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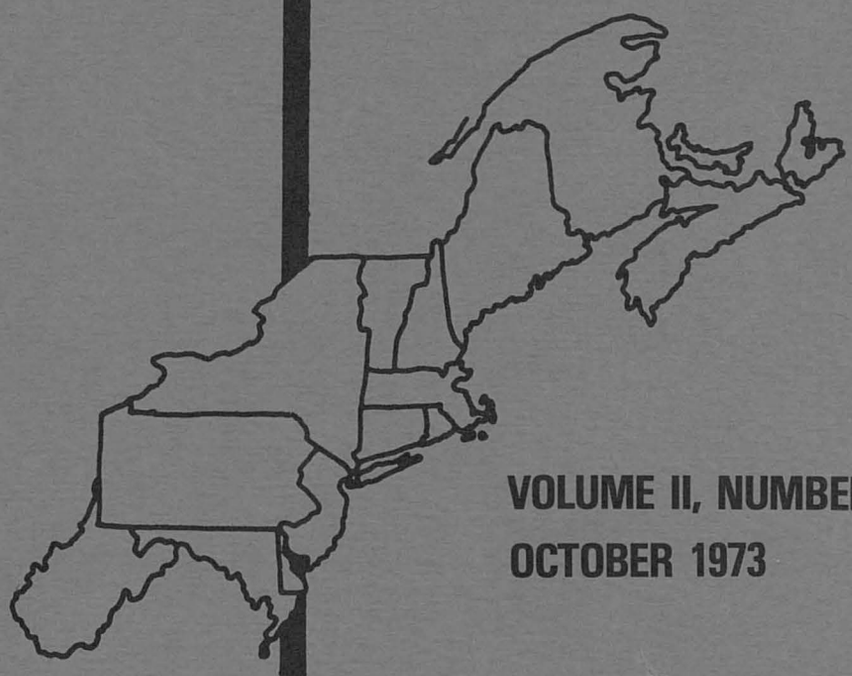

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A RESOURCE BASE APPROACH TO COMMUNITY DEVELOPMENT EDUCATION[1/]

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The Setting

Rural community development finally has come of age. After the not very productive rural development program of the 1950's with its emphasis on the small farm, and the equally tepid rural areas development effort of the 1960's, Congress and the Executive finally seem committed to improving the lot of rural America.

Manifestations of the commitment to rural community development at the national level may be seen in the various presidential councils and task forces on rural affairs, as well as in the Agricultural Act of 1970 and the Rural Development Act of 1972. At the local level officials, plagued by eroding tax bases and increasing demands for public services, play the industrial development game for all they are worth, seeing it as the panacea for many of their community's ills. Concurrently, at both the national and local level, the environmentalists frequently play the role of "damn the consequences--preservation now!"

It is into this milieu that the extension community resource development (CRD) specialist strides, bravely, but not always certain of his footing. Compared with only a decade ago, the decision making environment in which he finds himself is more conflict ridden, and devisive, with a more sophisticated client group seeking hard answers. The basic problem facing him is how to contribute meaningfully to such situations.

In order to operate effectively in this increasingly demanding atmosphere, the CRD practitioner must confront head-on the meaning of the term "community development." At the operational level there are at least two schools of thought. On the one hand there is the perception of community development as a "process"--"...the organized action of groups of people to bring about social and economic change." (1, p.9) This point of view is closely associated with Austin Bennett (1) and is exemplified by the point of view that the CRD educator"...is concerned with the way in which the community goes about problem solving... The end of that action is not in itself, of concern." (1,p.10)[2/] An alternative point of view is that of providing technical information, or what is termed here the "substantive" approach, and is best illustrated by the works of Eber Eldridge (3). Here the "end of an action" is indeed of major concern.

1/ This paper is contribution No. 1492 of the Rhode Island Agricultural Experiment Station.

2/ A similar position is presented in the ECOP report (4) and the writings of Littrell (5) and McMurtry (6).

In reality many CRD specialists incorporate both approaches in their dealings with communities. Thus, Eldridge speaks of "A process, yes--but with a purpose!" (3, p.832) Similarly, Bennett points out that the "...(CRD) educator rarely acts purely as a helping individual or purely as an information giver." (1, p.20) In fact, Vaughn and Wyckoff (7) have outlined a strategy for merging the roles of information giver with that of process educator, suggesting that such an amalgam is necessary for successful CRD efforts in urban areas.

