

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523
BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY

Batch 62

1. SUBJECT
CLASSI-
FICATION

A. PRIMARY
Food production and nutrition

AE30-0000-0000

B. SECONDARY
Development

2. TITLE AND SUBTITLE

A spatial framework for rural development, problems of organization and implementation

3. AUTHOR(S)

Friedmann, John

4. DOCUMENT DATE

1974

5. NUMBER OF PAGES

47p.

6. ARC NUMBER

ARC

7. REFERENCE ORGANIZATION NAME AND ADDRESS

AID/TA/RD

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)

9. ABSTRACT

10. CONTROL NUMBER

PN-AAD-810

11. PRICE OF DOCUMENT

12. DESCRIPTORS

Positioning
Regional planning
Sector analysis

13. PROJECT NUMBER

14. CONTRACT NUMBER

AID/TA/RD

15. TYPE OF DOCUMENT

A SPATIAL FRAMEWORK FOR RURAL DEVELOPMENT

Problems of Organization and Implementation

A Report to the U.S. Agency for
International Development

by

John Friedmann
University of California, Los Angeles

Revised November 1974

Acknowledgments

I wish to thank Mr. Wing Ning Pang, a doctoral student in the Urban Planning Program of the School of Architecture and Urban Planning, UCLA, for his valuable assistance in the research underlying this paper. Ms. Kitty Bednar prepared the manuscript with extraordinary attention and care for detail.

Los Angeles
November, 1974

CONTENTS

Introduction,	1
A Growing Concern,	3
Towards a Reordering of Priorities for Rural Development,	5
The Spatial Organization of Rural Development,	9
Choosing Regions for Development,	14
Organizing for Rural Development,	19
Problems of Implementation,	24
Appendix: Four Principles of Rural Development,	36
Notes,	38
Bibliography,	41

A SPATIAL FRAMEWORK FOR RURAL DEVELOPMENT
IN POOR NATIONS

John Friedmann

Introduction

The purpose of this paper is to lay out the foundations for a new approach to rural development in countries whose inhabitants are mostly poor and still reside in rural areas. Such countries typically experience population growth in excess of two and even three percent a year and, in spite of accelerated urban growth, the absolute number of people who must be absorbed by rural households continues to increase.¹

The proposal made in these pages draws heavily on the accumulated evidence pertaining to a number of "pilot" experiences with integrated rural development and colonization (Adams and Coward, 1972; Mosher, 1972; Nelson, 1973; Stevens, 1974; Cohen, 1974). The principal components of this approach include:

1. A comprehensive strategy designed to achieve greater productivity, income, and employment in agriculture as well as a steady improvement in the social conditions of rural people.
2. A planning process that effectively links local projects for rural development to a long-term national strategy for balanced urban and regional development.

3. A program designed to benefit primarily the small, low-income farmer as well as populations living in agriculturally-based service towns.
4. A method of operation that seeks actively to involve local people in the planning and implementation of programs that benefit primarily themselves.
5. A process that will provide for the coordinated delivery of mutually supportive service for rural development.

The paper is divided into six sections. Section 1 summarizes some of the reasons for the renewed, widespread concern with rural development. Section 2 presents in a more detailed form the chief distinguishing features of the suggested new approach to rural development and shows how they imply, when taken together, a major restructuring of national policies for economic and social development. Section 3 presents key elements of a spatial framework for rural development. Section 4 addresses the question of what specific criteria should be applied to choosing regions for development. Section 5 deals with some of the implications for organizing rural development within a spatial framework. And Section 6 identifies and discusses some of the problems that are likely to be encountered in implementing the proposal. An appendix reproduces a set of four principles for successful rural development, and the paper concludes with a bibliography of the major works consulted and/or referred to in the text.

A Growing Concern

A sense of profound frustration with the observed results of developmental planning has become nearly universal (Faber and Seers, 1972; Hudson, 1974). The high hopes for the eradication of world-wide poverty, raised shortly after World War II, have yielded to a pessimistic mood. The number of people living in material and spiritual destitution has grown rather than diminished. In many parts, endemic hunger and even famine are everyday and ominous occurrences. And the number of unemployed and of those who are merely scraping a living in "involutated" occupations, both legal and illegal, has increased to dangerous proportions (Kirsch, 1974; Krishna, 1974; McGee, 1974).

Although the overall indices measuring the value of production have risen substantially in many countries, the developments to which they refer have affected only small numbers of people living in more or less privileged enclaves within larger national economies. Inequality in the distribution of income by social class and region has almost everywhere increased in countries that have implemented capitalistic models of development (United Nations, 1974), while dependency of these countries on foreign aid, foreign technology, and multi-national corporations has grown rather than diminished (Adams, 1970; Stallings, 1972; Bonilla and Girling, 1973).

These conditions are only partly explained by the rapid increase in population. In the language of an FAO report on

the drought-ridden Sahel, they were brought about by "the impact of the western economic and social system" (Wade, 1974, 236). The western model helped to structure the "opportunity spaces" of the population in such a way that the observed adaptive behavior and its consequences for poverty, social inequality, environmental degradation, and hyper-urbanization were the inevitable outcome.²

It is therefore not surprising that a search has started for new and substantially different approaches to national development (Owen and Shaw, 1972). A part of this search has focussed on the problems of rural people who make up the majority of the population in poor countries. For the most part, their needs have been ignored by governments, and the material benefits accumulating in the major enclaves of economic growth have failed to filter down to them. It cannot be denied that the task of developing the rural economy is a task of enormous complexity. How does one reach the hundreds of thousands and even millions of individual production units that are scattered over the entire territory of a nation? The problem is difficult enough in rich countries. It is infinitely more so in countries that are poor. Whatever may be the technical answer to this and similar questions, however, a political commitment must take precedence. Successful rural development in poor nations requires a major reordering of national priorities in the use of investment funds and the adoption of a spatial framework for the formulation and execution of the appropriate policies and programs.

Towards a Reordering of Priorities for Rural Development

The political commitment required is for a democratic strategy of national development. The essence of this strategy can be most readily defined by showing how it differs from strategies which, in the past, have been imposed on poor countries.

Towards a Democratic Strategy for National Development

- *from a process of economic growth which benefits primarily the rich and powerful to one in which the fruits of increased prosperity are shared more equally among the population
- *from central command planning to a wider distribution of effective power, decision-making, and popular control over the formulation and implementation of development plans
- *from an economic dualism artificially grafted onto a traditional society and frequently controlled, directly or indirectly, by foreign economic and political interests to a self-generating type of development which builds on existing knowledge and seeks to transform traditional structures from within
- *from a strategy which assigns priority to urban-industrial growth to one in which widespread improvements in agricultural production are seen as a necessary precondition for further developments in the urban-industrial sector

These principles of a democratic strategy may be illuminated by showing how they would affect specific policies for national development.

