

SPATIAL DISORGANISATION AND INTERNAL MIGRATION IN INDIA: SOME STRATEGIES FOR RESTRUCTURING THE SPACE ECONOMY AND DEVELOPMENT

S. L. Kayastha

Banares Hindu University, Varanasi, India

and

Shekhar Mukherji

Visva Bharati University, Santiniketan, India

Résumé — Dans cette étude on a discuté comment la désorganisation spatiale de l'économie indienne a causé des déplacements massifs des paysans et des travailleurs marginaux des régions chancelantes aux centres exportateurs et aux cités administratives et on a indiqué la forme des choses qui se présenteront en l'an 2001 si la tendance actuelle continue. Quelques-unes des stratégies probables qu'on a suggérées pour la reconstruction de l'économie spatiale et pour le développement économique, comprennent: la réorientation de l'économie spatiale du pays et des liaisons spatiales à ses marchés domestiques internes, des réformes agricoles, une culture coopérative, un développement rural, une création massive d'emplois, une augmentation de la productivité par tête en rehaussant la valeur des produits, une industrialisation rurale, une décentralisation urbaine, une migration restrictive et une répartition plus équitable de revenu, de richesse et des niveaux de consommation parmi les diverses couches de la société.

Abstract — The study discusses how the spatial disorganization of the Indian economy has been inducing massive dislocation of marginalized peasants and labourers from tottering rural areas to exporting centres and primary cities, and indicates the shape of the things to come in the year 2001 if the present trends continue. Some of the probable strategies suggested for restructuring the space economy and for economic development, include: reorientation of the country's spatial-economic structure and spatial linkages to her internal domestic markets; land reforms; cooperative farming; rural development; massive employment generation; raising the per capita productivity by enhancing economic value of products; rural industrialization; urban decentralization; migration-restriction and a more equitable distribution of income; wealth and levels of consumption among various strata of the society.

Key Words — poverty, inequality, migration influencing policies

I. Introduction

The main human problem of inter-regional and rural-to-urban migration in the low-income countries of South and Southeast Asia is that people here are mostly moving from unemployment to under-employment, from one kind of poverty to another, resulting in a colossal waste of human resources and great human misery (see Mukherji, 1976b:78-82; McGee, 1976:30-38; Hugo, 1977:1-10).

Set against this situation, four questions immediately come to mind. First, what are the processes responsible for dislocating populations on such a massive scale? Second, what role do national governments play in accelerating or retarding such processes? Third, what are the migratory responses by which populations react to the impact of these processes? And, finally, what policies can be adopted by national governments in South Asia to control, encourage or mediate in the migratory movements?

This study thus attempts to provide in four parts a brief discussion on the following interrelated themes:

First, a brief description of the processes which underlie the spatial inequalities and spatial disarticulation in India and an analysis of patterns of inter-state and rural-urban migration that have been occurring as passive responses to those limiting conditions;

Second, an analytic design to describe the shape of the things to come in the year 2001 regarding rural-urban migration, urbanization, unemployment, and manpower utilization if India follows different sequences of development;

Third, a critical evaluation of current models of regional development in regard to their applicability, or otherwise, as strategies for subnational developmental planning in India, if the aim is to alleviate spatial disarticulation and to meet the challenge to the future; and

Finally, a discussion of some probable strategies for restructuring the space economy and for economic development of India.

Although this paper makes a specific reference to India, the discussion on migration induced by poverty and spatial disorganization and the suggestions for new strategies for spatial restructuring are fairly general and applicable to a wide range of similarly situated underdeveloped areas.

II. Labour Migration in India: As Spatial Symptom of Underdevelopment and Spatial Disorganization

Unlike in developed economies where migration occurs in association with a qualitative change and a vertical shift in the labour force, labour migration in the low-income countries occurs as a spatial symptom of underdevelopment and regional disarticulation in the space economy. Phenomena of migration and urbanization in the low-income countries can be better understood within this framework. How did the spatial disorganization and spatial disarticulation in an underdeveloped condition, for instance, in India, affect and pattern internal migration?

First, when the country was brought under a colonial administration and came within the fold of the international market system, its economy became export-oriented and a great thrust was given to the cultivation of plantation and cash crops and the extraction of raw materials for export (Dutt, 1903:283-301). The indigenous forms of somewhat stable subsistence economy of the country, which had persisted earlier, was disrupted. As a consequence, huge massive migration of indentured labour occurred from agricultural areas to plantations (tea, coffee, cinchona, jute, rubber, opium, indigo) and mining areas (coal, iron, bauxite, mica). Since the profits were utilized in other sectors and areas, the condition of migrant labourers did not improve much. They were moved from green fields to dark mines. Even today the same kind of export-oriented economy and labour mobility continue.

Secondly, former national spatial structure became increasingly disorganized and was substituted by a new distorted space economy, as induced export-orientation created new ports and foreign enclaves but stunted the growth of old ports and settlements which had served their immediate surrounding in earlier periods. Former indigenous internal trade circuits, which used to integrate the local economy, were severed (Singh, 1968:210-219). Furthermore, as Berry notes (1966:8-9), most of the investments and services were focused only on a few nodes and ports (like Calcutta, Bombay, Delhi, and Madras) which grew very rapidly at the expense of the vast rural countryside and smaller towns. These nodes were imperfectly related to their hinterlands, and consequently stunted their

natural tendencies of development. As a result that still can be seen, millions of labour migrants have been gravitating towards larger cities and ports, which have become the new nodes of production enterprise, bypassing smaller towns and settlements, which have decayed. These processes have maintained regional and rural-urban inequalities within an underdeveloped country, as these foreign enclaves serve more as focal points of collection, rather than as poles of development to diffuse growth impulses to adjoining territories.

Thirdly, even after independence, the overall situation did not improve much and poverty and underdevelopment continue to exist even today, though to a lesser extent. Successive "five-year plans" in India have so far achieved only partial successes to alleviate poverty, underdevelopment, spatial disorganization, and social and economic inequalities. As the Indian planning commission recently observed in the draft version of its sixth five-year plan reports (1978:6): "the percentage of population below the poverty line in 1977-78 may be projected at 48 per cent in rural areas and 41 per cent in urban areas. The total number of the poor so defined would be about 290 million. . . . We have a long way to go to ensure a tolerable standard of living for the large numbers of the poor and the destitute."

