

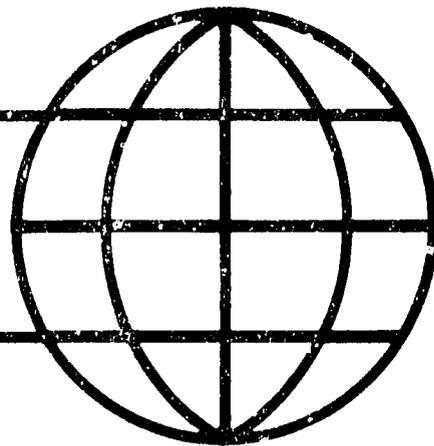
**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

REVIEW OF SELECTED DOCUMENTS
ON RURAL-URBAN DYNAMICS

by

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EXECUTIVE SUMMARY

As part of a front-end research effort for the proposed Rural/Urban Productivity and Employment Promotion (RUPEP) Project, this report assesses the contributions of four organizations involved with rural/urban linkage research. This report reviews selected documents from the International Labor Office (ILO), the United Nations Research Institute for Social Development (UNRISD), the International Food Policy Research Institute (IFPRI), and the Clark Cooperative Agreement on Settlement and Resource Systems Analysis and Management (SARSRA). The following findings can be gleaned from this review.

1. All four organizations assert that understanding rural/urban relationships is important for effective development planning. According to its annual report for 1983, IFPRI is concerned with generating nonfarm employment opportunities in rural regions to support agricultural development and alleviate rural poverty. In that same report, the authors assert that the location of, and farmers' access to, farm inputs, agricultural marketing and processing facilities, and goods and services for household consumption (generally urban-based) are critical factors in rural development. In a progress report that identifies research topics underway, the ILO (April 1984, p. 17) confirms the need for further research in this area:

Little is known about the precise relationship between agricultural growth and rural industrialization . . . Another field in which policy-makers need some guidance is the spatial dimensions of rural non-farm activities. For instance, what types of activities can be supported and promoted in various size groups of communities or settlements?

SARSA is specifically designed to address rural/urban dynamics, and so conducts a great deal of research relevant to RUPEP. Finally, in several of the UNRISD documents, authors assert that UNRISD explicitly considers urbanization as one of the processes affecting food security and food systems.

2. Each of the four organizations examine rural/urban linkages for different reasons, from different perspectives, and with varying levels of effort.

A. IFPRI— The focus of IFPRI's research has been on demonstrating that increases in income derived from agriculture result in increases in employment and production in nonfarm activities through consumption linkages between agricultural households and the nonfarm economy (industries and services). IFPRI has expended considerable effort to confirm John Mellor's (president of IFPRI) "agricultural-

led" rural development hypothesis and has been successful in pioneering methods for studying the relationships between growth in agriculture and growth in nonfarm urban-based activities. IFPRI has also begun to examine how levels of access to various government services and retail outlets influence agricultural growth on the one hand and small rural industries on the other. IFPRI has already contributed, through just a few works, a great deal of knowledge about rural/urban linkages (with the focus on the "rural") and has forcefully demonstrated the utility of household level analysis to examining rural/urban dynamics.

B. ILO- The ILO, under its World Employment Program, has focused on one rural/urban relationship. The ILO has very carefully and very systematically studied rural/urban (as well as urban-rural and rural-rural) migration and its impact on the development process. Although this linkage has been at the center of the ILO's research, at least two "impacts" of migration considered by the ILO also constitute forms of rural/urban linkages: (a) income remittances; and (b) technological changes and changes in production resulting from migration. In addition, the ILO's research on migration has also led its staff to assess policies designed to redirect migrants away from primate cities. These policies involve strengthening small towns in rural areas. Hence, during the late seventies, the ILO's reasons for examining rural/urban dynamics was to better understand migration and its implications for development; recently, the ILO has become interested in rural nonfarm employment. During much of the seventies, the ILO examined rural poverty and how it has changed over time. Findings from this period indicated that there was an increasing number of landless rural laborers, and that nonfarm employment was growing increasingly important to the household incomes of both landed and landless rural people. In two recent progress reports, the ILO has proposed to conduct research on employment opportunities in rural areas and has recognized the importance of rural/urban dynamics to this research.

C. SARSA/Clark Cooperative Agreement- SARSA has, for three years, been directly researching rural/urban dynamics from what has been called a "regional" or a "spatial" perspective. In a short time and with limited resources, SARSA has been successful in generating a number of reports on rural/urban dynamics, covering a range of topics. SARSA has produced over forty reports, all of which contain material that is relevant to RUPEP. For the purposes of this review, however, only eight pieces, representative of SARSA's several research topics, are annotated. One area of research has involved literature reviews and the commission of case studies to identify the range of rural/urban linkages that effect rural development and employment generation. Another area of research, and one which could prove to be of great value to RUPEP, has been on developing and/or arguing for the use of certain analytical techniques to improve rural/urban linkage planning. These techniques

include: periodic market structure analysis, commodity flow data analysis, location-allocation algorithms for locational planning of services, and the use of location-allocation techniques in conjunction with household analysis to identify viable nonfarm enterprises for investment.

D. UNRISD- The documents conveyed by UNRISD are principally concerned with the problems of persistent hunger and malnutrition in countries around the world. UNRISD's analysis of these problems centers on a food systems model. While the model is of considerable interest, and UNRISD's research is of the greatest importance, UNRISD has yet to explicitly consider rural/urban linkages and their relationship to food systems. Although they identify the importance of urbanization to food systems, they have not examined the structure of urban systems or of spatial issues in any thorough sense.

3. The documents reviewed in this report contain a great deal of information that is relevant to topics covered by RUPEP. The documents tend to support RUPEP's problem statement and many of its working hypotheses. The documents reviewed suggest that a fair amount is currently known about the nature and importance of rural/urban linkages and about the kinds of development interventions that should be promoted to strengthen regional economies through rural/urban planning. In addition, it would appear that there are a number of analytical techniques readily available for measuring rural/urban linkages.

A. Nature and Importance of Rural/Urban Linkages- The documents reviewed suggest that many rural/urban linkages are important to the development process and warrant attention in a range of planning contexts. Among the linkages most singled out for study are: (a) consumption linkages between rural households and non-farm (urban-based) enterprises; (b) income linkages between rural households and urban areas evinced by off-farm employment and urban to rural income remittances; (c) linkages between rural households and urban-based publically and privately provided commercial, retail, and human services; and (d) marketing linkages between rural areas and urban areas.

B. Activities That Best Facilitate Rural/Urban Dynamics- In the RUPEP Concept Paper, a number of hypotheses are advanced regarding the development interventions that might best contribute to an expanding regional economy. The documents reviewed support many of these hypotheses. In particular, this review suggests that the public sector ought to: (a) select industries for investment that are linked to other economic activities within a region; (b) invest in and provide credit to private sector rural industries that meet local consumption needs and are labor intensive; (c) invest in and provide credit to small enterprises that apply local skills; (d) continue to invest in government services, but locate them so that access is

maximized; and (e) provide leadership skills and management training to municipal governments.

C. Available Analytical Techniques- The documents reviewed contain a number of limited-use methodologies that can be used for rural/urban linkage and locational analysis. These methodologies include household analysis, commodity flow analysis, location-allocation algorithms, and periodic market analysis.

4. Although the documents reviewed do contain useful information and do confirm that rural/urban relationships are important, they also suggest that there are still many information gaps in the study of rural/urban linkages that must be filled. While it is true that from certain perspectives a great deal is already known about the nature of rural/urban dynamics, their importance, how they can be analysed, how to use this analysis in planning, and how conditions can be created that will facilitate rural/urban productivity and employment generation, it is also true that in many significant respects the relevant knowledge base is quite thin. Many of the documents reviewed for this report assert that a great deal still needs to be studied and that more methodologies must be designed and tested before the state-of-the-art in rural/urban planning advances very far. This review tends to support the contention (found in the RUPEP Concept Paper) that one of the main challenges in the field of rural/urban linkages research is to discover the conditions and activities that stimulate the emergence of mutually beneficial rural/urban relationships through entrepreneurial initiatives, and then to account for them in the design of development policies, strategies, programs and projects.

INTRODUCTION

In late 1984, Avrom Bendavid Val (AID/ S&T/RD/RRD) visited the International Food Policy Research Institute (IFPRI), the International Labor Office (ILO), and the United Nations Research Institute for Social Development (UNRISD) to determine whether these organizations were involved with research on rural/urban linkages, particularly in relation to productivity and employment promotion. Each of these institutions reported both interest and active involvement in this kind of research and provided documents considered most relevant to the research topic. It is, thus, assumed that these documents accurately reflect the nature and extent of the research of each institution on the topic.

Purpose

As part of front-end research for a proposed project entitled Rural/Urban Productivity and Employment Promotion (RUPEP), I was asked to review these documents as well as others generated under a Cooperative Agreement between Clark Univeristy and U.S.A.I.D. The purpose of this review is threefold:

1. To identify what information can be gleaned from these documents that is useful to: (a) supporting hypotheses posed in the RUPEP concept paper; (b) generating new ideas for possible hypotheses; and (c) suggesting appropriate methodologies for analyzing rural/urban linkages.
2. To examine how these various organizations currently treat rural/urban linkages in their research.
3. To contribute to the dialogue on rural/urban linkages both within AID and between AID and the organizations that provided the documents.

Accordingly, this report makes no attempt to summarize the content of each paper reviewed, but only to assess its relevance (or lack thereof) to the present conception of RUPEP.

Contents of the Report

This report comprises five chapters. Chapter One presents evidence contained in the documents reviewed that supports or strengthens arguments made in the RUPEP Concept Paper (see Appendix A). The chapter also includes references to methodologies and planning approaches that may be appropriate for RUPEP and summarizes the major findings that emerge from this review. Chapters Two through Five provide detailed reviews of each organization's contribution

to rural/urban linkages research and a detailed discussion of the relevance of each reviewed document to RUPEP-related research. Each chapter treats one of the four organizations under consideration and each is divided into two parts. The first section provides a general summary of the institution's documents and is meant to serve as a "reader's guide" to the annotations, which follow in the second section. The annotations discuss the specific relevance of each document to RUPEP.

CHAPTER ONE: SUPPORTING EVIDENCE FOR THE RUPEP CONCEPT PAPER

This chapter presents information from the reviewed documents that supports points made in the RUPEP Concept Paper. The purpose here is to identify some of the more general themes that emerge from the documents, and to relate them to statements that are made in the concept paper. The contributions to the state-of-the-art on rural/urban dynamic made by IFPRI, ILO, SARSA, and UNRISD are thus better appreciated.

This chapter is organized into three sections. The first section presents material from the documents relevant to the RUPEP problem statement (Appendix A, "The Problem," pp. 1-4); the second section presents information germane to the RUPEP hypothesis statement (Appendix A, "The Hypothesis," p. 5-6); the third section presents the analytical techniques discussed in the reviewed documents as related to the proposed RUPEP initiative (Appendix A, pp. 6-7).

Evidence Supporting The Problem Statement

The problem statement of the RUPEP proposal essentially asserts that rural and urban activities are linked to one another in dynamic and crucial ways. It is by understanding and building on rural/urban relationships that employment can be generated in rural regions and sustained urban and rural development engendered. The problem as formulated in the concept paper is that methods for identifying which activities are or could be linked within a region to promote sustained growth, as well as planning methods for strengthening these activities and their linkages, are only now emerging and are therefore not yet used by most governments and planners. In this section I examine some of the evidence that supports the contention that "rural/urban linkages" and "rural/urban" dynamics do exist and are indeed significant. In the next section I discuss some of the features that the literature reviewed for this report indicates are characteristic of those activities that have the greatest potential to promote sustained regional development. In the final section I demonstrate that just the few documents reveal that there are some analytical techniques and planning methods for identifying and planning key urban-based, rural-linked activities (though perhaps not for identifying and planning indirect interventions for stimulating them).

The documents reviewed affirm that there are a number of rural/urban linkages that are critical dimensions of the development process and that should be taken into

consideration in a range of planning contexts. Perhaps the most vital of all these linkages is the consumption linkage between rural (agricultural) households and nonfarm (urban-based) enterprises. The consumption linkage is best and most thoroughly studied by IFPRI in the reports by Hazell and Roell (1983) and by Wanmali (1983; 1985), although these linkages are also discussed by SARSA in Rondinelli's book (1983a) and the paper by Yapa (1984), and by the ILO, most notably in the paper by Bose (1983). The data (see annotations for each of these documents) suggest that for most rural households, increments to income are expended on locally produced consumer goods, especially food and personal services. Although inconclusive, the data also suggest that certain households (those with medium-sized farms) are likely to spend the largest portion of their income on local nonfarm activities. The data also indicate that the nonfarm activities that enjoy (or have the potential to enjoy) the greatest effective demand and that have the greatest linkages to other regional activities, and that generate the most employment, vary from region to region. The significance of these findings are that: (a) consumption linkages are an important and basic rural/urban linkage; (b) consumption linkages generate a great deal of local employment and income because they are heavily linked to local enterprises; (c) planning to build on consumption linkages must be rooted in a thorough analysis of a specific region; and, most importantly, (d) appropriate analytical techniques for measuring these linkages exist and are being refined.

Another very important set of linkages examined in these documents are these income linkages between rural households and urban areas represented by off-farm employment and urban to rural income remittances. Evidence has been amassed which shows that the percentage of rural household income contributed by nonfarm employment is large and continues to grow. More and more, planners are beginning to realize that all over the world seemingly agricultural households rely on one or more members hiring their labor to off-farm activities. The ILO has been central in collecting the data pertinent to this realization. In the paper by Bose (1983), in the book edited by Ghai and Radwan (1983), and in the progress reports by the ILO (April 1984; March 1984), statistics on the extent of nonfarm activities' contribution to rural household income are presented (see also Rondinelli 1983a and Yapa, 1984 under SARSA). The other linkage, income remittances, is another one that has been extensively studied by the ILO. Of the documents listed for the ILO under the heading "Part A," virtually all present statistics that describe the extent of remittances in different country cases. Rondinelli (1983a, SARSA) joins the ILO in presenting data that examines remittances.

Another major linkage between rural and urban activities examined in some depth in the documents is that between rural productivity and public and private sector, urban-based services. In this area of research, IFPRI, and, especially, SARSA are most active. Both organizations are concerned with how levels of access to these services can be improved with more efficient use of scarce investment capital. SARSA examines these issues in papers by Rushton (1984; 1983), Rondinelli (1983a), and Wilkie, Lentnek, and Carroll (1983); IFPRI examines them in papers by Wanmali (1985; 1983) and in Hazell and Roell (1983). A significant finding to emerge from these documents is that access to services largely determine whether households will avail themselves of a service. This can have a profound impact on agricultural production (if a production-related service is located at too great a distance to be accessible to a group of farmers it will not be used) and on nonfarm enterprises (certain viable employment generating enterprises might never be created because of ignorance as to where it could be located in relation to sufficient demand) (Rondinelli, 1983a; Hazell and Roell, 1983; Wanmali, 1983; 1985). An equally significant finding is that techniques for measuring access and for locational planning exist and have successfully applied to development (Rushton 1984; Yapa, 1984).

Although a range of other linkages are mentioned in the reviewed documents, a major linkage examined is the marketing of produce. SARSA has targeted research on marketing, arguing that this has one of the most direct and profound impacts on agricultural production. The report by Wilkie, Lentnek, and Carroll (1983) examines the significance of marketing in a region in Ecuador and applies interesting methods of marketing analysis. Rondinelli (1983a) and Belsky et al. (1983) also assert the critical importance of marketing both to the vitality of urban economies and to rural economies, and they provide evidence from a number of case countries to support their assertion.

Other linkages examined in the documents include: links between food systems and rural/urban issues (see UNRISD's documents; and see Ghai and Smith, August 1983 of the ILO); between market towns and resettlement (see Findley, 1984 of the ILO); between rural/urban migration and changes in technology and production in both rural and urban areas (see Obera', 1983 of the ILO); and a variety of others (see Rondinelli 1983a of SARSA).

Together, the documents reviewed for this report contain much to support RUPEP's problem statement. They certainly impress the need to introduce information on rural/urban linkages into development planning.

Evidence in Support of RUPEP's Hypothesis Statement

According to the 2/8/85 draft of the RUPEP proposal: "The central hypothesis [of RUPEP] is that given certain minimal necessary conditions in national and local development environments, interventions can be identified to stimulate and foster key private sector activities that are broadly generative with respect to rural regional development (p. 5)." Related to this central hypothesis are three others: (a) the "minimal necessary conditions" often prevail or can be readily achieved; (b) the "interventions" can be accommodated through improved design of current types of development programming; (c) the "key private sector activities" are vanguards of a sustained expansion of rural/urban relationships through which productivity and employment are compounded in the region.

The documents reviewed for this report appear to support all of these hypotheses. The documents reviewed demonstrate that minimal necessary conditions do already exist in many cases, at least insofar as they take the form of an intricate web of existing or potential rural/urban linkages. This section addresses the question of whether the state-of-the-art permits us to begin to identify the kinds of activities (both private and public) that pioneer sustained rural/urban relationships and the kinds of investment and planning activities that can promote them.

The documents reviewed suggest at least five "truths" about what activities best facilitate rural/urban dynamics. Many of these resemble the working hypotheses identified in paragraph 18, pp. 5-6, of the RUPEP concept paper.

1. Select Industries for Productive Investment that Are Linked to Other Economic Activities Within A Region- Much evidence suggests that investment in urban-based industries that have strong forward and backward linkages to other urban-based industries and rural-based agricultural production within in a region in both consumption and production has a far greater impact on rural and regional development than those that do not (see Rondinelli, 1983a; Hazell and Roell, 1983; Bose, 1983; Yapa, 1984; Belsky, et. al. 1983). In the past, government investment has often been concentrated on large industrial enterprises and on export-oriented production. While there remains a need for these kinds of investments, the more urgent and neglected need is for small and medium-sized industries that are oriented toward local domestic demand and toward building on economic activities already ongoing in the region.