Even if one opts for the substantative school (and the author has a clear bias in that direction) there remains the task of how to get ahold of the problematic situation. More precisely, we need to establish just how, as economists, we may contribute to the resolution of rural community problems. Are we merely to bring out our "growth theory" tool kit, rename it "rural development" and go to work? Alternatively, are we called to be apostles of the "Limits of Growth" thesis? Or are we constrained to functioning simply as conflict resolvers?

Perhaps the problems confronting rural communities are so complex and so diverse that it is meaningless to attempt to focus on a single approach for CRD extension work in this area. Nonetheless, in the paper the issue is raised and a suggestion concerning a possible approach for the CRD specialist is outlined in the next section. The final section touches upon a first attempt at an empirical application of the suggested approach. The results to be reported are most tentative; in some instances the data used were little more than suggestive. Thus the findings are to be regarded solely as illustrative. These caveats not withstanding, the nature of the approach discussed is felt to be sufficiently interesting to warrant presentation at this time.

Community Resource Management: A Point of Departure for the Economist--qua-CRD Specialist

Those readers who have been actively involved in CRD work recognize only too well the foresight (and luck) needed to get involved in a community conflict situation before lines of opinion have been rigidly drawn. All too frequently the CRD worker is asked to "assist" the community after conflict and polarization has occurred. Thus, the extension worker finds himself having to deal with citizens divided by arguments of the sort: "our town can survive only by growing" versus "let's keep our town just the way it is"; "we need to broaden our tax base to get some of the burden off the homeowner" versus "industry will ruin our environment"; "we need to promote greater efficiency in providing local government services through regionalization" versus "local control of government is the only way to keep those politicians in the State house from taking control of our town."

In this paper the position is taken that all these arguments can be viewed most usefully as arguments related to the use, in a qualitative as well as a quantitative sense, of the community's stock of resources.[3/]

3/ The author, trained and working in a resource economics setting, is willing to concede that a good deal of personal bias pervades his point of view.

To expand this argument, consider the following elements as the community's stock of resources.

1. Land -The simplest means for accounting for a community's supply of land is through the zoning classes. In some applications this may be the most expedient means for doing so. However, to the extent that the use classification was arbitrarily drawn, as opposed to being based on soils and location considerations, more precise means for specifying the stock of land must be devised. At the extreme this might involve on-site inspection, description and classification by the analyst in conjunction with, say, a soil scientist. It also must be kept in mind that a qualitative assessment of the land resource must encompass not only the soil aspect but also the surrounding amenities. Thus, two sites might be identical in terms of their soil characteristics, topography, and even zone classification. However, if one was located adjacent to an industrial complex and the other beside a suburban lake, they are quite different entities. It should be recognized that some uses that would enhance one site would be considered detrimental to the other. The basic plea here is for as precise a definition of the land resource as practicable.

2. Social Infrastructure--An important element in any analysis of a community is its infrastructure--schools, roads, water supply and waste disposal, fire-police facilities, etc. Careful scrutiny of these items will reveal which might be limiting for a particular sort of development activity. At the extreme, the absence of a particular service may make selected alternatives infeasible. If one then describes the infrastructure base in qualitative terms, additional considerations become apparent. Consider, for example, the school system. The system is readily described quantitatively in terms of numbers of pupils and teachers, square footage of classroom space, size of library holdings, etc. Qualitative measures are less easily defined and certainly less precise. In fact, no one index may be wholly adequate. However, a series of indicies might serve as reasonable proxies for quality measures. Thus, we might express the quality of an educational system with measures such as expenditure per pupil, teacher-student ratios, square footage of class space per pupil, etc. If the community has a sense of the quality of services that exist (or are desired), it is in a better position to judge how it wishes to deal with increased demands upon the services. Presumably with increased economic activity ("growth"), infrastructure use will increase. Over time the community must face up to one of two choices. If the services are to be maintained at a desired level, then the community must be willing to make the expenditures needed for expansion and upkeep. The alternative is to permit the services to deteriorate, in the sense that their qualitative aspects are altered. Thus, one might find that the student-teacher ratio in the school system has increased, the number of policemen per 1000 population declined, or the waste treatment plant consistently operated in excess of design capacity. Such a choice might be made consciously by the community. More

generally, however, one finds that the community has slipped into such a state without realizing what has happened.

3. Labor-force characteristics--Populations size is only one aspect of a community's human resources, and a relatively minor one from the standpoint of community development. Of greater interest to community planners would be characteristics of the population such as age distribution, income and education levels, available skills, and employment levels. All these together give a qualitative impression of the community's population. Such characteristics are of interest when considering the types of economic activities "suitable" to the community. To a lesser extent it may be possible for the community to specify the population characteristics it considers desirable, and consciously set about to alter the existing mix in the direction of the desired one. Granted, large changes of this sort are not likely. However, by a combination of instruments such as economic incentives and disincentives, zoning control of industrial activities and residential patterns, and control of the social-cultural system, alterations in population characteristics may occur. The desirability of such a goal is another matter.