Fourthly, there has been a growing realization that ". . . benefits of rapid economic growth, where achieved, have not reached the poor and to some extent, growth has even accentuated their problems" (Bardhan and Srinivasan, 1974:1). As the planning commission observes, "The concentration of economic power has increased, in the sense that, within the corporate sector, the assets of bigger corporations have increased more rapidly. The expansion of large-scale industries has failed to absorb a significant proportion of the increment to the labour force, and led in some cases to a loss of income for the rural poor engaged in cottage industries like textiles, leather, pottery, etc." (Planning commission, 1978:2). It was further found that ". . . evidence of persistence of gross inequalities is clear. Analysis of consumption expenditures shows that in 1973-74 the lowest 20 per cent accounted for 9.5 per cent of total consumption in rural areas, while the highest 20 per cent accounted for 38 per cent. For urban areas the corresponding figures were 9.2 per cent and 40 per cent. . . . The distribution of assets has recently been surveyed comprehensively. For rural household it shows that 20 per cent of households, each having less than 1,000 rupees of assets account for less than one per cent of all rural assets, while four per cent with asset-values of 50,000 rupees or more own over 30 per cent" (Planning commission, 1978:7). There are indications that whatever developmental planning has been attempted has virtually increased the gulf between the rich and the poor. Ad hoc regional development programmes, whenever undertaken, have often increased regional inequalities instead of decreasing them (Misra, Sundaram, and Prakasa Rao, 1974:106-109). In short, unemployment, poverty, inequality, and spatial imbalances have only impelled the labourers to move between one area of stress and another.

Fifthly, in the face of limited availability of land, expanding population has led to fragmentation, the growth of minifundia in agriculture, increasing inequality in land ownership patterns, and consequently, a great rise in the number of refugee migrants. According to an Indian Reserve Bank survey (1972) the concentration ratio of assets (mainly agricultural land) owned by rural households was 0.65 in 1961-62 and increased to 0.66 in 1972. The poorest 10 per cent of rural households owned only 0.1 per cent and the richest 10 per cent owned more than 50 per cent of total assets in 1971-72. This situation of inequality in land ownership, coupled with a lack of distributive justice, maintains the social relations of conflict between owning and non-owning classes, and an exploitation of small peasants and share-croppers by the landlords and proprietary

classes: a situation in which the former groups are increasingly pauperized and marginalized. They are progressively squeezed out of native villages in search of any kind of unskilled work in the cities. But, the cities themselves have no strong economic base and so cannot properly absorb this huge stream of impoverished humanity. Migrants rather join the army of proto-proletariats in the city slums as beggars, vendors, hawkers, rickshawalas, coolies, domestic servants, and prostitutes.

Sixthly, numerous village and town-based small-scale industries, cottage industries and handicrafts, which used to serve their local hinterlands and support the bases of internal integration of settlement hierarchy and territorial systems, are grossly neglected. Consequently, a great number of village artisans, craftsmen, masons, weavers, artists, and skilled operatives are thrown out of their age-old occupations and are virtually forced to join as marginalized agricultural labourers, thus further increasing the already heavy pressure on the meagre amount of cultivable land. But, eventually, they find their way to the dirty city pavements.

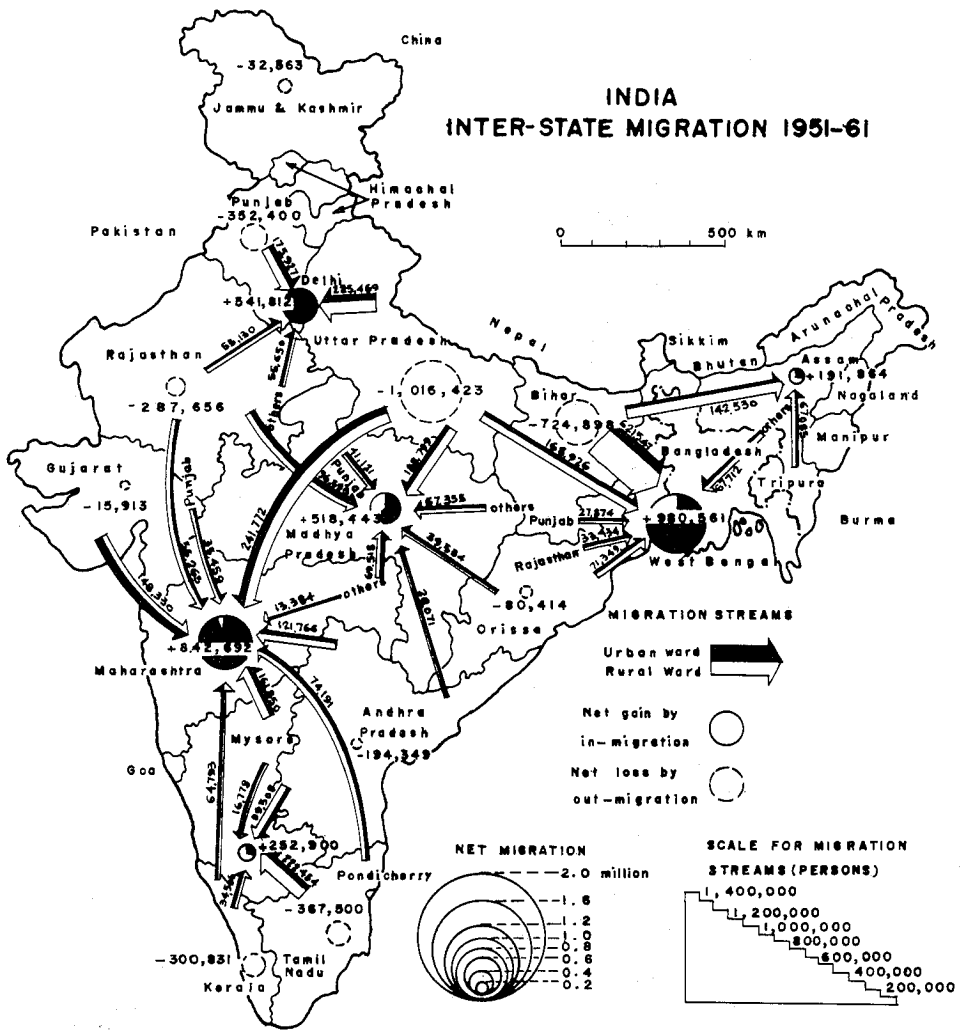
Finally, even after 27 years of planning, the national economy continues to be oriented toward export of raw materials, and railways and roadways continue to be linked and oriented toward ports and former foreign enclaves. The hiatus in settlement or regional hierarchy persists. Trade links still continue to feed exporting centres or primary cities. Investments, industries, and service facilities continue to be concentrated only in a few nodes, ports, and administrative centres (Planning commission, 1967:2-35). Internal trade circuits persist to be weak, undefined, and stultified. Seldom has there been a real and vigorous attempt for rural or community development during all these years of planning, and consequently, poor peasants and labourers have continued to migrate from submarginal rural areas to coastal ports, enclaves, mining areas, plantations, and satellites of primary cities.