2. Provide Credit to Private Sector Rural Industries that Meet Local Consumption Needs and Are Labor Intensive- IFPRI's research rather persuasively demonstrates that a great deal of nonfarm employment can be generated at the

same time that capital circulates in a region to generate more capital, expanded production, and improved lifestyles by satisfying local consumption needs through small nonfarm enterprises. According to Hazell and Roell (1983, p. 9): "These demand links to the nonfarm economy are important for national economic growth. They are also attractive because the rounds of growth they induce are predominantly concentrated within rural areas and because the kinds of goods and services demanded are typically produced by small, labor-intensive enterprises." SARSA research also confirms this finding (Yapa, 1984; Rondinelli, 1983a).

3. Provide Credit to Small Enterprises that Apply Local Skills to More Advanced Technologies Introduced to A Region- Although there is little direct evidence in the materials reviewed, both Bose's piece for the ILO (Bose, 1983) and Hazell and Roell's piece for the IFPRI (Hazell and Roell, 1983) provide data that supports this hypothesis. Bose, for instance, describes how services related to repairing irrigation machinery and husking expanded rapidly in newly irrigated rice areas in West Bengal. Parenthetically, Jane Jacobs, in her recent book, Cities and the Wealth of Nations, also makes much of the developmental role of these types of enterprises.

4. Continue to Invest in Government Services, But Locate Them so That Access to Them is Maximized- Governments have been and likely will always be in the business of providing a significant portion of social and agricultural-production related services. Given the limited resources that governments can spend on services that have a direct human impact (health, education, etc.) and an indirect impact on production and productivity (extension, credit, new seed varieties), it appears that the degree of access to these services is crucial. Wanmali's (1983; 1985) studies for IFPRI and Rushton's (1983; 1984) for SARSA indicate that geographical access to many services determines whether or not they will be used and, if so, with what degree of frequency. Further, easy access at certain crucial times during the year (e.g. planting time and harvest time) is essential if new agricultural production techniques are to be successful (Elliot, Januray 1980 [ILO]). Governments can create conditions whereby urban-based services contribute more significantly to rural productivity by explicitly addressing issues of access. If IFPRI is correct, better access by farm households can, in turn, increase urban productivity and employment through consumption linkages between agricultural incomes and nonfarm enterprises.

5. Provide Leadership Skills And Development Management Training to Committed Municipal Leaders- Rondinelli (1983a) has noted that a determining factor in whether or not medium-sized cities and towns in a region succeed in promoting regional and rural development is the innovativeness and

committedness of its leaders (in both the public and private sector). Strong and beneficial rural/urban dynamics are facilitated where leaders are aggressive in attracting outside resources, are able to put these resources to productive uses, are able to direct resources to activities that expand intra-regional linkages (in both a functional and spatial sense), and are able to convince the private sector to reinvest in the region rather than invest elsewhere. The extent to which the government can help to train municipal and regional authorities to be creative and aggressive leaders can have a powerful impact on rural/urban dynamics.

Planning Methods and Analytical Techniques

Knowing some of the conditions that create an environment favorable to strengthening rural/urban linkages and identifying the general characteristics of activities that build on rural/urban linkages in order to promote sustained regional development are significant first steps to planning for these activities in specific regions. However, to translate this knowledge into action, techniques must be developed that are capable of identifying actual activities in a region and the means for fostering them. Though certainly not well developed or integrated, a review of the ILO, IFPRI, SARSA, and UNRISD documents suggests that some tools are available to identify kinds of activities, as well as their preferred locations.

SARSA and IFPRI have both experimented with methods of rural/urban analysis and locational planning. IFPRI's household analysis methodologies demonstrate that it is possible to identify, with a great deal of precision, what portions of increments to household income are spent on locally-produced goods. This enables planners to identify those activities that are most likely to be economically viable while at the same time are those that can contribute to sustained and expanded regional growth opportunities (Hazell and Roell, 1983). Both Hazell and Roell's report and Wanmali's (1985) report indicate that the potential for growth in some particularly attractive activities (from the standpoint of employment generation, quantity of value-added, and backward and forward regional linkages) may be constrained because they are concentrated in urban locations that are inaccessible to many who might purchase the good or service. Hazell and Roell (1984, p. 11), commenting on the disappointing amount of incremental expenditures going to nonfood goods (industrial vs. agricultural goods) in the Gasau region of Nigeria, state: "The unusually low share of incremental expenditure allocated to locally produced nonfood goods by those with the highest incomes in Gusau may be due to their relative isolation. People are widely dispersed and roads are poor, which make it difficult to

reach local towns where nonfood goods are available." Further, the ILO has even recognized that: "The scope for increasing rural industrial employment also depends on how closely or loosely the rural markets are linked to other markets and hence the importance of the spatial dimension (ILO, March 1984, p. 5)."

SARSA has already begun to respond to the needs for considering spatial dimensions of rural/urban dynamics in development planning and for better locational planning. In the two reports by Rushton (1984; 1983), location-allocation techniques are presented as a powerful and versatile method of locational planning. Rushton describes these techniques in some detail and provides examples of their application to locational planning for service provisions. Yapa (1984) explains how location-allocation algorithms can be adapted, once a rural industry has been identified for investment, to plan the number and location of rural industry so that all facilities are economically viable.

Other locational planning methodologies described in SARSA documents are directed at identifying which settlements in a region have the greatest potential to generate regional growth. One of these methodologies involves analyzing periodic market structure and commodity flow data to identify particularly vigorous marketing centers (Wilkie, Lentnek, and Carroll, 1983). This methodology is capable of recommending specific towns for targeted government investment and is a first step towards locational planning for the marketing function. Another methodology directed at identifying settlements for investment is the Urban Functions in Rural Development approach. Although not reviewed here, a number of documents describing the approach are available from Clark/SARSA.

Thus, the state-of-the-art in locational planning and in understanding rural/urban dynamics is well advanced and continues to gather momentum. Many organizations are working to expand this state-of-the-art, but much remains to be done. Summary and Conclusions

The above discussion suggests several interesting findings. First, although a great deal is currently known about certain rural/urban relationships and although the development community has begun to perceive the importance of this complex web of relations, there is only a partial understanding of how these relationships can be guided to facilitate regional development. All the organizations under review clearly state the need for research on a range of topics.

Second, the documents reviewed also indicate that there is a considerable understanding of the characteristics of the kinds of economic activities that make the most

significant contribution to regional development by building on rural/urban linkages. Less is known about the conditions that spontaneously give rise to these activities or how they can be promoted through development policies and programs. It would therefore appear that the premise upon which RUPEP is based, namely there is a need to identify the conditions and catalytic changes that unleash entrepreneurial energy in a region and design projects to promote that energy, is a correct one and is supported by this literature review.

With regard to the analytical methodologies available to study and plan for rural/urban linkages, the documents reviewed indicate that there are a number of limited-use analytical techniques available. It is obvious that these are only a few of the many promising techniques being applied. The problem remains that while many of these techniques have been applied to planning, their value to development has yet to be proven.

Finally, this review had led me to conclude that the RUPEP proposal describes a well thought out and carefully designed research strategy. The hypotheses it proposes to test and the manner in which it proposes to test them are sound. This report confirms the need for a RUPEP project and indicates that at least certain of the documents reviewed here should be built upon and integrated into RUPEP. The documents most worth drawing more fully upon are: Hazell and Roell, 1984 (IFPRI); Wanmali, 1985 (IFPRI); Bose, 1983 (ILO); Oberai, 1983 (ILO); Rondinelli, 1983a (SARSA); Rushton, 1983 (SARSA); Wilkie, Lentnek, and Carroll, 1983 (SARSA); Yapa, 1984 (SARSA); and Garcia, 1984 (UNRISD).

**CHAPTER TWO:
INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
(IFPRI) DOCUMENTS**

General Discussion and Reader's Guide

Although IFPRI has only four documents related to RUPEP topics, the research reported in these papers is among the most relevant to RUPEP. IFPRI affirms the importance of rural/urban linkages. Two of the IFPRI reports stress the need to consider the exact location of off-farm economic and social activities in rural and regional development (IFPRI, 1983, p. 25; Hazell and Roell, 1983, p. 11), while the other two of its reports consider the specific locational attributes of off-farm activities (i.e. in what towns they are located and at what distances from targetted project beneficiaries) (Wanamli, 1983; 1985).

Hazell and Roell's report (September 1983) examines the effect of incremental expenditures made by rural households (made possible by increased agricultural incomes) on the demand for locally produced food and nonfood goods and services. They find that increases in agricultural income have a significant positive impact on demand for locally produced goods. They find further that the extent and nature of this impact varies according to region, income level, and farm size. This is important because it demonstrates clearly that rural and urban, agricultural and non-agricultural, activities are directly linked and that changes in income derived from the former will benefit the latter. It also suggests that agricultural planning can yield a beneficial impact on off-farm employment by incorporating household expenditure information.

Hazell and Roell's piece then, is important because: (1) it provokes interesting thoughts on how household consumption information, when it includes place specific information, might be used as a cogent method of maximizing regional economic income and employment; and (2) it provides case evidence of the strong link between increases in agricultural production and demand for locally produced nonfood goods.

The two IFPRI reports by Wanmali are related. One report analyzes village data on the changes in the nature, number, and distribution of services in a newly irrigated rural region in India between 1968 and 1978 resulting from deliberate government and spontaneous private sector provision of services. The other report analyzes household data for the same region and pays particular attention to issues of geographical access to services.

The first report (Wanmali 1983) lends support to the hypothesis that agricultural growth is linked to and can expand village nonfarm activities and that, conversely, village-based services can strengthen agricultural growth. This hypothesis, developed by Mellor in his book, The New Economics of Growth, is also supported by the Hazell and Roell report. In his 1983 report, Wanmali presents evidence that agricultural growth in newly irrigated regions can be accelerated by the provision of government services in a set of planned settlement locations. Evidence is also presented that agricultural development in the study region created regional demand for goods and services (production and consumption oriented) and that this demand was spontaneously met by the private sector, thus opening up new employment opportunities and further increasing regional incomes. Although data were unavailable to Wanmali to confirm or refute the hypothesis that initial provision of government services can create an environment conducive to increased private sector participation, this hypothesis can be partially confirmed by inference. Wanmali does present evidence that the towns where the private sector located retail services corresponded to the towns that the government selected as rural growth centers. This implies that the private sector tends to follow the public sector's "lead." A final interesting finding of the report is that the tremendous overall increases in service provision (see the annotation for some key statistics) in the study region were located in a way that created a more balanced and accessible urban network. In 1968, when the government selected 20 settlements in which they would invest in services, two towns contained almost all the services available in the region. By 1978, only ten years later, the primacy of these two centers was radically diminished and at least 20 settlements contained a significant set of production and consumption oriented services.

The second paper by Wanmali reviewed here complements the village level analysis presented in the paper above by examining household data from the same region on use and access to services. Wanmali found that the distance that members of a household must travel to avail themselves of a service can be a critical factor in determining whether or not they will avail themselves of it and with what frequency. This, the data suggest, is particularly true for low income households and for "agro-services" (production related functions). Although overall accessibility of individual households to most services has greatly improved in the region between 1968 and 1982, the data imply that many households still do not avail themselves of certain services because of the relative inaccessibility of these services. That many of these services are production-related suggests that possible gains in agricultural growth are not being realized. Interestingly, the services most accessible (most ubiquitous) and most frequently used are

"food and personal services." This is interesting because most all these services are provided by the private sector.

In both his papers, Wanmali recommends that provision of government services in a mobile fashion be seriously considered as a means for maximizing access to these services while minimizing their cost of delivery. He argues that providing these services in conjunction with periodic marketing arrangements in the region would be a more efficient use of resources than providing certain government services only at fixed points. This idea is one that has been taken seriously by the Clark Cooperative Agreement in its work in Ecuador (see SARSA annotations).

Annotated Bibliography

Hazell, Peter B. R and Alisa Roell. "Rural Growth Linkages: Household Expenditure Patterns in Malaysia and Nigeria." IFPRI Research Report 41, September 1983. (64 pp.).

This report contains a great deal of information that is relevant to RUPEP and poses some pertinent questions about rural/urban productivity and employment promotion. The report presents the results of a detailed analysis of household expenditure (consumption) patterns in two regions in which World Bank agricultural projects were implemented (Muda in Malaysia and Gusau in Nigeria). The study examines the linkages between increases in agricultural production and incomes and increases in non-farm employment and regional growth. It also demonstrates the importance and varied uses of data collected at the household level. The report is exemplary for the rigor of its analysis.

The research presented in this report is particularly important to RUPEP for two reasons. First, it establishes and quantifies the relationship between increases in farmer income and growth in demand for nonfarm goods and services as revealed through household expenditures. Second, it addresses itself to two spatial questions: (a) what proportion of increases in demand for nonfarm goods and services are satisfied by local enterprises and how much is satisfied outside the region; and (b) what effect does the number of urban centers and the degree of linkage among them have on the nature of marginal expenditures?

Impacts of Growth in Agricultural Income
on Employment and Off-farm Incomes

The study clearly demonstrates that increases in farmer incomes can have a significant impact on off-farm employment and incomes through demand linkages. As the authors explain: "These demand links to the nonfarm economy are important for national economic growth. They are also attractive because the rounds of growth they induce are predominantly concentrated within rural areas and because the kinds of goods and services demanded are typically produced by small, labor-intensive enterprises (p. 9)." As proof of the relationship between agricultural incomes and nonfarm activities, the authors present the findings from their two case regions and cite other case studies that have established this relationship. In the introduction the authors note that (pp 12-15):

1. Rangarajan found that a 1% addition to the agricultural growth rate stimulated a 0.5% addition to the growth rate of industrial output (IFPRI Research Report 33).

2. Gibb found that a 1% increase in agricultural income in the Nueva Ecija Province of Central Luzon in the Philippines generated a 1-2% increase in most sectors of the off-farm economy (Ph. D. thesis, U. of Michigan, 1974).

3. Bell, Hazell, and Slade found that in Muda, Malaysia, for each dollar of income created directly in agriculture, an additional 80 cents of value added was created indirectly in the local nonfarm economy (Project Evaluation in a Regional Perspective. Johns Hopkins University Press, 1982).

Spatial Implications: Expenditures on Locally Produced Goods and Services

The authors do not come up with a figure for the multiplier effect of an increase in agricultural-related incomes on off-farm income and employment in Muda or Gusau (although the Bell, Hazell, and Slade report quantifies it for value added in the Muda region). In this report they are rather concerned with: (a) what proportion of rural household budgets are expended on which goods and especially on which locally produced goods and services; (b) what proportion of incremental changes in income are expended on which goods and services; and (c) how are these different or similar for households grouped by income level and farm size. The principal findings are summarized on page 10 of the report. I will report here only on the major findings concerning the amount of expenditure and incremental expenditures devoted to locally produced goods and services because these are most germane to RUPEP. In addition, because of its relevance to RUPEP, I will also cursorily identify some of the problems with generalizing these statistics to make broad sweeping statements about how investment should be targeted to maximize employment creation and regional economic growth.

The findings demonstrate that significant amounts of household budget go to locally produced food and nonfood goods. In Muda 41% of marginal budget shares go to purchasing locally produced goods and in Gusau 32% do. Further, in Muda, 18% of total expenditures go to locally produced nonfood goods and 37% of incremental expenditures go to it, while in Gasau the figures are 8 and 11%, respectively.

But more important than these numbers are the substantial variations in patterns of household expenditure evident in these and other statistics presented in this report. These variations arise when different regions, households with different income levels within regions, and households with different farm-sizes are compared. These differences suggest that while the multiplier effects of increases in agricultural incomes on regional economies are generally significant, the exact level of these multipliers

and in what kinds of enterprises they will be principally felt depends on the region and on which income groups and which farm sizes within a region targeted for development assistance. In addition, to determine impacts on employment and income, one must examine the trade-offs between potential decreases in agricultural employment resulting from investing in different farm sizes and potential increases in employment that expenditures from the selected households with these farm sizes will promote in the region. One must also examine the propensity of different groups to spend on locally produced goods versus those coming from outside the region. No generalizations on these scores are possible from the available data.

Spatial Implications: Urban Network

Although the report does not go into a great deal of detail on the importance of urban centers and the urban network in shaping household expenditures, I did find at least two statements of interest to RUPEP.

In attempting to account for the major difference found between the amount of incremental expenditure devoted to locally produced nonfood goods in Muda versus Gusau (Gusau devotes most of its incremental expenditures on food goods), the authors suggest that: "The unusually low share of incremental expenditure allocated to locally produced nonfoods by those with the highest incomes in Gusau may be due to their relative isolation. People are widely dispersed and roads are poor, which may make it difficult to reach local towns where nonfood goods are available (p. 11)." If the authors are correct and a government wishes to encourage off-farm employment in rural regions, this is not a trivial point. It means that for increased farm incomes to contribute to off-farm employment and enterprise development, the importance of accessibility to urban places must be taken into account, and efforts made to improve that accessibility.

Another interesting point made by the authors is:

In each [region], only one or two large towns . . . dominate a rural network of much smaller towns and villages and provide the focal points for local trade and commerce . . . The long distances of more than 100 miles to other major towns and the few roads and public transportation facilities serve to define the Gusau project area as a reasonable watershed around its focal towns. This is important because any meaningful analysis of the spatial aspects of household expenditure behavior depends on a regional definition that encompasses all the places where the households do their shopping, as well as the places in which local nontradable goods and services are produced (p. 18-19).

Unfortunately, the authors do not elaborate on spatial factors and were limited by the data collected in drawing urban and spatial considerations fully into their analysis.

IFPRI. Institute for Food Policy Research Institute Report 1983. (60 pp.)

This document is IFPRI's annual report for 1983. According to the report, one of six questions that IFPRI's research is intended to answer is: "What policies are needed for technological change in agriculture to stimulate growth in income and employment necessary to alleviate rural poverty (p. 5)?" Obviously, this demonstrates that IFPRI's research agenda is relevant to RUPEP.