INVESTMENT
PRIORITIES

from major emphasis on urban-industrial investment to an approach which seeks to achieve a better balance between the interests of urban and rural populations

SPATIAL
PLANNING

from national planning for individual sectors to planning which incorporates an explicit spatial dimension in the allocation of investments and the design of action programs

GROWTH
CENTERS

from an emphasis which promotes and sustains economic growth at only one or a few major urban centers to a policy that will strengthen the economies of intermediate cities and rural service centers through a concerted effort at raising the productivity and incomes of rural populations

TARGET
POPULATION
IN RURAL
DEVELOPMENT

from policies which favor large-scale, commercial farming to those that are primarily directed at small farmers, artisans, industrial, and service workers who, in the aggregate, make up the majority of the rural population

MARKETS

from policies which favor production for export in the primary sectors of the economy to those which give substantially greater emphasis to production for domestic use

TECHNOLOGY

from introduction of standard western technologies in agricultural production and manufacturing to the development of technologies that are economically appropriate to the conditions of the country

**IRRIGATION
AND SETTLEMENT**

from large-scale resettlement, colonization, and irrigation schemes to small-scale irrigation and improved practices in land management

HEALTH

from provision of costly medical facilities and of professional staff experienced in the practice of clinical medicine to greater emphasis on environmental sanitation, preventive medicine, the eradication of endemic diseases, and family planning, especially in rural areas

EDUCATION

from education oriented predominantly to urban professional careers to programs that will prepare youngsters as well as adults for productive work in rural and urban areas

TRANSPORT

from priorities for the construction and operation of international, inter-urban, and urban transport facilities to priority for the development of rural transport networks with the objective of improving year-round farm to market access and of achieving closer linkages among lower-order cities and towns

**PRICE AND
FISCAL
POLICIES**

from policies which result in an inter-sectoral and inter-regional transfer of economic surplus for the principal benefit of city populations and international corporations to policies that seek to generate a surplus within localities primarily for reinvestment in these same localities and for the benefit of local populations

**PLANNING
AND IMPLE-
MENTATION**

from processes in which planning is separated from implementing actions and in which the needs of local populations are determined by a central authority to processes that join the competence of central planning with effective practice at the local level

A shift in basic strategy that will give priority to rural development and so to the conditions of welfare of the democratic majority requires a spatial framework for coordinated action. Professional and business groups may lobby for their interests without being confined to spatially contiguous communities. But rural folk who have very limited access to contact networks that reach up into the higher spheres of governmental policy have no way to make their voice effective, unless they act in concert at the level of their own communities and in the context of a style of planning that makes spatially defined communities the heart and center of developmental change. A democratic strategy calls for a spatial framework that will enable local people directly to participate in the events that shape their lives. Failure to appreciate this principle is likely to lead to administrative disasters such as the infamous Bilas rice growing scheme in Indonesia (Hansen, 1972).

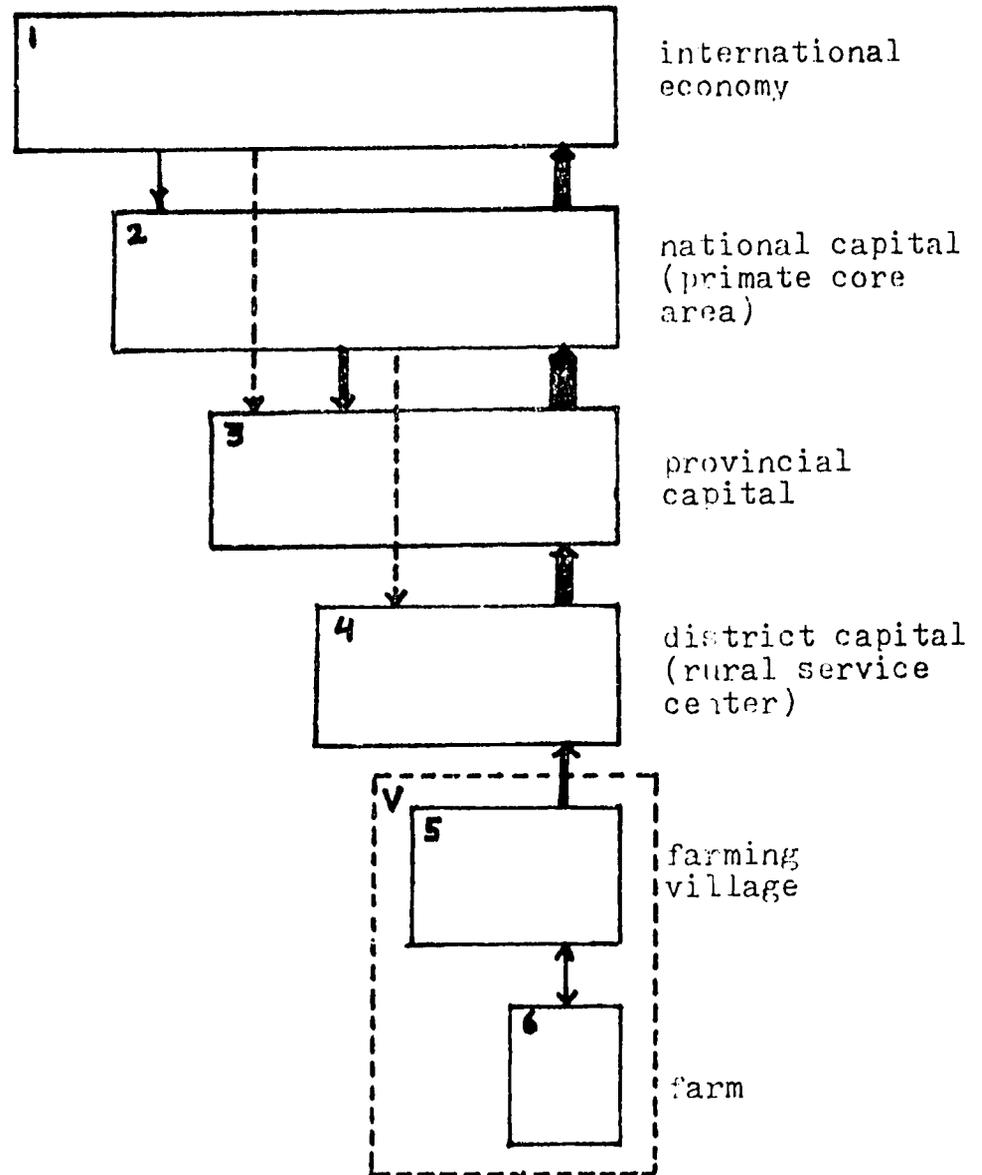
The Spatial Organization of Rural Development

Fig. 1 shows a 5-level hierarchy of decision-making levels that is interrelated through flows of financial resources (for convenience, levels 5 and 6 have been collapsed into a single level, V, the village farming economy). The picture is idealized but serves to point up a number of characteristics of poor countries prior to the adoption of a democratic strategy.

1. Downward flows of resources tend to stop at the provincial level (3); only a trickle of resources ever reaches level (4), and virtually none get down to the level of the village economy (V).
2. True reciprocity in economic relations exists only at the level of the village economy. (For the sake of simplicity, existence of feudal land holdings and/or large commercial estates in which the majority of the workers are landless and work for wages are excluded from consideration.) At all higher levels, the flow of resources is essentially upward and imbalanced, with more resources being removed from lower levels than are added from above. For the majority of countries in Latin America and tropical Africa, this also includes the international level of decision-making.