III. Patterns of Internal Migration in India

Persistent patterns of migration can easily be seen from maps of inter-state migration in India, during 1951-61, and in 1971 (Figures 1 and 2). Though these two maps are not strictly comparable — the former shows decadal migration during 1951-61 and the latter shows lifetime migration as enumerated on the census date of 1971 — they at least indicate a remarkable similarity and persistence in migration patterns over the two decades (1951-71). It is remarkable that the same type of migration streams which had been occurring in the past from the poor areas of Uttar Pradesh and Bihar to the export centres of Bombay and Calcutta have persisted for decades and continue even today.

Both the maps show that the interior states of Uttar Pradesh and Bihar have been the two main source areas of out-migrants and coastal states of Maharashtra and West Bengal, the two main destinations of in-migrants. In fact, migrants are actually pulled toward the ports of Bombay and Calcutta and their peripheries. Thus, the centrifugal forces exerted by these exporting centres, which was created by the syphoning mechanism in the past, persists even today and prevents the emergence of centripetal forces at the local levels in the interior of the country.

Uttar Pradesh and Bihar remain relatively more depressed and backward. In these states lack of adequate bases of industrial activities, heavy pressure on cultivable land, over-fragmentation of holdings, and the prevalence of drought, flood, unemployment, and under-employment make a depressing tract from which sub-marginalized farmers and labourers try to escape and crowd in relatively industrialized states of Maharashtra and West Bengal, plantations in Assam, and, recently, in areas of higher agricultural productivity of Punjab, Haryana, and Madhya Pradesh. But they move from green fields to



Source:- Census of India, 1961 Migration Tables

FIGURE 1 INDIA
INTER-STATE MIGRATION 1951-61

dark slums, from unemployment to under-employment, from one region of poverty to another. No cold statistics can unravel the poignantly sad story of such involuntary migrants. "Geographic mobility of people" is such an insipid phrase for such an agonizing process!

Imagine — there are "millions of very poor, landless, low castes, hungry, malnourished, illiterate and poverty-stricken peasants and workers, denied of any education, hope, and aspiration for betterment, chained to fatalism, submissiveness, and traditionalism, designedly and deliberately pauperized through centuries of exploitation,

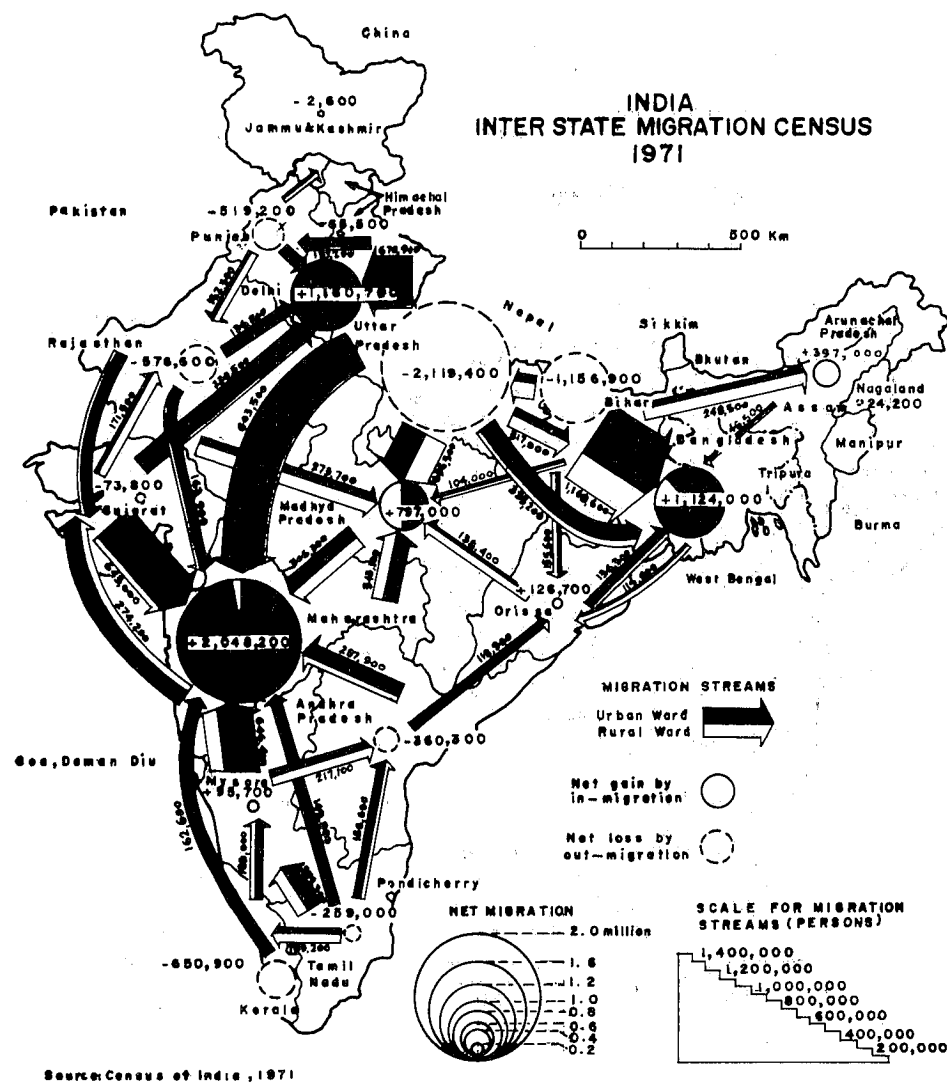


FIGURE 2 INDIA
INTER-STATE MIGRATION CENSUS 1971

colonization and induced underdevelopment and ceaselessly struggling throughout their lives for the barest sustenance. Imagine their emaciated faces, moist eyes and tattered clothes. Only then one would be able to understand the real situation. Indeed, India is a sea of sad faces” (Mukherji, 1976a:226-227).