In order to answer the income and employment generation question, the report states that a number of research activities has been undertaken (pp. 24-25). Two have been completed and are reviewed (Hazell and Roell, 1983; Wanmali 1983). The report also makes note of on-going research in Tamil Nadu, India on demand linkages between rural households and nonfarm enterprises and makes note of research into the effects of infrastructure investments on nonfarm employment creation in Bangladesh.

The report includes two assertions that are worth quoting for their relevance to RUPEP:

1. In the introduction to the report, Mellor (founder of IFPRI) asserts that: "Technological change in agriculture increases the income of small landowning peasants who in Asia typically spend 40 percent of their increments to income on locally produced, nonagricultural goods and services. Since these goods and services are highly labor intensive, their production provides new sources of employment and income growth for the poor. Past research indicates that employment and income linkage effects . . . are weaker in Africa than Asia, partly because the infrastructure in Africa is poorer . . . (p.10) (emphasis added)."

2. The report also asserts that: "Although the crucial importance of farmers' access to farm inputs and agricultural marketing and processing facilities is well-established, much less is known about the importance of their location and about the effects of farmers' access to rural goods and services for household consumption (p. 25)."

Wanmali, Sudhir. "Service Provision and Rural Development in India: A Study of Miryalguda Taluka." IFPRI Research Report 37, February 1983. (62 pp.).

This report examines the relationship between agricultural development and the provision of government (rural) and private (retail) services. This relationship is studied in a region in India that, in the mid 1960's, was the site of an irrigation project. By comparing data on the number and location of services from a 1968 survey of settlements in the region with data from a similar survey conducted in 1978, the author is able to generate some very interesting findings concerning the impact of ten years of agricultural development on urban-based functions in the region. This report is therefore of great interest to RUPEP.

The region that the author examines is particularly interesting because an explicit effort was made by the government to invest in support services in such a way as to develop the middle-levels of the urban hierarchy in the region. This allows the author also to study the effectiveness of government efforts to develop balanced urban systems (those with well developed small urban centers nearer to the grassroots of rural regions). It also means that, as Mellor expresses it in his foreword: "By focusing on the impact of government efforts to introduce a wide range of socioeconomic facilities into a rural area in India, it [the report] calls much-needed attention to the critical role that government policy plays in stimulating the multiplier effects of agricultural development."

The report is divided into three sections: the policy and theory of service provision in India (pp. 13-23), the empirical evidence from the study region (Miryalguda Taluka) (pp. 24-53), and the policy implications of the findings (pp. 53-56). The first section is a thoughtful and intelligent review of spatial policies in India and is interesting in its own right. Wanmali argues that the Indians adopted an urban bias in their approach to the study of rural/urban relations and criticizes the theories of Rao, Misra, and Sundaram for lacking definitional and conceptual clarity. He also explains the theory behind the rural growth centers approach that was developed in India to counter this urban bias and view urban development at the village level and in relation to rural needs. The survey conducted in 1968 in the study region was done for a pilot project of the rural growth centers approach and the decisions on where to locate government services in the region were based on analyses of this survey. The government plan for the region was thus unique in that its decisions on what services to provide and where to locate them were based on an analysis of a functional profile of the existing settlement system and of effective service areas (much like those performed for UFRD).

The empirical evidence from the Miryalguda case contains many interesting findings. For RUPEP, the most interesting relate to the effectiveness of government investment in 22 service centers in attracting private investment to these centers. The data indicate that the government has been very successful and that its achievements have not only meant increased employment opportunities and nonfarm incomes for the region, but have transformed the settlement system as well. In 1968, out of 150 settlements, 104 did not have any services provided by the private sector. In 1978 this number was reduced to only 34 (p. 37). In 1968, an index of service provision for the Taluka was 4.63. In 1978 it rose to 9.94. Pages 40-48 report on how this increase in services was distributed among settlements. The statistics on these pages demonstrate that the government had succeeded in promoting its 22 service centers from 1968 to 1978 and that by 1978, the 1968 condition of the primacy of two towns in the region had been substantially reduced.

Because a portion of the region was left unirrigated (dry), it is possible to gauge how great an impact agricultural development in the region has had on general economic growth by examining the increase in the provision of retail services (those provided for private profit and that require effective demand to continue) in the irrigated versus the dry areas. According to Wanmali's index of service provision, the dry tract increased its index from 4.71 in 1968 to 5.86 in 1978, while the irrigated tract increased its index from 4.63 to 13.92. This lends support to the hypothesis that regional development can be "agriculturally-led."

Comment: There are three other hypotheses that would be interesting to test in the region: (a) whether or not the provision of government services in specific locations induced private firms to locate in these same locations; (b) whether or not the provision of retail and rural services benefitted most households (who had access to these services and who actually utilized them?); and (c) whether or not the provision of services significantly increased off-farm employment opportunities and significantly contributed to increased agricultural production and productivity. Unfortunately none of these hypotheses are tested in the report. The "a" hypothesis would require survey data on the location decisions of private firms providing retail services. These data have yet to be collected and therefore it is not possible to determine the ability of the government investment policies in the region to shape rural/urban linkages. The "b" and "c" hypotheses require household data to test. Some household data were indeed collected and an attempt to test the "b" hypothesis is made in the paper reviewed below. The data to test the "c" appear to have been collected (there is a table in the report below on the amount of household income obtained from

agricultural and non-agricultural activities), but the hypothesis has yet to be tested.

Wanmali, Sudhir. Rural Households of Services: A Study of Miryalguda Taluka, India. January 1985. Draft Only, Not For Quote.

This study, described by the author as the "sequel" to the report annotated above, is an attempt to measure the impact of geographical accessibility (distance) to various goods and services on their patterns and frequency of use. Because it examines how households in rural areas use services located in towns and villages as a function of their distance to them, this report is of considerable interest to RUPEP.

Service use patterns are identified by analyzing data from a survey of 369 households conducted in Miryalguda Taluka in 1982 that included questions regarding what services households use, at what distance these services are located, how often they are used, and what the usual mode of transport for availing of these services is (p. 1.2). From this analysis some very interesting findings are generated. the most relevant of these for RUPEP are:

1. All villages interact with outside service centers for satisfying their demand for in excess of 70% of goods and services. Further, all the service centers with which the villages interact are those recommended in 1968 as service centers and subsequently invested in (p. 1.5). This finding is significant because it indicates that services are indeed utilized in a hierarchical fashion -- that is, smaller villages are nested under the areas of influence of larger towns. In addition, it would appear that by targeted investment, the government can shape the development of the settlement system and its relationship to rural areas.

2. The frequency of use of services is influenced negatively by distance and positively by the economic status of the household (p. 1.8 and pp. 6.8-6.13). This finding is significant for two reasons. First, it suggests that distance from a service can be a critical factor in whether or not that service is used by especially lower and middle income groups. This means that certain promising non-farm enterprises, in terms of value-added and/or employment generating potential, may be made more viable if they (or marketing outlets for their products) are located closer to low income rural households than if they are located in large but distant towns. Second, it means that the importance of distance in determining the use of services by higher income households is relatively low.

3. Food and personal services are by far the most accessible (average accessibility of 4.79 km.) and most frequently used (36.6 trips per household per year) services

in the Taluka. Agro-services (production related) are used only 3.41 times on average and have an average accessibility of 13.36 km. For consumer durable goods the figures are 0.68 trips and 16.80 km, respectively. This finding indicates that consumption related activities comprise the majority of spatial interaction for service provision. It further indicates that the private sector (since it provides food and personal services) has responded well to satisfying rural demand by locating ubiquitously through the Taluka.

4. Regression analysis reveals that the most significant variable in explaining the use of agro-services is distance from the service and not income (income is the most significant variable governing the use of consumer durables) (p. 6.105). This finding is very significant. It indicates that the accessibility of production-related services (generally provided by the state) has a great impact on whether or not they will be used. This in turn suggests that more efficient government provision of these services (to maximize accessibility) could help raise agricultural production levels and productivity.

5. Specifically, the rural (government provided) services that appear to be most dependent on distance for their use and that also have negative distance elasticities, are communications, credit and banking, transport, animal husbandry, and cash crop marketing. Making these services more accessible would likely have a positive impact on production and agricultural income in the region (p. 8.2).

As a final note on this draft report by Wanmali, I should add that the author asserts several times, both in this report and in the one annotated above, that the possibility of providing government services in a mobile fashion should be taken very seriously as a means for maximizing the accessibility of these services while minimizing their delivery costs. He also suggests that a closer study of current periodic marketing arrangements and a dovetailing with them might lead to the more efficient planned delivery of government services in rural areas.

**CHAPTER THREE:
INTERNATIONAL LABOR OFFICE (ILO) DOCUMENTS**

General Discussion and Reader's Guide

Through mid-1983, if these documents are representative of the work done by the ILO in areas that involve rural/urban concerns, it would appear that the ILO's consideration of rural/urban issues was limited almost exclusively to: (a) examining the disparities between urban and rural poverty and the effects of government policies on these disparities; and (b) examining the determinants of migration and its implications for rural and urban development. For the purposes of this review, I have divided the ILO documents into two categories. "Part A" documents include general World Employment Program Research Papers and progress reports. These documents are for the most part concerned with analyzing poverty (especially rural poverty) and how its nature has changed over time. "Part B" documents are papers and books written for the Population and Employment Project and for the Population and Labor Policy Project of the World Employment Program. These papers and books report ILO research on migration.

Part A Documents

The Part A documents dated before 1983 are, for the most part, of little interest to RUPEP. Under the individual annotations, I have noted where documents dated from this period contain information relevant to RUPEP. In these cases, the information is usually on the extent of off-farm employment opportunities in a given country or is on urban vs. rural incomes.

There are exceptions to this rule, however. Ghai and Smith (August 1983) analyze the effects of food policies on food production and equity in Sub-Saharan Africa and conclude that, unless rural/urban issues are recognized and addressed, food policies will be ill-conceived and are likely to be inadequate. In the introduction to their edited volume, Ghai and Radwan (1983) stress the need for off-farm employment in rural areas and posit that most migration, be it seasonal, permanent, regional, or inter-regional, is in search of off-farm employment. They do not, however, discuss the off-farm employment issue with reference to rural/urban linkages. In the same volume, House's contribution goes in some detail into the negative impact of the spatial distribution of government investments on ameliorating rural poverty and promoting rural industries. In Elliot's contribution, he discusses the many service and extension needs of new grains introduced in Zambia to improve small holder production and argues that

their delivery most be carefully planned if the grains are to be of any use. The most glaring exception to the rule, and one which heralds a shift in the ILO's treatment of rural/urban concerns (discussed below), is a paper by Bose (April 1983). Not only does this document specifically address the relationship between agricultural production and rural off-farm employment, it actually presents data on the spatial linkages of these off-farm employment opportunities. Unfortunately, the data is under-utilized in the paper and the role of urban centers as a factor in the location of off-farm enterprises is not discussed.

The change in the ILO that the Bose paper heralds is from an emphasis on basic research on rural poverty to more explicit attention to the generation of off-farm employment in rural areas. This change was undoubtedly precipitated by growing evidence (much of it to be found in these ILO documents) that off-farm employment already represents a substantial source of income for rural households and that its generation is important in regions in which commercialization of agriculture displaces more and more small farmers. The ILO's World Employment Program (ILO, March 1984) has even begun to assert that spatial and urban factors are important considerations in enterprise development (see quotes included in the annotation for ILO, March 1984). However, at this point the ILO's work in this new area (which is of far greater direct relevance to RUPEP) amounts to little more than assertion. Any real data of value are most likely only now being analysed and reports based on them are only now being written.

Part B Documents

The ILO has made a considerable contribution to understanding the determinants and implications of migration. In the Part B documents, the findings of the ILO's research into the causes and impacts of migration are enumerated. The materials reviewed for Part B are of greater and more direct relevance to RUPEP for two reasons. First, the movement of people between rural and urban areas and the flow of remittances to and from migrants certainly constitute important rural/urban linkages. Second, certain government policies discussed in these ILO documents involve efforts to redirect rural/urban migration away from primate cities by strengthening smaller towns and their linkages to the rural economy.

The findings in these materials that are most relevant to RUPEP can be divided into three categories: (a) income transfers (remittances) to and from migrants; (b) the effect of migration on technological changes and changes in production in rural areas; and (c) government policies effecting migration. On income transfers, the materials

present a good deal of data on who sends remittances, who receives them, how much is sent, how frequently, and how remittances are spent. In the individual annotations, I have included some of the more interesting statistics from case studies in India and Kenya (see annotations for Anker and Knowles, 1983; Bilsborrow, Oberai, and Standing, 1984; and Oberai and Singh, 1983). The authors generally agree that while remittances can often significantly contribute to rural incomes and absorb a substantial amount of a migrant's income, it is by no means possible to conclude that this is universally or even generally the case. In both Kenya and India, evidence indicates that the effect of remittances on rural household incomes are not great and will probably diminish over time.

On the issue of how migration effects technological change and agricultural production, Oberai (in Oberai and Singh, 1983; and in Bilsborrow, Oberai, and Standing, 1984) contends that it is difficult to determine whether migration effects technological change and if so in what ways. He also argues that it is difficult to distinguish between whether it is technological change or migration that is the dependent variable (if there is such a one-way cause and effect relationship). In the Indian case, Oberai (Oberai and Singh, 1983) notes two exceptions: In the Indian Punjab, data suggest that families with return migrants tend to adopt changes in technology more readily than other groups and that households receiving remittances are more likely to devote more of their land to cash crop production.

On the issue of the effects of state policies on migration, there is a book edited by Oberai (1983) that contains portions that are relevant to RUPEP. Oberai, in his introduction, examines the role of growth center policies on migration and this theme is picked up in case studies from Poland, Malaysia, Sri Lanka, and India (see annotation for Oberai, 1983).

Finally, the paper by Findley (November 1984) is interesting to RUPEP. This paper describes colonization policies in Latin America. Although early in the paper the author recognizes the importance of planning market towns in frontier areas, she fails to link this need to later discussions of the need for agricultural extension, credit, marketing, and the development of community organizations in frontier zones.

Annotated Bibliography

Part A

Bose, A.N. "Intersectoral Linkage in a Comprehensive Area Development Approach: The Case of West Bengal." World Employment Programme Research, April 1983. (93 pp.)

This report presents the results of an evaluation of a set of six experimental projects conducted in West Bengal, India called Comprehensive Area Development Projects (CADP). The CADPs were integrated irrigation scheme projects in which concern with increasing agricultural production was combined with a direct and serious effort to direct the benefits of increased production to the rural poor. They are fascinating and well designed projects and the report presents a wealth of intricate data collected to evaluate the CADPs. What is of interest to RUPEP are the sections (pp. 65- 83) of the report that establish a relationship between increased agricultural production and significantly increased demand for locally produced non-farm goods and services for household consumption and agricultural purposes.

Before discussing this relationship, it is interesting to note that the evaluators of CADP discovered that as much as 43% of total income in the areas was derived from non-farm activities (especially from handloom weavers) and that 54% of employment was accounted for by non-farm activities. Further, it was found that, taken as a whole, the agricultural classes work an average of 118 days a year in agriculture and 74 days in non-agricultural work. Given the rural character of the project areas this came as a great surprise to the evaluators and they apologize that: "Had this importance been foreseen and understood earlier, more detailed information about the non-agricultural activities could have been collected (p. 51)."

The report contains time series data on: household expenditure patterns for non-farm goods; number, employment, output and value added by type of non-farm enterprise; employment and value added by industry group; and extent of spatial linkages in the non-farm sector. The data reveal that the number of non-farm enterprise units grew by about 12% in two years, the value of output almost doubled, and the gross value added increased by 74%. The greatest increases in number of units, value added, and value of output were in the food and drink industries, particularly the dehusking of paddy. These industries together with engineering and repair, and bamboo and allied products, accounted for 68% of employment in and 75% of gross value added by the non-farm sector in 1977-78.

Of greater interest to RUPEP than the quantification of the relationship between the growth in agricultural production and the expansion of rural industries, is the method used by the author for assessing the nature and extent of spatial linkages of rural non-farm activities. Information was collected from each of 490 enterprises surveyed on: "(a) whether the final product or service was marketed within the area [within 5 km] where the unit is located; (b) whether the inputs required were obtained within the area where the unit is located; (c) whether the tools and equipment used, if any, came from within the same geographical area; and (d) whether the services such as repairing of tools, etc. are from within the proximity of the unit concerned (p. 71)." The results of this survey are presented in tabular form. Some interesting findings are that only one sixth of the enterprises are linked to outside markets, but that a third purchase inputs from outside their area and 80% rely on tools produced outside the region. It is also interesting to note that for West Bengal as a whole, the report states that per capita production of consumer goods in the province is only half of the amount expended per capita for these same goods, suggesting a demand potential for increased local production (p. 57).

The author concludes that: "it would seem necessary to evolve a spatial hierarchy of industrial location, reserving the labor-intensive tiny production sectors for the rural areas, and the capital-intensive basic and capital goods sector for the urban areas. The plan for the revival of the metropolitan industrial complex will have to be drawn on the basis of this rapid development of industrial units in the rural and other urban areas (p. 80)."

Comment: The information on spatial linkages sought by the survey of rural enterprises is interesting. However, little is done with the data. The implications of a pattern of input provision which relies on sources outside the region for a third of all inputs are not explored, i.e. whether these inputs are available or could be produced locally is not determined. Likewise, the implication of the fact that only a sixth of the enterprises are linked to outside markets is not explored. For instance, the percent of bamboo and allied product industries linked to outside markets is almost triple that for the average, while its dependence on outside inputs is far lower than the average. The report does not address whether this is a good or a bad thing for the region, whether the fact that it is more linked to outside markets indicates that there is a demand outside the region for bamboo and allied products, or whether the region has a comparative advantage over other locations for bamboo manufacture. It is unfortunate that the author did not realize the full potential of the data that were collected on spatial linkages, but rather devotes

only two pages to a discussion of the data. Rather than basing any conclusions on these data and their implications for revenue and employment generation in the regions studied, the author's only conclusion on spatial relations is a rather weak one which has nothing to do with data presented in the report. To say that labor-intensive industries should be "reserved" for rural areas ignores that many labor-intensive activities in urban informal sectors are well suited to their locations and meet critical low income demand items in the cities in which they are located that could not effectively be met by enterprises operating at great distances from these cities. The sweeping conclusion of the author is not supported and he misses the opportunity to extend knowledge of urban-rural relations with regard to enterprise development.