Fig. 2 shows what may happen after the adoption of a spatial framework for rural development. Levels (3), (4), (5), and (6) are now aggregated into a three-level, nested

Fig. 1. Hierarchical Levels of Spatial Organization and Resource Flows in a Dependent Economy



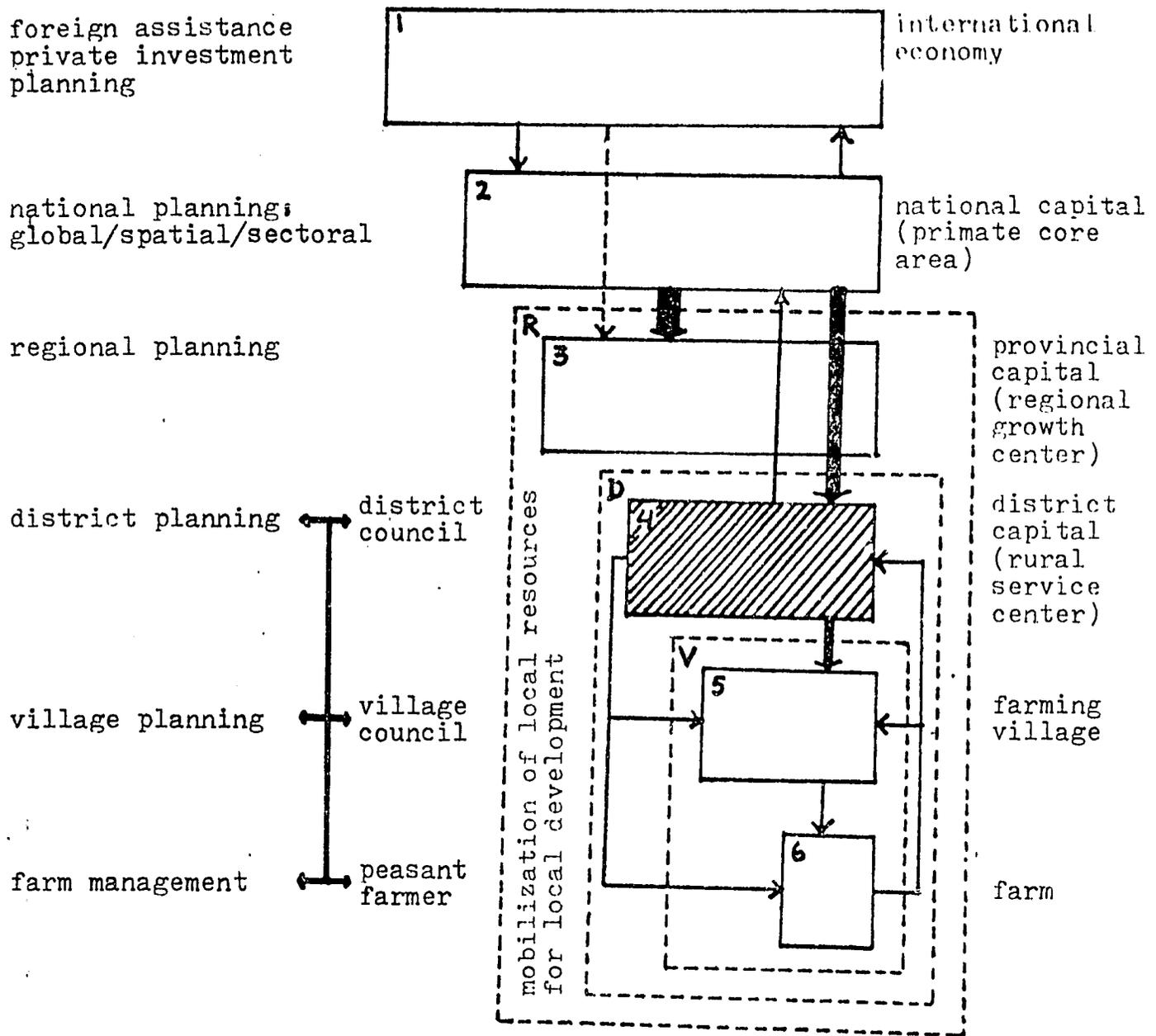
V Village farming economy

Arrows indicate direction of major financial flows

hierarchy of development regions, R, D, and V. From the standpoint of planning, the district level (d) emerges as the most important: it is within the district economy that local resources are mobilized for local action. Financial flows from the primate core area (2) reach down to district levels from where they are passed on to the village economy (V). And reciprocal relations which formerly were limited to the village economy now embrace the district economy as well. Additional resources are also channelled to the regional level, R, which now serves as growth center for the districts within its boundaries (Weiker, 1972). Finally, the net-loss of resources to the international economy (1) which was still evident in Fig. 1 has been reduced, and the international flow of resources has been restored to balance.

Different planning levels are shown on the left-hand side of Fig. 2. At the level of the international economy, planning for foreign assistance and private investments is of major interest. National planning is focussed on level (2) and proceeds down the hierarchy of decision levels to the individual district (d). It is here that it interfaces with local planning groups, including district and village councils who, acting on their own behalf, generate proposals for action and participate with national officials in the implementation of action programs. [Although they may be physically located at level (4), extension agents operate primarily at levels (5) and (6)].

Fig. 2. Levels of Spatial Planning for Rural Development



R Development region

D Development district

V Village farming economy

Arrows indicate direction of major financial flows

Planning for rural development has thus two principal points of origin: the national level (2) whence information proceeds downwards, and the district level (4) whence it reaches upwards to instruct planners at hierarchically higher levels. The practical problem is how to bring proposals originating at these two levels into conformity with each other and to ensure their consistency with global planning figures.

Just as global planning establishes certain parameters for sectoral planning, spatial planning sets constraints for subordinate levels of region and district. And similar to global planning, which involves a give-and-take between sectoral ministries and central planners, spatial planning at the national level involves a lengthy dialogue with planners and local people at lower levels in the hierarchy. Only now, a further consistency test is required so that:

$$\text{global national plans} = \sum \text{sectoral plans} = \sum \text{spatial plans}$$

In practice, however, these formal equivalencies are rarely achieved. Instead, spatial planning provides criteria of location for sectoral planners who, in turn, proceed to coordinate their projects in accord with principles and policies set forth in the spatial development plan. And even though the requirement for formal consistency is important, the practical success or failure of the planning effort will ultimately depend on what happens in the districts themselves. It is here that implementing actions take effect. Given the importance of this level in the overall scheme, the question arises of how districts are to be delineated and selected for intensive work.

Choosing Regions for Development

Because the approach to rural development put forward in this paper is a national one, the definition of district boundaries involves, as a preliminary step, a choice of regions for development (level R in Fig. 2). This must be done on the basis of a comprehensive spatial analysis of social and economic changes for the country as a whole, including the spatial distribution of the population, patterns and flows of migration, the spatial distribution of production and employment, inter-urban transport and communication, relative accessibility, spatial service distributions, and so forth, taking due account of the physical geography, cultural diversity, and historical settlement of the country.

A second step involves a tentative "grading" of major urban centers by their expected probability for sustaining economic growth. Although certain positive criteria may be applied to this exercise, such as the degree of connectivity of any given city with all other urban places, existing infrastructure, administrative functions, and population size, it may be easier to proceed by the progressive elimination of those cities that, for one or another reason, should be excluded from further consideration as regional growth centers. The remaining set of cities may then be classified according to hierarchical principles as growth centers of certain rank. Criteria for this ranking may vary but should be made specific.

