

## **LOW QUALITY MIGRATION IN INDIA : THE PHENOMENA OF DISTRESSED MIGRATION AND ACUTE URBAN DECAY**

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### **Introduction**

The large metropolitan cities are growing very rapidly in India, unfortunately with slum growing many times faster. Poverty, agony, misery, exploitation, humiliation, insecurity, inequalities, and human unhappiness are also multiplying tremendously in the recent decades. These are indeed manifestations of our iniquitous society and faulty planning. These crucial problems will aggravate many times in the early part of the next century, specially when aided by population explosion and increasing migration. These crucial human problems need our urgent attention and immediate redress. This is the main concern of this study .

### **Four Objectives**

**1. Distressed Migration and Urban Decay in India:** First objective of this paper is to unfold true nature of migration and urbanization that are occurring in India. It is mainly a tale of massive poverty-induced migration of illiterate and unskilled peasants into Mega cities and large metropolises, who are compelled to migrate to such metropolises, and absorbed in poor urban informal sectors. They somehow eke out their miserable living in urban slums. Thus, it is primarily a very low quality migration. It also leads to low quality urbanization and acute urban degradation.

**2. Linkages between Migration, Urbanization and Regional Disparities in India :** These aspects are further analyzed with 1991 census's district-level migration data, migration to cities, and data on levels of regional disparities. Such analyses are made at different levels: (1) Four Mega city level, (2) District level, (3) State level, (4) 22 Million city level , and (5) 40 Class I city level. Findings from such sets of analyses further highlight on the above aspects of distressed migration and low quality urbanization in India.

**3. Explanation of Underlying Socio-economic and Spatial Processes:** Underlying spatial and socio-economic-political processes of poverty and underdevelopment are also very briefly discussed.

**4.Planning Strategies:** Finally, planning strategies are recommended to ameliorate problems of such poverty-induced migration and urban involution in India.

### **Part I**

#### **Distressed Migration and Urban Crisis in India**

##### **1. Poverty-Induced Migration and Crucial Urban Crisis**

Crucial problems of massive distressed migration of people from villages to metropolises and problems of unbalanced urbanization and extreme urban decay in India call forth urgent attention of scholars, administrators, and planners for immediate remedies, before such maladies reach a catastrophe. Based on earlier studies on problems of migration, urbanization, poverty, underdevelopment (Mukherji, 1975, 10-345; 1977; 1979a; 1979b; 1981; 1985a; 1985b; 1991; 1992a, 1992b, and 1997), the complex scenario are described as follows .

First, masses of the poor, landless, illiterate and unskilled agricultural laborers and petty farmers from backward states of such countries make quantum jumps towards big metropolises like Calcutta, Bombay, Delhi, Madras, and so forth, bypassing local small towns and small cities -- which fail to give them even minimum employment. Such massive rural to metropolitan migration of distressed people is a typical characteristic of migration in India, which is leading to acute urban involution, congestion and decay. Proliferation of filthy urban slums and pavement dwelling, extreme squalor and very poor level of living characterize such metros. Because such metropolises have failed to provide to migrants and residents with minimum shelter and minimum subsistence employment. Overflow of urban poverty, unemployment, extreme housing shortages, and frequent breakdowns of essential urban services (like water, electricity, sewerage, transport) are visible everywhere in such metropolises (Mukherji, 1977, 1-42), (Ministry of Urban Development, New Delhi, 1988).

Secondly, such phenomena are occurring because the metropolises of many such countries have very limited employment-generating capacity under capital-intensive industrialization, and consequently, the incoming illiterate and unskilled migrants are absorbed only in very poorly paid urban informal sectors; that are characterized by low productivity, cut-throat competition, insecurity and exploitation. Although such migration helps to avoid starvation (hence desirable), it does not improve their economic condition adequately, nor permits their social mobility. Rather, it leads to a colossal waste of human resources and of national potential. So the migrants are in fact moving from rural poverty to urban poverty (Mukherji, 1981, 10-150; NIUA, 1988, pp.66-67).