4. Environmental resources--Living as we do in the "ecological age", little time need be devoted to pointing out the importance of the environment in which we live. What is needed, however, is a better understanding of the concept of land, water and air as economic resources. Society needs to understand fully the implications of viewing these resources either as free goods or as having infinite value. Many of the activities of man implicitly price these resources. Moreover, attempts to place qualitative constraints upon them, via the mechanism of quality standards, etc., has implications for society's valuation of these resources. In fact, it is the author's view that much of what resource economists "do" centers on making explicit the cost and value implications of society's use, real or contemplated, of its natural resource base.

5. Fiscal constraints--The fiscal state of a community is not a part of the resource base in the same sense that the four items discussed above are. However, the fiscal climate of a community impinges upon its resources and their use. Land development, open space preservation, infrastructure supply and environmental preservation all are related quite directly to either the structure of taxation, the tax rate, or the magnitude of tax receipts. Thus, when considering the resources of a community available for development, one must be conscious of the relevant fiscal constraints.

The major theme of this paper is that through carefully defining the resource base of a community along the lines outlined above, it is possible to deal more objectively with the sorts of community confrontations and polarizations mentioned earlier. One can take the most vociferous argument and reduce it to a problem of allocating the community's stock of resources. Consider, for example, a situation in which a community is divided on the

issue of industrial development. Proponents of the idea are apt to dwell on the benefits of a broadened tax base and fail to specify all the resource costs. For example, such a scheme could make major demands on land (open space), social infrastructure (schools, roads, public utilities) and the environment (water, air, noise, visual pollution). At the same time opponents of industrialization will focus on possible environmental damages while ignoring the economic opportunities foregone through the imposition of overly stringent water or air quality standards. Neither group, it would seem, has attempted to analyze all the possible impacts of industrialization on the resource base of their town.

What is the value of a resource oriented analysis of community development stiuations to the extension economist-CRD specialist? It is the author's contention that this value is found on at least two levels. In the first instance the approach is useful as a conceptual device from which the logical structure of arguments related to community development options may be deduced. In many instances logic is the only "tool" available to the CRD agent entering a highly changed situation. Before it would be possible to attempt empirical measurement, he may need to engage community leaders in orderly discussion in order to bring some objectivity to the debate.