The third step in this procedure involves the assignment of areas to each of the three top levels in the hierarchy of growth centers on the basis of the areal extent of their influence, taking into consideration marketing patterns, areas of material supply, central service areas, and migration sheds, as well as historical factors. This phase of the study should continue until all the effectively controlled political space of the country has been allocated to at least one higher-ranking center.³ If necessary, the boundaries may be adjusted to coincide with existing administrative subdivisions, especially if the government should wish to use the hierarchy of growth centers for the establishment of regional planning offices and as the common location for the field operations of national ministries.

Of greater importance is the designation from among the entire set of regions of a limited subset for accelerated development. The problem is two-fold. First, it is to find one or more regions that are judged to have considerable potential for economic growth, particularly in the primary production sectors and, second, to balance this "growth efficiency" criterion with criteria for social equity and spatial integration. In the final analysis and applying political reasoning, equity-integration criteria may, indeed, weigh more heavily in the balance than simple efficiency considerations. In any event, this final step in the analysis will require taking account of such factors as the occurrence of important natural resources, including

water; the distribution of the population according to ethnicity and/or language and culture; international frontiers; the existing hierarchy of cities; transport networks and access to markets; types of farming areas; and climatic conditions. The area closely linked to and surrounding the nation's capital may be treated as a special case in the category of national capital region. In general, however, the proper identification of a regional center would seem to be more immediately important than the precise determination of its outer boundaries. Regionalization is chiefly a device for focalizing interest. The actual region will define itself through the spatial pattern of activities and through repeated use.

Within each of the regions designated as having priority claims for investment and preferential treatment in the determination of national policy, districts may be chosen for launching intensive programs of rural development. Again, the first step requires a comprehensive study of the relevant conditions that, at a minimum, should include the following: distribution of the population; language, culture, and ethnicity of the population; prevailing conditions of health; ecological variations at the scale of normal district size (see below); farm size distribution; land tenure relationships; type of farming area; transport networks and accessibility; location of existing services and rural industries; traditional marketing patterns; central place hierarchies; migration; and rural commuting. The object of this study is to delineate rural development

areas according to three basic considerations: (1) a criterion of centrality, (i.e., relation to a district center), (2) a criterion of homogeneity with respect to ecological conditions, types of farming, land tenure conditions, size of farms, ethnicity, etc., and (3) a criterion of size (see below).

A study of potential development districts will normally require extensive field work and is best conducted by initially concentrating on future district centers having a population of between 10 and 25 thousand and a complement of basic urban facilities. Although the size of the district may vary considerably, its precise determination will hinge primarily on the question of its accessibility. District centers should normally be reachable from surrounding villages on either foot or bicycle in a day's round-trip journey. Depending on the density of rural population, the district area may fluctuate between 1000 and 3000 square miles, encompassing a total population of 50 to 150 thousand or from 10 to 30 thousand households.⁴

Once the entire region has been studied and subdivided into development districts, the choice of districts for priority attention may proceed. This is best done in combination with the design of specific programs for development which, in turn, may vary according to the mix of economic, social, and physical measures (Mosher, 1972). Where programs that aim at an increase in farm productivity and the development of rural non-farm activities take precedence, those districts offering the best prospects for

a positive response to innovations should be selected.⁵

This choice is fraught with great uncertainty, but at least should take into account the size and liveliness of the district center, the range of non-farm activities located there, the center's rank in the administrative hierarchy of urban places, the relevant characteristics of the rural population,⁶ prevailing marketing patterns, and general conditions of year-round accessibility both from the village areas to the district center and from there to higher-ranking urban areas and to major markets for the district's produce.

Districts appearing less promising initially may be designated for other types of program, particularly for those having a social emphasis. In any event, they should be considered in planning rural transport networks that will make them more accessible to the designated district centers and, via these centers, to the larger world outside.

Organizing for Rural Development

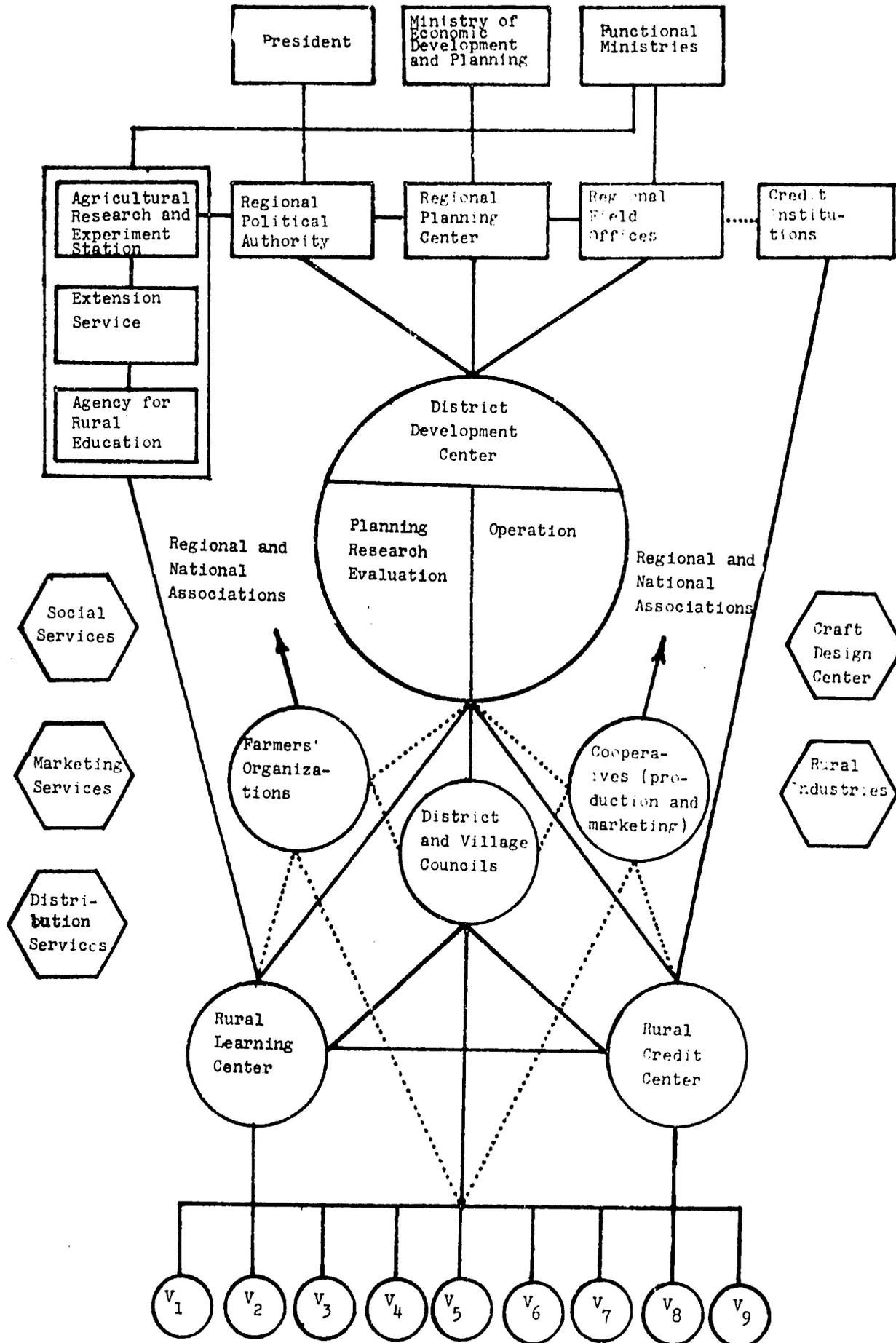
In a rough outline, the process of rural development planning has been described in section 3.⁷ The specific organization at district levels remains to be considered, however. Fig. 3 illustrates the major elements and relationships.