Thirdly, as a result, such metropolises also became very much involuted, not evolved; i.e., they grew merely in population, not in prosperity. Mega cities (which will have 10 million population by 2000) of India are becoming merely over-blown villages, without urban culture and urban functional characteristics.

Fourthly, such Mega cities are very fast degenerating into extreme filth and undescrivable qualor; where very rude denial of even minimum shelter to the illiterate and unskilled migrants from pauperized villages to their metropolitan El-Dorado, and consequently, their below-human-dignity-level existence in filthy slums has been further aggravated by very cruel denial of even minimum water, sanitation and electricity. These are indeed very cruel mega cities, specially for poor children, women, the weak, the poor, the old, and the destitute.

Fifthly, such metropolises are very fast becoming the scenes of extreme social and economic inequalities wherein abundant affluence among a handful few stand hanging and over-looking abject poverty among the masses down below. These kinds of situations may create a dangerously eruptive situation -- which is conducive to unleash in the near future extreme social disorder, severe class conflict, crimes, widespread violence and urban civil war. These situations urgently warrant immediate plans of action.

## **2. Acute Urban Environmental Degradation**

First, due to uncontrolled urbanization in India, environmental degradation has been occurring very rapidly and causes acute shortages of housing, worsening water quality, excessive air pollution, noise dust and heat, and the problems of disposal of solid wastes and hazardous wastes. Brief discussion of these problems are presented below. .

Second, as regards housing situation, due to heavy migration to cities and high urban fertility, housing shortages have been very acutely increasing and leading to proliferation of squatter settlements, shanty towns, stinking slums, and pavement dwellers. Presently, slum dwellers comprise about 30-60 per cent of total urban population with very poor housing conditions. For instance, Bombay has more than 50 % of population as slum dwellers, and Calcutta (43%) and Delhi (30%) follow the suit. Madras also has 2 million slum dwellers, followed by Ahmedabad (1.13 million), Hyderabad (1.1 million), Bangalore (1.03 million), Kanpur (0.8 million) and Pune (0.5 million). Providing housing to such teeming million is a formidable task, especially in the face of stringent financial shortages. In fact, preciously very insignificant attempt has so far been made to provide any kind of housing to these urban poor and the slum dwellers.

Third, as one recent survey-based study of migrants to Greater Bombay has revealed (Mukherji, 1991: 10-24), a majority of all migrants have moved to the metropolis just for survival (61.5 percent) -- just to eke out some kind

of miserable living in their Urban El-dorado -- by performing very low grade and low waged services in the poor urban informal sectors (such as domestic servants, hawkers, vendors, maid-servants, shoe-shine, road construction labourers, and so forth); followed by marriage migration (28.2 percent) and the remaining very few (less than 10 per cent) actually moved for prospect, business, transfer, or moved for seeking or getting any skilled job. The wretched socio-economic conditions of these migrants may be apparent from the following facts: (a) 48.3 percent live in only one room; (b) 57.5 per cent have no toilet facility; (c) 36.1 per cent are denied water facility; (d) 44 per cent live in *Kutchha* or *semi-pucca* houses (mud-walled or rag-roofed shanty/junk houses); (e) 32.0 per cent used gunny bag, straw, tin sheets, or mud as wall materials for their houses; and (f) 45.2 per cent used similar things for roof materials in their houses. Their such pitiable condition must be judged with reference to their long duration of stay in the metropolis (37 % lived below 10 years), 29 % lived 10-19 years, and 34% lived more than 20 years in the city). In sum, even after a long duration of stay in their El dorado, their wretched socio-economic condition did not improve substantially.

## **Nature of Low Quality Migration in Indian Mega Cities**

### **3. Occupational Status of Migrants**

The majority of the migrants are absorbed in low grade and low productivity work in the mega cities. This can be evidenced from accompanying Table 1. As the accompanying table shows, the majority of the migrants in four largest metropolises of India are not absorbed in professional or administrative or even clerical work; they are indeed absorbed in very low grade production processing work (categories no 7-8-9). The masses of illiterate and unskilled labour migrants have no other alternatives, but somehow to eke out their dismal living in urban centers by performing odd jobs, or performing petty sales or service work. The situation of women migrants are further dismal. If these are the situation of the incoming migrants into the Mega cities, then the more pitiable condition of the migrants in smaller cities can be easily understood.