Chipande, Graham H.R. "Labor Availability and Smallholder Agricultural Development: The Case of Lilongwe Land Development Programme." World Employment Programme Research Working Papers, ILO, September 1983. (85 pp.)

This paper does not contain information relevant to RUPEP. It is about the availability of labor in on-farm activities only. Neither the urban nor the spatial dimension is considered at all.

Collier, Paul. "Contractual Constraints Upon the Processes of Labor Exchange in Rural Kenya." World Employment Programme Research Working Papers, August 1983. (51 pp.).

This paper is not relevant to RUPEP. It is an attempt by the author to argue that the commercialization of agriculture in Kenya has led to inefficient uses of factor inputs (land, labor, capital) and to increasing inequality. He demonstrates that market mechanisms have failed to equalize factor returns resulting from differences in initial factor proportions.

Ghai, Dharam and Lawrence Smith. "Food Policy and Equity in Sub-Saharan Africa." World Employment Programme Research Working Papers, August 1983. (50pp.)

This paper examines the effect of pricing policies on the production of agricultural goods and on equity. In the conclusion of the report (pp. 41-46), the authors speculate on how the food "problem" is generally perceived. They suggest that it is often thought of as a problem of feeding the urban population while dependence on imported foods is increasing and the amount of foreign exchange available to purchase these imports is decreasing. The authors warn that

such a perception can lead to policies that ignore (a) the extent of rural poverty and (b) the capacity of agricultural production to meet urban demand. Hence, they argue that if rural and urban poverty are truly to be addressed, great caution must be exercised in formulating food demand and supply policies. Other than these concluding remarks, there is no material of relevance to RUPEP.

Ghai, Dharam and Samir Radwan, eds. Agrarian Policies And Rural Poverty in Africa. International Labor Office, 1983. (312 pp.)

This book contains nine case studies on rural poverty in Africa and an introduction which summarizes the principal findings of the cases. It represents the culmination of efforts conducted over 6 years by the World Employment Programme of the ILO. All the ILO materials that I have reviewed for RUPEP were generated for and by this program. Many of the individual "working papers" received from ILO also appear as chapters in this book. Those chapters that we also have as working papers are so marked.

First I will review the relevant sections of the editors' introduction to the book and then will review the individual chapters.

Introduction: Agrarian Change, Differentiation and Rural Poverty in Africa: A General Survey. pp. 1-27.

From the perspective of RUPEP, the introduction provides some useful information and makes some interesting statements. On page 2, the editors note that substantial wage employment is a feature of the rural economies of Ghana, Ivory Coast, Kenya, and Malawi, but is relatively unimportant in Botswana, Nigeria, Somalia and Zambia. On page 9, the authors state that agricultural production in all countries has shifted in favor of cash crops destined for export and that government policies have reinforced that trend. This bears indirectly on one of RUPEP's concerns, namely the food delivery system between urban and rural areas. Given the fact that large amounts of basic foodstuffs are imported and that "the rural poor often tend to be net food purchasers (p. 9)," RUPEP must address where the food that is to be delivered actually comes from and where it goes (rural to urban or vice versa).

On page 23, the editors conclude that public expenditures in Africa have shown a pronounced bias in favor of activities located in urban areas. Unfortunately, the authors only present aggregate data, none that is specific to urban locations. They base their conclusion entirely on

the percentage of investment in agriculture as a portion of total investment. This does not really address what other kinds of investment may be made in rural areas (i.e. infrastructure and services), nor does it address what areas in the national space specifically receive most of the investment. On the next page, however, the editors do state that certain regions have suffered from particularly low levels of investment in infrastructure and these regions tend to be those which produce primarily food crops. They go on to say that this has caused outmigration from these areas. They state that this can have both positive and negative effects--positive being income remittances and negative being manpower drain.

Pages 24 to 26 are the most germane to RUPEP. They discuss the growing need for rural off-farm employment in the light of the increasing inability of farmers and the landless to generate sufficient incomes from on-farm waged or non-waged work alone. Specifically, these pages discuss migration (intra-regional, inter-regional, international, and rural-urban) in search of wage work as a response to rural poverty. Interestingly, in most countries there is significant migration across borders in search of agricultural or mining work. Surveys in Botswana and Malawi indicate that income remittances are proportionately more important to low income households. However, a survey from Zambia suggests that often migrants do not remit incomes to their home regions and that in fact the most common and important result of migration is usually a labor shortage, as the educated and able-bodied leave the region: "Paradoxically, labour shortage may emerge as the major constraint to increased food-production and food self-sufficiency (p. 27)." In Botswana, for instance, 40% of rural households are temporarily or permanently without men. To my mind, this is a significant finding, for where it holds in Africa this means that the struggle to provide some forms of local off-farm employment to supplement agriculture incomes is crucial to maintaining or increasing food supplies. Unless off-farm employment is available locally, labor shortages are likely to result.

The introduction concludes with statements about what must be done in the future to reduce rural poverty and build sustained growth from an agricultural base. Among others, the editors stress that measures aimed at removing biases against the food sector: "need to be adopted in tandem with efficient and equitable systems of land use and ownership and, most important, of mechanisms for credit, seeds, fertilizers and extension services to reach the broad mass of the peasantry (p. 28)." This mechanism, they argue, must involve cooperatives. Although urban-rural linkages are implied here, they are not explicitly addressed.

House, William J. and Tony Killick. "Social Justice and Development Policy in Kenya's Rural Economy." (pp. 31-71).
[also have as: World Employment Program Research Working Papers, ILO, January 1980. (70 pp.)]

This report contains little that is relevant to RUPEP. The report focuses on a statistical analysis of rural poverty in Kenya and on various statistical analyses of the effects of Kenyan policies on rural poverty. The analyses are descriptive and the report fails to establish clear relationships between policy and actual developments in the Kenyan economy.

The report does examine data on urban and rural poverty and compares them (pp. 7-9) and also considers the effect of government policies on the spatial distribution of income and off-farm employment opportunities (pp. 40-52). The report finds that in 1972, 45% of modern sector employment was concentrated in 11 towns even though their joint share of the labor force was only 16%. It finds that per capita income in agriculture is 4 times less than that in non-agriculture. Great regional disparities in income and employment opportunities are also found. Value added in the Nairobi province is 3 times that of the average for all other provinces and as much as 90 times that of the Western province. The report posits two reasons why there is such a marked rural-urban and regional bias: the persistent tendency for internal terms of trade to be to the disadvantage of agriculture (75% of capital formation in Kenya between 1964 and 1977 came from agriculture), and government spending patterns that do not alleviate or might even reinforce regional and rural inequalities. With regard to government policies and spending, the report notes that: government capital formation in education, health, and roads all favor the Nairobi region and other regions with large towns that are already prospering relative to others; industrial protection policies have raised the price of manufactured inputs to agriculture; attempts to deconcentrate manufacturing from Nairobi and Mombassa have been made but have met with only limited success; and government efforts to promote the informal sector have largely ignored rural industries, while its support of modern sector industries in urban areas may have actually had a negative impact on rural industries.

Ghai, Dharam and Samir Radwan. "Growth and Inequality: Rural Development in Malawi, 1964-78." (pp. 71-99).
[also have as a working paper July 1980.]

The Malawian case presented is indeed a fascinating one. The economy in this country has experienced continuous and relatively rapid growth since its independence. Not only has GDP per capita increased, but agricultural

production and (of special interest) employment has grown as well. It is also a fascinating case because up until 1975, almost half the male workforce was engaged in wage employment outside the country.

As with all the pieces in this book, this chapter is devoted to examining rural poverty, its distribution and its change over the last twenty years. It therefore does not directly address rural-urban linkages or off-farm employment. However, it does raise some interesting issues and provides certain data that lead me to believe further research into Malawi would be interesting.

Between 1968 and 1978, domestic wage employment grew by 9% per year (p. 76). Agriculture increased its share of the employment between 64-78 from 38 to 50% while manufacturing, from 6 to 10%. Government and service sector shares actually fell in the period. Up until 1976, 250,000 Malawi workers were employed in Rhodesia and South Africa, but after 1977 South Africa limited this number to 20,000, thus suddenly straining employment opportunities in Malawi (p. 77). The number of non-agricultural employees rose by 44% between '69 and '79, while the number of agricultural employees rose by 168% (p. 92). Malawi is unique in that its land tenure system (still largely traditional) has created a situation in which there are virtually no landless peasants and in which 90% of the population is engaged in agricultural activities on their own small plots. This has permitted the peasants to subsist even though the real wages in both waged farm and non-farm work has steadily declined as employment opportunities have increased.

Malawi's growth has been attributed to expanding cash crop promotion, remittances from migrant laborers, and bringing more land into cultivation. Commercialization of agriculture, however, has increased inequality because government policies have supported cheap labor, because few investments have been made in small-holders and the infrastructure to support their activities, and because internal terms of trade have gone against small-holders.

Unfortunately, this chapter does not actually address or analyse labor migration, or how off-farm employment has achieved such spectacular gains, or where this employment is located or in what industries. It is also unfortunate that it does not address any issues of the marketing of output and the supplies of inputs.

Comment: It becomes increasingly clear that the ILO really has yet to give adequate thought to rural/urban dynamics concerns, even though their work clearly would be strengthened by it. Their publications are devoid of maps or disaggregations of the concept of "urban" in any country case.

Lee, Eddy. "Export-led Rural Development: the Ivory Coast." (pp. 99-124).

[also have as a working paper, January 1980]

This chapter does not consider any information relevant to RUPEP. It follows the format of most chapters in the book of measuring rural inequality and assessing the impact of government policies on it.

Colclough, Christopher and Peter Fallon. Rural Poverty in Botswana: Dimensions, Causes, and Constraints. pp. 129-151.

This chapter provides some detailed information on the distribution of income and poverty among towns of different sizes and on the sources of income among different income groups and among towns. The discussion of level of income and poverty distribution (pp. 133-137) reveals that incomes in large towns (eight centers with between 10,000 and 13,000 people) are almost 50% higher than average incomes in smaller towns and that disparities in income are greater in large towns than small. In terms of sources of income, the authors note that: "as we move from poorer to richer households, while the proportion of income received from both animals and wages rises, there is a decline in that received from manufacturing (predominantly traditional beer brewing), transfers (mostly incomes received from family members working in South Africa) and gathering (p. 138)." The authors also found that the proportion of income coming from the different sources are roughly the same for small and large towns.

Several times off-farm employment and income remittances are mentioned, but the authors do not include any data on these.

Elliott, Charles. Equity and Growth: An Unresolved Conflict in Zambian Rural Development. pp. 155-191.

[also have as working paper, January 1980.]

This chapter on Zambia is of some value to RUPEP. The case begins with a discussion of the importance and implications of rural-urban gaps in Zambia, in terms of income, migration, and dual economic structure. Unlike the other cases, this one examines the role of extension, credit, marketing, and the provision of agricultural inputs in increasing agricultural production and rural incomes. The author draws a distinction between two types of farmers: those that are on the threshold of commercializing their operations at a small-scale (25% of farmers), and those that simply do not produce a surplus (75%). He examines the latter group first. He begins by stating that for those

whose farm-size and climate permit a possible commercialization of agriculture, the level of credit, the quality of the extension service, and the timeliness of necessary input delivery are crucial to their success or failure (p. 167). He illustrates this point by discussing the requirements of maize as a crop and the complexities of adopting it as an innovation. He then goes on to criticize the government's efforts to provide the ingredients necessary for success in cash crops. Although the discussion is aspatial it is instructive. Credit, while hypothetically available in small towns, cannot be obtained by peasants who have poor institutional access to it because it is provided through town-based local elites. Moreover, attempts to give local governments in towns the authority to implement its credit schemes were abandoned. Extension has been underfunded and ineffective. But perhaps the worst failing is the inability of the government's central marketing board to provide critical agricultural inputs on time. Although the marketing channels out of regions are extremely effective, there is often little to market because inputs never arrived or arrived after planting.

According to Elliott, for the majority of farmers in Zambia, commercial agriculture is not a viable option. For these farmers, he argues that increased incomes and production can only be realized by developing labor-saving small technologies that relieve the chronic labor shortage that characterizes this group, and by providing readily accessible off-farm employment (on-farm employment tends to correspond to the same harvest season as for subsistence crops) (pp. 185-86).

Collier, Paul. Oil and Inequality in Rural Nigeria. pp. 191-217.

[also have as a working paper, February 1981]

This chapter contains little that is of interest to RUPEP. It discusses the distribution of rural incomes in Nigeria and the effect that Nigeria's oil boom had on that distribution.

Bequele, Assefa. Stagnation and Inequality in Ghana. pp. 219-249.

This case study of Ghana, like the preceding chapter, does not contain information or arguments relevant to RUPEP.

Srivastava, R.K. and I. Livingstone. Growth and Distribution: The Case of Mozambique. pp. 249-281.

[also have as a working paper, March 1981.]

This chapter, again, is not relevant to RUPEP. It is an interesting study of macro-level development currents in Mozambique both before and after liberation.

Jamal, Vali. Nomads and Farmers: Incomes and Poverty in Rural Somalia. pp. 281-307.

This final chapter is of no interest to RUPEP. It attempts to draw some rudimentary conclusions about poverty and inequality from a dearth of available data and concentrates mainly on nomadism and livestock.

ILO. Cottage Industries, Handicrafts, and Non-Farm Employment. World Employment Program, Research Report No. 1, March 1984. (22 pp.)

This report contains little that is of direct relevance or special interest to RUPEP. It reports on the progress of the ILO's rural non-farm program as a whole but does not discuss the findings of studies that have been completed.

Following is the little of value to RUPEP in the report:

1. Rural non-farm employment is defined to comprise manufacturing, construction, transport, trade and services.
2. Of these, manufacturing, or small rural-industries, are the most important because services and training rise and fall with rural incomes and employment and are therefore dependent, not independent, variables.
3. The report notes that: "There are industries which either supply inputs to (including simple machinery) or process outputs from agriculture and hence are concerned with patterns of agricultural development, technological change, agrarian structures and so on." (p. 4).
4. The report also states: "The scope for increasing rural industrial employment also depends on how closely or loosely the rural markets are linked to other markets and hence the importance of the spatial dimension." (p. 5)
5. Finally, the report ends by confirming the need for the type of research proposed for RUPEP: "Little is known about the precise relationship between agricultural growth and rural industrialisation. This area requires further investigation if it is to serve as the basis for policy formulation...Another field in which policy-makers need some guidance is the spatial dimensions of rural non-farm activities. For instance, what types of activities can be supported and promoted in various size groups of communities

or settlements? It is believed that the size of the market together with the infrastructural facilities (e.g. roads, transport and power) that exist play a key role in determining the scope for rural industrialisation." (p. 17)

ILO. Urbanisation, Informal Sector and Employment: A Progress Report on Research, Advisory Services and Technical Cooperation. World Employment Program, April 1984 (40 pp.).

This paper reports on the progress made by the ILO in its research on the relationship between urbanization and employment. The report states that unemployment rates in cities are generally higher than for rural areas and are likely to increase given massive rural to urban migration. A study of six metropolises found that migrants are drawn to large cities from a wide area and that recent arrivals tend to fill low-paid and physically demanding jobs, frequently in the informal sector. The ILO has also found that urban infrastructure investments have only a very limited direct impact on creating employment opportunities. The report recognizes the need in the future to more specifically address the nature of the informal sector in small towns and their potential to contribute to employment generation.

Peek, Peter. "Urban Poverty, Migration and Land Reform in Ecuador." World Employment Programme Research Working Papers, June 1979. (37pp.)

This paper is essentially a variant of the "push" theory of rural to urban migration. The author argues that land reform in Ecuador has resulted in lowering both rural incomes and rural employment opportunities as agriculture becomes more capitalist and capital intensive. The result is a rapid rate of rural to urban migration that strains urban areas beyond their capacity to provide employment.

Peek, Peter and Carlos Raabe. "Rural Equity in Costa Rica: Myth or Reality?" World Employment Program Research Working Papers, ILO, October 1984. (35 pp.)

This paper is one of a series of six that reports on the dimensions and trends of rural poverty in Central America. It focuses on rural development and only mentions "urban" with respect to urban-rural disparities in income.

It is interesting to note that while the report states that: "the relatively low level of poverty (in Costa Rica) was accompanied by a comparatively wide access to services (p. 16)," it offers no spatial data on levels of "access."

Radwan, Samir. "The Impact of Agrarian Reform on Rural Egypt." World Employment Programme Research Working Papers, January 1977. (83 pp.).

This paper is narrowly focussed on the impact of land reform and cooperatives on agriculture in Egypt, and hence is not relevant to RUPEP.

Part B

Anker, Richard and James C. Knowles. Population Growth, Employment and Economic-Demographic Interactions in Kenya: Bachue-Kenya. St Martin's Press, 1983. (735 pp.).

This book describes research undertaken by the ILO in Kenya. The research involved designing and implementing a very complex economic-demographic simulation model called the Bachue model (for a more involved description see the annotation for Moreland, 1984 below). The contents of the book may be divided into two categories: (a) studies done for the model to identify the determinants of key demographic and economic processes and, (b) descriptions of the model, its design, and outputs from different policy simulations. The latter sections, while interesting, are not particularly relevant to RUPEP. The larger model is designed to simulate impacts of government demographic policies on economic variables and vice versa. It is capable of forecasting urbanization rates and rates of rural and urban unemployment likely to result from different policies. Beyond these forecasting capabilities, the model is otherwise of little interest to RUPEP. Certain portions of the sections on determinants of economic and demographic processes, however, are of interest to RUPEP because migration and remittances (two rural/urban linkages) are two of the processes examined (pp 97-176).