It is predominantly a migration of young, single, and able-bodied males. While receiving areas gain from such massive migration, the economic consequences of loss to migrant source areas are tremendous. This is an important issue which is rarely investigated. We should, rather, try to develop the rural areas and restrict such draining, so that they may be able to forge the best out of themselves and make the village economy self-sufficient.

Another set of crucial questions which we would have to resolve are: (a) Why the development of subsistence agriculture intended for internal consumption and the exploitation of agricultural potential in certain regions of the interior has proved most difficult and almost impossible? (b) Why is capital, which is so mobile, available for export crops or cash crops and localized in certain regions and not other? And (c) for what reasons manufacturing industries do not go to Uttar Pradesh and Bihar where labour is abundant and why does labour always have to move into areas where capital has decided to install itself and not the other way round? Answers to these queries may lead to "an alternative strategy of greater self-sufficiency and independent development which implies an allocation of resources radically different from that which follows the rules of the market in a dependent country integrated into the international system. The new allocation of resources must provide for the development of areas previously condemned to stagnation" (Amin, 1972:120-121).

IV. Rural-urban Migration, Urban Involution and National Development in India: Shape of Things to Come in the Year 2001

Before we project to the future, let us briefly summarize the past trends of growth in different population components for India. Indian population has been growing very rapidly from 357 million in 1951 to 547 million in 1971, and in spite of some efforts to limit this growth, probably it will pass the billion mark by the year 2001. The natural increase rate was 22.5 per cent during 1961-1971. Unless drastic steps are taken toward fertility control, the population explosion can not be contained within reasonable limits.

The urban population has grown from 62 million in 1951 to 79 million in 1961, and to 109 million in 1971. Although only 19.9 per cent of India's population is urbanized, the magnitude of urban problems is very acute. (This 109 million figure is greater than the total combined population of U.K. and France.) The urban growth rate has been quite high, 37.8 per cent during 1961-1971, though it has slowed down since 1951 (41 per cent during 1941-1951; 39.4 per cent during 1951-1961). During 1961-1971, the urban proportion in India increased by only 1.9 percentage points as compared to 3.5 percentage points in Southeast Asia. Reasons for this are that the rural population has also been growing very rapidly in India (from a base of 295 million in 1951, to 360 million in 1961, to a staggering 438 million in 1971, and the rural-to-urban transfer of people is taking place at a relatively slower rate. Rural-urban migration (RUM) during recent times is as follows: 8.2 million migrated during 1941-51, 5.2 million during 1951-61 (Zachariah and Ambannavar, 1967:95-100); and roughly eight million during 1961-71 (Mukherji, 1978). Though eight million is a large figure, when compared with India's vast rural base even this is not very spectacular. Even then, if the current trends continue, this relatively small RUM may assume grave proportions in the future.

In 1951, the total workforce was 136 million in rural India and 23 million in urban India. These totals increased to 162 million and 26.4 million, respectively, in rural and urban area in 1961, but then decreased to 151.6 million and 32 million in 1971. The decrease was mainly the result of a stricter definition of workers in the latter census. Barring disguised unemployment, the open unemployment was 1.47 million and 1.07 million, respectively, in rural and urban areas in 1951. This has increased to 7.35 million in rural and 3.63 million in urban areas in 1971. These figures are based on registered unemployed. The actual magnitude of open unemployment must be much more.

The non-working adult population, consisting mainly of females, has also been steadily rising; from 39 million in 1951 to 92 million in 1971 (72 million in rural and 20

million in urban areas). Thus, a population roughly equal to that of Japan is adult non-working population in India.

Estimates of peasant and organized (capitalist) sectors in both rural and urban India were arrived at, not conventionally using data on industrial classification, but rather by using National Sample Survey estimates of occupational categories and applying these to the census figure. The majority of the urban capitalist sector and rural peasant sector are easy to indentify, but there are definitional problems regarding the other two sectors. It is assumed that the rural capitalist sector includes wage labourers in plantations, mining, quarrying, and similar wage sectors; and that the urban peasant sector includes all self-employed persons, agricultural workers, vendors, hawkers, indigenous transport workers, petty shopkeepers, low-grade services (domestic servants, etc.) and other workers in informal sectors. Based on such redefinitions and re-calculations, the following surprising tendencies were revealed for 1951-71: (1) the rural peasant sector is persistently large (of total rural workers 90 per cent were in the peasant sector in 1951, but 94 per cent in 1971); (2) growth in the rural capitalist sector has been slow, rather negative (10 per cent in 1951, only 6 per cent in 1971); (3) strangely enough, the urban capitalist (organized) sector is declining (57.5 per cent of total urban workers in 1951, 54 per cent in 1961, and 50.2 per cent in 1971); and (4) paradoxically on the other hand, urban peasant sector is steadily increasing (42.5 per cent in 1951, 46 per cent in 1961, and 49.8 per cent in 1971). A crucial thing to notice here is that, in spite of all five-year plans for rural and urban development, the Indian villages remain stubbornly peasant in character and that the urban peasant sector is ominously on the increase, partly because of overflow of peasant migrants into towns and partly because of urban economic stagnation. Unfortunately, this only confirms one of the central theses of this study.

A characteristic feature of the urban economy in India, and in other underdeveloped countries, is its lack of absorptive capacity. The urban economy maintains most of the people at a minimum level of consumption and wages and keeps absorbing more migrants, but at a still lower level of per capita productivity and consumption. As more and more people migrate to the Third World urban economy, they are absorbed not in the organized secondary sector, but rather in a bazaar-type informal or tertiary sector. In such a situation, increasingly greater numbers of workers perform decreasingly smaller amounts of work, and poverty is shared among them. For instance, if previously one person was selling a pack of cigarettes, more than one person today would be selling them individually. Over time, the town merely becomes a large-sized village and incorporates many of its characteristics and functions, especially a large proportion of poverty-induced tertiary or informal sector. This process is often termed an "urban involution" (McGee, 1971:64-94).

McGee examines the above in the setting of a dynamic model of possible migratory results that could occur in a hypothetical country according to the varying rates of growth of the workforce in the capitalist and peasant sectors in both rural and urban areas over a period of 50 years (1975-2025). His projections were based on two simple assumptions: (a) equal rate of natural increase of workforce between rural and urban areas for 50 years, and (b) a doubling of the workforce every 25 years (McGee, 1976:18-21).

