national policy concern.

A macrostructurally oriented definition of life quality is certainly in order. Life quality may be defined as the outcome of a set of structural conditions (social, economic and political) which enable individuals participating in a given social system to enjoy a variety of physical and social experiences. That is, the potential for expression of quality life is bounded by the complexity of the system. The greater the economic and cultural differentiation of the social system, the greater the potential life quality for any given participant. Thus I would suggest to all of you today that the issue of rural development is fundamentally a concern we all share for moving our American society to greater equality and proportional allocation of goods, services, and experiences.

However, many of the foregoing comments made here are disturbing to me in their emphasis upon the pathology of individual poverty to the neglect of social structure which generates such conditions. Specifically, we note that NE-80, a proposal involving a macrostructural focus upon economic organization, initiates its inquiry with an emphasis upon survey results demonstrating individual preferences for greater life quality than currently possessed. Can't we, as social scientists, assume that individual attitudes, preferences, and behavior will correspond to the conditions of emergent structures?

The inequality of system allocation has been dramatically suggested in the statistics just presented by William Erwin. He noted that federal expenditure on a per capita basis for health and welfare is four times greater in urban areas than in the rural sector. Similarly, Paul Eberts distributed data from NE-47 which demonstrates that poverty (as measured by those earning under \$3,000 a year) in hinterland counties ranges from 1.33 to 2.93 times that of the urban centers. In all subregions of the Northeast, poverty was greater in these hinterland areas than in the urban centers, yet per capita welfare expenditure is higher in urban counties for five of seven Northeastern subregions.

I suggest then that our focus should not linger upon the identification and description of the problem, either at an individual attitudinal level or with the aggregated data used frequently to round out a description

of the issue. Rather, we should focus upon the particular strategies or policies now in effect in the political economy.

This is an important change in emphasis, for it involves major assumptions often only implicitly made in our particular research tradition. Far too frequently agricultural station social science researchers are content to take a field-stimulated issue, draft representative questions, and turn them back to the rural constituency in the form of field surveys. The results of such operations are then reflected in "conclusive" bulletins depicting frequency tables of citizenry responses (and non-responses). Conclusions are left to the reader and an increasingly frustrated extension service. What, for example, can be done with the observation that a plurality of people interviewed (34%) would rather live in an open country environment? Such statistics only dramatize rural development issues. They do not move us toward solutions or the identification of problem sources.

The alternative suggested here, and certainly embodied in the main text of Dean Jansma's proposal, is that the sociologist or economist turn to the development of a disciplinary-based model to guide research. Implicit in this procedure is a focus upon identifiable policy-generating bodies in the political and economic structures of the society. Thus discussion comes full circle on the issue of appropriate focus. Both NE-47 and NE-80 have selected emergent structures as responsible for generating varying conditions of life quality in the Northeast. Critically, our concerns mesh in a focus upon life quality of the rural constituency. This may be defined as the degree to which jobs, goods, services and experiences are fairly distributed in the society.

At the macrostructural level of analysis it is customary to draw the political sector into analysis of policy formation. The tradition of our particular democratic-capitalist political economy would have us believe that it is through the political sector (frequently operating in a fashion analogous to Friedman's "Black Box" of monetary flow) that pressure is exerted upon the economic sector to better allocate goods, services, and experiences throughout the system. (Our own presence here today may bear testimony to that process.) In the context of these two projects, I concur with Jansma's comments that recent dictments of the agricultural establishment should serve to spur us to policy-relevant research for the rural sector. Thus we might profitably pursue just how policies affecting our sector are made. However, that would be an issue for yet another research project. NE-80 is better implemented by leaving the actual decision-making process inside a mystical Black Box and focusing instead upon the effects of particular economic policies and their rural life-quality impact.

In this investigation I would suggest greater specification of exactly which identifiable economic policies the project will focus upon. The proposal suggests five broad overlapping areas: (a) public investments in various types of infrastructures; (b) income possibilities from new economic activities; (c) local government planning and investment; (d) area taxation; and (e) private community group activities. The impacts of these are to be pursued by NE-80 researchers after they have established existing conditions in a population of rural counties through collection of base-line data early in the study. (Conditions NE-47 has found useful include organizational and economic linkage of the county to the larger system, local county differentiation of services, homogeneity of ethnicity and income among the citizenry,

and rigidity in the local political process.) I would like to conclude this set of comments with several suggestions regarding specific policies within the context of Dr. Jansma's identification of five general policy areas. These emerge from the political economy and have direct bearing upon constituent life quality.

1. National Level Spending Policies

a. Impact of the military draft upon rural areas

Comment: Today's modern armed services involve a major policy area with many implications for the drain of talent and skills from rural areas. While one might argue that the draft during an unpopular war has sent some young people scurrying to rural areas to avoid national service, by and large the military represents an institution critically involved in equipping physically fit young men and women for positions which have little post-service potential in rural areas. Moreover, military service is likely to expose these trainees to a set of urban experiences and life expectations that do not correspond to living in less differentiated rural areas.

b. Defense-related industry

Comment: Our concerns for rural welfare cannot allow us to ignore powerful institutions at a national level. The Department of Defense (coincidentally, one of the largest land-owning organizations in the world) has had direct influence upon the spending of between 40 percent and 70 percent of the national budget in recent years. Three-quarters of these government contracts are allocated to the top 100 corporations, which have a predominantly urban industrial base. Since these decisions are made, at least in part, in the political sector, they represent an area where research might show the benefits of greater competitive bidding and the allocation of these expenditures to smaller-scale industries in rural areas. An imaginative research design could locate areas where this form of allocation does occur and thoroughly describe the secondary impact upon local services, welfare expenditures, etc., etc.

c. National parks and recreation areas

Comment: To my knowledge, no thorough investigation as to the full impact of taking these huge tracts of land effectively out of the rural sector has been made. Increasingly, however, we are aware of federal programs to conserve the terrain through careful forestry practices and wildlife management. Instead of turning these land rights over to national and international economic concerns, the potential park and national lands have for generating and sustaining local industry might be further pursued. On a different tack, but involving the same organizations, the recent rapid increase of private recreation facilities leads us to suggest exploration of the degree to which existing federal properties have been developed to service this growing industry. An impact upon adjacent rural areas is implicit.

d. Federal highway program

Comment: Although a growing body of research exists from the environmental perspective on the highway program and the concomitant auto industry lobby, one might focus on the economic impact of the existing highway system. My impression is that it has not had rural areas in view, but is oriented primarily to development of high-speed linkages between urban centers. Variation does exist, and the impact upon varying rural areas of this basic economic policy might be explored.

2. National- and State-Level Policies of Economic Control

a. Industry and its responsibility to rural areas

Comment: The issues of safety standards and management of environment seem to increasingly dominate the news from coal-mining counties. They serve, however, to raise a whole series of fundamental economic issues which focus upon adequate public control of economic policy protecting rural people and settings. It is ironic, for example, that the Pittston Company (which owns, among other industries, the coal mines where dams gave way this spring at Buffalo Creek, West Virginia) can produce coal cheaply enough to export it to Japan and France.

b. Corporate sector development

Comment: Frequently, economic development occurring in the rural sector simply leaves no impact or, worse, undermines existing indigenous activity. Two examples come to mind. One is provided in the oil storage issue in northern Maine and the development of nuclear power generating plants throughout the Northeast. Both have threatened, and continue to threaten, local industry through creating basic changes in the environment. Both offer, in total, little opportunity for employment of local people, as they require sophisticated technological skills not commonly found in rural areas. A second type of corporate development one might examine is evidenced in the very site of our meeting today. Here in New England, the recreation industry has frequently been initiated and maintained by out-of-state capital and management. Stratton Mountain, for example, has developed in close coordination with International Paper Company subsidiaries. The total recreation environment competes with local services, while the cosmopolitan atmosphere attracts as many outside workers as locals. Careful examination of the impact of this form of economic activity could certainly shed light on appropriate state and federal policies for rural development. It is not unreasonable to assume that all northeastern rural areas will have some potential for recreation industry development in the years to come.

c. Investment policies

Comment: Although the policies which control banking activities are alien to me, laws permitting the consolidation of such activities are increasingly becoming a public issue. One major sector fighting the consolidation of banking and holding activities has been the smaller

banks. They claim that restrictive branch banking laws have led to a virtual monopoly on banking activities in rural areas. If their claims are accurate, retarded flow of capital, discouraged high risk development, etc., etc., are logical outcomes. Certainly this could provide a critical area for economic policy foci.

Many other areas could be cited. While some may charge that this sounds like Nader-type advocacy research, I would argue that from the limited perspective of a sociologist, these seem to reflect economic policies with significant impact upon rural areas. The object, as mentioned above, is not focus upon policy construction but simply objective pursuit of the policy consequences and impact upon rural sectors.

In conclusion, I will turn briefly to suggesting several accomplishments of NE-47 in its inventory and classification stage that might be relevant to NE-30 and perhaps to others in the audience.

Initial work in NE-47 involved the careful selection of appropriate units of analysis. Approximately 1,650 different measures were collected. Some measures were carefully selected to index the major concepts in the model presented here, but many others were included because they are frequently used in this type of research and they presented a potential to intrigue other regional researchers. In the light of our sincere concerns for ongoing, interdisciplinary research, it was deemed efficient to pursue a maximum number of indices useful to other projects.

Thus data collection was pursued with a major emphasis upon providing useful indices for other social and policy science researchers. Accurate records of all procedures were kept. The data set for this project is now available on computer tapes for interested parties.¹ (See especially Mattson and Eberts, 1972.)

Coding was conducted by a changing pool of undergraduate research aides. A 10 percent accuracy check was administered to all collected data. Much data was coded directly from standard government materials like the census, but a substantial amount was collected from a variety of secondary sources.² For each index an attempt was made to represent three time periods, 1950, 1960, and 1970. This, of course, creates the potential for three change measures: 1950 to 1960, 1960 to 1970, and 1950 to 1970. For the vast majority of indices this method of presenting diachronic measures was successful.

¹Because of the empirical tightness of the county as a research unit, no grave problem was encountered with missing data. Although it rarely occurred, several measures with high proportions of missing data were discarded. In the cases where only a few counties were without complete information, the data were tracked down through telephone calls or contacts with cooperating agency researchers.

²A bibliography of secondary sources is available from the New York State Data Bank for Social Accounting, 331 Warren Hall, Department of Rural Sociology, Cornell University, Ithaca, New York.

Typically, in research of this scale, many activities are conducted which are not directly reflected in the final data set. Most important to Northeast regional researchers was the construction of a consistent scheme to identify all spatially based socio-political units in the Northeast region. Because of valuable data not available in aggregated form at the county level of analysis, the need arose to develop a gazetteer of all identifiable "named" places in the Northeast.

Moreover, an elaborate, inclusive twelve-digit field was constructed to "nest" each identifiable place (with its own unique identification number) within its own township (or equivalent encompassing unit), county, and state. Thus some 15,000 places were identified as to name, location, type of place, presence of a post office, business activity status (Rand McNally), and population for 1940, 1950, and 1960 (when available). This classification scheme was utilized here in the collection of union data and to determine the county location of colleges, military bases, museums, libraries, art galleries, parks, and recreation centers.

A second area of research activity not adequately reflected in the final data set involved a thorough and comprehensive exploration of the labor union structure in the United States for the years 1960 and 1966.

A third and final area not directly reflected in the data analysis involves the development of an index of the top 200 corporations since 1954. Utilizing Fortune magazine, lists of the top 200 companies, transportation industries, utilities, banks, and merchandising firms, along with the nation's top 50 life insurance companies, were compiled. These data reflect, in addition to expandable identification codes, descriptive information as to size, headquarters, mergers, and changes.

I mention these briefly only to demonstrate that our experience in studying the changing organization milieu in the Northeast should provide some useful points of departure for NE-80. More extensive documentation is available from the New York State Data Bank for Social Accounting.

TECHNICAL DISCUSSION
NE-47: CONSEQUENCES OF CHANGING SOCIAL
ORGANIZATION IN THE NORTHEAST

Arthur W. Dewey

University of Connecticut

This morning Olaf Larson requested me to substitute on the program this afternoon. My response to the paper on the NE-47 project is going to be brief, and it must be a little different than most of the technical responses. Its purpose is to provide a platform and, more importantly, to provide encouragement for discussion from you who, as a result of the two papers, have some specific questions and comments that you would like to get in.

I don't know if all of you are familiar with the key role the department heads have played in rural development research in the Northeast. In the beginning there was NEC-12, primarily department heads, and they were the ones who invented some of the projects which we are dealing with here. Then, as in the allegory of the phoenix, everything disappeared, NEC-12 burned up, and now we have a new bird, with the same department heads.

Last January these department heads had a most remarkable all-day meeting; I'm not a department head, but I was there as a substitute and I heard them. Every department head had to study up on one particular regional rural development project and report. Each did an exceptionally good job. Each had an excellent background in all the things that are being said here. One of the best presentations was that by Kenneth McIntosh on NE-47. He had set himself, as an economist, to understand the general workings of a sociologist's mind and its application to social organization. As a result of his comments, I had a great deal more respect for the work that's being done in NE-47.

Of course, what's being proposed is a systems approach--an input-output model, if you will. What characterizes such models is how the elements are defined and how they interrelate. Development models seek to maximize something; the first thing you have to know about a model is what it's trying to maximize. And models are manipulatable--for example, by government inputs.

Finally, a model has structure. Economists have their growth models, and McIntosh discussed at length how he saw the interrelationship between the economists' mathematical modeling and the sociologist's mathematical modeling. How the two models fit together is a matter of judgment in which we can all participate. So let me, in this process, suggest that both NE-47 and NE-80 seem to be aimed at developing an understanding of why some communities develop or grow and other communities decline. My question for discussion is: How do you see these projects as fitting together?

TECHNICAL DISCUSSION
NEM-42: ECONOMIC ANALYSIS OF THE CAMPGROUND MARKET IN THE
NORTHEAST, AND NE-65: ECONOMIC ANALYSIS OF ENVIRONMENTAL
QUALITY EFFECTS ASSOCIATED WITH SEASONAL HOMES

Nelson L. Le Ray*

Economic Research Service
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It was to be expected that Dr. Cole and Dr. Gamble would present interesting and thoughtful papers. They have not disappointed us. It is evident that they have carried out their assignment for this workshop in that they have identified the research problem with which the regional project is concerned, stated the purpose or objective of the research, and specified the model or research design being used to achieve the research objectives.

My assignment, as indicated by Dr. Olaf Larson, is to provide a sympathetic but searching critique of the research projects. Since I am currently a member of the technical committee for two Northeast regional research projects, I believe I can take a sympathetic approach in this technical discussion.

My discussion will be divided into three parts: (1) specific comments on NEM-42, (2) specific comments on NE-65, and (3) identification of some interrelationships between these two projects and other rural development research in the Northeast, with emphasis on NE-77, that will hopefully provide a multi- or cross-disciplinary rural development perspective to these research projects. In parts one and two, my primary concern will be to identify a few points or aspects of the projects that might receive greater emphasis and to make some suggestions concerning research design.

NEM-42: Economic Analysis of the Campground Market in the Northeast

It is encouraging to note and, for my part, to applaud the chairman of this technical committee and the members for the extensive state participation achieved in the project. They are to be especially commended for collecting data in the northeastern states not represented in the technical committee. As one who has served on seven regional technical committees, I am aware of the problems that had to be overcome to obtain this degree of participation and cooperation.

* The conclusions and opinions expressed are those of the author and do not necessarily represent those of the Economic Development Division, Economic Research Service, or the U. S. Department of Agriculture.

Gerald Cole has presented us with a difficult paper and project to discuss. In comparing the paper with the project statement as approved, it is evident that the technical committee is doing what they said they were going to do. Since I agree with the basic importance of research on the economic importance of campgrounds in the Northeast, the research design, and the objectives, I had three possible approaches to take in discussing this paper. One was to make a few introductory remarks either related or unrelated to the paper and then to present my own ideas on some topic of immediate concern. Another was to repeat in summary what Cole said. The third possibility was to say very little about this paper and to utilize the time in meeting the third objective of my discussion. I have chosen to follow the latter course.

Within the framework of the research project, the technical committee has appropriately visualized the research problem as being a twofold one involving both the problems of public agencies providing campground opportunities in the Northeast, and the problems of private campground operators in the region. Within this framework, emphasis has been placed on the camping public utilizing these campgrounds. There is a segment of the camping public (market), however, that obtains all or part of its camping experience from sources other than campgrounds operated by public agencies or private campground operators. This is that segment of the camping population made up of the following: (1) those that camp on the land of lumber, pulp, and paper companies--frequently with only a permit required; (2) those that camp on the unoccupied land of friends or set up their camping equipment at the seasonal or year-round home of a friend; and (3) those individuals and families that are obtaining their camping experience on their own land.