The core of the organization is the District Development Center (DDC) which is conveniently divided into two branches, the first concerned with planning, research, and evaluation, and the second with operations. Closely integrated with the DDC are a Rural Learning Center (RLC) and a Rural Credit Center (RCC). Connected with this core of basic services, representing the commitment of the national government, three types of organization represent the local population: district and village councils, cooperatives, and farmers' organizations. Also shown are the individual village farming communities ($V_1 \dots V_n$) which have direct physical access to the center.

The DDC is linked hierarchically to institutions at the level of regional growth center and, above them, to the ultimate political and administrative authorities of the country, including the President (or Prime Minister), the Ministry of Economic Development and Planning (or its equivalent), and the various functional ministries and agencies.

Clustered around this triad of development services are other services and industries that strengthen and give further substance to their critical role in promoting rural development.

Fig. 3. Organization of a Rural Service Center



They include social services (communication, health, education, electric power, water, recreation), marketing services (permanent market installations, storage facilities), distribution services (agencies for the distribution of fertilizers, seeds, pesticides, tools, and simple farm machinery), a craft design center and workshop for the improved design and production of hand-crafted articles, and rural and agricultural processing industries. The expansion of these services and industries will provide a major source of non-farm employment for rural people. However, the major propulsive role in rural development will be performed by the three developmental services mentioned earlier: the DDC, the RLC, and the RCC. They must now be more closely described.

The District Development Center is the focal point for local planning surveys, program formulation, and the coordination of public works and other action programs in the district. With its small staff of trained professionals, complemented by an auxiliary staff of young people from within the district itself, it forms a crucial link in the chain of information between regional and national authorities, on the one hand, and various community interests, on the other. Telephone or, more likely, radio contact with the regional capital is essential. Equally essential, however, is the daily face-to-face contact with local officials, farmers, union representatives, and others with and through whom plans are articulated and ultimately carried out.

The Rural Learning Center may be operated as a dependency of a new National Agency for Rural Education but should also be linked to an agricultural experiment station in the region and to the national extension service. As a learning center, it would seek to impart new information relevant to households and producers through farm visits, lecture-demonstrations, films, discussion formats, pamphlets, and the like. It would also maintain its own model-demonstration farm and conduct limited testing of new varieties of seeds and fertilizer applications. As a training center, it would prepare young men and women from the district to work as para-professionals in the villages for such long-range, continuing tasks as improved land management, environmental health, literacy, nutrition, baby and child care, and other aspects of rural life.

Finally, the Rural Credit Center would bring together in a single place various lines of credit offered under different programs for such purposes as financing agricultural production (fertilizers, seeds, pesticides), small machinery and hand tools, building and construction materials, and small industries. Its principal purpose would be to make credit facilities more accessible to potential borrowers in the district, to simplify the process of loan application, to strengthen the supervision of outstanding loans, and to handle repayments. Credit policy would be formulated and supervised by the participant credit institutions at both regional and national levels.

Two operational measures will be decisive for the success of accelerated rural development at district levels. The first is the absolute necessity of follow-through on the final district plan in accord with the priorities agreed upon in dialogue with local councils and higher planning authorities. The failure to deliver on promises made (and the plan may be read as a kind of commitment) will quickly cool the enthusiasm of the local population and create a climate of apathy and frustration. The second, closely related, refers to the timely delivery of essential services in support of the district plan, such as fertilizers, new seed varieties, and credit. A great deal of attention will have to be paid to this aspect of the work, but it will only happen if the highest political authorities in the country lend to the program their enthusiastic endorsement and support. This brings us to the final point in this discussion, the implementation of a democratic strategy.

Problems of Implementation

Five critical issues will be dealt with in this final section: the choice of country or region for rural development; the necessity for national policies and programs supportive of rural development; the transferability and timing of rural development programs at district levels; the delivery of benefits to target populations; and social participation.

1. Choice of country or region. There is accumulating evidence that a rural development program can succeed in only limited ways, if at all, in countries or regions whose agrarian structure is still feudal (Holmberg and Dobyns, 1969; Adams and Coward, 1972; Nuñez del Prado, 1973; Willig, 1974; Cohen, 1974). As part of a more general democratic strategy, rural development is specifically aimed at the poor farmer, and this can be accomplished only through a major shift in the balance of rural and national power (Adams, 1968). In so-called bimodal societies where large land owners exist side by side with small farmers, and where a substantial proportion of all farmers may work the land of others under some form of tenancy arrangement, the rural development program will be either "captured" by the landed interests or allowed to pursue only very limited ends. A seminar sponsored by the Agricultural Development Council concluded with these words (Adams and Coward, 1972, 22): "There appear to be few cases where small-farmer development has occurred in bimodal societies. Some [participants] saw little chance

for improving the lot of small farmers until the social, political and/or economic systems were restructured, such as land reform. They felt that most growth stimulating programs in these types of societies (sic) resulted in deterioration in the position of the small farmer." Cohen's detailed analysis of Sweden's CADU project in Chilalo, Ethiopia arrives at similar conclusions. To cite only one pertinent observation (Cohen, 1974, 613): "Since CADU cannot control future cooperatives because of legal limitations, it is probable that, rather than serve as a vehicle for reaching the peasant, they will be used by the provincial elites to stem social mobilization among peasants and to stimulate provincial elite investment in land. The result will be eviction of tenants and erosion of the peasant sector without any real alternative for the tenant other than the limited possibility of becoming an agricultural laborer." It follows that an international assistance agency, such as AID, should seek to promote rural development in only those countries (or regions) that have a unimodal system of small family holdings, and where a feudal social structure either never existed or if it did, has been successfully destroyed.

2. Supportive national policies and programs. Neither a well-articulated spatial framework nor the direct project approach to rural development is in itself capable of restructuring the peasants' "opportunity space" (see section 1 above) in order to produce significantly altered behavior in such key areas as agricultural production and land and

water management. They must be seen integrally as part of a larger democratic strategy that, insofar as rural development is concerned, must include at least the following correlative policies and programs: a long-term commitment of expanded resources to rural development; land reform in the sense of both the break-up of large estates and the aggregation of small holdings into economically viable and cooperatively managed units; expanded agricultural research, with special emphasis on food and industrial crops for domestic use; a marketing system in which farmers are able to place their produce in the hands of the consumer without excessive payments to a string of middlemen who deprive them of their right to a fair price; and fiscal policies that are non-discriminatory against small farmers and non-farm producers.