The findings from these sections that may be relevant to RUPEP are:

1. In 1971, 87% of urban wage earners remitted income regularly to their rural home areas and such payments amounted to about 25% of their monthly incomes (p. 98).

2. Migration in Kenya appears to occur in stages. Migrants move in a generally step-like fashion from nearby small towns to larger towns further away (p. 109): "A possible policy implication is that steps taken by the government to increase the growth rate of smaller urban centers relative to that of Nairobi and Mombassa may serve to increase the overall rate of rural/urban migration (p. 116)."

3. Studies have shown that remittances account for between 10 and 20 per cent of migrant's urban incomes (p. 145).

4. The most important flow of remittances is from urban to rural areas (accounting for 50% of income transferred and 37% of recorded transfers), but the most frequent transfers are from rural areas to rural areas (46% of recorded transfers but only 28% of income).

5. The results of an econometric model indicates that decisions to remit are positively and significantly related to income of the sender, education, male sex, migrant

status, ownership of a house, and the number of household members residing away. The results indicated that the longer a migrant remains away the less likely he is to send remittances. Finally, urban migrants tend to send remittances regardless of income while rural residents only tend to remit income if they have relatively higher incomes (p. 158).

6. Remittances appear to be an "insurance policy" for migrants who expect that they might return to their place of origin in the future. As this expectation diminishes with time, the flow of remittances can be expected to diminish (p. 168-9).

Aside from these findings, which relate specifically to migration and remittances, there is little contained in the book that is relevant to RUPEP.

Arndt, H.W. "Transmigration in Indonesia." World Employment Program/Population and Labor Policies Program Working Paper No. 146, ILO, November 1984. (61 pp.).

This paper examines transmigration projects in Indonesia. Although land resettlement definitely involves planning, at least the location and functional composition of new settlements, this paper does not address how this was done. It is therefore of little use to RUPEP (unless a decision is made later in the project to consider general issues of resettlement).

Bilsborrow, R.E., A.S. Oberai and G. Standing. Migration Surveys in Low-Income Countries: Guidelines for Survey and Questionnaire Design. Croom Helm, 1984. (552 pp.).

This book draws on the ILO's considerable experience in studying the determinants and implications of migration in Third World countries in order: (a) to explain what kinds of data must be collected to analyze these determinants and implications; and (b) to formulate survey and questionnaire guidelines for collecting this information. It provides an excellent and thorough overview of migration and conveys a sense of the complexity of the topic. Although the authors review the theoretical perspectives on migration in the book's second chapter, and consistently relate methodological issues to theory throughout the course of the book, the book is more an applied treatment of migration than a conceptual one or one that presents empirical research findings.

Still, there are two sections of the book that may be worth noting, as relevant to RUPEP. One is on income remittances (pp. 264-276), and the other is on the impact of

migration on production and technological change (pp. 317-327). The section on income remittances emphasizes that generalizations about the nature and level of income transfers to and from migrants can not yet be made. Existing evidence indicates that the nature and extent of income remittances vary significantly from place to place (pp. 265-268). After presenting a typology of remittance flows, the author (Standing) then identifies the range of possible ambiguities in collecting data on the uses and impacts of these remittances (pp. 274-277). The author of the chapter on migration and technological change and production (Oberai) points out that it is extremely difficult to conclude whether it is technological change that effects migration or the reverse. He indicates that there are two hypotheses about this relationship that are more or less opposites: "The first is that out-migration stimulates development of origin areas, in so far as it generates remittances and induces technological change which results in higher output and incomes. The contrary hypothesis is that out-migration leads to a shortage of labor and an overall decline in the average "quality" of labor force in origin areas, which adversely affect output and productivity. The reduced supply of labor is also likely to push wage rates in origin areas and encourage labor-saving technological change (p. 317)." The general impression conveyed by the author is that at this point it is difficult to establish which hypothesis is the more valid.

Findley, Sally E. "Colonist Constraints, Strategies and Mobility: Recent Trends in Latin America Frontier Zones." World Employment Program/Population and Labor Policies Program Working Paper No. 145, ILO, November 1984. (83 pp.).

This paper reviews and analyzes Latin American colonization schemes. The paper begins with a comparison between integrated rural development and colonization programs. In this section, the author explains that: "development of rural market towns has been a part of several recent Latin American colonisation programmes, including Brazil's Trans-Amazon colonisation projects and Bolivia's semi-directed projects in Chapre (p. 4)." Yet after having made this statement, she does not discuss the role of urban centers in colonization schemes at all. Later in the paper, she states that: "their (the settlers') communities often lack a nucleated structure, and colonists are isolated from one another due to their dispersed lands (p. 29)." She contends that this is a significant problem because it impedes the development of community organization and cooperation. She also identifies lack of credit, nearby markets, rural industries, and rural services as critical problems confronted by settlers. But nowhere does she make

the link between all these problems and the notion of rural market towns mentioned in the first pages of the paper. It is therefore relevant to RUPEP only in that it is an example of a discussion that would have benefitted, but ultimately did not benefit, from explicit attention to rural/urban dynamics.

Knowles, James C. and Richard Anker. "An Analysis of Income Transfers in a Developing Country: The Case of Kenya." Journal of Development Economics, Vol. 8, 1981, pp. 205-226.

The research described in this article is also included in Anker and Knowles' book on the Bachue-Kenya model (1983). For a discussion of findings relevant to RUPEP see the Anker and Knowles annotation above.

Knowles, James C. and Richard Anker. "An Analysis of Income Transfers in a Developing Country: The Case of Kenya." World Employment Program/Population and Employment Working Paper No. 59, ILO, November 1977. (46 pp.).

Again, research findings relevant to RUPEP are reported under the Anker and Knowles annotation.

Moreland, R. Scott. Population, Development, and Income Distribution - A Modelling Approach: Bachue-International. St. Martin's Press, 1984. (197 pp.).

This book describes a large-scale economic-demographic model developed by the ILO called the Bachue-International model. The model is generalized from Bachue models built for the Philippines, Kenya, Brazil and Yugoslavia. The author describes the model-type and distinguishes it from others: "Firstly, they are disequilibrium models which are solved recursively . . . Secondly, they are highly segmented and disaggregated . . . Thirdly, the solution of the models is not arrived at through any kind of optimisation algorithm . . . Fourthly, a high degree of demographic detail is included in the models . . . Fifthly, the Bachue models are distinguished from other models by the inclusion of a high degree of feedback between income distribution, demographic variables and economic variables (p. 5-6)."

The model considers such factors as migration, urban vs. rural employment, and economic sectors. However, the model is highly sophisticated and relies on certain assumptions about the relationships between these variables that may or may not be valid in any given case. For instance, rural to urban migration is considered to be a function of literacy and "inequality". Obviously such an equation is

reductionist and based on a set of assumptions about the causes of migration that are by no means universally accepted. Further, although variables are disaggregated by "geographic location," the model only discriminates between the categories urban and rural and, therefore, is not truly place-specific. For these reasons, the book is of little value to RUPEP.

Oberai, A.S., ed. State Policies and Internal Migration: Studies in Market and Planned Economies. St. Martin's Press and Croom Helm, 1983. (347 pp.).

This book is another effort by the ILO's World Employment Program to share its findings with the development community. This book is particularly interesting to RUPEP because it examines the effect of state policies on internal migration in Third World countries. In the second chapter of the book, the editor provides an excellent overview of the kinds of policies that governments have employed to either reduce or direct migration. He classifies state policies into four categories: (a) direct controls on mobility, (b) redirecting migrants to other areas; (c) reducing the flow of migrants, and (d) policies influencing urban in-migration (pp 11-24). From the standpoint of RUPEP, the discussions of "b" and "c" above are the most important.

According to Oberai, policies for redirecting migrants have fallen under two categories: land settlement schemes and growth pole/dispersed urbanization strategies. The latter are strategies that attempt to reduce rural out-migration and/or redirect it to centers within a rural region by deconcentrating urban services, infrastructure investments, and industrial employment opportunities (through tax benefits and other incentives provided to encourage industry to locate in small centers) away from just a few large cities and to a number of smaller intermediate cities and market towns. As such, it is an attempt to make rural areas more attractive through urban-based interventions and is thus an excellent example of a rural/urban productivity and employment promotion scheme. Oberai notes that these strategies are based on the concept of a "growth pole," which assumes that, "initial government expenditures in sparsely settled or previously disadvantaged regions will lead to self-sustaining economic growth with beneficial effects on their hinterland (p. 17)." He also suggests that evidence indicates that such a strategy can be successful and has proven so, though at great expense, in Korea, Poland, and Japan. However, he also notes that in India the strategy has met with only limited success. It is generally large-scale industry in larger cities that the government there has been successful in fostering; it has met with a great degree of trouble attempting to facilitate

dispersed urbanization by promoting medium and small-scale industries in small and medium-sized towns. To conclude, Oberai states: "The development of market towns, however, requires the nurturing of the linkages both down to the rural villages and up to bigger cities, and the commitment of considerable administrative and financial resources. It is for this reason that few countries have been able to adopt this strategy on a nation-wide basis (p. 19)."

Under the category "reducing the flow of migrants," Oberai identifies two kinds of policies: rural development programs and nativist policies. Of the two the former is the more relevant. Rural development programs, according to Oberai, are designed to increase incomes, production, and quality of life in rural areas. As important components of these programs, Oberai includes: "provision of credit and physical infrastructure, introduction of labor-intensive agricultural technology, improvement of rural health care and housing, [and] promotion of non-agricultural job opportunities in rural areas (p. 21)." Since all these things are provided in or channelled through urban centers, the important role of these urban centers and their linkages to rural areas are implicitly stressed.

Of the case studies that follow (Malaysia, Sri Lanka, India, Indonesia, Nepal, and Poland), the most relevant to RUPEP is the one on Poland (although the extent to which Poland is a "developing" country is questionable). Relevant sections of the other cases appear on pages 55 to 76 (Malaysia), pages 98 to 114 (Sri Lanka), and pages 144 to 152 and pages 154 to 161 (India).

Oberai, A.S. "State Policies and Internal Migration in Asia." International Labour Review, Vol 120, No. 2, March-April 1981, pp. 231-244.

The material covered in this article is also covered in Oberai's introduction to the edited volume reviewed above (Oberai, 1983). See the annotation above for a discussion of its relevance to RUPEP.

Oberai, A.S. and H.K. Manmohan Singh. Causes and Consequences of Internal Migration: A Study in the Indian Punjab. Oxford University Press, 1983. (434 pp.).

The movement of people between rural and urban areas and the flow of remittances from migrants in urban areas back to families in the rural areas certainly constitute an important rural/urban linkage. Migration has an impact on the nature of both rural and urban employment and productivity. For this reason it is of definite interest to RUPEP.

In this book, the authors examine the determinants of migration and the impact of migration on urban and rural development in the Punjab region in India. They provide a good concise review of the literature on theoretical frameworks for understanding migration and its impacts (pp 26-27) and then go on to report the findings of a very detailed survey of migrants (out, in, and return) and potential migrants conducted in the Punjab. Among the more relevant findings for RUPEP are:

1. Out-migration from rural areas is dominated by individual rather than family migration. This increases the likelihood that remittances will flow back to rural areas. This also reduces the additional strain on urban services and labor markets that family migration causes.

2. Very little out-migration occurs from farm households that own between 0.1 and 5 acres.

3. The flow of remittances results in a substantial flow of resources from urban to rural areas -- over half of urban migrants remit money home.

4. More than 75% of households receiving remittances spend them on consumption, mostly on food and clothing. This tends to confirm Hazell and Roell's (IFPRI documents, 1983) finding that rural households tend to spend incremental increases in income on consumption and not on production (making investment in local enterprises producing consumer goods a possible source of employment generating activity).

5. The data suggest that migration has little effect on rural production, technological change, labor use, or labor productivity. There are two exceptions: (a) families with return-migrants tend to adopt changes in technology more readily than other groups; and (b) households receiving remittances are more likely to devote more of their land to cash crop production.

6. Ninety percent of migrants were able to find employment within two months of arriving in Ludhiana city. Of these, 75% were able to increase their incomes within one year, one third by over 50%.

7. Migrants from poorer households are more likely to send remittances back to their families than wealthier ones and on the average, according to an urban survey, these migrants remit from a quarter to a third of their income.

The authors conclude that rural to urban migration does in fact have a positive impact on the welfare of rural households and on development in rural regions: "All this leads us to conclude that migration plays a positive role in agricultural development since it brings improvements in the productive forces such as human and physical capital . . . Over-all, the analysis in this study suggests that migrants do succeed in increasing their individual and household welfare as a result of migration. Further, the analysis

shows that there is little empirical basis for the concern that migrants are confined to marginal employment in cities, and contribute disproportionately to urban unemployment (pp. 413, 415)." It should be stressed, however, that these findings are specific to the Punjab study area, and cannot be generalized.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Employment, and the Urban Labor Market: A Study in the Indian Punjab." International Labour Review, Vol. 123, No. 4, July-August 1984, pp. 507-523.

The subjects covered in this article are also covered in the book on the Punjab by Oberai and Singh (1983). See the annotation above for findings from it that are relevant to RUPEP.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Production, and Technology in Agriculture: A Case Study in the Indian Punjab." International Labour Review, Vol. 121, No. 3, May-June 1982, pp. 327-343.

The subjects covered in this article are also covered in the book on the Punjab by Oberai and Singh (1983). See the annotation above for findings from it that are relevant to RUPEP.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Urbanisation and Fertility: The Case of the Indian Punjab." Artha Vijnana, Vol. 23, Nos. 3 and 4, Sept.-Dec. 1981, pp. 260-298.

The subjects covered in this article are also covered in the book on the Punjab by Oberai and Singh (1983). See the annotation above for findings from it that are relevant to RUPEP.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Remittances and Rural Development." International Labour Review, Vol. 119, No. 2, March-April 1980, pp. 229-241.

The subjects covered in this article are also covered in the book on the Punjab by Oberai and Singh (1983). See the annotation above for findings from it that are relevant to RUPEP.

Standing, Guy and Fred Sukedo. "Labour Migration and Development in Guyana." International Labour Review, Vol. 116, No. 3, November-December 1977, pp. 303-313.

This article examines the causes of migration in Guyana and also the policies pursued by the government to lessen its impact on Georgetown. It does not discuss rural/urban dynamics.

**CHAPTER FOUR:
CLARK COOPERATIVE AGREEMENT (SARSA) DOCUMENTS**

General Discussion and Reader's Guide

According to FY 1985 work plan of the Cooperative Agreement on Settlement and Resource Systems Analysis, SARSA's efforts will concentrate on four planning and research topics: natural resources management, settlement and resettlement, rural/urban dynamics, and regional planning. The latter three topics are quite obviously and directly related to RUPEP. SARSA has generated over thirty research papers on the subject of rural/urban dynamics. Of these, I have selected a few that I believe are representative of the research being conducted at Clark University and that are most relevant to RUPEP.

Based on just the few documents reviewed it is clear that SARSA is examining a range of rural/urban relationships. Some of the research (Belsky, et al. 1984, Rondinelli 1983a; 1983 b) relates specifically to the role that either market towns or secondary cities can and do play in the development process (their relationship to rural, regional, and national development). These studies focus on the urban centers and on the opportunities that their demographic, economic, and social characteristics present for strengthening rural and regional development.

Another set of documents examines the settlement system as a whole, the general role of urbanization in development, and methods for analyzing settlement systems (Wilkie, Lentnek, and Carroll, 1983; Rushton 1983). Most of these documents relate to the Urban Functions in Rural Development approach pioneered by U.S.A.I.D. Because of the complexity of the approach and the limited scope of the present report, I shall not review UFRD documents.

SARSA has also supported research on specific rural-urban linkages. It has and is examining marketing (Wilkie, Lentnek and Carroll, 1983), rural nonfarm employment (especially in manufacturing) (Yapa 1984), and locational planning for service provision (Rushton 1983; 1984). In this work the emphasis is on developing planning methods and analytical techniques that will make rural-urban productivity and employment creation gains possible. The development and diffusion of these planning and analytical techniques perhaps represents SARSA's most significant contribution to understanding and promoting rural/urban dynamics.

The paper by Belsky, Hackenberg, Rondinelli, and Karaska (1983) expresses the regional perspective adopted by SARSA in its research on secondary cities. It also identifies the

roles that secondary cities can or do play in national development and identifies issues of special concern in planning for secondary cities. The definition of these roles and of special research issues was further refined for SARSA in a recent paper by Rondinelli entitled, "Regional Cities, Agricultural Productivity, and Employment Generation: The Challenges of Urban Transition and Rural Development." Although not reviewed here, it should be noted that the paper draws on SARSA case studies of Panama, Korea, Mexico, Ecuador, and the Philippines and recommends research on the following:

1. the characteristics and dynamics of rural-urban food marketing systems;
2. the dynamics of economic growth and development in regional cities and how that growth affects urban employment expansion capacity and rural development;
3. the dynamics of regional labor markets through which labor is transferred and absorbed in the economies of regional urban centers;
4. the evolution and changes in spatial and demographic structures as regions undergo economic development and how changes in the spatial structure of a region facilitate or inhibit agricultural development and employment generation;
5. the dynamics of informal sector expansion in regional cities and towns;
6. the institutional and administrative development needs of municipal and local governments in non-metropolitan regions of developing countries.

Rondinelli's (1983 a) book reviews case histories of 31 secondary cities and a range of other literature examining the role of urbanization in development. Evidence in the book supports many of RUPEP's contentions that where strong and supportive rural-urban linkages exist, development is facilitated. Rondinelli also identifies some of the factors that appear to lead to the development and strengthening of mutually reinforcing linkages between urban and rural areas. Broadly speaking, these factors fall into two categories: (a) innovative, effective, and concerned municipal leaders, and (b) economic activities that have strong consumption and production linkages with other activities in the region.

The paper by Rondinelli (1983b) is an example of the case study work on secondary cities commissioned by SARSA. This particular case demonstrates that given a serious commitment on the part of a government, it is possible to use both rural and urban development policies and projects to reduce regional disparities in levels of development, raise rural-urban productivity, generate nonfarm employment, and deconcentrate manufacturing.