The purchase of land by campers for camping may be a transition stage to a seasonal home or year-round residence in an area. The use of sites other than campgrounds for camping may result from a number of factors. These factors might include: (1) lack of campgrounds; (2) interest in an outdoor activity not generally available at campgrounds, such as hunting; (3) interest in the area for future year-round residence but concern about vandalism of seasonal homes; and (4) an opportunity to conduct timber stand improvement work while camping on one's own land.

Objective 1 of this project, to determine the motivations, goals, and characteristics of the camping public as a guide for the development of a rational pricing system of the public and private camping resource mix, is the only objective in this project for which primary data has not been obtained. Hypothesis 6, to be tested under Objective 1, deals with the diminishing satisfaction of campers in relation to crowded conditions within certain campgrounds and other factors. This might be an appropriate place to initiate study of the motivations, goals, and characteristics of that segment of the present or potential camping public that is obtaining or plans to obtain part or all of its camping experience at sites other than campgrounds operated by public agencies or private campground operators.

NE-65: Economic Analysis of Environmental Quality Effects
Associated with Seasonal Homes

The five surviving members of NE-65 are to be commended for their progress. A comparison of the listing of individuals and respective

universities as enumerated by Gamble, including the areas of interest and tentative contributions of participant stations when the project was approved, indicates an attrition of four states and six project leaders. A loss of this magnitude is very difficult to overcome.

Gamble indicates that Objective 4, to determine the total potential market for seasonal homes in the Northeast and to delineate the effects of environmental factors upon this market, has been dropped from the project because it was originally included to accommodate the research interests of an individual and an experiment station no longer represented on the technical committee. This appears to be a core of the project, and I urge that the dropping of this objective be reconsidered.

Although the objectives and justification for this research project are stated within a broad reference with respect to the environmental quality effects associated with seasonal homes, research activity to date appears to be limited to seasonal homes in seasonal home communities. Thus it is possible that important factors necessary for an economic analysis of environmental effects associated with seasonal homes may not have been considered. For instance, homes located in the open country or in communities not designated as seasonal home communities might, in fact, be seasonal homes. It also appears that the research to date has been restricted in terms of the type of seasonal home communities studied. Gamble notes that within the cooperating states, 18 seasonal home communities have been selected for study, 13 of which are situated on lakes and 5 on the Atlantic seashore (oceanfront or bays). In order to meet the objectives of the study, seasonal homes other than those located on lakes and water should be studied. Unless this is done, it is possible that the project will overemphasize the water resource and the milder weather aspects of the environmental effects of seasonal home use. Because of the importance of fall and winter sports and the concurrent winter seasonal home use in the region, this area of research deserves attention.

I am somewhat concerned about the variation in response rate for the individual communities of from 12 to 69 percent, with an overall rate of 43 percent. I would like to know more about the 88 to 31 percent that did not respond. Perhaps some information could be obtained from secondary data sources. With respect to future data collection, consideration might be given to utilizing WATS and FTS telephone hook-ups for interviewing. In the case of seasonal home owners, it might be feasible to reduce the number of non-responses by interviewing at the place of year-round residence. Gamble notes that input-output analysis is being used in NE-65. Because of the similarity between these two projects, it would appear to be productive if both projects would employ the same analytic techniques whenever this is feasible. I am impressed with the recent work of Walter Isard and others, Ecologic-Economic Analysis for Regional Development, in which the input-output technique, the gravity model (spatial interaction analysis), and activity complex analysis were employed in an economic-ecologic analysis of new marina complexes in Massachusetts.¹ A review of this work by the two

¹Walter Isard et al., Ecologic-Economic Analysis for Regional Development (New York: The Free Press, 1972). See also Garnett L. Bradford and Fred B. Saunders, Quantitative Techniques with Application to Rural Development Research (Southern Farm Management Research Committee and the Farm Foundation, March 1972).

technical committees might suggest some additional approaches to analysis of the data collected in these two projects.

Cross-Disciplinary Rural Development Perspective

In this part of the discussion I turn to my third objective to discuss the multi- or cross-disciplinary rural development perspectives of the two projects and NE-77. There is an excellent opportunity for close working relationships between the personnel of NEM-42 and NE-65, because Gerald Cole, Chairman of NEM-42, is a member of the NE-65 Technical Committee, and Hays B. Gamble, Chairman of NE-65, is a member of the NEM-42 Technical Committee. Both of these research projects have a duration of four years. NE-65 is in its final year and NEM-42 has two years remaining. Therefore, some of my observations may not be appropriate for the present stage of these projects but, hopefully, would be worthy of consideration when these projects are revised, amended, or extended or new projects are developed in this broad research area.

Migration

To a sociologist, seasonal homes and camping imply migration--migration of people from a primary place of residence to a temporary place of residence. It is quite appropriate that in both of these research projects emphasis has been given to the recreational aspects of camping and seasonal home occupancy and more specifically the outdoor recreation aspects. Attention might be directed toward the function of camping and rental of seasonal homes in the migration decision-making process for both seasonal home ownership and year-round change of residence. An example of the type of question that might be asked is: To what extent are camping and rental of seasonal homes used as scouting expeditions for selecting between alternative locations for recreation, retirement, employment, or other activities? Other avenues that might be investigated are:

1. Seasonal home:

- a. To what extent is the seasonal home used by the owner versus used by renters?
- b. To what extent is the seasonal home viewed as an investment?
- c. Is the seasonal home being considered as a place for future retirement?

2. Camping:

- a. What are the reasons for camping on one's own land rather than on rented land?
- b. What are the future plans for such land--production of forest or other natural-resource-based products, other business enterprises, seasonal home, year-round home?
- c. To what extent is camping viewed as an inexpensive way to travel?
- d. What changes in camping satisfaction and motivation are related to changes in the family life cycle?

- e. To what extent is the campground or campsite used as a base of operation to explore a much wider geographical area?

Housing

As chairman of the Housing Subcommittee of NE-77, "Community Services for Nonmetropolitan People in the Northeast," I have been devoting considerable attention to the problems of housing in this region. At this point let me open up a few general areas where NEM-42, NE-65, and NE-77 might benefit from a cross-disciplinary rural development project approach.

In general, housing that is owned by a nonresident for seasonal (vacational) use or owned by a resident and rented for seasonal use is not available for year-round use by residents of the community. With respect to the year-round housing supply, there are several benefits from seasonal home use:

1. Use of unoccupied dwellings,
2. Renovation and upgrading quality of housing,
3. Expenditures by seasonal dwellers at the local level for housing-related services, which in turn provide the critical mass of demand necessary to provide these services for year-round residents, and
4. Extension of seasonal use to retirement use.

The supply of seasonal homes comes from several sources:

- A. Year-round housing
- B. New construction
 1. Prefabricated units
 2. Conventional
 - a. Contractor built
 - b. Do-it-yourself
 - c. Mobile homes
 - d. Other (buses, trucks, railroad cars, etc.)

Some areas with a relatively high proportion of seasonal dwellings have been identified as rural areas with a year-round housing problem--quality and quantity. In the past, in the Northeast it has been almost traditional in marginal agricultural areas to convert year-round farm housing into retirement seasonal use and other seasonal use, often with little more than a transfer of title. More recently, however, some of these former farm-houses have become the year-round residence for both retired and non-retired individuals. Also, there is some indication that seasonal homes, both in the open country and in seasonal home communities, are being converted to year-round residences. Many of these homes, and especially those in summer seasonal home communities, are not fully equipped for year-round use from the standpoint of construction, facilities in the dwelling, and the availability of year-round community services--especially snow removal and school bus

routes. A longitudinal study of the transition and conversion of seasonal homes and seasonal home communities to year-round residences would seem to be the basis for a rural development study.

Home financing has been identified as a major problem with respect to increasing the supply of year-round housing in parts of the Northeast. At this point, because of time limitations, I will raise only a few questions to illustrate possible relationships between the three research projects. What is the source of financing for seasonal homes and campgrounds? Is it local-area or out-of-the-area financing? Many lending institutions in vacation home areas have relatively limited funds. What is the impact of loans on seasonal homes and campgrounds by local lenders upon the availability of funds for financing year-round housing?

This same line of questioning could be extended to other areas such as construction. What is the impact of seasonal home construction in an area upon year-round home construction? Do the various segments of the construction industry have a preference for either seasonal or year-round home construction? What are the manpower implications--employment opportunities, training and retraining, technical and high school curricula--as they relate to seasonal and year-round home construction.

Community Services

In planning for community services, and especially the environmental quality effects associated with these services, it is necessary to plan not only for year-round residences but for seasonal and weekend residences. Facilities and services that might be adequate to protect and enhance the environmental quality and meet the needs of year-round resident populations might be inadequate for meeting the peak needs of both year-round and seasonal residents.

A major issue facing policymakers and program planners in the mobile 70's is the provision of community facilities and services. If adequate provision is to be made for these services, both the seasonal and year-round resident population needs must be met. In order to adequately provide for seasonal residents and effective community and regional planning and development, it is necessary to have reliable information about their demographic characteristics and migration patterns. This is especially important if their demographic characteristics are significantly different from those of the year-round residents. Within the framework of NE-65 and NEM-42, emphasis should be placed on water supply, pollution control, solid waste disposal, and related areas. In the context of wider rural development and investment in overall social overhead capital, it would be necessary to study needs for health services, police protection, fire protection, snow removal, and transportation linkages. To the extent that these seasonal demands are peaked for a few weeks or months during the year, it may mean an overinvestment in social overhead capital for a major proportion of the year because of the requirements for services and facilities needed by the year-round population.

Community Development

Several years ago at an Appalachian and Northeastern Rural Development Research Workshop I presented a paper, "Outdoor Recreation Development

as a Tool for Rural Areas Development,"² that attracted considerable attention. Three types of economic activity were identified as being especially important to the development of recreation and tourism in low-income areas: (1) increased business activity related to outdoor recreation, including economic activity directly related to the development and maintenance of outdoor recreation facilities, activity generated as an indirect result of outdoor recreational activities, and development of industry to produce equipment for outdoor recreationists; (2) employment of unemployed and underemployed people in the development and maintenance of outdoor recreation facilities; (3) outdoor recreation development as a plant location factor. Although some research has been and is being done in the broad area of the relationship between rural development and outdoor recreation, including seasonal home use and camping, this is still a prime area for cross-disciplinary regional research. This would appear to be a productive area for multidisciplinary research for those interested in outdoor recreation, seasonal home use, community services, and rural development.

The seasonal resident and camper are more often than not viewed as a source of economic exploitation. The participation of seasonal residents in the life of their chosen community should be a fruitful area for research. Many seasonal home dwellers and campers have little freedom of choice with respect to their year-round residence because of employment commitments and other factors. However, with respect to their seasonal residence and camping area there is a much wider range of choice. Seasonal residents frequently possess skills, training, and knowledge needed for community development at the same time that these resources are in short supply in many rural areas. Some seasonal residents hold leadership positions and maintain contacts back home that extend to the state, regional, national, and international levels. Increased involvement of some seasonal residents in the community development process of their chosen community would provide a challenge for Extension and a research opportunity for those interested in communities and especially community development.

²Nelson Le Ray, "Outdoor Recreation Development as a Tool for Rural Development," in Selected Topics on Rural Areas Development Research, ed. by E. L. Baum, United States Department of Agriculture, Economic Research Service, January, 1963.

NE-78: NATURAL RESOURCE POLICIES AND
PLANNING FOR RURAL DEVELOPMENT

William L. Park

Rutgers University

I read Dr. Carlozzi's paper with interest and commend him for emphasizing the critical need to plan for the use of our natural resources. He describes the role of planning in resource management and the need for readily accessible data on natural resources. Under project NE-78, Natural Resource Policies and Planning for Rural Development, we hope to develop planning tools, evaluate information retrieval systems, and appraise the impact of alternative natural resource use policies on selected segments of society.

You are all acutely aware of the rapid urbanization of rural areas which is taking place in the Northeast and the problems which are being created as urban neighbors interact with farm production units. This rural-urban interface has become the locus for substantial conflict as urban lifestyles affect traditional rural production practices. For example, the odors from some agricultural operations are offensive to urban neighbors, who bring pressure to bear on the farmer with the result that he must modify his operation, move it, or close it down completely. In the years ahead, such conflict situations will be more frequent, which emphasizes the need to identify and promote the complementary aspects of rural-urban living.

The pressure is on to do something now. Public policy which will endure for many years is now being forged. We should bring the resources of our respective experiment stations to bear on molding such policies. We should move into this area of activity firmly but with care, as mistakes made at this juncture may be costly. We must develop and evaluate daring and imaginative programs to direct the use of our natural resources for the public benefit. It is timely that natural resource policies be developed and modified now. I fear that if we wait until it is politically expedient to do the job, we may be too late.

I do not mean to imply by the above comments that no planning is being done. Quite the contrary. Several states have proceeded to authorize natural resource planning, and in many instances imaginative and comprehensive master plans have been developed. The planning is being done by amateurs and professionals. Both experience a felt need for timely, accurate, and well-presented data upon which to base their decision making. I might

add parenthetically that in New Jersey, 94 percent of nearly 600 municipalities of the state have planning boards and a majority of these have master plans.

Of concern to resource planners in our state is the continued challenge of traditional zoning regulations and ordinances in the courts. In one instance, large acre zoning is being challenged on the grounds that it is discriminatory. The plaintiff seeks to build a high rise apartment complex which the local planning board thus far has refused to authorize. We expect such challenges to continue, necessitating a re-evaluation of existing planning law and procedures appertaining thereto. Hopefully, research under NE-78 will contribute to the development of concepts which serve the emerging needs.

There is general agreement among planning officials and the public alike that agriculture makes a valuable contribution to the quality of life to be developed through the master plan. Yet such planning is somewhat frustrating, as the agricultural base throughout the Northeast is shrinking and an assurance of its permanence is lacking.

The Agricultural Impermanence Syndrome

A few comments on the New Jersey experience might be appropriate here. As it is the most densely populated state in the Union, one might expect that problems associated with natural resource use would emerge there first. The average density of the state is approximately 1,000 per square mile, compared to some western states that have less than 10 per square mile. There are demands for land and water and related resources which are a result solely of population density. The state provides bedroom areas for New York and Philadelphia as well as local cities such as Newark, Trenton, Camden, and Atlantic City. The population centers of the state are near New York, Newark, and Philadelphia. This is where the population is; the rest of the state is generally rural.

The improvement of roads and the development of highway networks have prompted and made possible an exodus of people from the city to the semi-rural areas. In New Jersey, for example, we have only 0.6 percent of the population on farms, but 11 percent of the population lives in rural areas. Much of the development has been in strips along country roads and highways. As one rides through such countryside, it appears that the place is closed in, but if you were to go a hundred yards behind that strip, you might find open space. Thus even existing open space may not be readily available to our people.

There are also instances in which development comes in disconnected sections in a leap-frog effect, ending up with a checkerboard arrangement. The result is that we do not have an aesthetically planned area. Community services are difficult to provide under these circumstances.

Not too many years ago, Bergen County near New York is said to have had a very pleasant atmosphere because the small towns were separated by open farmland. It was pleasant to drive from one town to another. Now it is crowded--packed together. A number of us are concerned that the construction of Interstate 80 going across the state might induce a Bergen County sprawl all the way across the state.

There has developed in agriculture in New Jersey what we call an "impermanence syndrome." The impermanence isn't limited to agriculture, but agricultural land owners are reacting to it. Let me outline for you what I think the reasons are for this syndrome. We have a "sell fever" in the minds of the landowners in this state, particularly among the farmers. Land values are high and plenty of money to buy this land is available.

But, interestingly enough, the lease rates on this land are very low. In Plainsboro Township, for example, you can lease land for agriculture purposes for \$40 to \$50 per acre; other places it's \$30. In parts of the state, land is leasing for as low as \$10. Frequently, lease rates are barely sufficient to cover taxes. Farmers tend not to make long term investments. They tend to avoid investments in marketing facilities also.

Alternative employment opportunities are advantageous in this state. This is to some extent contrary to what we heard discussed yesterday, particularly regarding Appalachia. These alternative employment opportunities make it easy for farmers to leave the farm for a part- or full-time job. Farm labor is difficult to come by as well.

In spite of the fact that New Jersey has a Farmland Assessment Act, taxes on farmland are high because the rates are high. The psychology of nearby exits for farmers also contributes to this impermanence in the minds of farmers.

In short, the factors which have contributed to the agricultural impermanence syndrome are:

1. Demand for land--soaring land values.
2. Alternative employment opportunities--farm operators and farm labor.
3. Environmental regulations--urban conflict with long-established farm practices and pollution control.
4. Farm labor problem--shortage, wage rate, and dependability.
5. Rising tax rates.
6. Impact of increased transportation technology--interregional competition.
7. Psychological reaction to the exit of many farmers from agriculture.

Why Agriculture in an Urban State?