The evidence is clear that in most developing societies the rural sector has been "squeezed" to help finance the rise of large cities (Mellor, 1973). It has also been found that small farmers respond well to economic incentives (Beyerlee and Eicher, 1972). Unless the economic and social system is so arranged that economic incentives can stimulate farmers to seize new opportunities, the best-conceived "package" of rural development activities will yield only meager, unsatisfactory results. "By and large," writes Vernon Ruttan (1974, 23-24), "the opportunities for village development depend to a substantial degree on external forces over which the individual community, or the community development bureaucracy, have very little control. These

forces impinge on the community through intersector factor and product markets and through the development of bureaucratic resources at the national and regional level. The potential gains that can be achieved in the absence of expanding community markets and more efficient factor markets are limited. The ability of rural communities to respond to such opportunities when they do become available depends on technical and institutional innovations which also become available from sources outside the community. Even the capacity to organize the political resources necessary to achieve access to or enforce efficiency in the delivery of bureaucratic resources depends on the availability of social and legal instruments which permit communities to effectively organize their economic and political resources toward common objectives." Constraints on individual and collective choice at the level of the district or village economy can only be removed through appropriate policies and actions at the top. For this reason, the political commitment of the country to a democratic strategy is judged to be absolutely essential before a significant rural program can be launched.

3. Transferability and timing. Given the very limited resources of a poor country, it is obvious that all parts of the rural economy cannot be given equal attention. A choice of area must therefore be made. On the other hand, the pilot project approach for which international assistance agencies have so often opted, is also inappropriate.

What is the case against the pilot project approach? Briefly, the following arguments must be weighed.

- a. Pilot projects undertaken without the active involvement of the state bureaucracy are likely to engender serious opposition. Since the "outside" agency will have to withdraw from the project after a period of years, the project's subsequent fate will be to fall apart under the studied neglect of, if not actual dismemberment by, the state bureaucracy.
- b. Pilot projects are in themselves too small to generate the necessary political pressures for the required supportive changes at the top (see par. 2 above). Yet, without these changes, little can be accomplished.
- c. Pilot projects frequently owe their apparent success to an intensive application of financial and skill resources. When the attempt is made--if it is made at all--to generalize the experience as a model for a rural development program, the same level of inputs can usually not be sustained (Ruttan, 1974, 22).
- d. Pilot projects do not engender the learning process among the regular state bureaucracy which is necessary for an intelligent transfer of initial experience to other areas (Dunn, 1971).
- e. The experience of pilot projects, being restricted to areas of unusual responsiveness and opportunity, can rarely be "transferred" to

other areas whose ecological, social, and economic conditions are greatly at variance from those prevailing in the original area. Each area presents its own unique challenges. Since learning is restricted to the active participants in the pilot project (see par. d above), the likelihood is small that any lessons will be meaningfully applied in a new creative effort.

- f. The chief advantage of a pilot project may be its "integrated" nature, but, as Arthur Mosher has pointed out (1972, 2), an important distinction must be made between "the need for a certain group of activities to be administratively integrated, and the need for them to be simultaneously available...The major requirement is that...services be simultaneously available, and it is frequently possible for that to be achieved without administrative integration." Of course, this would imply the active collaboration of the state bureaucracy and of the private sector. In regard to pilot projects, such collaboration is rarely forthcoming. Hence the inclination of the project's sponsoring agency to "internalize" and "integrate" all of the required services.

From the very beginning, therefore, it will be advisable to follow a comprehensive national approach to rural

development. This may produce results more slowly than the more "dashing" pilot approach. Ultimately, however, it is the only approach capable of reaching the mass of a country's rural population.

Rural development must be viewed as a continuing process; it is futile to think of it as ever attaining a Rostovian "take-off" stage. In the world's poor countries, more and more people must be absorbed into rural society each year. This poses the challenge of how to employ them productively and, in some especially destitute countries, of even how to feed them. Faced with the sheer magnitude of this problem, neatly drawn pilot projects in integrated rural development are worse than irrelevant; they succeed only in squandering resources that might be employed in a massive effort to improve the livelihood of rural people.

In a national program, area priorities must be established. Some areas will be subject to intensive treatment, but no area will be totally neglected. The spatial framework for rural development is the only way by which the functionally specialized programs of national agencies may be ordered and brought into conjunction to help those who are most in need of help. Over time, as knowledge based on experience accumulates, as total resources expand, and as other resources formerly employed in one use may become available for another, the spatial priorities may be rearranged. This is best done in a considered way through an effort that looks forward to the progressive integration of rural populations into an interdependent national economy.

4. Delivery of benefits to target population. The primary target population in rural development is the "small" farmer and the worker in rural industries and service occupations who resides in rural areas. "Smallness" in this context is a broad metaphor for poverty. Applied to farmers, it includes "that part of the rural population broadly defined as lower-income...families" who in turn, may be land owners, share croppers, squatters, or renters of land (Adams and Coward, 1972, 5). In the seminar from which this definition has been taken, "a farm was considered small if its occupants had very limited access to political power, productive services, productive assets and/or income streams in the society" (ibid., 6). The same characterization may be made of those who live and work in rural towns. Some of these people are in the money economy, but many are not and consume all or nearly all that they produce. The problem then is how to design a program that will have maximum impact on this population.

Too often, the benefits of programs, such as credit extension, tend to be captured by those who, from a social point of view, are least in need of assistance. This has been generally true of the "green revolution," but it has very often been true also for services made available under the integrated approach. With reference to the latter, Mosher (1972, 6) proposes to "design the operation of all activities within all integrated projects primarily to serve the small farmers within the project area." This may be good advice, though in operation it will be found that even

among "small" production units there are degrees of smallness, and the poorest farmers are likely to be excluded.

A definitive solution to this problem will not be easy, and benefitting all the population in a district may be all but impossible. Under political pressure to produce results, rural development programs will tend to rely increasingly on their more successful "clients," escalating power into more power, until a stratified rural class system solidifies. The poorest peasants, especially those without land, will be pushed into the larger cities where they will swell the mass of an intermittently employed subproletariat in a host of legal and illegal occupations.

The paradox of a concerted rural development effort is that it may eventually increase migration and urban unemployment. Farming districts beginning to produce for urban markets may become the preferred target for migrants originating in still poorer areas, and as jobs become available at district towns, and both the frequency of urban contacts and general familiarity with an urban way of life increases, more rather than fewer rural people may decide to cast their lot with the big city. Rural to rural migrants may take up the temporary slack in the labor market by becoming workers and tenants producing for their own subsistence and for that of the small but ever more prosperous farmers whose poorest lands they operate, while the best lands are put by their owners into marketable crops. Under conditions of rapid population increase, rural poverty will tend to reproduce itself.

There may be no effective way to deal with this frustrating situation. A solution that may be considered is to convert individual small-scale farms to larger-scale units that are managed cooperatively by all the residents of a rural area including those who live--perhaps only temporarily--in district towns. Work tasks would be allocated among all the members of this community by democratic choice, and the proceeds would be distributed according to each household's needs after subtracting what is required for recurrent operations and for reinvestment. But this solution is unlikely to be tried in societies where every person seeks an opportunity to better his own life at the expense of those who are poorer and weaker than himself.

5. Social participation. The problem of delivering the benefits of rural development to a specific target population is intimately joined to the question of social participation. In a national approach, the resources that can be delivered to any given district will be small and must be used in combination with the comparatively much larger resources available among the local population (Lele, 1974, p. 174).⁸ But, in the absence of slack in the use of local resources, this principle will require a shift of resources out of their present to a new employment. And to accomplish this, substantial benefits from the new use will have to be demonstrated.

Whose voice shall ultimately be decisive in promoting the new uses? At least in general terms, the answer is

clear: the people have an inherent right to the use of their own skills, their own time, and their own savings. They themselves must thus determine what is their proper use.