The two papers by Rushton address the planning question: How can a government, given defined objectives, maximize access of a target population to services that it provides? Rushton argues that this question can now be effectively answered by the use of optimizing operations on research techniques called location-allocation algorithms. According to Rushton, "location-allocation methods are the only formal methods that have been developed to find optimal locations when many alternative locations exist. These methods evaluate alternative combinations of feasible locations and select the combination that performs best with respect to a defined objective (Rushton, 1984: 1-2)." These techniques have great promise to contribute to operational planning for rural-urban productivity linkages. Many government services, such as extension, credit, seeds, and fertilizer, are directly related to agricultural production and the matter of access to them is central to the government's ability to have a positive impact on agricultural growth. Other government services, such as health and education, have less direct but probably as significant a bearing on the vitality of rural and urban growth.

The report by Wilkie, Lentnek, and Carroll (1983) is of interest for a number of reasons. First, it demonstrates how a descriptive analysis of a settlement system and its change over time can be accomplished quickly and meaningful. Second, it examines the regional marketing system in Ambato, Ecuador in great detail and discusses possible interventions in that system suggested by this analysis. Third, and most importantly, it describes a series of analytical techniques that can be used to analyze the marketing system, including mapping the structure of periodic market systems and collecting and analyzing commodity flow data. Hence, it provides a number of techniques that can be used to analyze rural-urban linkages.

Finally, the paper by Yapa (1984) supports a number of the conclusions drawn by Rushton, the ILO, UNRISD, and IFPRI and hence is, in a sense, an integrative piece. It deals directly with the issues of nonfarm employment. Yapa cites statistics that suggest the need for nonfarm employment and that prove the strong role nonfarm employment already plays in rural areas. He also quotes statistics that suggest that increases in agricultural incomes expand nonfarm employment opportunities through consumption linkages. Yapa then discusses methodological and conceptual issues involved with planning the kind, number, and location of potential, small, nonfarm industries. He demonstrates that location-allocation algorithms can be adopted to these planning uses and argues that issues of technology choice and selective regional closure must be addressed to generate employment and regional growth from small rural industries.

Other relevant SARSA papers not reviewed here are:

Belsky, E. and G. Karaska. "The Urban Functions in Rural Development End-of-Project Assessment Report."

Belsky, E. and G. Karaska. "The Rural Demand for Urban Services Project: The Demand Approach."

Barkan, J. "Institutionalization: The Missing Link in UFRD."

Bromley, R. "Market Center Analysis in the Urban Functions in Rural Development Approach."

Chetwynd, E. "Regional Analysis, Market Towns, and Rural Development."

Ludwig, A. "The Hierarchy of Central Places in the Highlands of Guatemala: Their Periodic Markets and Tributary Areas."

Rondinelli, D. "Applied Methods of Regional Planning: The Urban Functions in Rural Development Approach."
(forthcoming from Westview Press)

Rondinelli, D. "Small Towns in Developing Countries: Potential Centers of Growth."

Rondinelli, D. "Regional Cities, Agricultural Productivity, and Employment Generation: The Challenges of Urban Transition and Rural Development."

Annotated Bibliography

Belsky, Eric, Robert Hackenberg, Gerald Karaska, and Dennis Rondinelli. "A Preliminary Concept Paper on The Role of Secondary Cities in Regional Development." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Regional Cities Project, Clark University, 1983. (49 pp.).

This report presents initial ideas of the SARSA group on the role of secondary cities in regional development. Because a regional perspective is adopted in the paper (and especially one concerned with rural development), it contains information that is relevant to RUPEP. Its relevance, however, derives more from its unique perspective than from empirical evidence included in it.

The authors of the paper explain that secondary cities should be viewed as places whose character is as much determined by their linkages both to an immediate rural hinterland and to other smaller cities, as it is by their size. The authors argue that by understanding these linkages and appreciating the role that such linkages play in rural development, this role can be strengthened. The authors then apply the regional perspective and identify the critical regional roles that secondary cities play (based on Rondinelli 1983a reviewed below).

The authors assert that in order to efficiently provide the services necessary to raise agricultural productivity (including inputs, extension, and marketing), the provision of these services must be understood in a regional context. This means that services must be understood to be provided at a number of locations in a regional space. For example, new seed varieties are usually not made available to farmers only at one location. On the contrary, there are usually regional stores of seed in secondary cities that supply smaller outlets in smaller towns. By analyzing the delivery of seeds through the urban network, it can be made more efficient in meeting the agricultural service needs of rural people.

Another linkage between secondary cities and agriculture noted in the paper is the demand linkage created for produce by agro-processing facilities based in secondary cities. A function identified in the paper as being of great importance both to the vitality of a secondary city and to its rural hinterland is the regional marketing function. A study quoted in the report (p. 14) states that commerce and services are the principle sources of employment in secondary cities. According to the authors of the paper, however: "Development planning has traditionally failed to analyze the spatial scope of the regional marketing system

and has failed to develop methods to improve that system through spatial planning (p.15)."

The paper concludes with a section that identifies seven issues of special concern in designing regionally focused secondary city strategies. These are: selective regional closure, regional context, institutional capacity for regional administration, financing and service delivery, urban and rural led development stimuli, the urban informal sector, entrepreneurship, and the impacts of infrastructure on generating growth.

Rondinelli, Dennis A. Secondary Cities in Developing Countries: Policies for Diffusing Urbanization. Sage Publications, 1983a. (288 pp.).

This book is based on research commissioned by A.I.D. to review the literature on urbanization in developing countries and on the potential for middle-sized cities to contribute to national and regional development. It is indeed a very comprehensive review and draws on dozens of case studies to support its conclusions. Because it identifies the many linkages that exist between secondary cities and development of rural regions, it is of interest to RUPEP. The findings of the report support the RUPEP contention that where rural-urban linkages are strong and mutually beneficial to rural and urban areas, they can accelerate regional growth. It even indicates what some of the conditions are that lead to such beneficially reinforcing linkages. However, the author warns that the linkages between secondary cities and rural development can also be "exploitative."

In the first chapter of the book, Rondinelli explains why secondary cities are critical for national development. He notes that secondary cities play a role in deconcentrating urbanization, reversing polarization, alleviating problems in larger cities, reducing regional inequalities, increasing administrative capacity, reducing urban poverty and increasing productivity, and stimulating rural economies. Of these, the last mentioned is of most interest to RUPEP. In this section (pp. 33-36), Rondinelli notes that World Bank analysts have stressed the importance of urban centers to rural development and that several countries, including Panama, Thailand, Costa Rica, and Indonesia, have all recognized this relationship and are attempting to build on it.

In the second chapter, Rondinelli examines the demographic, economic, and social characteristics of secondary cities of different sizes. Although the occupational and employment structure of these cities vary by size, Rondinelli's findings generally suggest that the

most important source of employment in secondary cities is the tertiary sector, and especially the tertiary informal sector. Further, evidence presented by Rondinelli suggests that manufacturing is dominated by small and medium-sized industries except in the largest secondary cities, and even then, the share of large-scale manufacturing contained in these cities is disproportionately small when compared to the share of manufacturing in the largest one or two cities in the country.

In Chapter Three, Rondinelli examines the dynamics of secondary city growth. He lists the following as important factors to the establishment and subsequent growth of secondary cities: favorable physical location and natural resources, defensive positions and military bases, selection as administrative and political centers, colonization and foreign investment, influence of transport technology, growth of commerce, trade and services, and the importance of synergism in the dynamics of growth. While evidence might suggest that promoting secondary city growth might be accomplished solely by selecting a favorable location, or by establishing regional administration in a city, or by building up the transport infrastructure to and from the city, Rondinelli points out that by far the most important factor in determining the eventual ability or failure of a secondary city to grow is the capacity of the city to perform commercial, service, and trade functions (p. 101).

The functions of secondary cities are examined in the fourth chapter. Based on case histories of 31 cities, Rondinelli (pp. 118-120) concludes that secondary cities can:

1. Provide convenient locations for decentralizing public services.
2. Offer sufficiently large populations and economies of scale to allow them to act as regional centers for a variety of basic social services.
3. Offer a wide variety of consumer goods and personal and commercial services through small-scale enterprises and through the informal sector.
4. Act as regional marketing centers offering a wide variety of market related functions.
5. Provide conditions conducive to the growth of small- and medium-scale manufacturing.
6. Act as agro-processing and agricultural supply centers for their regions.
7. Create conditions (high population concentrations, marketing and agro-processing functions) that are conducive to commercializing agriculture and increasing incomes in nearby rural areas.
8. Be sources of off-farm employment and supplementary incomes to rural people through remittances.
9. Serve as area-wide transport and communications centers.

10. Absorb substantial numbers of people migrating from rural to urban areas,
11. Function effectively as centers for social transformation.
12. Be channels for the diffusion of innovation and change, the spread of benefits of urban development, the stimulation of rural economies, and the integration of urban centers and rural settlements.

Rondinelli thus demonstrates that the linkages between secondary cities and their regions are many and varied.

The chapter most germane to RUPEP is the fifth. In this chapter, Rondinelli compares a "developmental" city (one which generates growth both of the urban center and its rural region) with an "exploitative" city (one which grows by exploiting the region around it). From a case history of Chiangmai, Thailand, and from other sources, Rondinelli identifies a list of factors that appear to facilitate developmental (p. 182-3) rural-urban relationships:

1. The degree to which local elites and leaders identify their own success and status with the economic and social progress of the city and its region.
2. The degree to which local leaders in both public and private sectors reinvest money in their city as opposed to in others.
3. The degree to which local leaders and entrepreneurs are innovative and aggressive in introducing effective production techniques.
4. The degree to which local leaders and entrepreneurs are aggressive and successful in attracting outside investment to the city.
5. The degree to which the city receives support from the national government.
6. The degree to which economic activities established in the region are linked through mutually beneficial processes of exchange to the city's hinterland.
7. The degree to which economic activities have backward and forward linkages to other economic activities in a region.
8. The degree to which economic activities within the city are organized to build on and meet local demand.
9. The degree to which public and private sectors cooperate with one another.
10. The degree to which leadership promotes behavioral and social changes to respond to changing economic conditions.

Of these ten factors, many relate to the leadership and management capacities of public and private sector entrepreneurs, suggesting that leadership skills and innovative management training could greatly enhance the strength of rural-urban linkages. Others relate to the extent to which economic activities build on regional

advantages and provide backward and forward economic linkages to both production and consumption in the region.

Rondinelli then argues (also in Chapter Five) that national urbanization strategies can guide the development of rural-urban relations so that they are mutually beneficial. He examines a variety of possible urbanization strategies that have or could be implemented to achieve integrated and balanced regional growth.

Comment- Rondinelli's book is rich with case study details, to which a short annotation cannot do justice.

Rondinelli, Dennis A. "Intermediate Cities' Role in Industrial Decentralization, Employment Generation, and Economic Development in South Korea." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Regional Cities Project, Clark University, 1983b. (88 pp.).

This report is a case study of South Korea's attempts to deconcentrate urbanization (reverse polarization of its economy and demography around Seoul) and to reduce regional disparities in income and level of development. It is a very interesting case and one that is of great relevance to RUPEP because the Koreans combined grassroots rural development policies centered on villages with top-down industrial incentive policies and infrastructure investments to achieve their goals. Evidence suggests that the Koreans have been rather successful in achieving their goals and have not only succeeded in turning the tide of polarization, deconcentrating industrial development, and improving infrastructure and social services in rural regions, but have succeeded in reducing income disparities and in generating off-farm employment opportunities.

The rural development policy pursued in Korea was called Saemaul Undong. The Saemaul movement was a self-help scheme in which the national government assisted "underdeveloped villages" to provide basic infrastructure and facilities and also "assisted local leaders and village groups to organize income-producing activities and increase agricultural productivity in "developing villages," and to diversify the economies of and provide new job opportunities in "developed villages (p. 11)." The movement was responsible for literally hundreds of thousands of projects of the kinds listed above, completed during the 1970's (pp. 11 and 12). Surveys estimated that between 446,000 and 448,000 households earned income from Saemaul projects each year between 1973 and 1979 (p. 12).

Complementing these grassroots efforts were macro-policy interventions and investments designed to deconcentrate manufacturing from Seoul and to strengthen 17 "growth pole" intermediate-sized cities. The government utilized land use

planning regulations (pp. 13-26), financial incentives for established industries to relocate from Seoul and for new industries to locate outside of Seoul (p. 26-27), and invested in social services and infrastructure especially in the 17 intermediate cities (pp. 31-37).

After reviewing the evidence, Rondinelli concludes: "Thus, over a twenty year period . . . manufacturing became the dominant sector in most of the larger secondary cities that had been designated as growth poles . . . As economic growth accelerated and industrial activities were deconcentrated, there was a strong division of labor among intermediate cities (pp. 58-59)." In terms of the impact of changes in intermediate cities on their hinterlands, Rondinelli describes an interesting case study of Taegu to illustrate the complex web of changes (pp. 60-62). The case suggests that intermediate cities facilitate commercialization of agriculture in their immediate hinterlands, increase demand for agricultural produce, provide increased off-farm employment opportunities, and produce farm tools and implements that diffuse rapidly and improve agricultural production. Rondinelli also provides some evidence that secondary cities in Korea have begun to play a role in transforming social behaviors (e.g. reduced fertility and family size).

Finally, Rondinelli reports the increases in employment registered between 1970 and 1980 in intermediate Korean cities. It is clear that a significant number of jobs were created (1.5 million jobs in 31 cities over 100,000 in population). It is also clear that many of these jobs were created in manufacturing. It is less clear, and Rondinelli does not attempt to explain, how Korea was able to industrialize so effectively during the period and whether the Korean experience can be replicated elsewhere.

Rushton, Gerard. "Indian Planning of Urban Functions for Rural Development." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper. Rural Marketing Centers Working Group, Clark University, July 1983. (51 pp).

This paper reviews Indian efforts undertaken in the late sixties and throughout the seventies to improve the accessibility of rural populations to urban functions and compares these efforts to U.S.A.I.D.'s Urban Functions in Rural Development (UFRD) project. The author is principally concerned with assessing the planning methods used by the Indian Growth Centers project and the UFRD project to determine the location of government services. The paper is an excellent review and critique, and is relevant to RUPEP.

Rushton argues strongly against using descriptions of settlement hierarchies and of the centrality of places as a basis for any kind of planning. This kind of planning method, he argues, was used in the early stages of the Indian project and throughout the UFRD project. According to Rushton, this kind of planning does not directly address how a government can optimize the use of its resources to maximize the level of accessibility of dispersed rural populations to centrally located and important productive and social services. The use of such descriptive techniques are particularly upsetting to the author because, he argues, optimizing techniques already exist and can be used. In fact, he notes that in India these techniques are now being used in place of the earlier descriptive kind: "The Indian approach, after a start that many observers believed to be a false start, decided that the core questions were normative questions involving the changing of many patterns of spatial linkages in order to connect disadvantaged villages to the full range of supportive urban services. The project tested some simple optimizing (heuristic) algorithms (some computerized, others not), designed to evaluate existing levels of geographical accessibility to urban centers and to identify interventions that were optimal with respect to defined criteria (p. 44)."

Rushton's discussion is important to RUPEP because it raises some central issues as to how planning for rural-urban linkages should be approached. His arguments suggest that planning for rural-urban linkages is best addressed through prescriptive and not descriptive techniques. Assuming that all can agree that the access of rural populations to production and human related services provided by the government is important to agricultural production and the health and vitality of rural people, then Rushton would argue that government should attempt to optimize geographical access to this group of services through the application of the location-allocation technique (in the paper annotated below, Rushton demonstrates how this is done).

Finally, Rushton provides a very telling critique of Wanmali's (1983) paper (reviewed above). To sum up the worth of Wanmali's piece and its critical omissions, Rushton writes: "Wanmali's recent comparison of the situation before and after the plan does not measure the locational efficiency of the new investments in urban services. His study allows us to conclude only that new outlets for the twenty services provided by the government were constructed and that substantial increases in production occurred at the same time . . . there is no analysis of the locations selected for these services to establish whether the sites selected could most efficiently serve the populations in need (pp. 34-35)."

Rushton, Gerard. "Location-Allocation Algorithms as a Method of Locating Facilities in Developing Countries: Extensions to Cope with Identified Policy Constraints." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Rural Marketing Centers Working Group, Clark University, January 1984. (65 pp.).

This paper reports on an exciting operations research technique that has been successfully applied to locational planning in the developed, and, more recently in the developing world. According to the author: "location-allocation methods are the only formal methods that have been developed to find optimal locations when many alternative locations exist. These methods evaluate alternative combinations of feasible locations and select the combination that performs best with respect to a defined objective (p. 1-2)." Rushton presents a convincing array of evidence that these techniques can be used to assess the efficiency of a set of locations of a service in providing maximum access to a dispersed population and can be used to assess the efficacy of planned interventions designed to improve accessibility. Location-allocation can hence assess the adequacy of an existing spatial structure of service locations and can be used to plan to improve it. To the extent that RUPEP is concerned with the accessibility of rural populations to urban-based services, this is an important document for it.

The location-allocation technique is described on pages 1 through 15. From pages 15 to 23, an illustration of an actual three day run of a location-allocation algorithm in Nigeria is described (including figures on pages 43 to 58). Finally, Rushton reviews applications of location-allocation models in the Third World to planning the location of schools and health facilities (pp. 23-36). Should RUPEP move in a direction where locational planning for government provided services is addressed, this paper could serve as a valuable resource piece.

Wilkie, Richard, Barry Lentnek and Thomas Carroll. Urban Dimensions of Rural Development in Ecuador: Progress Report for the Ecuador Project on Rural-Urban Linkages. Rural Marketing Centers Working Group, Clark University, 1983. (137 pp.).