It is obvious that urban growth planning must account for the use of land presently in agriculture. Whether agricultural business should be preserved in the public interest depends upon the contribution that agriculture in its several forms can make to the social welfare of the public at large. The natural resources of the state exist for the public benefit and should be managed for the welfare of all. At the same time, however, the rights and legitimate interests of landowners must be protected. Planning should not operate in a confiscatory manner as decisions on land use are made.

Recently, Governor Cahill of New Jersey appointed a Blueprint Commission on the Future of New Jersey Agriculture. Implied in the formation of the Commission is the question, "Why agriculture in an urban state?" What contribution does agriculture make to the public welfare? It is our view at Rutgers that land used for agricultural purposes is in the public interest for the following reasons:

1. It provides productive environmental open space.
2. It adds to a secure and wholesome food supply.
3. It contributes significantly to the state's income and employment.
4. It can be an important element in the land disposal of sewage wastes.
5. It serves as a land reserve for future generations and prohibits premature development.

I think it unnecessary to elaborate on these points, as you are conversant with the issues involved, except to say it is not enough that agriculture exists solely for its own sake as a means of livelihood or as a means for food production. In an urban state, other reasons take on real significance.

Objectives of NE-78

The major objective of project NE-78 is to develop procedures, tools, and concepts which will facilitate orderly and imaginative natural resource use planning in the Northeast. More specifically, it is:

1. To describe and appraise selected local, state, and federal natural resource planning policies and the respective means of policy implementation for use in rural areas;
2. To improve the quality of information on natural resources and existing information retrieval systems, and to develop procedures for use of such systems at all governmental levels in natural resource planning; and
3. To determine the reactions of selected social, economic, and cultural groupings to existing and potential natural resource policies.

With respect to the first objective, there is a need to review existing policy elements in each of the states in the region and prepare a compendium of such policies for use by planning officials and others interested in natural resource use policy. We should not succumb to the temptation to launch our evaluative research on a massive scale before an adequate information base is established.

As has been mentioned previously, many of the problems of rural-urban planning are now upon the Northeast, but this is not necessarily so in other parts of the country. Others will look to us for guidance in developing solutions to such problems. It behooves us to be truly creative in developing and evaluating policies and institutions concerned with resource use.

There is no paucity of information to be used by planners and public officials responsible for resource use, but the ready availability of such information is lacking. Objective 2 is designed to assist in the rapid generation and dissemination of planning data. There are several regional planning agencies which have extensive data files on natural resources. These agencies welcome the idea of their respective files being integrated for use by all.

In the conduct of Objective 2, let us recognize that we do not have the resources under NE-78 to implement a regional information system. In my opinion, we can determine the feasibility of such a system from both a technical and economic point of view. The system(s) to be developed under the project should be tested on a small scale to determine its workability. Once a system is operating, we should seek outside funding for its implementation.

The third objective is closely linked to the first and is evaluative in nature. Inasmuch as public policy affects the lives and fortunes of individuals, we should try to estimate the impact of policy directives upon social and economic groupings.

As a start, let me suggest a few policy issues which might be appraised under NE-78:

1. Differential farmland taxation--use-value assessment. I suppose researchers associated with NE-67 (now terminated) will continue their fine work on this subject under NE-78.
2. Purchase and lease-back of agricultural land to provide open space.
3. Allowing the dedication of development easements on land for open space to governmental units.
4. The establishment of agricultural priority districts.
5. Zoning and planning ordinances.
6. Agri-city planning under which permanent agricultural preserves are integrated into "new town" concepts.
7. Permanent agricultural zoning and compensation of landowners for the development value of their land through (a) the transfer through private purchase of development rights and (b) development easement purchase by governmental units.
8. Establishment of inter-city agricultural open space corridors through an inter-municipality arrangement of procedures mentioned under item 7 above.
9. Restrictive zoning of flood plains, woodlands, and marshlands to preserve open space and maintain an ecological balance.
10. Contribution of highway construction to scenic beauty and appreciation of open space.

11. Compensatory regulations.

12. Water policies.

Under NE-78 we can apply our collective energies to a high-priority area of research. I trust we will have the resolve and foresight to do it well.

TECHNICAL DISCUSSION
NE-68: PATHS OUT OF POVERTY

Robert W. Miller

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When Olaf Larson asked me, on short notice, to fill this spot on the program, I hesitated because of the considerable commitment of time which would be involved. As it has turned out, the experience has been most rewarding, largely because of the excellent quality of the papers by Jerry Stockdale and Pat Madden.

These two fine papers cover a lot of ground and touch a lot of bases. They do not leave much room for a discussant, and especially for one that agrees with their basic approach and concerns. I found few targets upon which to focus a critique. Consequently, I hope my remarks add up to more than merely an echo of Stockdale and Madden.

Pat Madden has described a number of ongoing and planned research projects which together make up the NE program of research on poverty. It is an impressive list covering several levels of analysis. I am not going to comment on each of these but rather will direct my discussion to the more general issues which have been raised, such as additional areas of needed research, the need for integration of research findings, and the problem of transforming research outcomes into operational programs to alleviate poverty.

One of the issues Madden raises is that researchers need to be concerned about the question of "so what." In his words, we need to answer at least 3 queries about research:

- a. Will policymakers have new insights?
- b. Can the findings be implemented?
- c. Will our disciplines be enriched?

I would ask at least another question: Are we, as researchers, willing to go beyond the customary limits of our roles to help insure that our research results are translated into action? It is important that proposed research be weighed not only against a criterion of theoretical relevance but also against the probability that it will generate information which can provide a basis for practical, effective, politically feasible intervention to alleviate poverty.

Any of a number of disciplinary perspectives can further our understanding of the existence of poverty. However, these perspectives may not

all be equally valid as bases from which to launch meaningful programs to alleviate poverty. As a psychologist, I am aware that psychological perspectives have contributed importantly to explanations of poverty. At the same time, it is my judgment that poverty and approaches to its solution have perhaps been over-psychologized. Over-reliance on psychological explanation probably does not provide the basis for an effective attack on poverty, because it leads to over-reliance on program strategies which focus on changes within individuals. Such changes are not only difficult to accomplish but are inefficient considering the scope of the problem of poverty.

As researchers, we need not only to be concerned that our results are used by other researchers but also to have in mind specific, potential program users and the levels of intervention at which our results may appropriately be applied. This may require that potential program users be consulted before our research is begun. However, as both Madden and Stockdale point out, policymakers especially may possess attitudes concerning poverty which will influence their acceptance and use of research findings. Findings from a study by Zeller and myself support this point. We found, in a large random sample of Ohio residents, a strong, significant, and positive relationship between education, income, and the tendency to believe that unemployment was the fault of the individual. Thus we may need more research into such attitudes and also into programs and processes which might overcome such barriers to effective programs for change. It would seem that extension would have an important role in programs directed at policymakers.

If we, as researchers, are committed to the principle that our results should be used to guide programs to alleviate poverty, then we do need to be concerned about follow-up to our research. We not only have an obligation to communicate findings to other researchers; if we want program users to be influenced, we may need to go beyond mere publications and become personally involved through user conferences, personal contacts, or other means of follow-up. It may not be enough to publish our results and let the chips fall where they may. In this respect, perhaps we need more evaluative studies of the processes by which research results can best be gotten to policymakers and users. Similarly, we may need more research into the strains that our political and service delivery systems are exposed to as they accommodate new program thrusts.

Jerry Stockdale's very fine discussion of poverty in relationship to change strategies can be a useful guide to planning an effective research and action program. We especially need the type of guidance he provides for making decisions on research priorities. Stockdale proposes five system levels of analysis useful in conceptualizing the causes of poverty:

1. Society;
2. Region, State, Area;
3. Locality;
4. Organization;
5. Family.

Research is needed which relates to program intervention at each of these levels. The NE program is presently focusing on several of these. However, limited resources for research and intervention are available, and we need to consider what level of analysis will generate information of greatest leverage in effecting changes.

An important question is whether more of our research should be tied directly to ongoing potential action programs. I agree with Pat Madden that we need more policy or evaluative research done at a level of disciplinary quality. As social psychologist Donald Campbell has put it, we need to move toward an "Experimenting Society," in which programs of change are tested under experimental or quasi-experimental conditions. As researchers it is important that we become more heavily involved in both the design and evaluation of pilot programs for change. Also, it is important that we do more to initiate programs, as Madden has pointed out. We should, however, also continue to be involved in evaluating programs we do not design. One can react to programs without necessarily becoming a servant to the program administrators and without losing one's creativity or perspective. Moreover, reaction may be an important step toward initiation. For example, by use of within-program variations it is possible for an evaluator to impose his own experimental or quasi-experimental tests on programs someone else has designed. Thus evaluation can weigh program outcomes against goals while at the same time generating useful information of disciplinary quality for the design of future programs.

Finally, I would like to say a word about theoretical or conceptual models in poverty research. I think we still tend to be disciplinary people working on a multi-disciplinary problem. Can we develop theoretical systems which incorporate variables and units of analysis from a number of disciplines? It is important that we have the perspectives of psychologists, political scientists, medical specialists, lawyers, and engineers to successfully attack problems of poverty and rural development. If so, greater efforts to integrate our work with such disciplines will have to be made.

TECHNICAL DISCUSSION

NE-77: COMMUNITY SERVICES FOR NONMETROPOLITAN PEOPLE IN THE NORTHEAST AND
W-114: INSTITUTIONAL STRUCTURES FOR IMPROVING RURAL COMMUNITY SERVICES

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I could "pick nits" about these two projects, but I don't really think this is the time or place for nit-picking. Let me see if I can't take some of the broader similarities and differences and try to say a little more about them. Some of the similarities are obvious. Both projects concern community services to rural people; both of them, furthermore, seem to me to have essentially the same basic outline. They're both going to do three things. One, they are going to go out and measure service levels. Two, they are going to go out and collect a sizable assortment of socioeconomic data about the areas in which those services are provided. Three, they are going to try to explain the variations in service levels in terms of the variations in socioeconomic data. At the same time there seem to me to be some differences in approach. NE-77 is, for example, setting out to use systems analysis. When we start dealing with broad interdisciplinary research of this kind, we run into communication problems. I am trained as an economist; sociologists don't always use terms the same way. I understand the words; I think I understand their denotations most of the time, but they do not always call up the same connotations that they do for one whose acculturation processes (i.e., graduate schooling) were in sociology. But I suspect that, even in terms of methodology, these two projects are not really as far apart as they look.

Both projects, furthermore, have proceeded to take the overall problem and break it up into fragments. There is some difference in the way they describe their fragmentation. NE-77 says health, education, housing, and welfare (with welfare "on the shelf" at the moment). W-114 appears to be talking in terms of a subcommittee working on adequacy of services but seems to be working mainly with health, organizational structure, and social indicators. I think one item we might discuss is: Would it have been better to have gone ahead and set up a committee that would go look at health and involve both the people on W-114 and the people in NE-77 who were interested in studying health, and to have done similarly for some of the other major services? I think I can see some advantages in terms of getting a better critical mass of people working on a given area. I see some disadvantages in terms of finding out something about trade-offs among services, which is a subject I want to get back to.

Overall, it seems to me we've come a long way in the last ten years. I first started looking at the government service segment of this subject ten years ago when I began working for the Department of Agriculture, and I doubt that you could have gotten a group this size together if you had scoured the entire country at that time, particular as long as you confined yourself largely to the experiment stations. We know a lot more than we

knew then. We also have a long way to go, and it seems to me both projects have some rather serious problems that we need to look at.

One of the areas that seriously disturbs me about these projects is measurement. I think both committees recognize it; I wish both committees had said more about how they propose to tackle it. It seems to me that you can get at the question of measuring government services on at least four levels. One is just trying to get at some qualitative differences, and we do pretty well at finding things that we think are somehow related to output that we could point to as evidence for qualitative differences. We get all the data on the expenditures per pupil, we summarize them according to rural and urban areas, and we can paint some beautiful horror stories of the quality of education in rural areas. At the second level, though, we would quantify those differences to be able to say that the education in rural areas is only half as good or is twice as good as in urban areas. We don't know how to do that, in general. We need something akin to the Fahrenheit scale where we can say it's twice as warm in one place as it is in another.

Then there is the third level, which would enable us to get quantitative differences and furthermore to make comparisons among services. Following out my temperature analogy, this is the problem of finding the formula that takes you from Fahrenheit to Centigrade--the one that enables you to compare a given level of education services with a given level of health services. It seems to me we haven't even really begun to approach that problem. Then, finally, cutting across all these is "the level of adequacy" concept which suggests that, in addition to being able to compare Situation A with Situation B, we know of a Situation C which represents some minimal level of adequacy, and we can measure the shortfalls or the overshoots. Here the only suggestion I would make is that we often exhibit a level of credulity which is unbecoming to researchers, in the extent to which we are willing to take the opinions of physicians about what's adequate health service or of librarians about what's adequate library service or of school administrators about what's adequate educational service, without asking whether these standards are based on adequate data and analysis.

On the other hand, let's not let a counsel of perfection interfere with progress. The encouraging thing about these projects is that they are trying to measure services. I'm increasingly convinced that we won't progress if we insist that before we're going to do anything we've got to have a measure that's professionally satisfying to us. We may have to learn to crawl rather haltingly before we ever learn to walk.

Let me turn to a somewhat different problem. The individual parts of this project, it seems to me, are very worthwhile. We need to know a lot more about health, we need to know about education, and so on. But we don't seem to be planning to put them all together. Sam Leadley made the point in the course of his discussion that one of the problems with NE-77 was that of coordinating the individual projects, and this is one of the things that bothered me the most about both of these projects. There seems to be little overall theoretical framework on which to hang the various parts of the project. The questions to be answered seem unclear. In that connection, let me cite some important problems. Extension has been prominent in your discussion of potential audiences for your research. I might

point out that there are questions of national policy as well. This is true particularly if the present budget trends continue, because ERS is not getting the money to answer the national policy questions that need to be answered, and if you guys don't do it, nobody will. Just take one example: priorities among services. It looks as if the new Rural Development Bill is going to pass, and one of the first things that is going to happen is, somebody from FHA is going to be asking, "Okay, we've got all kinds of new authority; we can use money to support all kinds of community services going into rural areas. Where should we start? What are the key variables in here? How can we tell our field men how to recognize what's needed in a given area?" Hopefully, some of this kind of information will come out of these two projects and some of the others that we've been talking about, but I'm bothered because I don't see any mechanism built into the projects that looks like it's going to bring it about.

How about the allocation of functions among units of government? I haven't heard any discussion or any mention of any of the questions of how you pay for the services, which is certainly one of the major parameters that restricts the output of services in rural areas. What about the present political institutions? The suggestion was made yesterday that we need a psychologist on some of these committees, but my personal feeling would be that a political scientist might be even more necessary. Are the present political institutions both effective and efficient for providing these services? If they are not, what can you do about it? In most parts of the country, researchers respond to this question with a plea for county consolidation, but I think you could still count on the fingers of one hand the number of county consolidations you've had in this country since the turn of the century.

To quickly sum up my comments, the biggest area that bothers me is this: Where is the mechanism for putting "the who-o-ole thing" together?

USER DISCUSSIONS OF THE PAPERS ON THE
RURAL DEVELOPMENT REGIONAL RESEARCH PROJECTS
IN THE NORTHEAST

USER DISCUSSION

NE-47: CONSEQUENCES OF CHANGING SOCIAL ORGANIZATION IN THE NORTHEAST
AND NE-80: PROCESSES OF RURAL ECONOMIC CHANGE IN THE NORTHEAST

George E. Whitham

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Encouraging rural development research with emphasis on its applications is a major objective of the Northeast Regional Center for Rural Development that we all applaud. While the Center is experiment station and research oriented, it was expected that extension would be included, as you have done today. My immediate interest is to understand more clearly how some of the RD research may be directed to meet the needs of those extension people who are trying to help problem solvers and be community educators.

Too often we extension practitioners have to respond intuitively to problems brought to us by communities--problems which we may not even have anticipated. Lacking research to fall back on, we are forced to apply problem-solving processes without having applicable data. Thus our crucial question is, can research feed us the thinking and data that we need on rural development so we can be more effective? In other words, will rural development research be the kind of work that can be easily referenced and applied by community problem-solvers?

The ideal problem-solving situation from the standpoint of extension is having staff researchers at hand to whom we can turn. Often it is the man rather than his product that in particular situations is most helpful. Without the man, understandable research reports must suffice. These reports must be interpretable by the practitioner, and therefore the product must be in a language he can understand. Some seminars being planned by the Center, I understand, may help to reduce language gaps between us.

Extension users of research are looking for answers to questions being asked by two kinds of audiences. One kind of audience calls us, asks for the best information we can give, and then goes on its way. A second kind of audience comes into being when extension is developing and pursuing particular educational programs. CRD educational programs arise because they are requested by communities that are seeking ways to come to grips with development concerns. The problems are real, they are local, and they are emotionally laden. Sometimes we can adapt national educational programs. But when we are adapting such programs with their general, suggestive wording, we presume that research assistance will follow through with substance in addition to what extension can generate on its own.