McGee's analytic framework is further elaborated and applied here to the Indian case in order to examine the future possible trends in rural-urban migration, urbanization, unemployment and manpower utilization during 1971-2001 and to estimate variations in them if India follows different paths to development. Instead of dealing with a hypothetical country, here actual time-series data of India for 1951-1971 period were employed in

the calculations of birth rate, death rate, migration rate, trends in urbanization, labour force, employment, unemployment, urban and rural peasant and capitalist sectors, and growth rates in agricultural and industrial production. Projections are also based on different sets of assumptions on all these items and with reference to four different development sequences. These assumptions are listed below:

(a) *Structural setting A* — assumptions:

1. Fertility is being reduced from 39 births per 1,000 in 1971 to 26 births by the year 2001;
2. Continuation of 1951-71 trends in urbanization-migration;
3. Continuation of 1951-71 trends in growth of rural capitalist sector and peasant sector, accompanied by growth of urban capitalist sector at 1.4 per cent annually.

(b) *Structural setting B* — assumptions:

1. Fertility is being reduced to 21 births per 1,000 by the year 2001;
2. Urbanization accelerates from present 20 per cent to 40 per cent of total population by year 2001;
3. National income grows from the present rate of three per cent to seven per cent annually;
4. The urban-rural capitalist sector grows at 3.5 per cent annually.

(c) *Structural setting C* — assumptions:

1. Very slight reduction in fertility;
2. Little change in urbanization (2.25 per cent annually);
3. No change in capitalist/peasant sector of economy;
4. Equal rate of growth of urban-rural work force.

(d) *Structural setting D* — assumption:

1. Fertility reduced to 20.9 births per 1,000 by 2001;
2. Land redistribution policy for the rural poor immediately implemented;
3. Controlled urbanization, increase up to 30 per cent of total population by 2001;
4. Co-operative organization of the economy in both rural and urban areas.

These assumptions can easily be criticized but they are capable of modifications. Figure 3 presents four possible developmental sequences for India during 1971-2001. Table 1 presents summary results of the projections, the details of which are given elsewhere (Mukherji, 1978). There is nothing sacrosanct about these projections. These simply attempt to demonstrate the broad differences in trend patterns if the country follows different sequences of development.

Structural setting A tries to foresee the situation in India in the year 2001 if the past 1951-1971 trends continue in the future in all matters of population explosion, rural-urban migration, urbanization, manpower utilization, and growth in the rural peasant and capitalist sectors. It is further assumed that growth in the urban peasant sector is arrested and is substituted by growth of the urban organized sector at the rate of 1.4 per cent annually. This is a difficult task but not altogether unachievable. Out of 162 million additional workers, a majority (92 million) would have to remain within the peasant rural sector, and only 4 million would be absorbed by the urban peasant sector. There would still have to be an expansion of jobs in the capitalist sectors in urban areas (49 million) and rural areas (17 million). Thus, there would be some improvement in the

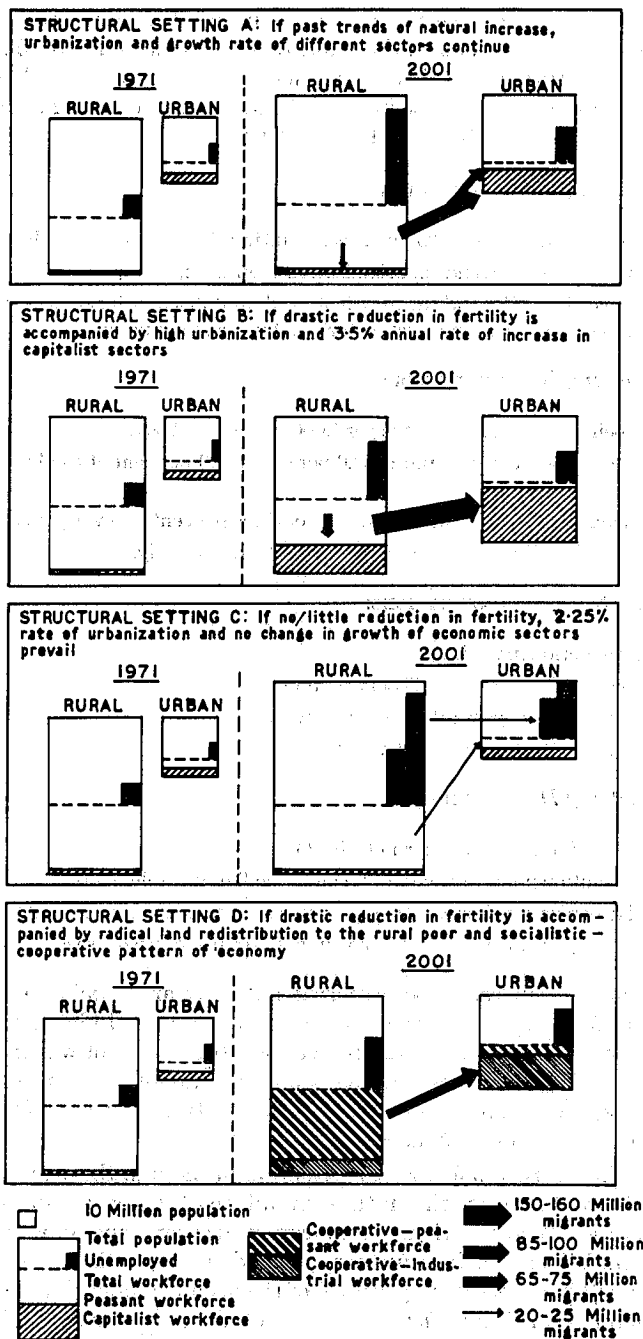


FIGURE 3 DYNAMIC MODEL OF STRUCTURAL SETTINGS OF RURAL-URBAN MIGRATION, URBANIZATION AND NATIONAL DEVELOPMENT, INDIA, 1971-2001