### **4. Educational Status of Migrants in Indian Metros**

Table 2 vividly presents the nature of low quality migration that have been occurring in India, specially towards largest metropolises, even according to 1991 census. The majority of the migrants are illiterate or semi-literate peasants and laborers who are virtually compelled to move from stagnant villages and countryside and crowd into the Indian Mega cities in order to somehow eke out their miserable living in their Urban El-Dorados. They are forced to live villages because of lack of any employment opportunities there. But the mega city also failed to provide them with adequate employment, because of limited job opportunities created, due to capital intensive industrialization. so these masses of incoming migrants are compelled to take up whatever employment absorption is available to them in the Bazaar economy or urban informal sector, where wages are very low, productivity very low grade and insecurity and cut-throat competition prevail.

**Table 1: Occupational status of Migrants in Four Largest Metros, 1991 census**

%MIGRANT WORKERS (OTHER THAN CULTIVATORS AND AGRICULTURAL LABOURERS) REPORTING 'EMPLOYMENT' AS REASON FOR MIGRATION BY DURATION OF RESIDENCE, EDUCATIONAL LEVEL, OCCUPATIONAL DIVISION AND SEX

Educational Level	YEARS				Div 1		Div.2		Div.3		Div.4		Div.5		Div.6		Div.7-8-9		Div.10	
	M	F	M%	F%	Professional workers etc		Administrative workers, etc		Clerical workers		Sales workers		Service workers		Farmers & related workers		Production workers		Unclassified Workers	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>BOMBAY</b>																				
Total	237093	14088	100.00	100.00	5.70	21.04	3.27	1.46	10.55	17.04	10.83	2.31	13.50	32.73	0.39	0.20	55.06	24.08	0.68	1.14
Illiterate	38818	4078	16.37	28.95	0.07	0.32	0.09	0.03	0.01	0.00	1.71	0.74	3.16	13.80	0.15	0.14	10.92	13.56	0.26	0.35
Literate but below matric*	96392	3601	40.66	25.56	0.56	0.99	0.38	0.12	1.86	0.94	5.00	0.55	6.88	16.78	0.18	0.04	25.61	6.00	0.18	0.14
Matric but not graduate	68877	3066	29.05	21.76	1.04	7.57	0.76	0.27	4.58	7.71	3.22	0.62	2.98	1.56	0.05	0.01	16.25	3.90	0.16	0.13
Tech dip, not degree	4655	753	1.96	5.34	0.83	4.78	0.13	0.03	0.18	0.25	0.07	0.03	0.03	0.12	0.00	0.00	0.72	0.13	0.01	0.01
Grad/PG, not tech degree	22655	2008	9.56	14.25	1.69	3.73	1.56	0.92	3.70	7.89	0.75	0.33	0.43	0.46	0.01	0.01	1.35	0.42	0.06	0.48
grad/PG	5696	582	2.40	4.13	1.50	3.64	0.36	0.09	0.22	0.26	0.08	0.04	0.03	0.01	0.00	0.00	0.20	0.07	0.01	0.02
<b>CALCUTTA</b>																				
Total	58411	7643	100.00	100.00	5.99	10.26	3.40	0.50	13.52	4.81	8.13	0.84	17.77	58.30	0.59	0.09	48.31	24.09	2.29	1.11
Illiterate	15545	4846	26.61	63.40	0.05	0.10	0.07	0.05	0.03	0.00	1.91	0.33	4.15	40.56	0.24	0.07	19.58	21.37	0.57	0.93
Literate but below matric*	20824	1572	35.65	20.57	0.48	0.68	0.30	0.01	2.31	0.89	3.56	0.26	7.86	16.51	0.24	0.01	20.46	2.08	0.43	0.12
Matric, not graduate**	10714	524	18.34	6.86	0.79	3.90	0.42	0.04	4.24	1.52	1.68	0.13	4.42	0.85	0.05	0.01	5.81	0.39	0.94	0.01
Tech dip, not degree	498	65	0.85	0.85	0.37	0.81	0.04	0.01	0.10	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.27	0.01	0.03	0.00
Grad/PG, not tech degree	9224	498	15.79	6.52	2.52	3.13	2.13	0.35	6.58	2.32	0.91	0.10	1.32	0.35	0.03	0.00	2.02	0.22	0.28	0.04
Tech deg, equal to Grad/PG	1606	138	2.75	1.81	1.77	1.64	0.43	0.03	0.26	0.09	0.05	0.01	0.02	0.01	0.01	0.00	0.18	0.01	0.03	0.01