The old adage that research first discovers and extension then

carries the new information to the public does not seem to hold true for community development. In many instances, extension, through its community contacts, discovers the problems that should be researched. But here conflict can arise. When research takes over, it may so redefine the question at hand in order to make it quantitatively researchable that the question becomes significantly changed. Extension may be the loser in stimulating some research but a gainer in other ways as it looks to prior commitments of research that will stand extension in good stead.

Rural development research, at this time, stands in some danger of concentrating on national concerns that are not those of our rural communities. From the national standpoint, the challenge for rural development is the assertion, "Rural America stands today as a sector badly out of balance and urgently in need of coordinated planning, resource use, and development." The fact is that many rural communities do not feel themselves to be out of balance. Instead, many fear the imbalances that accompany rural development. Maine communities, for instance, have mixed feelings about the promoted influx of campers. Vermont has expressed its concerns about more and more population inflows. In eastern Connecticut well-organized groups are fighting both a proposed metropolitan jetport-industrial complex and the extension of an interstate highway to be built from Hartford to Providence. When development means more residents, and it usually does, many rural communities wish that the instigators and the beneficiaries of development would go and develop somewhere else.

As I've looked at NE-47 and NE-80, I have attempted to think in terms of my experiences as an extension administrator of CRD programs, as a member of a town council of a rural town in transition, and as a practitioner who has developed an economic and social comprehensive plan for a rural community.

Three questions come to mind to which research such as this should be responsive. The first relates to the definition of rural development. Rural development can be defined in many ways, as Jansma's paper points out. It is (1) helping farm families or rural residents, (2) providing new job opportunities, (3) reversing the trend of migration from farm to city, (4) making provision for urban persons with residential preferences for the less densely populated areas, (5) designing and implementing structural changes by which communities can become economically viable units, (6) reshaping nonmetropolitan economic activity in terms of its locational intensity and economic income-promotional activities, (7) providing projections for the applied use of decision-makers in their planning and policy efforts.

The second question deals with how research assists rural communities to deal with external pressures. Will it be primarily research dealing with export base theory which is of central importance in regional growth analysis? Will it also recognize the need for analyses of social, political, and demographic changes?

My third question deals with what research can do for the community decision-makers. Will it encourage them to be innovative and/or creative in their thinking? Or will it be reworked to fit available analytical models?

Jansma, in defining researchable problems, has emphasized "developing new methods for estimating human resource availability" and has said, "The central place model will be used in conjunction with gravity models which are basically techniques for quantifying interrelationships between population centers." The major thrust of the research will be to evaluate the multi-dimensional aspects of rural development. I must admit uncertainty on just how decision-makers and their advisors on rural development policy and planning efforts will perceive that their questions may in some way be analogous to those that the research is addressed to. Although the study of how change takes place will help immeasurably as we work with decision-makers, NE-47 (presented by Eberts) has developed a model using some interesting concepts. Linkage, equality, fluidity, and differentiation all, when properly applied, have a definite relationship to my concerns about external and local decision-makers. In the case of both NE-47 and NE-80, although the data generated may soon be out of date, the questions suggested for use by the practitioner should prove invaluable.

I am sure you sense the concern I have led up to. This is the recurring question that hovers over all extension-research relationships. Are we playing in the same ball park? Are we using the same definition for similarly common words like "rural development" and "decision making?" Are the same common criteria used to judge the quality and worthwhileness of our work? Can the jargon of one be re-expressed in the jargon of the other?

I am not looking for answers to these questions today. I raise questions because in everything we do we should be critical, we should question our assumptions. Now, assume that we all have the same objective of improving the quality of life in rural America. We are all concerned with removing the impediments to achieving this objective. A conference such as this one provides the avenue for making extension educational work complementary with research investigations.

USER DISCUSSION
NEM-42: ECONOMIC ANALYSIS OF THE CAMPGROUND
MARKET IN THE NORTHEAST

T. L. Rowland

Pennsylvania Department of Agriculture

I would like to begin my statement by saying that I felt it was unfortunate, and, I might add, a decisive disadvantage that I had no opportunity to review, from the viewpoint of a user, research in which many statistical instruments were employed. This was particularly true of the research project entitled "Economic Analysis of the Campground Market in the Northeast Region, NEM-42."

With much consideration, I have attempted to critique the information which was submitted. As far as I am concerned, this is not necessarily good, since many of my remarks may well have been considered and implemented in the actual work accomplished on NEM-42. As a user of research by assignment, and a technician by profession, I therefore beg your forgiveness if, in my remarks, I delve into methodology and documentation. I believe this is excusable, since as a user my job is to measure the usefulness of the output. However, this is difficult to accomplish when I question whether the input is quantitative.

Before I address myself to the objectives of NEM-42, I would like to preface my remarks by stating that I, as an assigned user, believe there is a definite need to provide both private and public resource management agencies with quantifiable data required to make decisions on improving the methods of marketing and pricing campground opportunities. I do, however, question the advisability of preparing specific recommendations on pricing and marketing procedures as proposed in Objective 4 of this project. I would prefer to provide a range of alternatives, of which one or more could be selected by the manager for implementation in his particular park.

Additionally, I would like to see Objectives 1, 2, and 3 more closely related. By that I mean recognizing existing camp users along with the potential and drop-out campers and indentifying specific motivational data of all three, particularly their preference of facilities by nationwide regions. This information would then be delineated in map form outlining particular regional preferences. Having accomplished this objective, there would follow, using acceptable sampling techniques, identification of specific camp facilities in which interviews would be conducted using what I call a "facility complex rating sheet" and a "user information questionnaire." This would be accomplished for both private and public campgrounds in each of the regions mentioned above. If regions outside the cooperating 14 state regions had been frequently mentioned, a small sample of those might also be interviewed to further identify camper preference.

This, I suspect, would provide a more comprehensive view as to camper motivations and would specifically identify the area of concentration for marketing efforts, particularly if distance and quality are criteria for camper preference. It would also appear that the coupling of Objectives 1, 2, and 3 would lend themselves to the development of a computer model comparing economics, camper preference, distance, quality, and market potential.

I have mentioned quality of facilities several times. What I am suggesting here is that the facility complex rating sheet provide a graded score which will enable inventory personnel to rank a particular facility complex on its quality of services provided. I strongly feel that it is important that facilities be ranked. It is simply unsound to compare highly developed state park areas and the recreational experiences they provide with experiences offered at deluxe, resort-type camping facilities or estates with a small pond or an abandoned farm. Of course, this is not to say that one experience is necessarily better than another, only that they are different and that calculations of supply and demand for outdoor recreational opportunity must take into account different kinds of opportunities available. To further describe what I refer to as the facility complex rating sheet, I would offer the following examples:

If the direct access to a particular facility complex is a road paved with a hard surfacing material, such as asphalt or bituminous mix, then a point ranking would be a five. A road paved with gravel, however, would rate a one. Or, for water supply, if the water supply originates in a well or boxed spring, but is delivered to the facility complex or to each camp site by pipe, five points would be recorded. In a more primitive campground where the only source of water for the facility complex is a well, without the piping to individual sites, a one point grade would be recorded. If we were to, say, rank beach development facilities, we would identify the ranking by a 1-5 score. A five rating would be permanent, finished change houses; clothing storage; hot and cold showers; complete lavatory; lighted swimming area; guard stations; rescue equipment; first-aid rooms; buoys and lines on the outer limit; a float; a diving platform; and shallow water markers. A ranking of four might well be a permanent unfinished change house; cold showers; urinal and commode; lighted beach; guard station; rescue equipment; buoys and lines on the outer limit; diving platform; shallow water marker. A three ranking for the beach development would be a temporary change house; foot shower; commode; rescue equipment; buoys on the outer limit; shallow water marker. A two ranking would be foot shower; buoys on the outer limit; shallow water markers. And a one would be buoys on the outer limits of the swimming area. Whichever of these five descriptions best fits the situation viewed by the interviewer, he or she would mark accordingly. This same ranking procedure would follow for all other facilities within the complex. This might include: swimming pools; boat access; marina; land-oriented recreation facilities such as trails, amphitheaters, camp sites, group camps, transit trailer parks, motels, cabins, lodge, restaurant, cafeteria, stables, designated picnicking, group picnicking, golf, amusement areas, nature trails, interpretive exhibit buildings; restoration, excavation and display areas; blinds and shelters; game field playgrounds; and, of course, facilities for winter sports such as ice skating, skiing, tobogganing, sledding, snowmobiling, etc. When all of the facilities within each complex have been graded, then a total point count could be given for each of the complexes observed.

Returning to other objectives, I propose that Objective 2, which is "Determine the legal authority and policies which underline the pricing and marketing decisions of public camping management agencies," be included, in addition to a review of the state statutes and other local authorities. I would recommend conducting an intensive survey of the public complex facilities using methods similar to those to be used in observing the private camping facilities which I outlined for Objective 3.

As I mentioned in the beginning, I am in complete accord with the purposes of this survey, which is a study of the methods of marketing and pricing the camping opportunities. However, as I also stated earlier, as a user, I must be concerned with the quantitateness of the material developed, and unless quality is considered, along with other variables mentioned, I would have some serious reservations about the methodology used.

USER DISCUSSION
 NE-78: NATURAL RESOURCE POLICIES AND
 PLANNING FOR RURAL DEVELOPMENT

Donald J. White

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As I read the paper on NE-78, I found myself nodding in agreement with many of the situations, trends, and needs expressed. There were mentioned a number of items of mutual concern, items that we have been involved with, such as:

1. Studies of the impact of non-residents, and educational programs with this audience.
2. A study for CDRPC dealing with open space and agriculture.
3. The maintenance of agricultural lands through legislation.
4. Various legislative aspects of planning.

The paper also indicated many areas worthy of further pursuit. But for user reaction, the following interrelated items were selected:

1. The role of agriculture in the rural countryside.
2. Determiners of land use in rural areas.
3. Orientation of the professional planner.
4. Plugging into the political process.

Let's look briefly at each of these and indicate the user research needed. First--the role of agriculture in the rural countryside. Answers to the following questions are greatly needed:

What is the economic contribution--tax-wise, investment-wise, employment-wise--of farming and agri-business to the state, the region, and, more importantly, the local community?

What is the social contribution of farming to the state, the region, and, more specifically, the community?

What is the physical contribution--i.e., open space, recreation--of farming to the region and community?

For example, if we can show that farming contributes X amount of

dollars to the local economy through first-level inputs and outputs, we have one piece of hard data that can be used in discussing whether farming ought to be maintained in that community. Similarly, if farming is to be maintained, what existing methods--zoning, agricultural value assessments--are available or what additional alternative methods need to be considered?

Answers to these broad questions are needed before we can discuss alternative land uses with planners, town planning groups, legislators, and other decision makers.

Through recent legislation in New York, agricultural districts are being formed to maintain, and hopefully increase, the viability of the total agricultural industry. This is a start in looking at the role of agriculture in the community. But analysis of the impact of the districts will be needed during the next decade.

Second--who actually determines or influences land-use decisions in the rural areas? Perhaps the real planners are:

1. The individual landowner--when he sells land, how much land he sells, how much he sells the land for. If he sells to a developer, that developer is also influencing use--be it for vacation homes or shopping centers.
2. The assessors--by the value they annually place on the land. By increasing assessments, they may force the owner to change the use of that land. Many assessors lack up-to-date knowledge of how to assess agricultural lands and buildings.
3. Various forms of government with the power of eminent domain, such as state departments of transportation or power authorities.

Why is it important that we identify the determiners of rural land use? So we can plan an educational program for these people to help them realize how and to what extent their decisions affect the future use of their land and the future of that community.

The third area of research for user reaction--the orientation of professional planners--whether they be consultants, county planners, regional planners, or state planners. Most are not oriented to agriculture. For example, several years ago in working with a county planner on a land use plan, any land not in industry, housing, roads, education, or services was termed "other." This included agricultural--which was the largest income producer in that county.

Planners do not seem to understand agriculture--its place in the social, economic, or physical community. It seems that we need to begin integrating rural planning concepts, situations, and considerations--especially relative to agriculture--into the undergraduate and graduate levels. Here again, research about rural economics, values, politics, etc., is needed if we are to do the job adequately.

We also need to consider the incorporation of planning, such as land use alternatives, into the secondary education system. These students are the future community decision-makers.

A pilot project in a New York school district is attempting to teach, through a multi-media concept, the fundamentals of community planning development to students in grades 7 through 12. Hopefully this is a start, but how do you convince the state education officials that such a subject ought to be in the curriculum?

There is an educational need to use research in attempting to develop and change the formal and informal orientation of planners and future generations of community decision-makers.

Fourth--plugging into the political process. Here is where, I believe, the final but often frustrating payoff becomes a reality. The educational users need research in rural development concepts, policies, and alternative land uses to help political decision-makers understand:

1. The effects of various alternative land uses on the future of a community. For example, what implications does legislation for county-wide zoning have on local town controls over land development? What effect does the acquisition of large acreage for a pump storage electric project have on the economic and social status of the affected communities?
2. The contribution of agriculture to the community's or region's economic and social fabric. Experience indicates that many of our political representatives from city and urban areas do not realize the total contribution of agriculture to society. It seems that on-going research is needed to show these decision-makers how the agricultural industry relates to rural development.
3. The development and implications of legislation dealing with land use. A recent experience in New York regarding introduced legislation indicated that the sponsor wanted assistance in thinking through the bill and its implications--especially for agriculture. But he found few professionals willing to assist. Had research information on land-use policies and goals been available, that legislator's decisions would have been easier. It is helpful to remember that not only can we help the legislators--they can help us, through the funding of specific research, especially for joint research purposes.

Finally, I agree with Carl's concern for the lack of effort regarding the integration of existing research on rural development problems. It would be extremely helpful for the user-educators to be kept posted on research results dealing with rural development.

Knowledge of what has been done in the past may help in solving a current community problem, help in considering alternatives, or lead to the development of additional research. Knowledge of current research also may enable the introduction of new needs, considerations, or funds.

It seems, then, that the effective model of research, teaching, and extension can contribute greatly to dealing with today's problems of rural development, planning, and policies.

Let me conclude with the following brief anecdote. In speaking to a group of scientists on the impact of science on the future, South African mathematician A. M. Starfield ended his paper in this fashion:

"If I have stopped during this talk to scratch my head, an ethologist might tell you that this is a characteristic we share with the apes. It is an example of a displacement activity. When a person is under pressure--such as I am in talking to this audience--he is often unsure of what action to take or what to say next. He resolves the conflict by doing something totally irrelevant, but something he is used to doing and can do almost automatically--like scratching his head.

"The scientist is faced with tremendous problems in the future. How many of us are scratching our heads?"

USER DISCUSSION
PROJECTS NE-68, NE-77, AND W-114, WITH EMPHASIS
ON NE-68, "PATHS OUT OF POVERTY"

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Introduction

The headlines read, "Representative _____ to Seek More Aid for Rural Areas," "New England Rural Growth is Conference Topic," "Money vs. Human Values." Pick up your newspaper or a periodical today and issues in reference to rural development are important discussion topics. Oh, yes, we mustn't forget radio and television. It's there too. Rural development is the issue at hand on the minds and tongues of taxpayers and legislators alike in rural areas.

As you will note on the program, my assignment is to be a "user" discussant of NE-68, NE-77, and W-114, with emphasis on NE-68, "Paths Out of Poverty." The poor are in need of community services and are directly affected by the services provided by the institutions. In other words, the poor, community services, and institutions are interrelated.

Rural Development

How does rural development relate to "Paths Out of Poverty"? The report of the President's Task Force on Rural Development says the purpose of rural development is to "create job opportunities, community services, a better quality of living, and an improved social and physical environment in the small cities, towns, villages, and farm communities in rural America."¹

I like the remarks of the Deputy Under Secretary for Rural Development:

"Rural America is a place where you can walk in the evening and hear the crickets and the frogs. But it is also a place where 63 percent of the housing still lacks complete plumbing, where an average family income is 23 percent less than in metropolitan areas. The challenge in rural development is simply to make rural America a better place to live and a better place to work.

¹U. S. President's Task Force on Rural Development, A New Life for the Country (Washington, D. C.: Government Printing Office, 1970), p. 1.

"Rural development is, of course, economic development--more jobs--a prosperous agriculture. It is also developing community facilities--recreation and land use planning.

"It is most important to remember that successful rural development requires a BALANCED COMPREHENSIVE APPROACH simultaneously involving economic development, people building, community facility improvement, and environmental quality. Deficiency in any of these areas will be the limiting factor in a community's fulfillment."²

An important goal is to "bring jobs, opportunity, and a better life to low-income, underemployed people in rural America."³

We must recognize that we have all socioeconomic classes living in rural areas: rich and poor; upper, middle, and lower classes. If our goal of rural development is applied, an important audience will be the low-income one.