Small peasant farmers appear to be conservative and to favor "traditional" solutions to their problems. But their conservatism merely reflects an ancient wisdom of dealing with adversity. Their margin of survival is slim, and they will be reluctant to venture a course of action that, should it fail to bring the expected benefits, may destroy the very basis of their livelihood. The rural development bureaucracy cannot itself assume the risk of failure; this will always be borne by the local population. And so the shots must be called by the people themselves. This alone may elicit a positive response to the new opportunities made available to them under a program of rural development.

But the agents of rural development have knowledge that can be useful to the local population. The key to this relationship is mutual learning by which the agents and their "clients" meet together to consider the new options. In this way, local knowledge can be conjoined with the more generalized and abstract knowledge of the agent in the solution of a problem (Friedmann, 1973, chapter 7). But the final responsibility lies with the people themselves. Rural development agents are understandably anxious to get on with their work. But their work is precisely to motivate others, and their daily parole must be "patience."

Social participation can have two meanings. In the first, it refers to direct participation in decision-making

over the contents of a plan and the disposition of local resources. In the second, it refers to what the French call social "animation," or the encouragement and support given to rural populations in organizing for development. Both meanings are relevant and, if properly understood, may supplement each other in the process of rural development. Village and district councils may be composed of "elders and notables" reluctant to change their accustomed ways, but rural organizations, such as youth clubs, progressive farmers unions, cooperatives, artisan unions, and para-professional cadre attract the more venturesome types. All of these groups must be mobilized for development.

In the final analysis, social participation means to activate a population that has become accustomed, over the centuries, to passively adaptive behavior. Rural development seeks to enlarge the traditional opportunity spaces available to rural people. Through social participation, the new opportunities may be brought a little closer to their full realization.

APPENDIX

Four Principles of Rural Development

The following is quoted verbatim from a seminar report on Small-Farmer Development Strategies (Adams and Coward, 1972, 20-22).

1. Farmers must develop the feeling that they can control their own destiny. Thus, successful SFD programs must include some type of farmer organization which can help link the individual to regional and national political, social, and service institutions. The form of these organizations varies widely. In some cases farmers' cooperatives or associations provide this vehicle. In other cases farmers' unions or leagues, credit and savings unions, tribal units, or community development organizations provide this linkage. Creating these types of organization is still more of an art form than a science. But, at least three vital elements which contribute to creating these types of organizations were identified in the seminar: (a) Promoters of the organization must have patience and intent to let grass roots leadership emerge within the organization. (b) A set of "high payoff" economic, political, and/or social functions must be identified for the organization to perform. (c) Responsibility for developing the organizations must be in the hands of technicians who empathize with and respect the farmers they seek to help.
2. SFD programs can only be highly successful if farmers' incomes can be substantially increased. Seminar participants generally concurred that there is only a modest amount of productivity slack in small farms which can be taken up by additional credit, education, application of existing technology, and coordination. Clearly more new technology has to be made available to small farmers. There are two general solutions to this problem. First, more emphasis must be given to generating new technology more appropriate for the small farmer situation. Second, more attention needs to be given to innovative forms of social organization that will allow small farmers to collectively utilize indivisible technologies which are, or will be, available. There is little doubt that such indivisible technologies, if they provide a "high payoff," could provide additional economic opportunities to strengthen small farmer organizations.
3. SFD programs have a much better chance of success if they receive strong support from regional and national agencies. SFD strategies work best when woven into the existing institutional fabric of the country rather than being appended

in an ad hoc fashion. Policy makers must be particularly careful to include adequate incentives so that agricultural service institutions will be induced to address SFD problems seriously.

4. A major factor in the success of SFD programs is the presence of a trained and motivated cadre of technicians who identify with rural poor and appreciate their potential. It often takes a significant change in technician attitude toward small farmers to successfully carry out SFD. This attitudinal change may be more difficult to effect than the changes in attitude of farmers toward change. The various pilot SFD projects scattered around the world are helping to implant these attitude changes in technicians. This may be their more significant long-run contribution.

Notes

1. "The absolute addition to the [world's] rural population between 1950 and 1970 was approximately 434 million. This was nearly two-thirds of the increment (around 639 million) added to the urban population. In other words, if the world's urban places had absorbed all of the rural natural increase, they would have had to grow almost twice as fast as they actually did, and they were already growing... at a totally unprecedented rate!" (Davis, 1972, 58).
2. The concept of opportunity space refers to the options left open for individual choice by the real or imagined constraints on a decision. For the analogous concept of "plays" in social anthropology, see Uzzell (1974).
3. The concept of "effectively controlled political space" refers to that portion of a national territory which is under the effective legal and administrative control of the central government.
4. According to Mosher (1972, 6), "The actual optimum size for a farming district will vary widely from place to place. Normally, it will need to be large enough to include at least ten farming localities and to include at least twenty to twenty-five extension workers (since this is the minimum number for effective and continuous in-service training). The upper limit is set by convenience in supervision and servicing from the district headquarters.

In general terms, this means that the optimum size will normally lie somewhere between 1000 and 3000 square miles. At that size, an integrated project can take advantage of most of the economies of scale of large projects, and is of a size that is appropriate for multiplication in additional units of similar size in other areas of the type to which it is suited." In Zambia, a 35-mile radius is the basis of much of the planning for social services in rural areas (Mihalyi, 1974, 4). In purely geometrical terms, this works out to about 3800 square miles.

5. This is an explicit argument against the popular "first worst" policy of choosing regions for preferred government action in the United States.

6. In a study of "progressive" farmers in Baganda (Uganda), the following characteristics were shown to be significant: they were willing to experiment with new ideas; visited the nearby town more frequently; tended to have lived in town; tended to have worked for wages; tended to have some work skill that they could practice instead of farming; tended to have had some kind of work training; had wider contacts with local administrative, government, and farming officials; were more likely to visit farm institutes, research stations and cooperatives; and had more contact with the outside world through radio and newspapers. Age, sex, and education did not distinguish the "progressive" farmer from others (Bowden and Morris, 1969).

7. This might also be called the "three-ups-and-two-downs" process of rural planning. Information originates in the development district and is sent up for review to regional and national planning bodies. It is returned in the form of guidelines and suggested revisions, and this process continues until a final plan is agreed.

8. Ruttan (1974, 24) underscores this point when he writes: "Rural development program activities must be organized to utilize the relatively low quality (and inexperienced) human resource endowments that are available in rural areas. They must be extensive rather than intensive in their use of high-cost human capital."