Educational Level	YEARS				Div.0-1		Div.2		Div.3		Div.4		Div.5		Div.6		Div.7-8-9		Div.10	
	M	F	M%	F%	Professional workers		Administrative workers		Clerical workers		Sales workers		Service workers		Farmers & related workers		Production workers		Unclassified workers	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>DELHI</b>																				
Total	213695	8907	100.00	100.00	6.52	23.89	4.66	3.31	10.54	16.77	11.88	2.87	14.15	32.83	0.56	0.13	49.88	18.83	1.81	1.36
Illiterate	59403	3020	27.80	33.91	0.11	0.15	0.14	0.09	0.01	0.00	3.28	1.06	4.37	19.64	0.25	0.09	18.97	11.98	0.67	0.91
Literate but below matric*	65931	1391	30.85	15.62	0.49	1.11	0.28	0.09	1.67	0.68	4.07	0.48	5.51	10.46	0.18	0.02	18.29	2.63	0.36	0.13
Matric,not graduate**	52667	1833	24.65	20.58	1.03	6.98	0.57	0.31	4.48	6.53	3.36	0.74	3.64	2.34	0.12	0.01	10.98	3.54	0.48	0.12
Tech dip, not degree	2494	492	1.17	5.52	0.57	5.07	0.12	0.03	0.14	0.21	0.06	0.03	0.02	0.01	0.00	0.00	0.25	0.15	0.01	0.01
Grad/PG,not tech degree	27086	1643	12.68	18.45	2.59	5.59	2.86	2.50	4.03	8.84	1.06	0.53	0.58	0.36	0.01	0.01	1.30	0.48	0.23	0.13
grad/PG	6114	528	2.86	5.93	1.73	4.98	0.69	0.28	0.20	0.51	0.06	0.03	0.03	0.02	0.00	0.00	0.09	0.06	0.06	0.04
<b>MADRAS</b>																				
Total	73263	6094	100.00	100.00	11.71	28.65	10.34	3.30	12.65	19.30	13.84	3.46	9.74	16.92	0.51	0.15	40.71	27.78	0.52	0.44
Illiterate	6396	1463	8.73	24.01	0.06	0.18	0.08	0.02	0.00	0.02	1.00	0.89	1.23	8.20	0.14	0.05	6.01	14.42	0.20	0.23
Literate but below matric*	23838	1065	32.54	17.48	0.77	1.41	1.39	0.13	1.20	0.59	6.94	1.05	4.65	6.83	0.24	0.10	17.24	7.35	0.12	0.02
Matric, but not grad	22178	1618	30.27	26.55	2.11	11.01	2.16	0.57	5.55	7.58	4.16	1.08	3.18	1.43	0.08	0.00	12.92	4.79	0.11	0.08
Tech dip, not degree	3805	175	5.19	2.87	1.79	1.67	0.42	0.13	0.39	0.44	0.20	0.02	0.04	0.03	0.01	0.00	2.32	0.53	0.02	0.05
Grad/PG, not tech degree	13170	1227	17.98	20.13	3.65	6.55	5.14	2.18	5.22	9.98	1.37	0.41	0.61	0.41	0.02	0.00	1.91	0.57	0.05	0.03
Grad/PG	3876	546	5.29	8.96	3.34	7.83	1.16	0.26	0.28	0.69	0.15	0.02	0.02	0.02	0.02	0.00	0.32	0.11	0.01	0.03