The recent report "Hard Tomatoes--Hard Times" calls our attention to abandoned towns, boarded-up business establishments, migrants who have moved to the cities to try to make a living.

Coles refers to the migrant as seeing his children "growing up to have no shoes, to walk barefoot, to miss school . . . sickness with its attendant weakness; gloominess and self-doubt; and indifference, a child's realization that books don't matter in a neighborhood where very few people, literate or not, can find work."⁴ The cities offer hope, but all too often we realize the problem of poverty is only displaced.

I note rural development is a "people" program to lift up those in greatest need. Since it is a "people" program, those living there must want it and leaders' involvement is essential. As I view this, the poor must be involved (both men and women, as well as youth), and this may be through their opinion leaders. Rogers claimed "opinion leaders are most often of the social system in which they exert their influence. In some cases, however, individuals with influence in the social system are professional persons representing organizations external to the system."⁵ We must find out who they are and work through them if we sincerely wish to accomplish our goal of "Paths Out of Poverty."

One thing is sure--if it hadn't been for the creation of Adam and Eve, we wouldn't be facing the problem of rural development today. It seems the term RD has been in existence for a long time under the guise of different titles.

²RC and D Newsletter, II, No. 6, pp. 1-2.

³U. S. President's Task Force on Rural Development, op. cit., p. 6.

⁴Robert Coles, The South Goes North (Boston: Little, Brown and Company, 1971), p. 17.

⁵Everett M. Rogers, Diffusion of Innovations (New York: The Free Press of Glencoe, 1962), p. 16.

Families make up a community. The community influences and affects its families--their habits, their decisions and struggles for a full, rewarding life. The future of a community depends on the abilities, attitudes, understanding, and actions of people. And the poor are members of the community. Like the words to a popular song, "You are a child of the universe; you have a right to be here." That's you and I--rich or poor.

An environmentalist raises the question, "Have we identified a sacrosanct segment of our natural resources for protection, i.e., trees, rivers, fish, while overlooking and minimizing the need to protect with even greater fervor our primary source--human lives?"⁶ Do we want to save a generation of children growing up in pockets of depression scattered around the country? Children living in a pit of degradation could grow up and become the parents of children who are frustrated and violent. The destruction they could produce could be permanent and immeasurable in economic and social losses.

Rural development seems to be an all-encompassing process--it includes not only economic, but social and human resources as well. In fact, sometimes social and human development may be essential before economic development can take place.

Poverty

As a user of NE-68 research, it was necessary to keep foremost in my mind the fact that poverty can very well be a "way of life into which people are locked from birth."⁷

It is not a single condition, and we should think of it as a continuum rather than consider it as a point on an absolute scale. Poverty represents inequality.

The chances are favorable to being poor if one is "over 65, a female head of a household, non-white, or a rural farm resident."⁸ To continue, "The very young families with more than six children under 18 have a greater likelihood of being poor than other members of the population, and individuals who live alone have a greater probability than those who live with families."⁹

Let me share with you some of the problems of the poor:

⁶Eugene M. Ezensky, "Priorities of Environmental Concern," Journal of Environmental Concern, III, No. 4 (Summer, 1972), 11-12.

⁷Lola M. Ireland, Low Income Life Styles (Washington, D. C.: U. S. Department of Health, Education and Welfare, Division of Research, 1966), p. vii.

⁸Oscar Ornati, Poverty Amid Affluence (New York: The Twentieth Century Fund, 1966), p. 38.

⁹Ibid., p. 132.

Housing

The poor live in more crowded living conditions than the middle class. Their housing may be dilapidated, ramshackle houses, or shacks. Often it is rat infested and provides poor protection from bad weather and changeable temperatures.

Public services are nonexistent or desperately inadequate. Landlords tend to exploit the poor by refusing to give good services to them. "Poor housing leads to pessimism, stress, poor general health, loneliness, and a high degree of sexual stimulation."¹⁰

"One rural house in four is substandard and rural families who rent are twice as likely to occupy substandard housing as families who own their own homes."¹¹

Health

The poor are often hungry and inadequately clothed and evidence a need of dental and medical treatment. Infant mortality, disease, and premature death are high among them. "Rural people have higher rates of injuries, more days per year of restricted activity, and lose more days each year from work because of illness and injury than their urban counterparts."¹²

Fewer health facilities are available.

Deprivation means: "excess fatigue, disturbance in sleep, inability to concentrate, queer bodily sensations, depression, apathy, loss of ambition, and the tendency to transfer blame from one's self to others."¹³

Education

The poor have not had the educational opportunities of the more affluent. In many instances, they have been hurt so much in school after having one failure after another that they eventually drop out of school. They often have a low language level and their speech habits are poor. There may be a unique dialect of spoken language.

Their low level of skills and insufficient motivations, due often to a lack of education, promote their poverty. The disadvantaged person has a problem thinking well of himself. He tends to feel he has been

¹⁰ Bruce W. Tuchman and John L. O'Brian, Preparing to Teach the Disadvantaged (New York: The Free Press, 1969), p. 4.

¹¹ Luther T. Wallace, Daryl Hobbs, and Raymond D. Vlasin, Selected Perspectives for Community Resource Development (Raleigh, North Carolina: North Carolina University, 1969), p. 40.

¹² Ibid., p. 43.

¹³ Tuchman and O'Brian, op. cit., p. 4.

"cheated of the chance to develop into a successful person."¹⁴ He is convinced that he cannot achieve any worthwhile goals and feels insecure and reticent about his abilities.

The average rural adult has completed fewer years of education than an urban adult.

Unemployment

Another crisis the poor are subject to is unemployment. The demands and experiences they do have are restricted by lack of education and money. The jobs they do have do not require the quality of work that is needed in a complex situation. The poor can be easily replaced because they are unskilled and uneducated.

The need for farm labor has declined. The rate of unemployment is higher in the rural areas. Jobs lost as a result of technological progress have not been replaced sufficiently. "Most of the rural poor are on the outside of the market economy looking in."¹⁵

I often think the best way to understand the problems and plight of the poor would be to live among them and experience the same experiences. Of course, there would be one thing in our favor and that is we're not "trapped" and could move out any time.

Research

Paths out of poverty. What does it mean to the researcher? Your definition implies change. Is the researcher concerned about just the characteristics or problems of those in poverty? Does he want to carry this further and find out what is being done to assist these families and individuals in finding and getting onto the right path? What organizational and community programs are most effective? What additional resources are needed? Do we know whether or not the poor get out of poverty and stay out? If not, do we know why?

Are we objective about our research or subjective? Do we tend to select those areas we feel most comfortable in doing? With whom do you plan to share your research?

I wasn't aware of what was being done until the opportunity was presented to participate in this program. There is some research in progress that relates directly to problems and needs of poor families. However, there is a need to carry the research beyond that of a study to analyze a situation relevant to the poor. Have we overanalyzed the poor, leaving them no better off? I feel our need extends beyond the analysis of problems and needs. You can logically answer whether or not NE-68, NE-77, and W-114 do this. I'm amazed that only three and a half scientific-man-years are being spent on NE-68.

¹⁴Willard J. Congreve, "Not All the Disadvantaged are Poor," Education Digest, XXXI (April, 1966), p. 4.

¹⁵Wallace and Vlasin, op. cit., p. 44.

NE-68 indicates you are aware of the implications of your research. Hopefully, it is more than for policymakers, as you stated. This could defeat the main goal of rural development. Often "do-gooders" do not understand the problems of the poor, and organizations developed to work with the poor are too middle-class oriented.

As a user of your research, I'm vitally interested in who is doing it. All of the areas of community services are within the scope of our Extension Home Economics program.

I believe you must realize the home economist has a real part to play in research related to community services. She/he should be involved, as she/he represents the family and individual viewpoint. Somehow I wasn't aware of home economists being involved in your projects, but perhaps they were. The interdisciplinary approach is good and should be encouraged.

One serious concern is the timing of the research. In some situations, programs are under way before the research is even started or finished. This, of course, allows for much trial and error, which is expensive in money, time, and its effects on humans. It may mean the researcher must "run" to catch up.

NE-77 indicates it is working in areas related to the poor. Hopefully, the plan involves the poor or their leaders in identifying their own needs and problems related to community services.

NE-68 refers often to influential persons defining the problems and proposing the solutions. Were the poor involved in developing your project outline? Why not involve the poor? It won't work? Do we have the research to prove it? There is leadership among the poor and we need to "harness" it. The leaders may not be the ones we think.

It is good to include an analysis of institutional changes in communities that would better serve the needs of the aging and other age groups, as well as socioeconomic groups. A conference discussing alternatives to institutionalization for the aged concluded that "income ranked first, the second most important role was increasing the availability of a comprehensive range of services which could assist older persons to remain independent as long as possible."¹⁶

Do the poor know the system? In your research, will you find out if the poor are on the outer boundaries of the systems? If so, will you take the research one step further and find out why and how they may be included? Hard work alone is not the only means of overcoming poverty.

NE-68 comments that middle-class citizens, political leaders, and administrators tend to feel the poor regard welfare as a "hustle." Do we have any correlational studies to indicate whether the middle class or the poor hustle the system the most? I've heard the poor don't know the

¹⁶"Conference Discusses Alternatives to Institutionalization for Aged," Aging, No. 213 (July, 1972), p. 8.

system well enough to teach their children how--or the poor elderly take pride in being self-sufficient to the point that it is a detriment to themselves.

Descriptive research is helpful in defining the situation. However, using this as a foundation to do additional research is imperative if it is to be of utmost benefit to the user. I like the statement, "Action without research into needs is folly and research into human problems without action is stupidity."¹⁷ Interestingly, it is reported that while scientific research is in the space age, human research is in the horse-and-buggy age.

NE-77 reports scientific-man-year commitments by ten of the Northeast Experiment Stations to community research projects for description and analysis of housing, transportation, employment opportunities, education, medical and health services, welfare, protective services, recreation, and planning. All these have implications for the poor. After description and analysis of NE-77 research, what are your plans? We need research to provide the basis for programs as we work with the poverty group and those local citizens having this assignment.

Dr. Leadley indicates subcommittees in housing, health, and education are already progressing. Other disciplines doing research in these areas should be contacted, if this has not already been done, to learn their direction of research. The compilation of data would be most helpful to the user. In addition, it would avoid duplication of effort. In passing, there is a research effort in some medical schools to make for better transfer of patients' records. Some refer to this as accountability. Are we, too, talking about greater accountability to the poor?

What other research would be helpful? Foremost, identify the attitudes of the middle class toward those less fortunate than they. Why do they feel this way? How can these attitudes be improved?

NE-68 refers to a study by Bruce and Colle at Cornell to improve the lines of communication between and within organizations and programs. This should be of value to organizations dedicated to the interests of the poor.

Give the poor an opportunity to communicate their needs to local officials. Do they participate as well as informed citizens in community planning? How can we improve their participation? Are they possibly overshadowed by those interested in financial gain? Is the community being shaped disproportionately? Is the growth direction and quality of the community skewed? Tell us how to prevent this.

What efforts are we making to improve community health, safety, and recreation for the poor? Have ways been found to identify and solve problems to improve the health of those with limited resources? Are we aware of the availability and need for mental health services for the poor?

¹⁷Marvin B. Sussman, quoted by Samuel M. Leadley in his paper on NE-77 in this proceedings, p. 141.

What is the impact of the supplementary food distribution programs on the general health and nutritional status of the recipients? What are sources of information and misinformation about health and nutrition? Do the poor utilize the mass media as a source of health and nutrition information? What factors in the community adversely affect the health and safety of the poor? How can we improve the health services?

NE-68 reports that a study of the cost-effectiveness of cash payments versus income-in-kind for dietary adequacy of low-income families tends to discredit the value of these programs--i.e., food stamp, commodity, etc.--and that the dietary intake of low-income families would be cheaper through cash payments. A word of caution! No matter what the kind of program, much will depend on the family background, the degree of nutrition education, and the amount of income, plus other variables. Our EFNEP aides find that when income is adequate, the diets are often better.

The issuance of food stamps through other channels seems very logical, and this is particularly a problem of the elderly and those with transportation problems. I've even wondered if EFNEP paraprofessionals could be involved. The buying of the allotted amount of food stamps by those with low incomes is often a problem.

There is a rather serious danger in citing the difficulty of getting low-income families to change their dietary behavior. So many variables are involved. Change is difficult and often a lengthy process--sometimes a generation passes! Low-income families have multiple problems, and our aides say maybe you can't start with nutrition first. The income may be inadequate. How much time has the paraprofessional spent with the family? The number of visits? What has been the follow-up? Have we expected miracles in two to three years?

Our number one challenge by the President's Task Force for Rural Development is to bring jobs, opportunity, and a better life to low-income, underemployed people in rural America. How effective are the educational programs for the poor? Are curricula planned around the needs and capabilities of the poor who often have a low IQ? Has a determination of needs been made for educational programs to meet the life styles of the poor with respect to more effective participation in the labor force, the political arena, the family, and various community programs? Do we know what special education programs would contribute to the economic and social advancement of the disadvantaged? Are the persons being trained for existing jobs in the area or is their training already obsolete? What is happening to those being trained for the job? Paraprofessionals are being used more and more in educational and informational programs for the poor. Have we any research to know their effectiveness? What types of persons relate best? How competent are they? Can they contribute effectively in other subject areas? Do we really know whether it is best to combine lower- and middle-income children in the EFNEP program, or does the gap still exist?

The same goes for volunteers to work with the poor. What can they do most effectively? Do they need to receive some sort of remuneration? How do you train them? How competent and dependable are they? Are we working with communication disciplines? Do we know what media the poor use?

Do we have any comparison studies of the input versus the output of our various low-income programs? This would be helpful in evaluating effectiveness of the various programs and deciding future directions. Are we planning any longitudinal studies of the programs? For example, would it be well to follow those families in the Rural and Farm Family Rehabilitation Project to learn what happened to them after the paraprofessional left?

Why were not participants in the AFDC program being interviewed to learn their opinions and possible recommendations for modification of the program?

It has been suggested that a team of workers from various agencies "zero in" on working with the poor. How effective is this? What is the best method of doing this? Should all agencies send representatives in, or should one agency take the leadership and bring in the existing resources at the appropriate time? How do agencies perceive their roles in working as a team? I like the idea of the evaluation of the team approach in the WIN Program. This should give direction to our work.

The reference to the workers syndrome was of concern to me. Do we understand the situation well enough to make inferences as to why people drop out of the labor force and stop seeking employment? Remember, man is a total person with many things affecting his situation. What is his self image? What about the quality of his housing? The number of rooms versus the number in the family? How is his health? Does he have transportation? Is he unskilled and apt to be laid off again anytime? If he loses his job again, will it take quite some time to get on welfare? There are so many variables to be considered.

In a community, people's needs should be given highest priority in planning for future development. Residents must be involved in determining their surroundings. There should be a balance of services, housing, and programs for all. Families must be able to communicate their needs to local governments. What are the family needs when planning low-income housing? Are they fulfilled? What is the perception of private enterprise regarding its role in closing the gap between present low-income housing and needed housing? What is the response of builders, suppliers, and financiers of housing to proposals for more livable low-cost housing designs? What is the perception of citizens of their role in affecting decisions (i.e., zoning, codes, special permits, tax base) which determine the long-term quality of housing in their community? How can all this be done or improved?

Imagine my surprise to learn recently that many standards used in codes were set by committees who used "self-authority" to reach decisions back in about 1937-57. They must need revision.

I note your plans for a self-housing project evaluation. Good!

As a user-discussant, I believe I've raised many more unanswered questions than the planned research will provide. Much is needed for the poor to accomplish the main goal of rural development and to help the poor find a path out of poverty.

Conclusion

There are four basic assumptions about man. First, all men are different. From his day of birth, each man is unique. The people, things, and events man comes in contact with day by day make him different. As no two snowflakes are alike, the same is true for man. Second, his home life is not totally separate from his work life, and his emotional life is not separate from his physical condition. Each affects the other. Third, man is not motivated by what people think he ought to have, but what he himself wants. Man needs to be shown that a desired action will increase his need-fulfillment. And, lastly, man wants to be treated with respect and dignity and should be treated this way.

As we provide and plan programs for the poor, it may mean we have to retrain staff, secure new staff with different competencies, utilize the multidisciplinary approach, and even develop new research tools as we pioneer the path out of poverty.

It is essential to remove the barriers that impede those in poverty. Are you planning in your projects to give priority to these needs as you plan for future development? You are the ones who can decide whether this is planned. To date, really not much has been achieved, but many good assumptions are in progress.

I believe researchers and users should be working together to combine the theory with the application as we aim toward the target. Perhaps it may even require new organizational structure.