TABLE 1 STRUCTURAL SETTINGS FOR URBANIZATION, RURAL-URBAN MIGRATION AND NATIONAL DEVELOPMENT, INDIA, 1971-2001

Demographic-Economic Characteristics (figures in millions)	Situation in 1971	Structural setting: A by year 2001	Structural setting: B by year 2001	Structural setting: C by year 2001	Structural setting: D by year 2001
1	2	3	4	5	6
1. Total Population	547	945	845	1032	830
2. Rural Population	438	676	505	818	580
3. Urban Population	109	269	340	214	250
4. Birth Rate (per 1000)	38.5	25.7	21.1	30.4	20.9
5. Death Rate (per 1000)	16.0	9.7	9.8	9.7	9.4
6. Natural increase rate	22.5	16.0	11.3	20.7	11.5
7. Total work force	183	345	400	355	400
8. Total dependents	255	372	305	440	290
9. Non-workers	92	158	92	92	92
10. Open unemployment	16.4	70	47	145	48
11. Urban workforce	32	85	150	60	120
12. Peasant workforce	16	20	10	30	30*
13. Capitalist workforce	16	55	150	30	90**
14. Open unemployment	4	20	17	52	20
15. Rural workforce	151	260	240	295	280
16. Peasant workforce	142	234	150	277	225*
17. Capitalist workforce	9	26	90	18	55**
18. Open unemployment	12.4	50	30	93	28
19. Total rural-urban migration during (in 1971-2001)	8.0	89	156	21.7	66.7
20. Rural-urban migration 1991-2001	1961-71)	49	74	11.5	39.6

* Cooperative peasant sector

** Cooperative Industrial sector

volume of migration from rural peasant to urban capitalist sectors but migration from rural peasant to urban peasant would also continue. According to this model, open unemployment would cross 70 million in 2001, most of which would be forced to remain in rural areas (50 million). Total rural-urban migration during the 1971-2001 period would be of a magnitude of 89 million, of which 49 million would have migrated in the 1991-2001 decade alone. Most people will have to be contented with a very low level of per capita consumption in all areas of basic human need.

Structural setting B assumes a drastic reduction in birth rates to half of the present level, accelerated urbanization, and a rapid increase in the growth rate of national income from the present level of three per cent to seven per cent. It further assumes that the rural and urban capitalist sectors will absorb a large proportion of the labour force increase as the urbanization level increases from 20 to 40 per cent. This would mean that 240 million workers would be absorbed in the capitalist sector during the 30-year period, of which a large segment (150 million) would get work in the urban capitalist sector and the rest (90 million) in the rural capitalist sector. This developmental path could only be accomplished with massive industrialization and a very high rate of economic growth. It is very doubtful whether India, under the present circumstances of slow economic growth, can fulfil these requirements and achieve such a structural change as expected in the capitalistic model.

Structural setting C represents a truly depressing situation in which neither the level of urbanization nor the proportion of workers in the various sectors changes over the 30-year period. Total population would have doubled and crossed the billion mark, but the country would still have a predominantly rural character (80 per cent) and unchanged urban proportion (20 per cent). Open unemployment would have reached an alarming total of 145 million, of which 93 million would have to live in rural areas while

urban unemployment would grow to 52 million. Overflow of unemployed persons from rural areas to urban areas would continue and raise the situation to a fearful level. The peasant sector would have to absorb a majority of the labour force. Even then, the capitalist sector would have to provide an additional 23 million jobs in a situation of very limited economic growth. In such a situation there would be little scope for rural-urban migration, only 21.7 million during the entire 30-year period. Since all the economic sectors would be stagnant, people would be forced to remain where they are. Almost no migration would be possible between the rural peasant sector and the urban capitalist sector, and the situation would only allow increasingly circulatory migration between the rural peasant and the urban peasant sectors. Of the three developmental sequences it is possible to suggest that, in all likelihood, the situation described in structural setting C is the one which most closely approaches the late-seventies situation in India.

What can be the way out of all this? Structural setting D may provide a tentative suggestion. It presents a slightly idealized model, for it assumes considerable changes in the ownership of land, capital, and industries. It assumes a drastic reduction in fertility level, accompanied by land redistribution to the rural poor and a co-operative pattern of ownership of the majority of the economic sectors in both the rural and urban areas. The total population of India would be about 830 million by the year 2001, with 30 per cent of the country urbanized, and a much smaller rural population. Land reforms and co-operative farming programmes would have absorbed 225 million in the rural peasant sector (discussed later), and rural industrialization, under co-operative organization, would have provided jobs to another 55 million. Similarly, expansion of the urban organized sector and the urban peasant sector under co-operative management and ownership would provide an additional 88 million jobs. Consequently, rural and urban unemployment would be much less problematic (28 million in rural and 20 million in urban areas) than that in structural settings A or C. The problem of rural-to-urban migration, then, would also be of much less magnitude: only 67 million in setting D as against 156 million in setting B (during 1971-2001 period). More importantly, a structural change in rural-urban migration and a vertical shift in the labour force would also be possible, since in setting D about 65-75 million labourers would migrate from the rural peasant to the urban organized sector. But, all these can only be accomplished if present-day concentrated ownership patterns in land and other means of production are changed considerably and if social and economic inequalities are reduced promptly enough.

The foregoing discussion point toward a need for considerable changes in the planning perspective and strategies. Without these, the country cannot possibly alleviate the great problem of migration induced by poverty and underdevelopment. The planning strategies that may be adopted within the existing economic framework are discussed later. Before that, it is probably worthwhile to examine critically the two main strategies that are often prescribed as panaceas to some of these problems.

V. Critical Evaluation of Current Models and Strategies of Regional Development

Francois Perroux's original growth pole theory was based on the trivial observation that "growth does not appear everywhere at the same time, it manifests itself in points or poles of growth; with variable intensities, it spreads by different channels and with variable terminal effects for the economy as whole" (Perroux, 1955:299). In other words, Perroux is advocating a polarized development.

Later, the theory of growth poles was expanded into a regional development model. The idea of concentrated efforts or investments in focal points of backward areas was in-

troduced, and the growth pole theory was used as an analytical instrument for identifying and choosing such points. Perroux's "theory of polarization" was not, and cannot be, a general theory or model of regional development planning for the underdeveloped countries.

Another theory which dominates the conventional thinking of scholars and planners in both underdeveloped and developed countries is John Friedmann's oft-quoted centre-periphery model of regional development and urbanization (Friedmann, 1966:40-59; 1970:8-21). Let us briefly examine the model's basic assumptions.

With reference to regional policy problems in a newly freed but underdeveloped country, Friedmann has formulated a normative theory based on the assumption that a country must be spatially integrated to develop economically and socially along the axis of national development. This objective can only be achieved, according to Friedmann, by concentrating production, population, and consumption in urban centres (Friedmann, 1970:18-21). Notice that, right from the beginning, Friedmann's model is advocating "polarization" and "diffusion" from polarized centres to underdeveloped regions of those values which benefit only urbanites. We are still led to believe that such a model will help development of poor regions in the "peripheries".