**Table 2: Educational Status of Migrants in Indian Metropolises , 1991 Census**

Metros	Last Residence	All Duration of Residence						Duration of residence < 1 year					
		No. of Migrants		Literate (%)		Illiterate (%)		No of Migrants		Literate (%)		Illiterate(%)	
		M	F	M	F	M	F	M	F	M	F	M	F
Bombay	Total	2116093	1563081	81.9	61.6	18.9	38.3	34690	33920	59.2	49.5	40.8	50.5
	Rural	1494013	1021390	80.0	55.5	19.9	44.5	23400	22710	57.2	42.5	42.8	59.4
	Urban	575380	541691	83.6	72.4	16.4	27.6	9780	10250	61.9	63.7	38.0	36.3
Calcutta	Total	5476221	12394560	66.3	38.5	33.7	61.5	148775	174288	45.7	39.2	54.3	60.8
	Rural	3146415	9866287	61.6	34.9	38.3	65.1	105230	131718	42.1	36.9	57.9	63.1
	Urban	836497	1197378	77.8	66.0	22.2	34.2	26265	27570	55.6	55.0	44.4	45.0
New Delhi	Total	2002615	1415675	73.5	63.4	26.5	36.4	81202	60170	57.2	46.4	42.8	53.6
	Rural	1064666	824574	67.9	37.4	32.1	62.5	48283	32180	49.1	31.2	50.9	68.8
	Urban	768297	754845	78.4	65.7	21.6	34.3	29024	25577	68.7	63.9	31.3	36.1
Metros	Last Residence	Duration of Residence 1-4 years						Duration of residence over 5 years					
		No. of Migrants		Literate (%)		Illiterate (%)		No of Migrants		Literate (%)		Illiterate(%)	
		M	F	M	F	M	F	M	F	M	F	M	F
Bombay	Total	291664	249171	70.2	55.5	29.9	44.5	1638109	1187930	83.9	63.4	16.0	36.5
	Rural	212614	168110	69.9	50.3	30.1	49.7	1160929	752500	82.8	42.8	17.2	57.2
	Urban	74100	77841	71.2	66.7	28.8	33.3	441890	404670	86.7	74.3	13.2	25.7
Calcutta	Total	810217	1783453	61.3	47.8	38.7	52.2	3969756	9862824	68.8	36.6	31.2	63.4
	Rural	533048	1438591	58.3	45.4	41.7	54.6	2132350	7860075	64.2	32.8	35.8	37.2
	Urban	162090	225300	71.3	67.1	28.7	32.9	569995	873333	82.3	66.4	17.7	33.6
New Delhi	Total	439965	363626	69.2	55.6	30.8	44.4	1447943	1271715	75.8	51.7	24.2	48.3
	Rural	245419	181047	65.2	47.5	34.8	56.5	756023	600634	70.1	36.1	29.9	63.9
	Urban	179272	172767	74.6	68.1	25.4	31.8	546918	545951	80.4	65.2	19.6	34.8