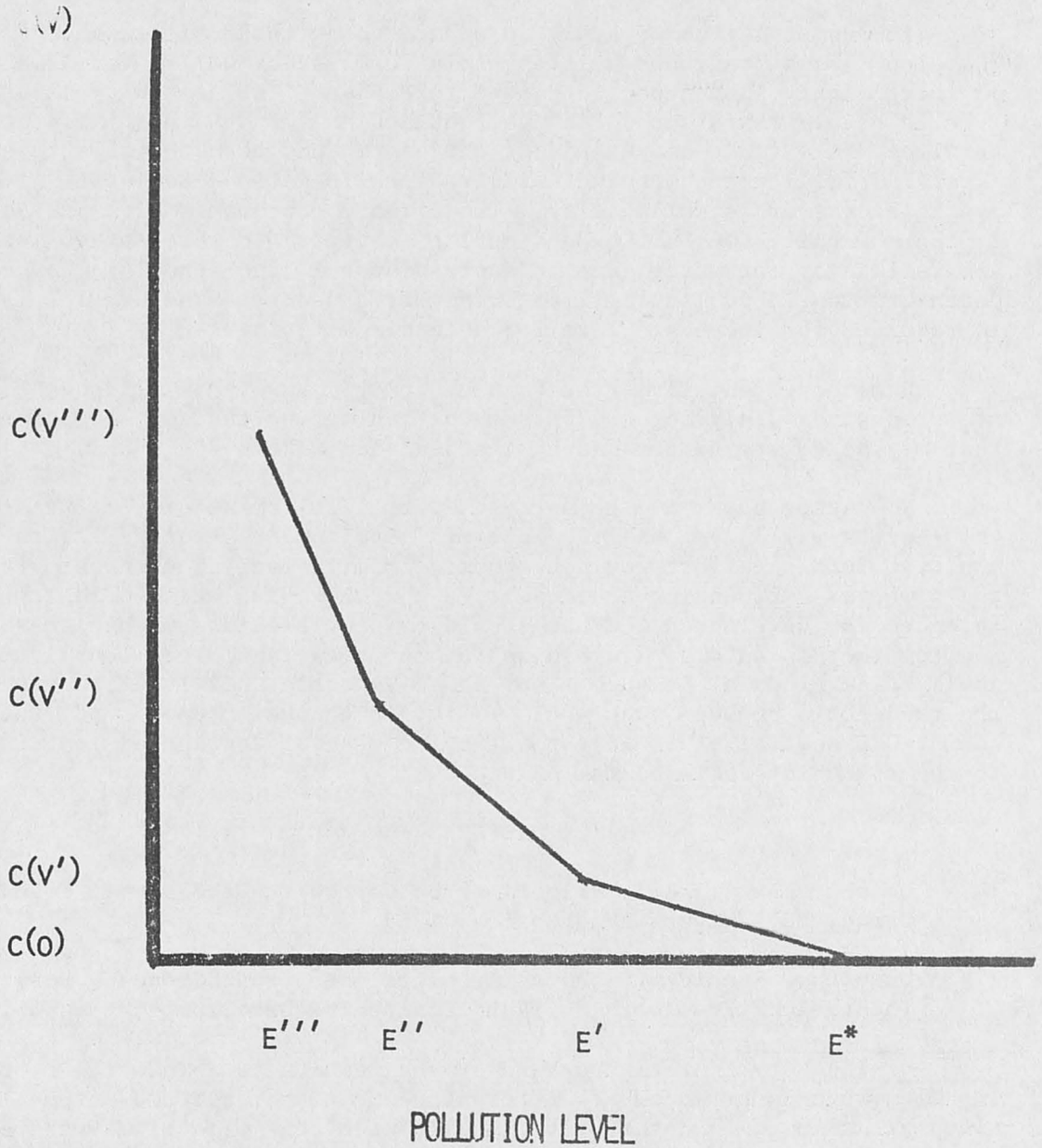
Some may argue that old fashioned common sense is all that is needed to carry out the discussions suggested above. The position taken here, however, is that the complexities of community resource planning are great and all of the interdependencies may not be obvious immediately. Utilizing the approach outlined above will assist in making explicit all of the linkages, hidden or not.

A second value of the resource-utilization approach is at the empirical level. Using any one of several techniques, it should be possible to carry out empirical analyses regarding decisions facing communities utilizing the framework suggested above. At this level one can move quite easily into the measurement of trade-offs and the opportunity costs; e.g., those that arise between competing demands on the community's resource base. By way of illustration, the community resource allocation problem was cast in a linear programming framework in a paper the author prepared with two of his colleagues (2). Figure 1 illustrates the sort of information that could be obtained from such an approach. Increasingly tolerant pollution standards, E, are plotted on the horizontal axis, while the opportunity cost, C(V), (reduction in the value of the objective function associated with pollution standards of varying stringencies) is given on the vertical axis. It is precisely this sort of objective material that is felt to be of value to the community decision makers.

In summary, it is suggested that the extension CRD specialist increasingly finds himself thrown into complex and highly controversial community conflict situations. It is argued that such problematic situations may be viewed most usefully as problems in the allocation of the communities resources, broadly defined. Finally, the utility of such an approach is felt to be twofold. On the one hand, it permits the development of a framework by which to examine logically a conflict situation. At the same time it provides a point of departure for empirical research concerning the

FIGURE 1

A Conceptualized Community Trade-Off Function



problem.

Some Concluding Remarks

As was argued above, a programming framework for the resource-use problem allows considerable flexibility in evaluating alternative development strategies. In an earlier paper (2) a linear programming model was developed for the problem of allocating a community's limited resources among given development activities. In the spirit of the discussion above, the author is in the process of attempting an empirical application of this model to a small coastal community.

The community under study is under strong internal pressure to "Develop" (as in many communities, this term is not well defined) and has an increasingly inadequate infrastructure base. The community power structure is highly resistant to change, particularly in the provision of public services. One trade-off examined, therefore, has been the effect on "growth" of allowing certain infrastructure items to deteriorate, i.e., use in excess of rated capacity. The primary concern is with the issue: if the community does not expand public services (in this study, included are facilities for water supply, waste disposal, and schools), how much deterioration in public facilities (higher student-teacher ratios, etc.) is required for increased level of economic activity?