This report presents some initial findings (after one year) of an ongoing research project on rural-urban dynamics being conducted in Ecuador by a team from the Clark Cooperative Agreement on Settlements and Resource Systems Analysis and from a pre-investment agency in Ecuador called FONAPRE. According to the authors, while the report principally examines the marketing structure in the Ambato

region, the project has already begun to examine commercial and industrial activities and was committed to exploring the behavioral processes which affect and are affected by marketing, commercial services, and industrial activities. The report is very interesting because it goes into considerable depth in describing both the periodic marketing structure in the region and the flows of commodities going to and coming from those markets. The authors explain what can be gained from these kinds of descriptive analyses and use them to identify economically active towns for possible investment. This report's relevance to RUPEP derives from the methods it presents for collecting and analyzing rural-urban dynamics information on the wholesale periodic marketing function.

The methods of periodic market and flow structure analysis are presented in Chapter Four. The knowledge gained from the application of these methods is graphically depicted and discussed throughout the chapter. Finally, in the conclusion of the report, the authors discuss the implications of the spatial analysis of periodic markets for possible marketing reform in the region (pp. 123-126).

Yapa, Lakshman. "Regional Issues in Strategies for Increasing Rural Employment." Draft paper prepared for the Rural Marketing Centers Working Group, Clark University, June 1984. (36 pp.).

This paper is of great relevance to RUPEP for a number of reasons. First, it reviews some of the ILO documents annotated in this report and other documents that support the hypothesis formulated by Mellor that strong and beneficial consumption linkages exist between agricultural households and off-farm activities. Second, it offers a sweeping but telling review of attributes of nonfarm employment. Third, it considers three issues that bear directly on planning to increase rural nonfarm employment: technology choice, locational planning for nonfarm activities, and appropriate degrees of protectionism for small-scale rural manufacture. Thus, this paper not only supports the RUPEP proposal, but it draws upon and integrates a number of ideas presented in other papers annotated for this report (IFPRI's model of agricultural led rural-urban growth, SARSA's concern with location-allocation and locational planning, and ILO's basic research).

Yapa first describes the background of the emerging focus on rural areas, agricultural incomes, and the non-farm sector as a means of increasing employment and then presents empirical evidence supporting Mellor's rural-led development strategy. Among evidence Yapa presents is an ILO survey of 63 settlement projects that found a strong correlation between levels of net income of settler households and non-

agricultural employment, and a study by Scudder that indicates that settlement schemes based on irrigation can generate two jobs per settler family -- one for agricultural employment and one for nonfarm employment (p. 3).

In considering the attributes of nonfarm employment, Yapa cites several reports:

1. A World Bank report notes that in some African countries nearly two thirds of all nonfarm employment is found in rural areas, while in some Asian countries over half of this employment is found in rural areas (p. 5).
2. A paper by Tom Carroll notes that less than 1 percent of the World Bank's rural development loans went to nonfarm manufacturing activities (p. 5).
3. The World Bank report also notes that rural nonfarm employment is generally 20 to 30 percent in manufacturing, 20 to 35 percent in services, 15 to 20 percent in commerce, 5 to 15 percent construction, and 5 percent transport. Manufacturing is broken down into food processing, textiles and apparel, wood and furniture making, and metal fabrication including blacksmithing (p. 8).
4. A report by Art Gibb estimates that four-fifths of all nonfarm employment in a region in the Philippines was generated by the demand for goods and services from agricultural households (p. 8).

After discussing issues of technology choice (pp. 10-19), Yapa demonstrates how the location-allocation technique (explained in Rushton's paper) can be used to plan the number and location of possible off-farm enterprises (pp. 19-25). Finally, Yapa examines the question of selective regional closure (pp. 26-32) (also examined in Belsky et al. annotated above).

**CHAPTER FIVE:
UNITED NATIONS RESEARCH INSTITUTE FOR
SOCIAL DEVELOPMENT (UNRISD) DOCUMENTS**

General Discussion and Reader's Guide

The UNRISD documents appear to be of little or no relevance to RUPEP. All the documents are from a research program entitled "Food Systems and Society." The purpose of this program is to develop an adequate model of explanation for continuing hunger and malnutrition in the world today. UNRISD takes as its point of departure that the food problem is more a problem of the way natural and capital resources are used than of production or production in relation to population. The program has involved both (a) the development of conceptual models and methodologies for analyzing food systems and (b) the application of these models and methodologies in country and regional cases. The approach taken is insightful and extremely well worked out. Unfortunately, although the research recognizes that urbanization is an important factor in food systems and must be accounted for in food systems research (Barracough 1982; 1984), the materials I reviewed do not include any real consideration of the urban system or of rural-urban relations. The research also has not examined the spatial nature of food marketing and distribution systems, although it appears the research would benefit from this perspective (Barracough 1982, p. 4; Garcia 1984). The only remotely spatial discussions in the documents are: (a) an analysis of the amount of labor time spent traveling to procure and sell food in rural and urban China (Croll, 1982); and (b) a discussion of the need to integrate peripheral regions in Nicaragua with the national economy and society (Barracough 1982).

The documents written by Spitz are intriguing but are of little relevance to RUPEP, except that they and other UNRISD documents argue strongly against making assertions (implicit in the work of Rondinelli and many others) that the commercialization of agriculture made possible by strengthening rural-urban linkages is desirable in terms of development. Spitz and the UNRISD staff believe that commercializing agriculture reduces food security and increases inequality.

Some of the documents might, however, be of considerable interest to the Clark team working on food marketing as a rural-urban linkage in Ecuador. From what I was able to gather, the food systems model advocated by UNRISD is similar to the models of marketing chains that are currently being developed by SARSA. There appear to be differences in that Clark addresses space explicitly while UNRISD does not and UNRISD goes into greater depth in elaborating a "food

system" than Clark does in elaborating a "marketing chain." Unfortunately, the UNRISD model is only referred to and not described in detail in the documents provided (Barraclough 1982; 1984; and Garcia 1984).

Annotated Bibliography

Barraclough, Solon. "Effects of the Urban Explosion on Rural Development in Latin America." Paper presented at the First International Social Prospects Week, Geneva, November 1984. (30 pp.).

The purpose of this paper is to explain the impacts of urbanization on rural development in Latin America. The article's relevance to RUPEP is limited because it focuses on the problems associated with rural/urban relations and not on their benefits.

The author does, I believe, an excellent job of explaining the relationship between urban and rural development. He correctly asserts that this relationship hinges on social and economic processes (the most important of which are class forces) and not on some fictitious structural dualist model that holds that development problems stem from the failure of a dynamic modern sector to transform a stagnant traditional agricultural sector. The author examines the demographic, economic, environmental and social/political impacts of urbanization. In demographic terms, the author concludes that urbanization is clearly equated with out-migration from rural areas and that this out-migration is caused mainly by "push" factors, often resulting from reduced employment created by commercialization of agriculture. The implications of this for development, Barraclough concludes, are mixed. On the one hand it drains rural areas of labor, but on the other it makes the land/population ratio more favorable in rural areas. If the latter does not create a labor shortage situation it may be construed as positive. In economic terms, urbanization results in increased demand for certain foodstuffs. When these are provided by rural regions within a country, economic growth (though not necessarily with equity) results. When provided by imports, however, urban demand can have a disruptive effect on indigenous agriculture.

The author does note, however, that UNRISD explicitly considers urbanization as one of the processes affecting the food security of poorer groups in the developing world (p. 8).

Barraclough, Solon and Peter Marchetti. "Agrarian Transformation and Food Security in the Caribbean Basin." Paper presented at the Institute of Social Studies, the Hague, June 1983. (26 pp. + tables).

This paper discusses food security in the Caribbean with particular reference to Nicaragua. While it is an extremely interesting paper that considers what macro-economic

strategies are necessary, if not essential, to build sustained development and provide food security, it does not raise urban or spatial issues and contains no information that is useful to RUPEP.

Barraclough, Solon. "A Preliminary Analysis of the Nicaraguan Food System." Food Systems Monograph, Food Systems and Society Series, UNRISD, 1982. (133 pp.).

Again, this is a very interesting report but one which does not contain any information or assertions relevant to RUPEP. It is a detailed political economic analysis of Nicaragua both before and after the Sandinista revolution. It examines the macro-economic development needs, constraints, and opportunities in post-revolution Nicaragua and the strategies pursued by the government. The report uses an analysis of what UNRISD calls the food system as its central focus.

To the extent that anything from this report can even remotely be construed as relevant at all to RUPEP, there are one or two statements to the effect that the Nicaraguans have identified the need for: (a) analysing the effects of urbanization on the food system in the Managua--Masaya area; (pp. 4 and 128) and (b) integrating of peripheral regions into the national economy and society (pp. 101, 102, 108). However, there is no discussion of how either of these is to be accomplished.

The food systems research approach discussed in the preface (pp. v, vi), introduction (pp. 4, 7, 8) and appendix (pp. 123-133) of this report bear a strong resemblance to the marketing chains approach being developed in Ecuador by Clark. UNRISD's does not address the spatial aspects of their model and Clark has not addressed some of the social issues addressed by UNRISD. The report also notes that UNRISD's approach is elaborated in UNRISD's "Food Systems and Society (UNRISD/78/C.14/Rev. 1) and in "Food Systems and Society: Summary of an UNRISD Project (June 1979).

Croll, Elisabeth. "The Family Rice Bowl: Food and the Domestic Economy in China." Food Systems Monograph, Food Systems and Society Series, UNRISD, Geneva, 1982. (372 pp.).

A study of the food system in a country like China where 20% of the world's population is adequately fed from 8% of the world's land under cultivation cannot be any thing but fascinating. From the perspective of RUPEP, however, there is really nothing of value or interest in this report.

This massive report might be useful to the marketing research being conducted at Clark, though. It examines the distribution and marketing system in China in detail both in terms of how it is structured by Chinese institutions and national policies and of how it actually affects

households. The approach taken is, as the author describes it, anthropological and is concerned with answering such questions as: What expenditure in labor time goes to the production and distribution, respectively, of staple and non-staple foods? How long does it take to travel to markets to obtain various foodstuffs? How often and at what opportunity cost do rural producers travel to large cities to directly market their produce? What are the impacts of the food system on division of labor within the household?

Garcia, Rclando. "'Food Systems and Society': A Conceptual and Methodological Challenge." Food Systems Monograph, Food Systems and Society Series, UNRISD, Geneva, 1984. (73. pp).

This paper explains a systems approach to understanding the relationships between the factors that comprise food systems and how changes in these factors or their relations affect the food system in general. About 40 pages are devoted to explaining the conceptual basis of the approach and reads like a treatise (albeit an interesting one) of the philosophy of science. In the last 20 pages, an application of the systems model to determining the impact of a change in the Bajio region in Mexico from maize production to sorghum production is described. The approach is potentially of great value in assessing impacts of development interventions and to understanding regional change, but is of little direct value to RUPEP.

Spitz, Pierre. Food Systems and Society in India: A Draft Interim Report (two volumes). UNRISD, July 1983. (393 pp.).

This interim report describes research being conducted for the food systems project in India. It is a long report which really has no bearing on RUPEP.

Spitz, Pierre. "Livelihood and the Food Squeeze." Ceres, Vol. 14, No. 3, May-June 1981, pp. 27-30.

This short article discusses the nature of hunger in the world today. It focuses on the negative effects incorporation into a world market has had on food security and equity, and on the dangers of continual promotion of export crops and increasing concentration of land ownership. The author ends by stressing the "right to food" and the need for: (a) radical changes in social structures; and (b) research into creative endogenously-, as opposed to exogenously-, oriented agricultural strategies. The article is not useful to RUPEP.

Spitz, Pierre. "Drought and Self-Provisioning." Food Systems and Society Working Paper, UNRISD, Geneva, June 1980 (28 pp.).

Again, though this report, based on Spitz's work in India is interesting, it is of no direct relevance to RUPEP.

Spitz, Pierre. "The Public Granary." Ceres, Vol 12, No. 6, November-December, 1979, pp. 16-19.

Again, unrelated to RUPEP, it is an article about public storage of grain reserves and some its more ethical implications.

Spitz, Pierre. "Right to Food for People and for the People: A Historical Perspective." in Alston, P and K. Tomasevski, eds. The Right to Food. Martinus Nijhoff Publishers, (date ?), pp. 169-186.

This paper is an exposition of the concept of "the right to food" -- the right of everyone to have enough food to eat that has continuously not been met and has been systematically ignored by legal systems around the world. The paper is of great interest to those concerned directly with equity considerations and with orienting food systems to meet equity goals. Any attempt, however, to find in this chapter any material of direct relevance to RUPEP would be strained.

BIBLIOGRAPHY

IFPRI Bibliography

Hazell, Peter and Ailsa Roell. "Rural Growth Linkages: Household Expenditure Patterns in Malaysia and Nigeria." IFPRI Research Report 41, September 1983. (64 pp.).

IFPRI. International Food Policy Research Institute Report 1983. (60 pp.).

Wanmali, Sudhir. "Service Provision and Rural Development in India: A Study of Miryalguda Taluka." IFPRI Research Report 37, February 1983. (62 pp.).

Wanmali, Sudhir. "Rural Household Use of Services: A Study of Miryalguda Taluka, India." Draft Paper, Do Not Quote, Revised 14 January 1985.

ILO Bibliography

Part A

Bose, A.N. "Intersectoral Linkage in a Comprehensive Area Development Approach: The Case of West Bengal." World Employment Programme Research, ILO, April 1983. (93 pp.).

Chipande, Graham H.R. "Labor Availability and Smallholder Agricultural Development: The Case of Lilongwe Land Development Programme." World Employment Programme Research Working Papers, ILC, September 1983. (85 pp.)

Collier, Paul. "Contractual Constraints Upon the Processes of Labor Exchange in Rural Kenya." World Employment Research Programme Working Papers, August 1983. (51 pp.).

Ghai Dharam and Lawrence Smith. "Food Policy and Equity in Sub-Saharan Africa." World Employment Programme Research Working Papers, August 1983 (50 pp.).

Ghai, Dharam and Samir Radwan, eds. Agrarian Policies and Rural Poverty in Africa. International Labor Office, 1983. (312 pp.).

ILO. Cottage Industries, Handicrafts, and Non-Farm Employment. World Employment Program, Research Report No. 1, March 1984. (22pp.).

ILO. Urbanization, Informal Sector and Employment: A Progress Report on Research, Advisory Services and Technical Cooperation. World Employment Program, April 1984. (40 pp.).

Peek, Peter. "Urban Poverty, Migration and Land Reform in Ecuador." World Employment Programme Research Working Papers, June 1979. (37 pp.).

Peek, Peter and Carlos Raabe. "Rural Equity in Costa Rica: Myth or Reality?" World Employment Programme Research Working Papers, ILO, October 1984. (35 pp.).

Radwan, Samir. "The Impact of Agrarian Reform on Rural Egypt." World Employment Programme Research Working Papers, January 1977. (83 pp.).

Part B

Anker, Richard and James C. Knowles. Population Growth, Employment and Economic-Demographic Interactions in Kenya: Bachue-Kenya. St Martin's Press, 1983. (735 pp.).

Arndt, H.W. "Transmigration in Indonesia." World Employment Program/Population and Labor Policies Program Working Paper No. 146, ILO, November 1984. (61 pp.).

Bilsborrow, R.E., A.S. Oberai and G. Standing. Migration Surveys in Low-Income Countries: Guidelines for Survey and Questionnaire Design. Croom Helm, 1984. (552 pp.).

Findley, Sally E. "Colonist Constraints, Strategies and Mobility: Recent Trends in Latin America Frontier Zones." World Employment Program/Population and Labor Policies Program Working Paper No. 145, ILO, November 1984. (83 pp.).

Knowles, James C. and Richard Anker. "An Analysis of Income Transfers in a Developing Country: The Case of Kenya." Journal of Development Economics, Vol. 8, 1981, pp. 205-226.

Knowles, James C. and Richard Anker. "An Analysis of Income Transfers in a Developing Country: The Case of Kenya." World Employment Program/Population and Employment Working Paper No. 59, ILO, November 1977. (46 pp.).

Moreland, R. Scott. Population, Development, and Income Distribution - A Modelling Approach: Bachue-International. St. Martin's Press, 1984. (197 pp.).

Oberai, A.S., ed. State Policies and Internal Migration: Studies in Market and Planned Economies. St. Martin's Press and Croom Held, 1983. (347 pp.).

Oberai, A.S. "State Policies and Internal Migration in Asia." International Labour Review, Vol 120, No. 2, March-April 1981, pp. 231-244.

Oberai, A.S. and H.K. Manmohan Singh. Causes and Consequences of Internal Migration: A Study in the Indian Punjab. Oxford University Press, 1983. (434 pp.).

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Employment, and the Urban Labor Market: A Study in the Indian Punjab." International Labour Review, Vol. 123, No. 4, July-August 1984, pp. 507-523.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Production, and Technology in Agriculture: A Case Study in the Indian Punjab." International Labour Review, Vol. 121, No. 3, May-June 1982, pp. 327-343.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Urbanisation and Fertility: The Case of the Indian Punjab." Artha Vijnana, Vol. 23, Nos. 3 and 4, Sept.-Dec. 1981, pp. 260-298.

Oberai, A.S. and H.K. Manmohan Singh. "Migration, Remittances and Rural Development." International Labour Review, Vol. 119, No. 2, March-April 1980, pp. 229-241.

Standing, Guy and Fred Sukedo. "Labour Migration and Development in Guyana." International Labour Review, Vol. 116, No. 3, November-December 1977, pp. 303-313.

SARSA Bibliography

Belsky, Eric, Robert Hackenberg, Gerald Karaska, and Dennis Rondinelli. "A Preliminary Concept Paper on The Role of Secondary Cities in Regional Development." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Regional Cities Project, Clark University, 1983. (49 pp.).

Rondinelli, Dennis A. Secondary Cities in Developing Countries: Policies for Diffusing Urbanization. Sage Publications, 1983a. (288 pp.).

Rondinelli, Dennis A. "Intermediate Cities' Role in Industrial Decentralization, Employment Generation, and Economic Development in South Korea." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Regional Cities Project, Clark University, 1983b. (88 pp.).

Rushton, Gerard. "Indian Planning of Urban Functions for Rural Development." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Rural Marketing Centers Working Group, Clark University, July 1983. (51 pp.).