USER DISCUSSION

NE-77: COMMUNITY SERVICES FOR NONMETROPOLITAN PEOPLE IN THE
NORTHEAST, W-114: INSTITUTIONAL STRUCTURES FOR IMPROVING
RURAL COMMUNITY SERVICES, AND NE-68: PATHS OUT OF
POVERTY, WITH EMPHASIS ON NE-77 AND W-114

Maynard C. Heckel

Cooperative Extension Service, University of New Hampshire

I would like to share with you some general comments related to the area of rural development as a user of research. Because of the short history of the specific projects NE-77 and W-114 assigned me, my comments, for the most part, will be rather general in nature.

First of all, there is continued difficulty in getting handles on the basic concepts related to rural development. We all admit this, and we all say it's a very complex process, but I feel we need to do as much as we can to work for further clarification. "Getting handles" on rural development is extremely important when it comes to communicating with our staff in trying to explain to them what it is that we expect of them professionally. A clear understanding is also essential when it comes to communicating to others from whom we are seeking financial support.

Secondly, I think we have a problem when we refer to resource development as "rural development." There are hangups in how people define "rural." In the definition that we are using nationally we take in many communities that I don't think consider themselves to be rural communities, and we try to involve numbers of people that don't think of themselves as rural residents. This may be a deterrent to making progress, since some people may be turned off when we talk about rural development in communities of 5,000, 10,000, 15,000, or 20,000. People don't know what it is we're getting at, and they say, "It's not for me; I live in a small town; I'm certainly not urban, but I'm also not a rural resident."

When we mention delivery of community services, let's concern ourselves with the educational delivery system of the Cooperative Extension Service. We say within Cooperative Extension we have an educational delivery system that we can fully utilize in getting information to our publics. What does this really mean, and how does it become operational in relation to rural development? Let's really test the system through some evaluative research.

Also, let's consider relationships of land-grant universities and Cooperative Extension with other organizations and agencies involved in community resource development. What are these relationships? We are subject to a great deal of criticism for overlapping. What can we uniquely contribute? What can other organizations and agencies uniquely contribute?

I would suggest some attention be given to this aspect, not only identifying the community services, seeing whether or not they are adequately serving rural areas, but also identifying the unique contributions of each.

Another area has to do with staff development. Much of the research that is being done in rural development has certain implications for staff development. Establishing clearer job expectations for those people who are working in the field of rural development--this is always a little hazy. We say to staff, "This is an involved process, and you know you just get out there and help people relate to each other, identify problems, and help with solutions." The staff members we try to explain this to say, "This is what we're already doing," and go back to the job, or are so confused they don't know when they are involved and when they are not. Consequently, we do very little in recognizing some of the contributions that some of our staff make. I think job expectations need to be clarified, and the results of research efforts certainly can help us here.

Another thought concerns establishing some minimum knowledge levels for our professional staff. What is the minimum knowledge that our staff, working in rural development, should possess? What sort of skills should they master? How do we help these people develop these skills and obtain this knowledge?

Another aspect of rural development related to staff development concerns the "retreading" process. We've done a lot of retreading of many of our professional staff. I'd be interested to know how effective this has been and what dimensions of retreading have seemed to work, or are we really fooling ourselves? Should we be seeking out those people who are professionally trained in areas closely related to rural development and moving ahead with these kinds of people rather than trying to "convert" staff?

We must identify ways and means of assisting our traditional support groups to better understand and accept our involvement in rural development. Many times they wonder why the staff is spending time on development. Why aren't they devoting more time to traditional kinds of programs? I think we need to carry on educational efforts with some of these support groups so that we can develop more significant programs. Certain types of research might help on this one.

I think we overdo the process aspect of rural development. We've got to be concerned a little bit more with action leading to results. I know it is a process, I know it is a very complex process, but I don't think we can spend all our time on process. I think we've got to get more action-oriented, and we've got to help people not only understand the process but also recognize some things that can make impact locally, statewide, and nationally so we have evidences of progress.

I would also make an appeal, when research projects are written, for you to include a statement which adequately reviews related literature with some indication of how previous research has been used or has not been used and why or why not. This might provide helpful guidelines in designing research projects likely to yield useful findings. I think some consideration of this in the design of these projects would be beneficial.

Most of my comments have been general in nature, reflecting, from a user's viewpoint, areas of concern that might be considered in present and future research efforts. Answers to the questions I've raised would be helpful in providing a partial basis for administrative decisions related to rural development.

PANEL:
FUTURE DIRECTIONS IN PLANNING, MANAGEMENT,
AND USE OF RURAL DEVELOPMENT RESEARCH
IN THE NORTHEAST

PANEL: FUTURE DIRECTIONS IN PLANNING, MANAGEMENT, AND
USE OF RURAL DEVELOPMENT RESEARCH IN THE NORTHEAST

Panel Chairman: W. E. McDaniel,
University of Delaware

Four members of the panel--all except the chairman, W. E. McDaniel, and Paul J. Jehlik--had chaired the group meetings which preceded the panel session. There were four groups: (1) administrative advisers of the rural development regional research projects and experiment station directors; (2) department chairmen or their representatives who serve as members of NEC-14 Technical Committee; (3) rural development regional research project technical committee chairmen and members; and (4) users of rural development research, including representatives from Cooperative Extension. During the first day of the Workshop, W. E. McDaniel gave instructions for the group meetings and provided all participants with a list of questions (see Appendix B) which the groups might wish to consider in view of their purpose, i.e., to discuss future directions in planning, management, and use of rural development research in the region.

The panel members' suggestions and recommendations relative to the planning, managing, and use of rural development research in the future could be drawn from the group meetings, but they were not necessarily expected to summarize the discussions of the meetings which they chaired.

Prior to the group meetings Dr. Jehlik had made available to Workshop participants the following items: (1) a Cooperative State Research Service list of rural development research projects in the northeast region initiated between July 1, 1970, and July 20, 1972, (2) a Federal Extension Service list of approved special projects for fiscal year 1972, and (3) a preliminary draft of a Cooperative State Research Service paper by Harold R. Capener on "Improving Efficiencies in Regional Research in Rural Development."

B. L. Coffindaffer
West Virginia University
Chairman of Group 4--
Research Users

Some Assumptions

1. The need for research results will increase.
2. A state is too small an increment to consider; attention must be given to a region. Multi-state.
3. The need is so great, and the elements of rural community development are so basic and common, that we cannot afford the luxury of duplication. Thus we should be continuing our efforts at effective coordination of our research efforts.
4. Extension has been and can, if we desire, continue to be on the cutting edge of community development through the utilization of solid research results to direct our efforts.
5. Extension, if designed to be the user of research, should be a party to the research, prior to the initiation of the research efforts.
6. Land-grant colleges will come under closer scrutiny by the public and consequently by governmental units--governors and legislators--for a return on the dollar invested.
7. The lack of clarity in terms and definitions related to rural-urban-community development-community resource development will persist for some time.
8. The rate and complexity of community change will accelerate and will require new skills, a rearrangement of existing skills and methods.

Problems

1. Researchers are captives of their disciplines. Peer approval--they research and write for each other, also they attempt to establish individual identities through becoming highly specialized--is a deterring factor to results for implementation.
2. The time of the researcher is completely committed by virtue of funding sources and work assignment within departments; thus little if any time to work on "hot" issues of perhaps an applied nature remains.

3. Current research seems to be much more discipline-oriented than process-oriented. It may well be that community development is much more of a process than a discipline.
4. Most researchers in the agricultural experiment stations are products of the agricultural colleges and the respective experiment stations. Many of the problems of community development require different backgrounds.
5. There is too much duplication. We replough the same ground over and over. Previous research is valid.
6. Research projects are launched many times on the specific interest of the researcher without looking at related research in other units of the university.
7. Researchers and their employers (deans and presidents) are not risk takers, particularly in politically sensitive areas such as most community development problems.
8. The predicting of future needs and trends is not generally applied to research efforts and extension program design.
9. Grantsmanship is a peculiar malady which affects what is researched and for whom.
10. Extension has not systematically looked at what we have done, what resulted in certain action, and what would have been the results with different alternatives applied.

Recommendations

1. Tie research more closely to ongoing action programs. Insure that evaluation procedures are a part of newly initiated programs or projects before they are launched.
2. Accept the premise of evaluation and applied research as a valid and creditable method to aid community development.
3. Establish more joint appointments between research and extension, with the extension portion being one of implementation related to research being done.
4. Shorten the time from planning to results. Three to four years for people-oriented research is too long to be of the greatest use to users.
5. Make research relevant to the needs of the user--based on the present and future, not after-the-fact. Involve users in the identification and design of research projects.
6. On Northeast research projects prepare progress reports often enough and with indicators which could be used now, instead of the present type of annual report.
7. Researcher and user together should interpret the research report into a usable document.

8. Establish a system (clearinghouse) to monitor and disseminate topics of research under investigation and proposed research.
9. Establish within each state and then the region a viable mechanism to identify the areas in which research is needed, and establish a priority for research projects.
10. Experiment stations, in conjunction with extension training personnel, should design (1) a unit related to research for induction training programs for new extension workers and (2) retreading training for experienced extension workers.
11. Experiment stations should employ some researchers from disciplines such as political science, social psychology, labor, economics, manpower, health, education, etc., to give balance to community development oriented research.
12. Place greater emphasis on applied (demonstration type) research rather than pure or basic research.
13. Some Northeast projects should be planned in line with the national planning and development effort--for example, regional potentials in a national land-use policy.
14. Establish more pilot projects as a systematic way to initiate and establish new programs and methodology.
15. Research should be considered as a way of doing programming.

Topics Needing Research

1. The role of extension in community development. Is there a unique role?
2. What new specialists are needed and what would they do in such areas as housing, health, transportation, etc.
3. Results of mixing children of various income levels in activities.
4. Identification of barriers preventing rural areas from achieving desired services. And how can barriers be overcome?
5. Process of changing people.
6. Process of decision-making.
7. How to identify the real needs of community which need research and action.
8. The full utilization of social action.
9. Political change in communities.
10. Attitudes of people toward change and development.
11. Strategies of bringing about change.

Also see discussion paper by Doris H. Steele for many questions which need answers.

Lee M. Day

The Pennsylvania State University

Chairman of Group 2--
Department Chairmen (NEC-14)

NE-47: Consequences of Changing Social Organization in the Northeast
NE-80: Impact of Economic Change on Rural Areas of the Northeast

The heads of departments met last January to familiarize themselves with the regional rural development projects and to make some tentative evaluations of where these projects were going. At that time we were very concerned about NE-47 and NE-80. To summarize our reactions at that time, we viewed these projects as having overlapping objectives, with NE-80 being dominated by the discipline of economics and NE-47 being dominated by the discipline of sociology. We feared not only considerable duplication of effort but, more importantly, research results which in each case would be partial, representing only the theoretical constructs and the variables that were considered relevant by the particular discipline. We were searching for some means of bringing the two disciplines--the two projects--together, and it was for that reason that the planners of this conference placed the papers for NE-47 and NE-80 back to back on the first day.

I am happy to report that about six researchers working on these two projects met Wednesday evening from 9:00 to 1:30 in a lively and bruising session. It was not a place for tender egos, and none were there. It was a stimulating discussion of the theoretical concepts and estimation techniques of the two disciplines. These researchers recommended to the NEC-14 committee chairman that they desire to meet jointly for at least one day this fall and another day next winter with a specific agenda--the first day on theoretical concepts and the second day on estimation techniques. We in NEC-14 are happy to forward this recommendation to the Directors. This we believe is an excellent beginning, but it may not be sufficient. If such is the case, Dr. Larson has indicated that the Rural Development Center might well host a one-week seminar session of NE-47 and NE-80 to further the task of better communication between the two groups. It is our hope that these efforts will finally lead to a truly integrated socio-economic theory of development as contrasted to separate economic theories and sociological theories of development.

NEM-42: Economic Analysis of the Campground Market in the Northeast
NE-65: Economic Analysis of Environmental Quality Effects Associated with Seasonal Homes

In reviewing the NEM-42 and NE-65 projects, the NEC-14 committee is pleased that these committees have functioned as regional projects.

Common instruments were used in data collection, and the basic analysis was uniform from state to state. It appears that the scope of each project was within the staff capability and resource availability.

As the work proceeds, care should be taken in identifying the areas of research to follow in building upon the existing base. We recommend that NEM-42 researchers be thinking about policy implications of their work, especially the ability of private campgrounds to provide recreation services at socio-economic costs less than that required to provide public services. We recommend that NE-65 researchers recognize that seasonal homes as considered by the study--water-based homes--are a part of a much larger universe of seasonal homes.

We also suggest that NE-65 may have a weakness in that they have directed their data collection activities to a limited number of states which may not be representative of the region. This in no way casts aspersions on the work done, but rather suggests directions for future work which can have a regional impact on public policy.

The operations of NEM-42 have some important management implications for other regional projects. Several regional projects are plagued by the small allocation of scientific man years by some of the participating states--often small enough to cover little more than participation in technical committee meetings. In NEM-42, two states (one large and one small) "bought in" to the project in the cheapest possible manner. They arranged for survey teams from neighboring states to collect the data, and thus for the relatively low cost of enumeration they purchased the data and the professional time for conceptualizing the project, developing the survey instrument, and training the enumerators. This allows a department to allocate its limited staff to a smaller number of projects and at the same time participate in a larger number of truly regional projects. We encourage all of you to seriously consider this means of participating in at least some of your regional projects.

NE-78: Natural Resource Policies and Planning for Rural Development
NE-68: Paths Out of Poverty

The NE-78 project is an example of an umbrella project under which each state pursues its research efforts without regard to the regional implications of their findings. This can be excused in part, as the project is only a year old and the research conducted is largely introductory. However, the nature of the project is one which requires a regional approach as planning of natural resource use near population centers such as Boston, New York, and Philadelphia spreads across state lines. Furthermore, public policies affecting natural resource use may have application throughout the region. This is particularly true as new mechanisms for affecting resource use are under evaluation.

We recommend that the NE-78 committee meet soon in a workshop session to further develop the procedures for research as expressed by the project statement. The need for the above is all the more acute as NE-67 personnel are added to the project.

As far as the objectives are concerned, we remind the committee that Objective 2 cannot be to develop and implement a full-fledged information

retrieval system. Rather, it should be to determine data needs by planners and planning agencies, the sources and availability of data, and the technical feasibility of an information retrieval system. The implementation of such a system, if feasible, should be funded through non-Hatch regional sources.

We also regard NE-68 as primarily an umbrella project--or, to put it another way--a collection of pilot projects.¹ We recognize the need for pilot projects as a part of the development of a research program in this area. We commend the committee for attacking critical policy issues. But we must remind the committee that policymakers are not likely to make major changes in action programs based on results from pilot projects. For example, who would expect decision-makers to make major revisions in the Food Stamp Program based solely on research results from two rural counties in Pennsylvania? It can be argued with considerable justification that regional differences in culture and climate as well as rural-urban differences might bring about conflicting results. Replications of this and other studies in NE-68 must be forthcoming if the project is to be truly regional in scope and relevant to public policy.

We recommend that the NE-68 committee and other technical committees give consideration to the experiences of NE-58. NE-58 passed through the pilot project stage and developed a regional proposal (later joined by Florida and Texas), which was submitted to the U. S. Department of Labor. This resulted in a \$1.8 million contract which will have policy impact. There have been some problems, largely because the regional research structure is ill-prepared to administer such an effort, but we believe these administrative difficulties can be overcome.

NE-77: Community Services for Nonmetropolitan People in the Northeast

We appreciate the large scope of the problem areas you have before you. We congratulate you on your efforts at multidisciplinary communication, coordination, and organization. It has been said that this is the best-organized project in the region. In a more critical view: (1) Your writing of objectives may have been too ambitious. You may want to consider a more limited set of objectives that can be accomplished by the termination date of the project. (2) We believe we detect a cleavage between macro (largely secondary data) and micro (largely primary data) interests without the advantage of theoretical constructs. Or, to put it another way, our interpretation is that you are collecting data and looking for a hypothesis.

We see a need for some one- or two-week workshops to concentrate on problem identification, theoretical constructs, and research methodology. We understand your workshop at the end of this conference is an effort in this direction. We commend you for it.

¹We acknowledge that part of NE-68--the part dealing with the Extension Nutrition Aide program--is truly regional in scope. But the other components of this project are not.

Regional Research Management and Efficiency

The members of the NEC-14 committee recognize and are deeply concerned about a number of problems that could be classified as having to do with management components and gaining efficiencies in regional research. Examples of such issues have to do both with content and with processes of research implementation. These include:

- a. Gaining more flexibility and variation in funding cooperative data collection, purchasing of data from another state; hiring or borrowing expertise from another state; having one state plan and carry out a research project covering more than one state; division of labor in data collection, data processing, manuscript authorship, and enumerator training; and control by one state but carrying out data collection in several states.
- b. Critical needs on the part of regional committees for administrative and financial support for travel, conferring, adequate meeting time, interdisciplinary language lessons, problem identification, conceptualization, instrument design, division of labor, target dates, project delineation, etc. These are the Social Science equivalents of hardware expenditures for the physical and biological sciences.