Some most tentative results are depicted in Figure 2. These findings are presented solely for the purpose of indicating the sort of information that may be generated for use by the decision makers.[4/]

No matter how well the analyst is able to refine his empirical work, the results will never be "the" optimal development strategy for the community. Such an effort would be doomed from the very beginning, given all the problems surrounding the measuring and weighting of a community's preferences for development. What should be possible is a mechanism for bringing together in an orderly fashion the numerous, and often conflicting, goals of development in such a way as to generate useful information about the trade-offs between such goals. If this can be accomplished, the economist-CRD specialist is in a position to make a substantial contribution to the community decision making process.

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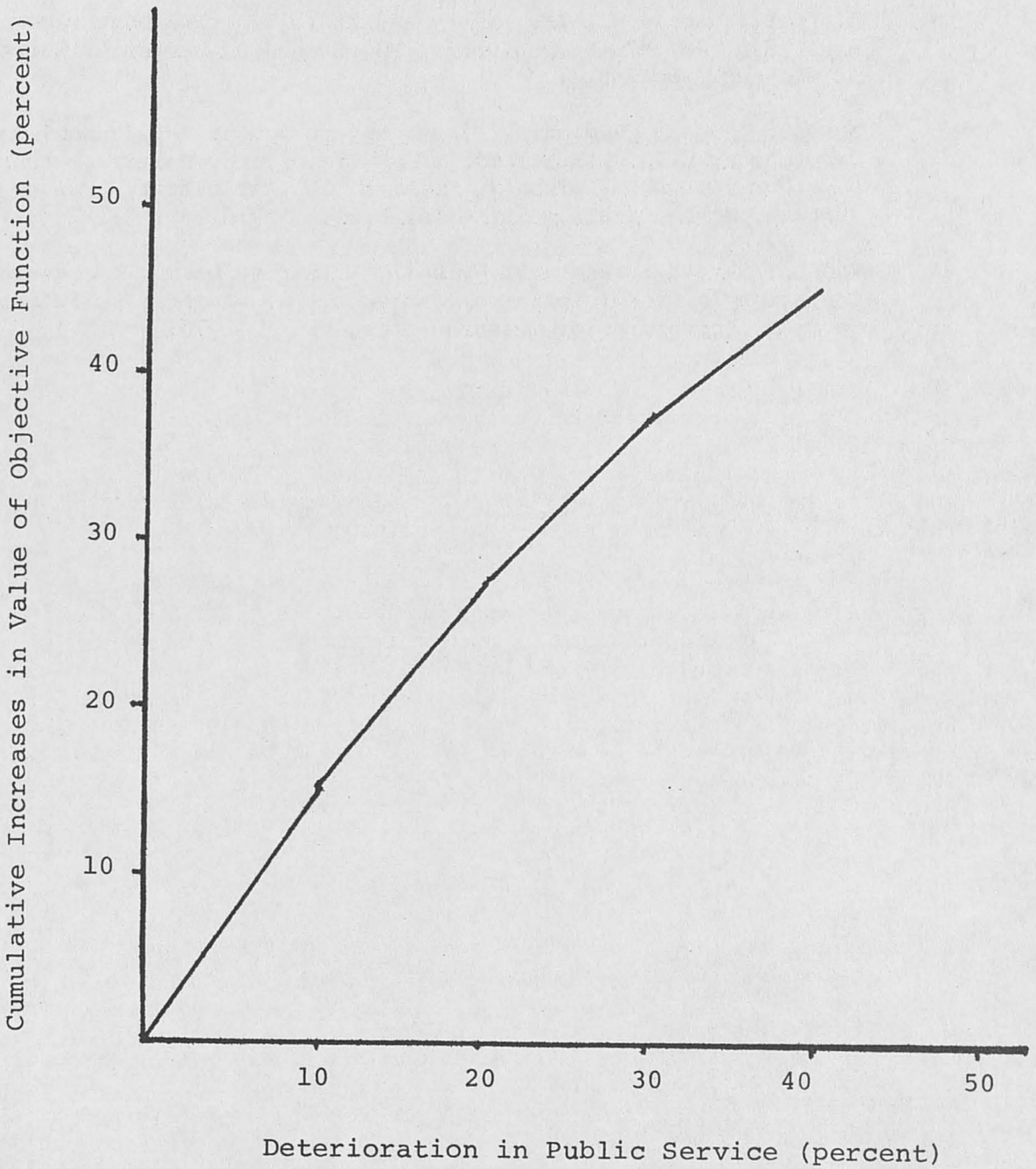
4/ The very tentative nature of the results is reinforced by the finding that when under somewhat different assumptions, a group of public services are allowed to deteriorate, the value of the objective function increased only a fraction of one percent for each percentage deterioration.

FIGURE 2

A Community Trade-off Function



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