Rushton, Gerard. "Location-Allocation Algorithms as a Method of Locating Facilities in Developing Countries: Extensions to Cope with Identified Policy Constraints." Cooperative Agreement on Settlements and Resource Systems Analysis Research Paper, Rural Marketing Centers Working Group, Clark University, January 1984. (65 pp.).

Wilkie, Richard, Barry Lentnek and Thomas Carroll. Urban Dimensions of Rural Development in Ecuador: Progress Report for the Ecuador Project on Rural-Urban Linkages. Rural Marketing Centers Working Group, Clark University, 1983. (137 pp.).

Yapa, Lakshman. "Regional Issues in Strategies for Increasing Rural Employment." Draft paper prepared for the Rural Marketing Centers Working Group, Clark University, June 1984. (36 pp.).

UNRISD Bibliography

Barraclough, Solon. "Effects of the Urban Explosion on Rural Development in Latin America." Paper presented at the First International Social Prospects Week, Geneva, November 1984. (30 pp.).

Barraclough, Solon and Peter Marchetti. "Agrarian Transformation and Food Security in the Carribean Basin." Paper presented at the Institute of Social Studies, the Hague, June 1983. (26 pp. + tables).

Barraclough, Solon. "A Preliminary Analysis of the Nicaraguan Food System." Food Systems Monograph, Food Systems and Society Series, UNRISD, 1982. (133 pp.).

Croll, Elisabeth. "The Family Rice Bowl: Food and the Domestic Economy in China." Food Systems Monograph, Food Systems and Society Series, UNRISD, Geneva, 1982. (372 pp.).

Garcia, Rolando. "'Food Systems and Society': A Conceptual and Methodological Challenge." Food Systems Monograph, Food Systems and Society Series, UNRISD, Geneva, 1984. (73. pp.).

Spitz, Pierre. Food Systems and Society in India: A Draft Interim Report (two volumes). UNRISD, July 1983. (393 pp.).

Spitz, Pierre. "Livelihood and the Food Squeeze." Ceres, Vol. 14, No. 3, May-June 1981, pp. 27-30.

Spitz, Pierre. "Drought and Self-Provisioning." Food Systems and Society Working Paper, UNRISD, Geneva, June 1980 (28 pp.).

Spitz, Pierre. "The Public Granary." Ceres, Vol 12, No. 6, November-December, 1979, pp. 16-19.

Spitz, Pierre. "Right to Food for People and for the People: A Historical Perspective." in Alston, P and K. Tomasevski, eds. The Right to Food. Martinus Nijhoff Publishers, (date ?), pp. 169-186.

APPENDIX A

RURAL/URBAN PRODUCTIVITY AND EMPLOYMENT PROMOTION (RUPEP) Initiative Concept Paper for Discussion Draft 2/8/85 S&T/RD/RRD

The Problem

1. In her recent book, *CITIES AND THE WEALTH OF NATIONS* [1], Jane Jacobs eloquently describes how the transformations associated with the growth of a healthy city economy generate employment, markets, technological improvements, capital, and spinoff enterprises that promote economic development in the surrounding rural areas. She believes that city economies, unfettered, are the primary engines of national economic development.
2. Raanan Weitz, in his landmark book *FROM PEASANT TO FARMER* [2] and elsewhere, details the succession of transformations in the agricultural sector as a consequence of which a rural region passes from subsistence to a modern diversified economic entity with the bulk of employment and income ultimately generated in urban areas. He believes that agriculture is the primary engine of development and the basis for a healthy urbanization process.
3. Jacobs and Weitz are both right. Whether viewed from the rural or the urban perspective, a healthy sustainable development process entails rising rural productivity coupled with expanding and increasingly diversified cities. Proceeding apace, rural and urban development reinforce each other. Rising agricultural productivity can free labor for urban enterprises, expand markets for urban products, create capital for urban investments, provide inputs for urban manufacture, and produce food for growing urban populations. Expanding and increasingly diversified cities can provide employment opportunities for those who leave the farms, markets for rural produce, capital for rural infrastructure, inputs that increase agricultural productivity, and goods and services for rural households.
4. The RUPEP initiative arises from the observation that in many developing countries, particularly the poorest ones, these sorts of rural/urban dynamics are not at work. Instead, accelerating urbanization is associated with lagging agricultural productivity. In the 32 poorest countries, according to the *WORLD DEVELOPMENT REPORT 1984*, while agricultural output was growing at 2.3% annually in the period 1970-1982 (a decline from the previous decade), total population grew at a rate of 2.6% per year, urban population grew at 5.2% per year, and the urban-based industrial sector grew at 4.0% per year (but also a decline from the previous decade) [3].

5. The World Bank's recent report on Sub-Saharan Africa [4] documents declining percapita agricultural output at a time when the urban growth rate in the poor countries of that part of the world is 6.3% per year. The report graphically describes the consequences of this phenomenon, including the drain of rural vigor, the urban squalor, the accelerating demands for imports, the increased dependence on export markets, the heightened economic vulnerability, the diversion of foreign exchange from developmental uses, and a general undermining of the potential for sustained national economic development.

6. Urbanization has tended to concentrate in the largest cities. In ten countries in Sub-Saharan Africa, between 50% and 83% of the urban population lived in the single largest city in 1980, and in another 13 countries the figure was between 30% and 50%. Moreover, the populations of the largest cities in west and southern Africa grew by 94% between 1970 and 1980, and for the largest cities in east and middle Africa the figure was 100% [5]. It is the combination of rural stagnation and massive migration to the largest cities -- associated and mutually reinforcing parts of a single phenomenon -- that gives special urgency to the RUPEP initiative.

7. While the elements contributing to relative rural stagnation in Sub-Saharan Africa are many [6], the absence or weakness of mutually supportive rural/urban relations ranks high among them. It does so both in its own right and as a major facet of other problems. Diversified, extensive, and dynamic rural/urban economic relationships foster healthy regional economies with productive and profitable agricultural sectors, reliable rural markets and distribution systems, and regional urban networks that collect, distribute, process, service, and manufacture consumer and producer goods.

8. When such relationships exist, they tend to be self-sustaining, if not self-promoting: brisk two-way rural/urban trade, for example, creates the climate and conditions conducive to broader trade, commercial services, transportation and communication services, travel, human services, and other dynamic economic linkages; and each of these, in turn, spawns more. The pattern is a familiar one. When such relationships do not exist, the situation tends to be self-perpetuating, if not self-exacerbating, and certainly promotes increasing rural/urban polarization. This pattern is also a familiar one.

9. Many people in Sub-Saharan Africa are moving from the countryside to the cities, especially the largest cities, even though their labor has not been "freed" by rising agricultural productivity nor are urban employment opportunities for them rapidly expanding. A significant proportion of the rural-urban migration is not so much the consequence of rational economic choice in the classical sense as it is the consequence of lack of

choice, a last experiment in a survival strategy of desperation. Without growing rural regional economies the opportunities for survival, much less prosperity, will remain severely limited outside the largest cities, and but an illusion for many who migrate to them.

10. Rural regions grow and develop on a fabric of urban settlements and their overlapping hinterlands sharing among themselves a diversity of mutually supporting functions and dynamic relationships. This fabric is the source of multiple income streams for city and farm families, technology transfer, human resources development, internal income multiplication, capital accumulation, and other elements essential to creating opportunities and encouraging entrepreneurial initiative. Without it there can be little rural regional growth and no sustained development.

11. Looked at from another perspective, major efforts are now justifiably focused on strengthening the export sector in many developing countries. Locational comparative advantage for export industries is often in the largest city. But particularly in Sub-Saharan Africa, investments in the largest cities have had little long-run national developmental benefit. There, the primate cities and their relationships with the rest of the country were often established on the basis of economic rationality from the perspective of a dominating and extractive external economic entity, rather than on the basis of internal economic rationality for the country.

12. For investments in a primate city to have lasting developmental benefits for the country as a whole, they have to ignite and reinforce self-sustaining nationwide developmental dynamics. This would happen if the primate city were part of an integrated and diversified national economy that served healthy domestic as well as export markets; if the primate city were the center of an efficient and dynamic network of urban places and their hinterlands, a node for transmitting and receiving buying and selling impulses, technological innovation, and capital. More often, primate cities in Sub-Saharan Africa function largely as enclave economies, contributing little to employment and productivity beyond their effective perimeters. The absence of extensive, diverse, and dynamic rural/urban economic relationships inhibits integration of the national economy; it impairs the ability of investments in primate cities to serve long-term national economic development objectives and provide greater benefits to the poor throughout the country. Polarization is thus reinforced.

13. Moreover, sustained economic growth in the major cities requires a network of supporting lower-order cities. These lower-order cities thrive in turn on the dynamics of their relationships with the larger cities, with each other, and with the rural areas surrounding them. To achieve growth without extreme vulnerability, stability with dynamic flexibility, expansion with improved human welfare, large cities must be closely tied to smaller cities through a dense and diverse complex of trade and other types of exchange relationships. Any smart investor knows you have to build on known strengths, seek diversified markets and sources of supply, and develop a structure of business relationships close to home.

14. As note [6] implies, this is not to say that rural/urban dynamics represent the problem or the solution. But they are clearly central to the success of most policies, strategies, programs, and projects aimed at achieving sustained development. If the main obstacle to increasing agricultural output in an area is poor soils, for example, attempting to promote a wider array of productive rural/urban relationships is not likely to contribute much. However, a project to introduce new agricultural technologies that will increase production from those soils is also likely to have little effect, and may even be resisted, unless the rural/urban relationships that open up material income-generating opportunities from the new technologies, and that are needed for their maintenance, are in place. Similarly, if there is a desperate need for urban jobs, attempting to generate them only by fostering rural/urban dynamics fails to address the urgency of need. A program to stimulate urban industry may be the chosen answer. If that program is designed so that it as well pioneers rural/urban economic linkages, the new urban jobs and value-added will stimulate expansions in employment and productivity in rural areas as well; and this, in turn, expands markets for urban goods and further helps alleviate urban unemployment.

15. Experience has shown that the kinds of economic relationships through which growth in rural and urban areas each promotes broad productivity and employment gains in the other on a sustained basis cannot generally be installed through development intervention. They must arise naturally and organically, because they are at once a cause and a consequence of development, and because they emerge initially on a base of existing institutions. The challenge is to discover the conditions and activities that stimulate emergence of these relationships through entrepreneurial initiative, and then to account for them in the design of development policies, strategies, programs, and projects.

The Hypothesis

16. The central hypothesis is that given certain minimal necessary conditions in the national and local development environments, interventions can be identified to stimulate and foster key private sector activities that are broadly generative with respect to rural regional development.

17. An associated working hypothesis is that:

- a. the "minimal necessary conditions" often prevail or can be readily achieved if the will to do so is present;
- b. the "interventions" can be accommodated through improved design of current types of development programming rather than radically new types of activities; and
- c. the "key private sector activities" are ones that pioneer a sustained expansion of dynamic rural/urban relationships through which productivity and employment gains are compounded throughout the rural region.

18. With regard to the pioneer private sector activities, a further working hypothesis is that they have the following characteristics, perhaps among others.

- a. They create opportunities for learning and skill development. They will usually involve applying skills and technologies currently found in the region to technologies more advanced (eg., applying carpentry skills to creating a new type of product, or machinery repair.)
- b. They have the potential, in a relatively short time, to precipitate a diversity of other types of private sector activities. This potential to stimulate economic diversification is more important than the potential to be economically viable in the long run.
- c. They rely heavily on local markets and local supplies. If imported supplies are used, the activities will be labor intensive activities.
- d. They are not installed through direct public sector intervention; they arise spontaneously or as an indirect consequence of public sector activities.

- e. They are urban-based. Even if a pioneer activity is made possible by a new crop technology, it will be the urban-based activity that is the pioneer, that will be broadly generative with respect to rural regional development.

19. These hypotheses are suggested by a review of the last decade of experience in S&T/RD/RRD. They are suggested as well by a careful reading of Jacobs ([1] and THE ECONOMY OF CITIES), Weitz ([2] and numerous other publications), Rondinelli [7], Mellor [8], Lipton [9], and Rodale [10]; by a review of studies by IFPRI, UNCRD, UNCHS, ILO, UNRISD, OAS, AID, the Institute of Social Studies, and others [11]; other rural and regional development literature [11]; and the most successful experiences of SBA, HUD, and the U.S. Economic Development Administration [12]. None of these, however, explicitly and completely articulates or addresses these hypotheses, and some might even be surprised to find themselves on this list.

The RUPEP Initiative

20. The objective of the RUPEP initiative is to improve the basis for fostering sustained mutually supportive rural and urban development in rural regions, and in particular to improve AID's policy dialogue and programming capabilities in that regard.

21. This will be accomplished by producing knowledge, analytical tools, and methodological guidance for:

- a. formulating policies that encourage pioneer private sector activities and foster mutually supportive rural and urban development;
- b. meeting the institutional and organizational requisites for determining and implementing such policies and their associated strategies and programs;
- c. designing urban-based programs/projects so that pioneer private sector activities are encouraged and benefits to sustainable rural regional development are maximized; and
- d. designing agricultural and rural development projects so that pioneer private sector activities are encouraged and benefits to sustainable rural regional development are maximized.

22. The knowledge, analytical tools, and methodological guidance will be developed through a combination of literature research, historical case research, field research, and field support activities centered around the central hypothesis and associated working hypotheses. We first need thorough reviews and analyses

of the theoretical, methodological, and case study literature, as well as of relevant AID and other donor projects. This will be supplemented by original research in a number of rural regions to further test, refine, and elaborate the hypotheses, and to draw operational guidance from field experience. The analytical tools developed during the field research will, together with the theoretical knowledge developed, provide the initial basis for field support activities. Knowledge, analytical tools, and methodological guidance will continue to be expanded and refined through field support work.

23. Research centered around the central and working hypotheses needs to be very carefully structured. To do this, a preliminary review of the literature, of relevant AID and other donor projects, and of related current and recent research work of other organizations is needed. Apart from the general guidance to be derived from such a review, it should help answer questions such as these:

- a. What sort of typology of regions should be set up against which to test the hypotheses? By stage of development? Principal resource base? National environment? A combination? What are the indicators of each type?
- b. How can the transition to development-sustaining rural/urban dynamics be recognized?
- c. What would be an appropriate typology of conditions in the local and national development environment? Are the policy, institutional, physical, legal, human resource, natural, social, administrative, and economic environments all part of the relevant local and national development environment?
- d. What would be an appropriate typology of private sector activities?
- e. How can the minimal necessary conditions in the national and local development environment and the key (pioneer) private sector activities be recognized? How can their effects be isolated from others?
- f. How can the critical events or interventions that gave rise to the pioneer activities be recognized? Is there likely a distinction to be made between what is required to stimulate pioneer activity and what is required to sustain and nurture it?

24. Initial research will be global in nature. However, in order to ensure that RUPEP deals in concrete terms with specific circumstances of immediate relevance even as it evolves, special emphasis will be given to Sub-Sahara Africa. This will enable RUPEP to build on considerable past and current RRD field experience, and to lay the groundwork for first field support activities where the urgency of need and the promise of making a significant near-term contribution are the greatest.

Next Steps

25. RUPEP has been launched as an "initiative" toward development of a PID and PP during FY 1986. Some literature review, discussions with other AID units, and exchanges with other organizations have already been undertaken in connection with preparation of this concept paper. The next step is to contract for the preparatory research described in paragraph 21, which will be coordinated with continuing in-house development of the initiative funded through S&T/RD's FSPD and SARSA projects. The preparatory research is expected to be completed in early FY 1986, leaving time for Bureau and Mission reviews and consultations prior to preparation of the PID. The preparatory research is estimated to take 6 months of professional time and cost \$30,000, funded by the Small Activities budget.

NOTES

- [1] Jacobs, Jane. Cities And The Wealth Of Nations: Principles of Economic Life. Random House, New York, 1984.
- [2] Weitz, Raanan. From Peasant to Farmer: A Revolutionary Strategy for Development. Columbia University Press, New York, 1971.
- [3] The World Bank. World Development Report 1984. Oxford University Press, New York, 1984. (Table 2, p.220; Table 19, p.254; Table 22, p.260.)
- [4] The World Bank. "Toward Sustained Development: A Joint Program of Action for Sub-Saharan Africa." The World Bank, Washington, D.C., August 15, 1984.
- [5] Rondinelli, Dennis. "Population Distribution and Economic Development in Africa: The Need for Urbanization Policies." Manuscript prepared for publication in Population Research and Policy Review, January, 1985. (Data compiled from the World Bank's World Development Report 1982 and [1983], and from the U.N.'s Patterns of Urban and Rural Population Growth, 1980.)
- [6] These include lack of arable land; poor soils; water shortages; lack of attention to agricultural development; policies, especially wage, price, and currency policies, that undermine the normal signals and incentives to increase productivity; tribal structures and rivalries; corruption; lack of protection from theft and confiscation; inadequate infrastructure; lack of reliable transportation and distribution systems; severely limited intracontinental cooperation and trade; absence of a vibrant middle class; lack of knowledge of scientific agricultural practices, management, and technologies; export-oriented farming systems; lack of investment capital; lack of skills and services for both human and mechanical maintenance; and an absence of faith in governmental commitment, fairness, and durability essential to encourage investment.
- [7] Numerous publications, but especially: Rondinelli, Dennis. Secondary Cities in Developing Countries. Sage Publications, Beverly Hills, 1983.
- [8] Mellor, John. The Economics of Agricultural Development and The New Economics of Growth: A Strategy for India and the Developing World. Cornell University Press, Ithica, 1966 and 1976 respectively.
- [9] Lipton, Michael. Why Poor People Stay Poor: Urban Bias in World Development. Harvard University Press, Cambridge, 1976.

- [10] In a series of papers that are part of an ongoing exchange between Robert Rodale and Peter McPherson.
- [11] A full bibliography, including these references, is currently in preparation.
- [12] The HUD and EDA reference are particularly with respect to projects undertaken through HUD's Urban Development Action Grant program and EDA's Office of Special Adjustment Assistance.

Drafter: Avrom Bendavid-Val
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