In a recent article, Kongstad (1974:118-121) presented a very useful and critical evaluation of Friedmann's model. Kongstad comments that "even if the periphery continues to be exploited Friedmann seems to believe that a breakdown of the 'system' can be avoided if the intensity of spread of innovation is big enough to counter-balance and surpass the polarization process". Friedmann's paradigm is basically a descriptive, normative theory: therefore, it cannot contribute very much to the development of concrete planning devices in underdeveloped countries.

Recently, a series of studies have been made on growth and development centres, but most of them are based on these two models, or their variations, and as such they do not offer any effective strategies for relieving spatial disorganization.

VI. Probable Strategies for Restructuring the Space Economy and Development

The new perspective focuses on two aspects. First, the problems of spatial inequalities and disorganization — that is, polarization of productive forces only at a few nodes and stagnation of the vast peripheries and of smaller settlements — cannot possibly be changed substantially so long as the economy remains heavily export-oriented, neglecting development of internal markets. Second, the economic and spatial disarticulations and inequalities cannot possibly be relieved without substantially restructuring the present-day concentrations in ownership of means of production and thereby reducing social and economic disparities between various social classes.

We may now briefly suggest, admittedly not comprehensively, the following strategies for restructuring the space economy and for economic development of India.

The first requirement is to re-orient the nation's spatial structure and spatial linkages to its internal domestic market, instead of its being mainly dependent on foreign market relations. This calls for considerable reduction of export of raw materials to the world market, and rather more efforts toward integration of trade relations, commodity, and capital flows and transport and communication links within the national internal circuits. By this, we mean greater efforts be made (1) to reduce excessive dependence, (2) to achieve self-reliance, (3) to expand domestic markets, and (4) to spatially integrate the economy for a self-sustaining development.

In the second place, a fundamental requirement is to make effective land redistribu-

tion to the rural poor. In 1971, the top five per cent of all cultivating households of rural India owned 36 per cent of all cultivable land and the bottom 60 per cent owned only 7.5 per cent (Ministry of Agriculture, 1976:10-64). This situation cannot continue indefinitely without explosive consequences. This will be the prime basis of all other changes. As estimated elsewhere, in India, 57 million acres of surplus land, if redistributed among the rural poor (especially among those who have no land or have less than 2.5 acres per household), will benefit about 230 million labourers and small farmers (Mukherji, 1978). Each of them will have 0.45 acres per capita, or 2.50 acres per household, which is, of course, not large, but would be just barely enough for their survival. Agricultural management studies have also amply shown that if properly utilized and if all agricultural inputs (such as irrigation, chemical fertilizers, pump sets, credits, etc.) are

TABLE 2 AGRICULTURAL GROWTH RATES OF 275 DISTRICTS OF INDIA
CLASSIFIED ACCORDING TO LEVELS OF GINI CONCENTRATION
RATIOS OF LAND OWNERSHIP, 1971

Gini concentration ratio of land ownership (according to Agricultural Census, 1971)	Number of districts	Average agricultural growth rate (average of 1962-65 to 1970-73)
1	2	3
0.360 - 0.385	5	4.16
0.386 - 0.411	4	0.57
0.412 - 0.437	9	-2.07
0.438 - 0.463	12	-0.59
0.464 - 0.489	32	0.83
0.490 - 0.515	38	2.51
0.516 - 0.541	41	2.47
0.542 - 0.567	45	2.32
0.568 - 0.593	36	1.52
0.594 - 0.619	27	1.45
0.620 - 0.645	16	1.24
0.646 - 0.671	10	0.49
Total	275	1.61

equally available to smaller holdings as well, then even a smaller holding of 2.5 acres can produce equally well, or better than, larger holdings of 20-30 acres. However, a land redistribution programme has to be integrated with a scheme for co-operative farming of fragmented holdings and with rural development programmes. Bank credits and all other subsidies or facilities, which have been denied until now, must be made available to them. Without this, the small farmers will not be able to increase productivity, nor to keep land in their own hands. Soon land will slip back into the hands of money-lenders and landlords.

However, it is sometimes argued that land reform would lead to a fall in the agricultural growth rate and productivity, and such measures are dismissed altogether as being radical. In this connection a few facts can be mentioned. First, land reform has been on the agenda of mankind, particularly of India, for a long time, but it has not yet been properly implemented. There is little radical about it. Secondly, as Table 2 demonstrates, higher degrees of inequality in land ownership in India militate against both agricultural growth rates and social equity (Mitra and Mukherji, 1978:101-121).

They have found that the agricultural growth rate progressively decreases (with certain fluctuations) as the Gini concentration ratio of land ownership increases. However, this general inverse relationship is obviated by the presence of 57 districts (belonging to 0.386 to 0.489 Gini ranges), but they are found to lie in the Central Indian hilly and plateau region and are characterized by rocky, infertile soil, inaccessible underground water, and scarce rainfall. Thus, there are indications that more equality in land ownership would ensure accelerated agricultural growth rate as well as augmented agricultural productivity.

Recently, Minhas (1974:65-121) has demonstrated that land reforms, co-operative farming, and integrated rural development programmes (e.g., development of cultivable land on a community basis, land levelling, reconstructing field drains and irrigation channels, etc.) together would not only add considerably to the total amount of land capable of cultivation and to productivity, but would also create jobs for the landless labourers and seasonally unemployed.

Thirdly, greater efforts are required to ensure that raw materials are processed as far as possible within the rural areas, at least in semi-finished form, so that economic values are added to products locally before these are transferred to urban centres for consumption (Mitra, 1977). Certain rural industries and cottage industries (e.g., rice-milling, indigenous sugar processing, oil-pressing, weaving, garment-making, etc.) may be set up (with government subsidies and under co-operative management) at some properly chosen, centrally located villages, each of which has to serve 10 or 20 surrounding villages. At the initial stages, this may be required for an efficient usage of capital. This value-adding process will raise the per capita productivity of rural people, improve their levels of nutrition and consumption of basic needs, and motivate them to work harder as they begin to derive benefits of their work themselves. When more work opportunities would be created within the rural sector, then it would considerably slow down the current tendencies of mass migration of able-bodied young people from rural poverty to urban poverty. This is imperative for migration-influencing planning strategy for India.

Fourthly, strenuous attempts have to be made for achieving as far as possible a more equitable distribution, over the whole national space, of productive forces and units and of means of production, employment, consumption, and investments, as well as of services such as schools, hospitals, vocational training, and all basic amenities of life. That is, an even distribution for all the people over the nation of what we would like to call "per capita civilization". It requires an evening-out of the social and economic

disparities among the social classes and among the regions throughout the country (Slater, 1975:165).