Longer meetings are proposed for regional research committees, as this is the primary mechanism for accomplishing significant progress. Concentrating efforts in in-depth sessions can accomplish more than several one or two-day meetings with long intervals in between.

- c. The problems of insulation and isolation of the scarce manpower resources and the scattered nature of funding suggest that better procedures of a management nature should be found.
- d. Perhaps new approaches need to be developed along applied lines, in regional demonstration projects or regional research-extension laboratories. Such concentration could generate theoretical frames of reference, models of procedure, methodological implications, program innovation, and visibility and impact for the scientist effort and the dollars expended.
- e. Much further thought needs to be addressed to these management components. This task is seen as a future responsibility for NEC-14. For example, if the Rural Development Act of 1972--an authorization bill--becomes an appropriation bill for the next fiscal year, what are we going to do with it? Are we going to add a county agent here and there, a specialist or two, and do it in such a way that three years hence we will have no identifiable output? Or, alternatively, can we create a joint research-extension system that will not only be an effective means of using the new funds but also have some implications for more effective use of existing funds?

Paul R. Eberts

Cornell University

Chairman of Group 3--
Technical Committee Chairman and Members

Although the purpose of this conference was to review regional research projects by a wide variety of people from inside and outside agricultural experiment stations, frankly, I was shocked by the directness and aggressiveness of the reports on the panel so far this morning. Undoubtedly, the speakers meant their remarks as "friendly suggestions" about our research, but the fact that they in most cases failed to take seriously the content of our research in criticizing it and, moreover, failed to adequately consider their own role in our research, grieves me.

I am puzzled as to why the burden of guilt for the state of current regional research must be borne by the researchers alone. Most of us genuinely believe we are doing the best job possible given our level of resources and the immensity of the task. What I believe we need most is to be taken seriously, at least to the point of showing us where and/or how we could be doing a better job on the things we are doing. The major message which came through to me from the first two speakers was that what we are doing is in essence not quite what we should be doing.

Actually, most of us have struggled with the problems of rural and regional development as best we know how. We feel it is not enough simply to be written off as irrelevant in such a fashion, without more of a struggle anyway.

For instance, in answer to the first speaker, who asked us to be more responsive to the needs of extension by researching questions for which they want answers, there are two basic replies: (1) perhaps the questions extension workers are asking cannot be answered before a great deal more research is done, and, therefore, (2) perhaps extension workers are asking the wrong questions at the present time. Perhaps they should listen more to us and take us seriously on the types of things they should be thinking about and acting upon. In any case, we were hoping that such discussions as we held this past week would have produced a more serious response to our present research.

The second speaker was somewhat more to the point in encouraging us to work in certain directions. On the other hand, most of his remarks dealt with the organization of our research committees, and in a way which made it difficult for us to see how they relate to the content of our research or to the problem of rural development. But because these suggestions were not specific, they also were not very helpful to the technical committees. Moreover, for many of the critical suggestions we could undoubtedly discover conditions whereby they could be negated. There may be optimum times when the various projects should share their findings and other

times when their division of labor may be important in order to permit researchers to examine their models thoroughly enough to make them significant in the process of accumulating knowledge for regional development. Once a project is established, it is not very helpful to admonish researchers for not working on the "right" project in the "right" way. It may still be helpful at that point to state a set of issues with which the projects must deal, especially in their implications or policy considerations, such as that NE-47 and NE-80 should work more closely because their variables and methods overlap. But not even here have the findings from these projects been documented thoroughly enough for substantive arguments on models or policy. Insofar as NE-47 is moving into a new project and NE-80 is just developing its methodology, however, there are undoubtedly important points of contact and content to be made. Still, making sweepingly general suggestions without drawing out their implications for the projects may not provide much help to the researchers in getting their jobs done more adequately.

Finally, since I have been looking over the next speaker's shoulder at his notes, which indicate a need for a "PLAN," presumably a plan devised largely from directors' offices, it may be appropriate to comment upon such a device. I believe most plans in most research are for the administrators' benefit. For a number of reasons, they are seldom followed by researchers, especially if the research is largely exploratory in a new area such as research on rural regional development. Research findings at this level are simply too fickle to fit into the certainty of an overall plan. In such cases a wrong plan can be detrimental, not only in terms of allocating resources but also in accumulating the next most important sets of knowledge. Beneficial accumulation most often means that the next piece of research builds upon the findings of the previous piece. But, especially in exploratory research, subsequent research can often not be specified until results from previous research are fully analyzed.

As I listened to the "defensiveness" of the comments of the previous speakers and myself--each asserting that the others have not quite "hit the point"--one issue continues to arise, namely, that most of us are very willing to shift the burden of blame for poor performance from ourselves to someone else, and, perhaps because we are the lowest paid and least influential men on the totem pole, the buck seems to stop with the researchers. The situation almost reminds me of the night Vice President Spiro Agnew and a group of "radiclib" students were on the David Frost Show for a panel discussion. First Agnew spoke, throwing accusations at the students and implicitly defending himself; then the students spoke, throwing accusations at Agnew and implicitly defending themselves. But since neither side was willing to accept any of the assumptions of the other side, they were always talking past each other rather than discussing the real issues with each other, the first real issue being why they were throwing accusations at each other. Our present condition here is not unlike that.

Actually, I am somewhat relieved to know that this is the situation. Back at Cornell we often hear that we and our research in rural sociology are not well understood or appreciated by the directors. But mostly we researchers hear this second or third hand and indirectly, through the department head or some other intelligence source. Seldom are "they" ever so blunt as to indict us face to face. In some masochistic

ways, therefore, such frankness today is a relief. At least we can defend ourselves directly and make counter-indictments.

Such a situation of accusation and counter-accusation is also a typical condition of what Clark Kerr in an article on wildcat strikes called "the isolated masses." The less people communicate with one another and the more they are physically and socially isolated from one another, the more justified they feel in blaming their troubles on someone else. I believe this notion is common to the four groups represented on this panel today. Each--extension, department administration, college administration, and research--has found itself increasingly isolated from the others. When this happens, not only do they accuse one another of being unresponsive in the situation, they in fact become almost arrogantly unresponsive themselves.

To my knowledge, this is the first open meeting of these four groups in a long time, if ever. I am glad this problem of candor is on the table so that we can now stop the "niceties" and begin to zero in on the whole raft of real problems in our own situations and in the real world.

One resolution of the problem of isolated masses is to attempt to reduce the isolation by establishing recognized channels of communication between the various groups. In terms of the concepts used in my NE-47 report, what has to happen is that more fluidity ("relevant information exchange") has to occur between the four groups. Then each group will presumably become more responsive to the others' needs. The following proposals by the researchers, developed through their discussions this week, are intended to facilitate such fluidity.

The first proposal is that the Center should play more of a role in providing mechanisms for information exchange, not only among these four groups but among people in the different stations in the Northeast. One such mechanism would be through conferences such as this. It is recognized that these conferences are both expensive and time-consuming. On the other hand, as we learned throughout the week and this morning, it is only through face-to-face contacts that certain types of information are exchanged, and exchanged with appropriate force and understanding. Without the immediate feedback mechanisms of face-to-face interaction, which permit and encourage immediate adjustments in messages depending upon the responses of the mutual receivers (to use the jargon of those in communication arts), it is sometimes very difficult to be direct and frank, especially with those with whom one disagrees most. Non-face-to-face communications are more often misinterpreted and/or uninterpreted.

It may be, however, that a series of specialized conferences should be considered. A question of some concern during this conference has been the problem of coordination of the research. There are two general mechanisms for such coordination. The one comes when a plan is developed and people are committed to working on one or more aspects of the plan. This is used to some extent in agricultural experiment stations, but mostly when goals of the projects are quite clear and the researchers are all committed to the goals. As far as I can tell, neither of these conditions exists vis-à-vis rural development research.

The second general way for coordination to occur is for the researchers to be brought together so that they can discover their mutual interests through a process of communication around the notion of building a consensus on the critical issues. Very large conferences, however, are not conducive to working out the initial phases of such a process. It may be, therefore, that smaller conferences--for instance, the chairmen of the technical committees meeting with representative directors, extension administrators, and department heads--should be held to work intensively on this type of problem.

A second suggestion for coordination along this line is that perhaps some researchers from allied technical committees could be consulted or could actually join with the directors in evaluating new project proposals. As Professor Day has pointed out, there are a great many things that should be communicated to researchers about their projects. But unless the researchers become part of the total evaluation process, the "coordination" remains only "top level," and many of us researchers either hear about it and immediately let it pass as of no significance or, indeed, never even hear about it.

A third suggestion is that the Center or someone, perhaps even in CSRS, should institute a newsletter on regional research projects, especially those in the Northeast. Most researchers were quite frankly not aware of what was actually happening in other projects, despite the fact that there were researchers on these other projects from our own stations. Anyone attached to a technical committee would receive the newsletter, which would have news of interest about publications from the various projects, states of development, meetings, and so forth. The newsletter would not be intended to be chatty or humorous, but informative. It might consider publishing the "progress reports" or the projects as reported by members of the technical committee for each station, or at least the annual reports of the chairmen of these technical committees.

A fourth suggestion directly recognizes extension's gripes about our regional research. It is simply this: that one or more persons from extension ranks be appointed to the various technical committees. This would serve the major purpose of forcing researchers to listen when extension says we (the researchers) "are answering questions no one is asking" and would at the same time make extension take seriously our response that perhaps they "are asking the wrong questions." In other words, such enforced cooperation would facilitate the confrontation of the two sets of perspectives. It is my impression that extension personnel work much more closely with research committees in the production area than they do in the social sciences. Moreover, perhaps through this mechanism more broad interests could be generated in more extension operations so that state and local extension offices would consider hiring more people with social science perspectives.

A fifth suggestion is that the Center may want to undertake sponsorship of certain committees in conferences which would meet even longer than we have met here. As a matter of fact, this conference has enabled many of us to meet for the first time, and, in a sense, not that it is drawing to a close we are just getting acquainted enough and feeling comfortable enough with each other that we can begin to challenge each other's

basic assumptions. Moreover, meeting for a more extended period of time might enable us to develop a more intensive and extensive approach to the problems of regional development. Most of the projects as presented here stand as separate packages whose interrelations are not immediately apparent. Either these interrelations could be made more apparent through additional work, additional projects could be created to link the present projects, or the present projects could be interpreted to be unrelated to the problems of rural regional development. In any case, more work is needed in this area, and an extended "conference" or set of workshops may be helpful in resolving the issues.

Finally, a sixth suggestion for future Center activities would be that it create facilities whereby graduate students and faculty from the various stations in the Northeast could take some work, for varying lengths of time, on campuses other than the campus where they will be receiving their degrees or on which they work. Perhaps some type of "exchange relations" like those among the "Big Ten" schools in the Midwest could be developed for this purpose.

Again, all of these suggestions present directions through which more pertinent information can be passed from one group concerned with regional development to other groups concerned with regional development. The suggestions have also noted that such fluidity is important, not just among directors, administrators, extension, and researchers at any one station but also from one station to another in the Northeast. The tasks are very great. At present none of us at any of the stations has all the answers. But if the Center can create more pertinent fluidity and reduce the defensiveness of isolated masses, then we should be able to develop more adequate regional development programs than we have had up to the present.

Homer C. Evans

West Virginia University

Chairman of Group 1--
Administrative Advisers and Directors of Research

Our group consisted of 8 individuals associated with administration in the Agricultural Experiment Stations in the Northeast.

We first took a look at the present effort going into rural development research. Using the CRIS System, Research Program 5:03, Rural Development and Quality of Family Living, should cover the principal research being done in this area. The following table shows the effort:

UNITED STATES

<u>Program</u>	<u>Scientific Man Years</u>		
	<u>State Agricultural Experiment Stations</u>	<u>USDA</u>	<u>Total</u>
5:03	231 (3.7%)	100 (1.9%)	331 (2.9%)
Total, all research programs	6,299	5,302	11,602

NORTHEAST

<u>Program</u>	<u>Scientific Man Years</u>		
	<u>State Agricultural Experiment Stations</u>	<u>USDA</u>	<u>Total</u>
5:03	47 (4.7%)	52 (3.3%)	99 (3.8%)
Total, all research programs	1,000	1,585	2,585

In the Nation, 2.9% of the total research effort is devoted to rural development research. The State Agricultural Experiment Stations are devoting 3.7% and the USDA 1.9%. In the Northeast, the State Agricultural Stations are devoting approximately 4.7%, while the USDA is devoting

3.3%, for a combined effort of 3.8%. It was the consensus of our group that more of our total research effort should go into rural development research. In order to accomplish this, we feel that there is a need for a comprehensive plan of the research needs in rural development with priorities among these needs.

There is a joint, nationwide effort by the State Agricultural Experiment Stations and the USDA to update the identification of research needs. The northeastern directors last week completed plans for the Northeast Research Planning Committee, which will be co-chaired by Director Don W. Barton of the Ithaca Station and Steve King of ARS. No doubt the Northeast Research Planning Committee will have many task forces and sub-groups. In order that rural development research be given adequate representation in the plans for the Northeast, our group makes the following recommendation:

"The Administrative Advisors of Rural Development projects will recommend to the Northeastern Directors Association:

- (1) that the Regional Planning Committee give the earliest possible attention to planning for rural development research in the Northeast region;
- (2) that a task force on rural development be created to assist the Regional Planning Committee;
- (3) that representation on the task force include representatives from NEC-14; the Northeast Regional Center for Rural Development Technical and Advisory Committees; technical committee chairmen and administrative advisers of existing rural development projects; state rural development committees; and consumers of research, including Cooperative Extension."

In conclusion, we feel that the Northeast Regional Center for Rural Development should be the focal point in planning rural development research needs for the Northeast. It should also develop and distribute a current inventory of what is going on and what is available in terms of research findings in rural development.

Paul J. Jehlik

Cooperative State Research Service

United States Department of Agriculture

I feel a bit like the fifth wheel on an automobile. My colleagues on the panel have had the benefit of input from their particular groups. But let me share with you a few of my thoughts dealing with the subject of future directions in planning, management, and use of rural development research in the Northeast.

I would submit that future directions for our research in the Northeast or in any region, or in the nation, for that matter, can only be determined and should be determined by the setting of some kind of goals. During this conference, I listened for an enunciation of goals for research here in the region. Perhaps this isn't the kind of conference where you develop goals, but directions are determined by goals and then once goals are established, then you start identifying the problems that emerge in your attempt to reach a goal. It's as though you're planning a trip to London. That is your goal, but there are problems in reaching there. You have to make hotel reservations and plane reservations and pay for the ticket.

Secondly, I would say that goals should be established in terms of the needs of the population, not wants. There's a difference between needs and wants. Do we know in the Northeast region what the needs of the rural population are? Research that is based on wants rather than needs can be rather precarious, because wants are rather fluid--they can change from day to day, or from week to week. Needs, however, persist until satisfied.

Thirdly, in the process of establishing goals and in identifying problems, we want to be sure that we don't overlook our clientele. That is, are we communicating with the clientele, and is the clientele communicating in turn with us? Are we recognizing the various sub-groups? Some discussion yesterday centered around the upper, middle, and lower sub-groups of our population. We can ask ourselves the question, "Will the findings from our regional projects relate only to the general population, or will the findings relate fairly specifically to the sub-groups?"

A good review of literature, of course, is essential for any project. I think even more important--and this is a drudgery kind of job--is the need to have a good collation and synthesis of rural development research and of the literature already available dealing with rural development. Perhaps some research would not be needed if we were aware of all the fugitive literature dealing with rural development that is gathering dust on some shelf.

In anticipation of new rural development funding resources, there would be much wisdom, it would appear, in putting these resources into carefully selected, planned, crucial, additive, cumulative, and comparative program areas that will produce results, add up, count, be visible, be reportable, and be meaningful to the clientele and to those who hold the purse strings, namely to our appropriation bodies. The Rural Development Act of 1972 gives us only three years to do this. Perhaps the step that needs to be taken in terms of planning for and in the management of rural development research is that of generating a definitive appraisal of the status of rural development research and other action programs or those in prospect, for example, in the Northeast. A conference such as this is a move in this direction. This appraisal might be in the form of a report that would be useful to deans, directors, and agency heads for research and extension program planning and for Congressional committee purposes.