# CONCEPTUAL AND ANALYTICAL DESIGN *Canonical Model*

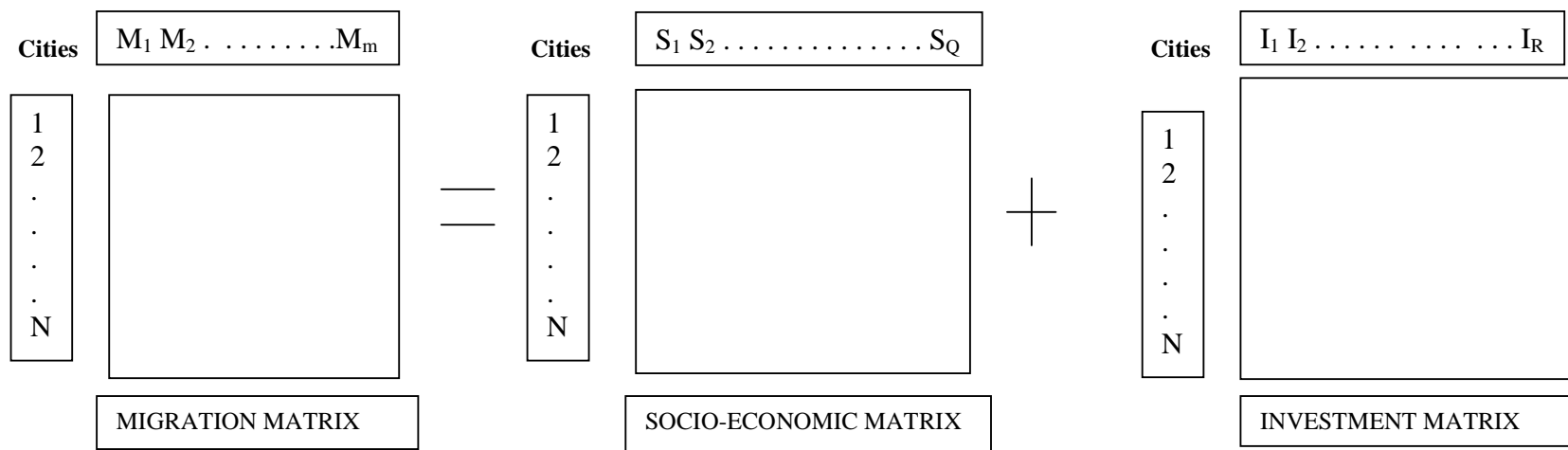


Fig. 1

## **Part II**

### **Results of Factor and Canonical Analysis of Migration, Urbanization and Regional Disparities**

#### **Analytic Methodology of Factor-Cum Canonical Model**

A new and novel methodological technique has been developed and utilized in this study, which involves utilization of factor analysis-cum-canonical analysis in the study of migration-urbanization-disparities. A series of canonical analyses were made, at each of the above domains. The causal relationships between volume and patterns of migration, urbanization, and of regional development were analyzed, at each of these domains of research: districts, states, class I city and million city levels.

A series of high powered factor analyses and Canonical linkage analysis were made between : (a) Volume and patterns of migration (as the Dependent matrix), and (b) Economic Structure of districts (or states or cities/metropolises), cum (c) Growth efforts or investments made therein (as combination of Independent matrices); and, each time, a series of final canonical linkage equations were generated, linking each time, a specific pattern(s) of migration, with a specific pattern(s) of economic structure-cum-investment pattern(s). These canonical linkages are not only statistically very powerful, but are also found to be practically very meaningful. They have generated very many useful planning directives for reducing poverty induced migration, querulous urbanization and acute regional disparities that adversely affect the economy of India. Hence, this research monograph offers both new methodological pathways in population studies, as well as offer substantive findings for migration-urbanization research and for alleviating human problems associated with low quality migration and urban decay that are occurring in India.

#### **CANONICAL MODEL**

Developed by Hotelling (1936 : 321-377), canonical analysis basically elicits the maximum correlation between linear functions of two sets of variables describing the same subject(s). Given the two sets of data on migration behaviour between regions and socio-economic structure of those regions, canonical analysis may yield answers to two related basic research questions (Phillip, 1973):

(1) What is the overall general relationship between migration behaviour in the one hand and the socio-economic structure of spatial regions, on the other ? and

(2) Given this overall general relationship, what are the underlying casual relationships between specific combination of migration behaviour variables and specific combinations of socio-economic structure variables of regions ?