Lack of space does not permit discussions of other strategies necessary for restructuring the space economy. Briefly the suggested changes are required to be accompanied by the following programmes:

1. The fullest possible utilization of the agricultural and industrial resources of all regions (local, micro- and meso-levels) by creating both producer-goods and consumer-goods industries.
2. Articulating more productive links between industry and agriculture and between towns and villages through industrialization of agriculture, creating a new division of agricultural labour and transferring a part of them to industrial crop-growing, agro-industries, and small-scale industries, and raising their skills levels through short but effective training.
3. Working out a balance between production and consumption at all levels, both regional and social, by developing each small region's productive base according to its potential and basic human needs.
4. Developing inter-regional economic bonds, through proper extension and re-orientation of transport and communication links and forging mutually beneficial inter-local and inter-regional trade links.

VII. Conclusion

This study has discussed the problems of people's mobility that are induced by poverty, underdevelopment, and spatial disorganization of the economy, with special reference to India. It has also sought to outline some probable measures to alleviate some of the problems. The paper has attempted to show that for India's economic development a major requirement is to reorient the country's spatial-economic structure and spatial linkages to her internal domestic market. Unless and until this is done, there could be little possibility of relieving its spatial disorganization and underdevelopment.

By this it is meant: (1) that as far as possible raw materials should be exported only after being processed within the underdeveloped country, a step which would increase the economic value added to products and would also benefit people within the country; (2) that to the largest possible extent economic value should be added to products locally before raw materials are transferred from the rural areas or small towns to central places for consumption; (3) that as far as possible a path of self-reliance, rather than dependence, be pursued; (4) that ports, settlements, resource use, railway links, trade links, credit services, etc., be reoriented, not so much to export promotion, but to the creation and expansion of domestic market; (5) that this expansion of internal markets presupposes speedy progress in agriculture and raising rural people's per capita savings, investment and consumption levels; (6) that such progress may possibly come by mobilization of rural masses and mass employment generation which, in turn, may be achieved by changing substantially the present accentuated patterns in ownership of means of production, income, and wealth; and (7) finally, that this may possibly be actualized within a co-operative system which is able to arouse the necessary collective enthusiasm.

References

- Amin, Samir (ed.). 1972. *Modern Migration in Western Africa*. Oxford: Oxford Publishing House.
- Bardhan, P. K. and T. N. Srinivasan (eds.). 1974. *Poverty and Income Distribution in India*. Calcutta: Statistical Publishing Society.

- Berry, Brian J. L. 1966. *Essays on Commodity Flow and the Spatial Structure of the Indian Economy*. Research Paper III. Chicago: University of Chicago.
- Dutt, R. C. 1903. *Economic History of India in the Victorian Age*. London: Allen and Unwin.
- Friedmann, John. 1966. *Regional Development Policy — A Case of Study of Venezuela*. Cambridge; Massachusetts Institute of Technology.
- . 1970. *Towards a National Urbanization Policy: Problems, Decisions, and Consequences* (a conference paper):18-21. Copenhagen.
- Hugo, Graeme J. 1977. *Commuting, Circulation and Migration in West Java* (a conference paper):1-41. Honolulu: East-West Population Institute.
- India, government of. 1976. *Agricultural Census of India 1971*. New Delhi: Ministry of Agriculture.
- . Hazari, R. K. 1967. *Industrial Planning and Licensing Policy*. Volume 5. New Delhi: Planning commission.
- . 1978. *Draft five-year plan, 1978-83*. Volume I. New Delhi: Planning commission.
- India, Reserve Bank of. 1972. *All-India Debt and Investment Survey, 1971-72*. New Delhi.
- Kongstad, Per. 1974. *Growth Poles and Urbanization: A Critique of Perroux and Friedmann*. *Antipode* 6:118-121.
- McGee, T. G. 1971. *The Urbanization Process in the Third World: Exploration in Search of a Theory*. London: Bell and Sons.
- . 1976. *Rural-Urban Mobility in South and Southeast Asia. Different Formulations . . . Different Answers? A Paper Presented at a Seminar on Human Migration: Patterns, Implications and Policies*. Bethesda: Midwest Council of the American Academy of Arts and Sciences.
- Minhas, B. S. 1974. *Planning and the Poor*. Delhi: S. Chand.
- Misra, R. P., K. V. Sundaram and V.L.S. Prakasa Rao. 1974. *Regional Development Planning in India: A New Strategy*. New Delhi: Vikash Publishing House.
- Mitra, Asok. 1977. *Personal Communication*. Centre for Regional Development Studies. Jawaharlal Nehru University. New Delhi.
- , and Shekhar Mukherji. 1978. *Population, Food and Land Inequality in India, 1971: A Geography of Hunger and Insecurity*. An Indian Council of Social Science Research Publication. New Delhi: Allied Publishers.
- Mukherji, Shekhar. 1976a. *The Mobility Field Theory of Human Spatial Behaviour: A Behavioural Approach to the Study of Migration and Circulation in the Indian Situation*. Doctoral Dissertation. Department of Geography. Honolulu: University of Hawaii. Ann Arbor: Xerox University Microfilms.
- . 1976b. *A Field Theory of Movement Behaviour: A Pathway to Micro-Macro Generalizations for Migration Planning in Underdeveloped Countries*. In Yuri Kozlov (ed.), *Population at Micro Scale*. Moscow: USSR Academy of Sciences.
- . 1978. *Spatial Disorganization, Labour Migration, and Planning Strategies in India*. An Indian Council of Social Science Research Publication. New Delhi.
- Perroux, Francois. 1955. *Sur la notion de Pole de Croissance*. *Economic Applique*. January-June:299.
- Singh, K. N. 1968. *The Territorial Basis of Medieval Town and Villages in Eastern Uttar Pradesh, India*. *Annals of the Association of American Geographers* 58:210-219.
- Slater, David. 1975. *Underdevelopment and Spatial Inequality: Approaches to the Problems of Regional Planning in the Third World*. *Progress in Planning* 4(2):165.
- Zachariah, K. C. and J. P. Ambannavar. 1967. *Population Redistribution in India: Inter-State and Rural-Urban*. In Ashish Bose (ed.), *Patterns of Population Change in India*. New Delhi: Hind Publishers.

Received October, 1977; revised October, 1978.