Bibliography

- Adams, Dale W. and Coward, E. Walter. 1972: SMALL-FARMER DEVELOPMENT STRATEGIES: A SEMINAR REPORT. New York: The Agricultural Development Council.
- Adams, Richard N. 1967: El sector agrario inferior de Guatemala, 1944-1965. Institute of Latin American Studies, The University of Texas at Austin, Offprint Series No. 64.
- Adams, Richard N. 1970: CRUCIFIXION BY POWER: ESSAYS ON GUATEMALAN NATIONAL SOCIAL STRUCTURE, 1944-1966. Austin: University of Texas Press.
- Bataillon, Claude. 1973: Papel y carácter de las ciudades pequeñas. In Piel, Jean et al., REGIONES Y CIUDADES EN AMERICA LATINA. Mexico City: Sepsetentas.
- Bonilla, Frank and Girling, Robert, editors. 1973: STRUCTURES OF DEPENDENCY. Institute of Political Studies, Stanford University.
- Bowden, E. and Morris, J.R. 1969: Social characteristics of progressive Baganda farmers. EAST AFRICAN JOURNAL OF RURAL DEVELOPMENT, 2, 56-62.
- Byerlee, Derek and Eicher, Carl K. 1972: RURAL EMPLOYMENT, MIGRATION AND ECONOMIC DEVELOPMENT: THEORETICAL ISSUES AND EMPIRICAL EVIDENCE FROM AFRICA. African Rural Employment Paper No. 1. Department of Agricultural Economics, Michigan State University.
- Cohen, John M. 1974: Rural change in Ethiopia: the Chilalo Agricultural Development Unit. ECONOMIC DEVELOPMENT AND CULTURAL CHANGE, 22, 580-614.
- Davis, Kingsley. 1972: WORLD URBANIZATION 1950-1970. Vol. II. ANALYSIS OF TRENDS, RELATIONSHIPS, AND DEVELOPMENT. Population Monograph Series, No. 9. Institute of International Studies, University of California, Berkeley.
- Dejene, Tekola and Smith, Scott E. 1973: EXPERIENCES IN RURAL DEVELOPMENT: A SELECTED, ANNOTATED BIBLIOGRAPHY OF PLANNING, IMPLEMENTING, AND EVALUATING RURAL DEVELOPMENT IN AFRICA. Washington, D.C.: American Council on Education, Overseas Liaison Committee.

- Dunn, Edgar S. Jr. 1971: ECONOMIC AND SOCIAL DEVELOPMENT: A PROCESS OF SOCIAL LEARNING. Baltimore: Johns Hopkins Press.
- Faber, Mike and Seers, Dudley, editors. 1972: THE CRISIS IN PLANNING. 2 vols. London: Chatto and Windus.
- Farvar, M. Taghi and Milton, John P. 1972: THE CARELESS TECHNOLOGY: ECOLOGY AND INTERNATIONAL DEVELOPMENT. Garden City, N.Y.: The Natural History Press.
- Fogg, C. Davis. 1971: Smallholder agriculture in eastern Africa. In Dalton, George, editor. ECONOMIC DEVELOPMENT AND SOCIAL CHANGE: THE MODERNIZATION OF VILLAGE COMMUNITIES. Garden City, N.Y.: The Natural History Press.
- Friedmann, John. 1973: RETRACKING AMERICA: A THEORY OF TRANSACTIVE PLANNING. New York: Doubleday/Anchor.
- Hansen, Gary. 1972: REGIONAL ADMINISTRATION FOR RURAL DEVELOPMENT IN INDONESIA: THE BIMAS CASE. Working Paper Series No. 26, East-West Technology Development Institute. Honolulu, Hawaii.
- Hudson, Barclay. 1974: The crisis in planning. ECONOMIC DEVELOPMENT AND CULTURAL CHANGE, 22, 518-26.
- Kimani, S.M. and Taylor, D.R.F. 1973: GROWTH CENTRES AND RURAL DEVELOPMENT IN KENYA. Thika, Kenya (not otherwise identified).
- Kirsch, Henry. 1974: Employment and the utilization of human resources in Latin America. ECONOMIC BULLETIN FOR LATIN AMERICA, 18, 46-94.
- Krishna, Raj. 1974: UNEMPLOYMENT IN INDIA. Agricultural Development Council, Teaching Forum No. 36.
- Lele, Uma. 1974: THE DESIGN OF RURAL DEVELOPMENT: AN ANALYSIS OF PROGRAMS AND PROJECTS IN AFRICA. Studies in Employment and Rural Development No. 1. Development Economics Department, IBRD.
- Mabogunje, Akin. Forthcoming: PROCEEDINGS OF A CONFERENCE ON REGIONAL PLANNING AND NATIONAL DEVELOPMENT IN TROPICAL AFRICA. Ibadan: Ibadan University Press.
- McGee, Terry C. 1974: THE PERSISTENCE OF THE PROTO-PROLETARIAT: OCCUPATIONAL STRUCTURES AND PLANNING FOR THE FUTURE OF THIRD WORLD CITIES. Comparative Urbanization Studies Series. School of Architecture and Urban Planning, University of California, Los Angeles.

- Mellor, John W. 1973: Accelerated growth in agricultural production and the intersectoral transfer of resources. *ECONOMIC DEVELOPMENT AND CULTURAL CHANGE*, 22, 1-16.
- Mihalyi, Louis J. 1974: Legacies of Colonialism: Zambia. *FOCUS*, 24, No. 10, 1-8.
- Mosher, A.T. 1972: *PROJECTS OF INTEGRATED RURAL DEVELOPMENT*. New York: Agricultural Development Council. Reprint.
- Nelson, Michael. 1973: *THE DEVELOPMENT OF TROPICAL LANDS: POLICY ISSUES IN LATIN AMERICA*. Baltimore: Johns Hopkins University Press.
- Núñez del Prado, Oscar. *KUYO CHICO: APPLIED ANTHROPOLOGY IN AN INDIAN COMMUNITY*. Chicago: Chicago University Press.
- Owens, Edgar and Shaw, Robert. 1972: *DEVELOPMENT RECONSIDERED: BRIDGING THE GAP BETWEEN GOVERNMENT AND PEOPLE*. Lexington: D.C. Heath and Co.
- RURAL DEVELOPMENT IN NIGERIA*. Proceedings of the 1972 Annual Conference of the Nigerian Economic Society. Ibadan: University of Ibadan.
- Ruttan, Vernon. 1974: *RURAL DEVELOPMENT PROGRAMS: A SKEPTICAL PERSPECTIVE*. Agricultural Development Council. Draft document.
- Stallings, Barbara. 1972: *ECONOMIC DEPENDENCY IN AFRICA AND LATIN AMERICA*. A Sage Professional Paper, 3. Beverly Hills, Cal.: Sage Publications.
- Stevens, Robert D. 1974: Three rural development models for small-farm agricultural areas on low-income nations. *THE JOURNAL OF DEVELOPING AREAS*, 8, 409-20.
- United Nations, Economic Commission for Latin America. 1974: Income distribution in selected major cities of Latin America and in their respective countries. *ECONOMIC BULLETIN FOR LATIN AMERICA*, 18, 13-45.
- Uzzell, Douglas. 1974: A strategic analysis of social structure in Lima, Peru, using the concept of "plays." *URBAN ANTHROPOLOGY*, 3, 34-46.
- Wade, Nicholas. 1974: Sahelian drought: no victory for western aid. *SCIENCE*, 185, 234-37.

- Weiker, Walter F. . 1972: DECENTRALIZING GOVERNMENT IN MODERNIZING NATIONS: GROWTH CENTER POTENTIAL OF TURKISH PROVINCIAL CITIES. A Sage Professional Paper. International Studies Series, Vol. 1. Beverly Hills, Cal.: Sage Publications.
- Weitz, Raanan. 1971: FROM PEASANT TO FARMER: A REVOLUTIONARY STRATEGY FOR DEVELOPMENT. New York: Columbia University Press.
- Willig, Richard Lee. 1974: URBAN ORGANIZATION AND URBAN RURAL DEVELOPMENT: A CASE STUDY OF POLARIZED DEVELOPMENT IN EL SALVADOR. Unpublished doctoral dissertation. University of California, Berkeley.