Dr. Evans mentioned the prospective planning process to be undertaken by ARPAC in this region as well as in the other regions. It's possible that this may do part of the job, but I'm not so sure that it will do the total job that is essential. And if it does not do the total job, then the responsibility for supplementing that work needs to be placed somewhere else. In looking ahead, there are several issues that remain, and these have been alluded to and perhaps mentioned. If so, my comments will be redundant. One is how to maximize the role and functions of the Centers and how jointly the Centers can participate in providing national leadership, thrust, communication, and coordination. Obviously, as has been mentioned, there is the issue of more funding for and staffing of the Centers. We are asking them to do an awful lot now with their rather limited resources. There is the issue of a broader base of activity for the Centers, to include research, extension, and training; then there is the issue of more coalescence with other hardware agencies involved in rural development, for example, FHA, REA, SCS, HUD, OEO, and HEW. Coming down to a bit more specificity, I feel that there is an urgent need for more of the jointly planned pilot experimental action research projects, with research, extension, and action agency collaboration, and again including such agencies as I've just mentioned, as appropriate.

You have a couple of pilot projects here in the region--the Penobscot, Maine, project and the Chenango County, New York, project. Pilot projects such as these established in carefully selected, representative areas can result in generalizations to much larger areas. In the pending rural development legislation, there is a small farmer component. There are a number of small farmers here in the Northeast. Whether attention enough has been given to the small farmers here in the Northeast is of course for you to decide, but it would appear that here is an important area for consideration.

We have heard nothing in the reporting of the past couple of days that deals with the general subject of rural industrialization. As I think all of you know, a rural industrialization conference was held recently at Purdue University. One of the things that seemed to come out is that the industry representatives in making their presentations were always interested in locating in favorable type communities, in the sense that the tax base was favorable, and that adequate public services utilities, cultural opportunities and other amenities were available. With regard to this position, I would raise the question, "What is the relative social cost of establishing

industry in such areas as against establishing industries in areas that are less well off and where there are rather severe pockets of unemployment?"

During the course of this conference, much attention has been on the group situation, on community problems, etc. Not too much was heard about the topic of human resource development. While there is some work under way on individual state projects, there is little being done on a regional basis. Neither is there much going on in the area of the elderly. Another important area is that of land use and the effect of urbanization. The Northeast region, which is urbanizing rather rapidly, can be an example for the rest of the country.

Many have tried to define rural development; I hear rural development mentioned as a process. This bothers me a little bit. I like to think of rural development as being a bundle of processes that are in a state of interaction with each other, each of which functions at varying rates of input as determined by the situation, the time, and the place. It seems to me if we think of rural development in this sense, and with a goal orientation, we will end up with a better balanced total growth and development.

As a final comment, we need to be looking rather seriously at what expertise is available in our total institutions that can be marshalled for rural development.

APPENDIX

APPENDIX A

WORKSHOP ON CURRENT RURAL DEVELOPMENT REGIONAL RESEARCH IN THE NORTHEAST

Arranged by the Northeast Regional Center for Rural Development
in cooperation with the NEC-14 Committee on Rural Development

Stratton Mountain Inn, Stratton Mountain, Vermont, July 25-28, 1972

Program and AgendaTuesday, July 25

8:00 p.m. Registration

Wednesday, July 26

Morning session: Chairman, J. F. Metz, Jr., Cornell University;
Administrative Adviser, NEC-14

9:00 Welcome - G. A. Donovan, Dean and Director, University of
Vermont

Purpose of workshop, its relation to NEC-14 and to
administrative advisers--Olaf F. Larson, NERCRD

9:20 NE-80, Processes of Rural Economic Change in the Northeast--
J. Dean Jansma, Pennsylvania State University; Chairman
of Technical Committee

10:00 NE-47, Consequences of Changing Social Organization in the
Northeast--Paul R. Eberts, Cornell University; Chairman
of Technical Committee

10:40 Coffee break

11:00 Rural Development and the Land-Grant Institutions--William
Erwin, Deputy Under Secretary for Rural Development, USDA

11:40 Discussion; lunch

Afternoon session: Chairman, David J. Burns, Rutgers University;
Administrative Adviser, NE-68

- 1:30 Technical discussion on NE-47--Arthur W. Dewey, University of Connecticut
- 1:50 Technical discussion on NE-80--Frederick E. Schmidt, University of Vermont
- 2:10 Discussion
- 2:30 NEM-42, Economic Analysis of the Campground Market in the Northeast--Gerald L. Cole, University of Delaware; Chairman of Technical Committee
- 3:00 Coffee break
- 3:15 NE-65, Economic Analysis of Environmental Quality Effects Associated with Seasonal Homes--Hays B. Gamble, Pennsylvania State University; Chairman of Technical Committee
- 3:45 Technical discussion on NEM-42 and NE-65--Nelson L. Le Ray, Economic Research Service, USDA, and University of New Hampshire
- 4:05 Discussion
- 4:20 User discussion of NEM-42 and NE-65--Thomas L. Rowland, Pennsylvania State Department of Agriculture
- 4:35 User discussion of NE-47 and NE-80--George E. Whitham, Cooperative Extension Service, University of Connecticut
- 4:50 Discussion
- 5:10 Instructions for group meetings of administrative advisers, NEC-14, technical committees, and research users on future directions of rural development research in the Northeast. W. E. McDaniel, University of Delaware; Administrative Adviser, NE-47 and NE-80

Thursday, July 27

Morning session I: Chairman, John P. Hill, Cornell University;
Administrative Adviser, NE-77

- 9:00 NE-78, Natural Resource Policies and Planning for Rural Development--Carl A. Carlozzi, University of Massachusetts; Chairman of Technical Committee
- 9:40 Technical discussion on NE-78--William L. Park, Rutgers University

- 10:00 User discussion of NE-78--Donald J. White, Cooperative Extension Specialist, Community Resource Development, New York State Cooperative Extension
- 10:15 Discussion
- 10:30 Coffee break
- Morning session II: Chairman, Earl F. Patric, University of Rhode Island, Administrative Adviser, NEM-42
- 10:45 NE-68, Paths Out of Poverty--J. Patrick Madden, Pennsylvania State University; Chairman of Technical Committee; and Jerry D. Stockdale, Cornell University; member of Technical Committee
- 11:25 Technical discussion on NE-68--Robert W. Miller, West Virginia University
- 11:45 Discussion; lunch
- Afternoon session: Chairman, R. F. Hutton, Pennsylvania State University; Administrative Adviser, NE-78
- 1:30 W-114, Institutional Structures for Improving Rural Community Services--Eugene C. Erickson, Cornell University, Chairman of Technical Committee; Garrey C. Carruthers, New Mexico State University, member of Technical Committee; and Wayne H. Oberle, Texas A & M University, member of Technical Committee
- 2:10 NE-77, Community Services for Non-metropolitan People in the Northeast--Samuel M. Leadley, Pennsylvania State University; Chairman of Technical Committee
- 2:50 Coffee break
- 3:10 Technical discussion on NE-77 and W-114--Thomas F. Hady, Economic Research Service, USDA
- 3:30 User discussion of NE-68, NE-77, and W-114, with emphasis on NE-68--Doris H. Steele, Cooperative Extension Service, University of Vermont
- 3:45 User discussion of NE-68, NE-77, and W-114, with emphasis on NE-77 and W-114--Maynard C. Heckel, Cooperative Extension Service, University of New Hampshire
- 4:00 Discussion

Friday, July 28

8:00 Group meetings

Group 1. Administrative advisers and directors of research

Chairman, Homer C. Evans, West Virginia University;
Administrative Adviser, NE-65

Group 2. Department chairmen (NEC-14)

Chairman, Lee M. Day, Pennsylvania State University;
Chairman of NEC-14

Group 3. Technical committee chairmen and members

Chairman, Paul R. Eberts, Cornell University

Group 4. Research users

Chairman, B. L. Coffindaffer, Cooperative Extension
Service, West Virginia University

Morning session: Chairman, W. E. McDaniel, University of Delaware

9:00 A Look to the Future in Rural Development Research and Extension:
The Northeast in National and Regional Perspective--
R. J. Hildreth, Farm Foundation10:00 Panel: Future Directions in Planning, Management, and Use of
Rural Development Research in the Northeast

W. E. McDaniel, chairman

B. L. Coffindaffer

Lee M. Day

Paul R. Eberts

Homer C. Evans

Paul J. Jeilik (Cooperative State Research Service, USDA)

11:45 Adjournment

APPENDIX B

Questions That Could Be Considered
in Group Meetings

1. Does a "Northeast Research Program for Rural Development" exist, or is there a group of Northeast regional research projects with relatively little coordination among them?
2. If a group of regional research projects exists with relatively little coordination among them, is a "well-coordinated research program" of rural development desirable? If so, what procedure should be followed in developing the program?
3. What are the most critical issues concerning rural development in the Northeast? Are all of these being researched? What "gaps" exist?
4. What anticipated research results from on-going rural development research can be used by extension?
5. What additional research results are needed by extension?
6. Are research procedures well developed in the area of rural development? If not, what procedures should be used to improve them?
7. Are extension procedures well developed in the area of rural development? If not, what procedures should be used to improve them?
8. What is the need and what are the realistic opportunities for training workers in research, extension, and action programs in rural development?
9. What is the need and what are the realistic opportunities for developing joint or parallel research-extension projects in rural development?
10. What should be the key recommendations that could be developed in this workshop for the attention of one or more of the following groups:
 - A. Directors of Cooperative Extension Service
 - B. Directors of Experiment Stations
 - C. Department Chairmen
 - D. N. E. Experiment Station Directors Association
 - E. N. E. Cooperative Extension Directors Association
 - F. Committee of Three
 - G. NEC-14 Committee (Department Chairmen)
 - H. U.S.D.A. Agency administrators
11. What types of additional conferences, workshops, training programs, etc. should be conducted by the Northeast Regional Center for Rural Development?

APPENDIX C

List of Workshop Participants

Christopher T. Babb, Assistant Professor of Consumer Economics and Public Policy, Cornell University.

A. Gordon Ball, Associate Director of the North Central Regional Center for Rural Development, Iowa State University.

Signe T. Betsinger, Professor and Chairman of the Department of Home Economics, University of Vermont.

Malcolm I. Bevins, Adjunct Assistant Professor of Resource Economics, University of Vermont.

Richard N. Boisvert, Assistant Professor of Agricultural Economics, Cornell University.

Emory J. Brown, Assistant Director, Extension Service, Pennsylvania State University.

David J. Burns, Associate Director of the Agricultural Experiment Station, Rutgers University.

Harold R. Capener, Principal Sociologist, Cooperative State Research Service, U.S. Department of Agriculture, Washington, D.C. (on leave from Department of Rural Sociology, Cornell University).

Carl A. Carlozzi, Associate Professor of Resource Planning, University of Massachusetts.

Garrey C. Carruthers, Assistant Professor of Resource Economics, New Mexico State University.

B. L. Coffindaffer, Dean, Center for Appalachian Studies and Development, and Director of Cooperative Extension Service, West Virginia University.

Gerald L. Cole, Associate Professor of Agricultural and Food Economics, University of Delaware.

Charles O. Crawford, Associate Professor of Rural Sociology, Pennsylvania State University.

Lucy M. Cunnings, Northeast Regional Center for Rural Development, Cornell University.

Robert P. Davison, Director of Cooperative Extension Service and Associate Dean, College of Agriculture and Home Economics, University of Vermont.

Lee M. Day, Professor and Head of the Department of Agricultural Economics and Rural Sociology, Pennsylvania State University.

Donn A. Derr, Assistant Research Professor of Agricultural Economics, Rutgers University.

Arthur W. Dewey, Professor of Agricultural Economics, University of Connecticut.

G. A. Donovan, Dean, College of Agriculture and Home Economics, and Director of the Agricultural Experiment Station, University of Vermont.

Paul R. Eberts, Associate Professor of Rural Sociology, Cornell University.

N. Eugene Engel, Associate Professor and Head of the Department of Agricultural and Food Economics, University of Massachusetts.

Donald J. Epp, Associate Professor of Agricultural Economics, Pennsylvania State University.

Eugene C. Erickson, Associate Professor of Rural Sociology, Cornell University.

William Erwin, Deputy Under Secretary for Rural Development, U.S. Department of Agriculture, Washington, D.C.

Homer C. Evans, Associate Dean, College of Agriculture and Forestry, and Associate Director of the Agricultural Experiment Station, West Virginia University.

Irving F. Fellows, Professor of Agricultural Economics, University of Connecticut.

Hays B. Gamble, Associate Director of Institute for Research on Land and Water Resources, Pennsylvania State University.

Frank M. Goode, Assistant Professor of Agricultural Economics, Pennsylvania State University.

Armin E. Grams, Professor of Human Development, University of Vermont.

Kenneth P. Hadden, Instructor in Rural Sociology, University of Connecticut.

Thomas F. Hady, Chief of Community Facilities Branch, Economic Development Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C.

Otis F. Hall, Director of the Institute of Natural and Environmental Resources, University of New Hampshire.

Maynard C. Heckel, Director of Cooperative Extension Service and Associate Dean, College of Life Sciences and Agriculture, University of New Hampshire.

Willis H. Hayes, Vice President, Federal Land Bank, Federal Intermediate Credit Bank, Springfield, Mass.

R. J. Hildreth, Managing Director, Farm Foundation, Chicago, Illinois.

John P. Hill, Associate Dean for Graduate Education and Research, College of Human Ecology, and Assistant Director of Research, Agricultural Experiment Station, Cornell University.

Kenneth J. Hock, Assistant Professor of Resource Management, West Virginia University.

Robert F. Hutton, Assistant Director of the Agricultural Experiment Station and Assistant Dean, College of Agriculture, Pennsylvania State University.

Edmund F. Jansen, Jr., Associate Professor of Resource Economics, University of New Hampshire.

J. Dean Jansma, Associate Professor of Agricultural Economics, Pennsylvania State University.

Paul J. Jehlik, Director of Social Sciences, Cooperative State Research Service, U.S. Department of Agriculture, Washington, D.C.

Edward K. Knapp, Assistant Director for Agricultural and Natural Resources and Rural Development, Agricultural Extension Service, University of Massachusetts.

A. Robert Koch, Professor of Agricultural Economics, Rutgers University.

Olaf F. Larson, Director of the Northeast Regional Center for Rural Development, Cornell University.

Samuel M. Leadley, Assistant Professor of Rural Sociology, Pennsylvania State University.

Alvin T. M. Lee, Resource Economist, Cooperative State Research Service, U.S. Department of Agriculture, Washington, D.C.

Nelson L. Le Ray, Sociologist, Field Research Staff, Economic Development Division, Economic Research Service, U.S. Department of Agriculture, and Adjunct Associate Professor of Resource Economics, University of New Hampshire.

James W. Longest, Associate Professor of Agricultural and Extension Education, University of Maryland.

J. Patrick Madden, Associate Professor of Agricultural Economics, Pennsylvania State University.

Harry P. Mapp, Assistant Professor of Agricultural Economics, Cornell University.

Joseph F. Metz, Jr., Associate Director of Research and Associate Director of the Agricultural Experiment Station, Cornell University.

Robert W. Miller, Director of the Office of Research and Development, Appalachian Center, West Virginia University.

William E. McDaniel, Dean, College of Agricultural Sciences, and Director of the Agricultural Experiment Station, University of Delaware.

Richard Moore, Winthrop Rockefeller and Associates, Little Rock, Arkansas.

Wayne H. Oberle, Assistant Professor of Sociology, Texas A. & M. University.

William L. Park, Professor and Chairman of Department of Agricultural Economics and Marketing, Rutgers University.

Earl F. Patric, Associate Director of the Agricultural Experiment Station, University of Rhode Island.

Richard E. Patty, U.S.D.A. Liaison Officer, Delaware State College.

Louis A. Ploch, Professor of Rural Sociology, University of Maine.

Thomas L. Rowland, Administrative Assistant to Secretary for Planning, Research, and Governmental Services, Pennsylvania Department of Agriculture.

F. O. Sargent, Professor and Chairman of the Department of Resource Economics, University of Vermont.

Frederick E. Schmidt, Assistant Professor of Sociology, University of Vermont.

Mark A. Schulman, Chairman of the Division of Experimental Studies, University of Maryland, Eastern Shore.

Robert O. Sinclair, Professor of Resource Economics, University of Vermont.

Leonard M. Sizer, Associate Professor of Sociology, West Virginia University.

C. R. Skogley, Acting Associate Director of the Cooperative Extension Service, University of Rhode Island.

Dennis K. Smith, Assistant Professor of Agricultural and Food Economics, University of Delaware.

R. C. Smith, Professor and Chairman of the Department of Agricultural and Food Economics, University of Delaware.

Doris H. Steele, Supervisor and Program Leader, Cooperative Extension Service, University of Vermont.

Jerry D. Stockdale, Assistant Professor of Rural Sociology,
Cornell University.

Donald M. Tobey, Assistant Professor of Agriculture¹ and Resource
Economics, University of Maine.

Donald J. White, Cooperative Extension Specialist, Community
Resource Development, New York State Cooperative Extension Service.

George E. Whitham, Assistant Director for Programs, Cooperative
Extension Service, University of Connecticut.

K. E. Wing, Associate Professor and Chairman, Department of
Agricultural and Resource Economics, University of Maine.