What canonical analysis does is to delineate independent patterns in two sets of data in such a way as to ascertain maximum inter-relationships between the new sets of patterns or dimensions. Just as factor analysis separates out distinct clusters of variables that vary together over a set of observations, canonical analysis uncovers clusters of patterns in two sets of observations or matrices by maximizing the correlation between linear combinations of variables (Cooley and Lohnes, 1962, pp. 35-45). Details are presented elsewhere (Mukherji, 1975, pp 65-278; 1979, 20-65; 1983, 32-140). Such combinations of factors or patterns delineated in each set are independent of other patterns in the same matrix, but each is maximally correlated with a specific patterns found in the other matrix. Simultaneously, each pattern in the original matrix is independent of all but one pattern in the second matrix (Berry, 1966, 21-31). Detailed analytic technique of canonical model are elaborated in successive studies made by the present author (Mukherji, 1980, 1983, 1985, 1987, 1989; 1992(a), 1992(b)). In such studies, canonical models have also been successfully employed by taking three data matrices simultaneously, which was not done originally by Hotelling : that is, by taking one as the dependent matrix, and the combination of the other two matrices as the independent matrix. By its very nature, canonical analysis delineates a set of solutions or variates which will be as large as there are independent patterns in both the data matrices, usually as many as there are variables (or factors) in the smaller of the two matrices.

Thus, the main difference between regression analysis and cononical analysis is that in the latter both multiple dependent variables and multiple predictor variables are involved. In regression, a multiple coefficient of correlation (R)



measures the strength of the relationship between one dependent and a number of independent variables; but by comparison, in canonical analysis **a series of canonical correlations (rho's)** specify the degree of inter-dependencies or causal inter-relationships between different matched pairs of dependent and independent sets of variables, and, instead of one, a set of canonical correlations are derived. Canonical analysis provides a much higher level analysis than that of regression or simultaneous equations, as they can handle only one dependent variable, not a whole matrix of dependent variables; and can generate only one single solution at a time, not a series of **independent** solutions, as canonical model does. Thus, in short, successive iterations linearly recombines both sets of variables (or factors) in order to uncover newer combinations, which maximizes the remaining variables. .

### **Application of Canonical Model To Migration Research**

In general, canonical analysis is performed on two data matrices : Behaviour (B) and Attribute (A). Here, the first matrix is of (n x k) dimensions (n = number of regions or states; k = number of migration variables). Here, general behaviour matrix B becomes Migration behaviour matrix, M. The second matrix A is of (n x r) dimensions (n = number of regions or states; r = number of variables related to socio-economic structure of regions). Here, general matrix A becomes the predictor matrix S (socio-economic matrix, or termed as matrix of spatial structure of economy of regions).(here we have taken another matrix , like Investment matrix, which is combined with Predictor matrix (S). In canonical analysis, these two (or three) matrices are put together, considering behaviour matrix (M) as the dependent set and the attribute matrix (A, or S) as the independent set . Canonically, the field theory can be expressed as,

$$M = S.$$

### **Methodology**

In this paper, Census of India, 1991 migration data (available only in March 2000) are very thoroughly analyzed., in a special way. Migration data are analyzed in 5 levels: (1) Four mega city level, (2) 22 Million city level, (3) 40 Class I city level, (4) 16 major state level, and (5) 443 district level. Conceptually and methodologically, it is conceptualized that causal linkages exist between 3 sub-systems or 3 matrices: (a) migration flows to cities (or regions), (b) respective economic structure of cities (or regions), and (c) growth efforts and investments therein. Theorized that these 3 sub-systems of urban system are causally linked; changes in one would bring corresponding changes in other. Methodologically, test of causal linkages and interdependences between 3 matrices are tested by performing canonical (linkage) analysis between 3 matrices. However, canonical results of 40 cities and mega cities are not discussed here. So, in each of 3 levels of canonical analysis (district, state, and million city levels), 3 data matrices are constructed as inputs for canonical analysis. Each time, canonical analysis is performed on 3 data matrices: (a) Migration matrix (M) into the cities (states /districts), (b) Socio-economic matrix (S), and (c) Growth efforts–cum–Investments matrix (I). Canonical analysis is a higher form of regression analysis, but instead of one dependent variable it explains a matrix of dependent variable, and instead of one equation it generates a series of linking equation. At each level of analysis, a series of Canonical (causal) linkage equations are generated, each time linking a specific kind of migration (from M matrix) with a specific set of socio-economic structure from S-Matrix, and also specific type of Investment–cum–Growth effort from I-matrix. Each time this canonical linkage equation generates a specific linkage equation, linking particular migration pattern with particular economic structure (cities or regions), and with particular growth efforts/investment; and thus show their causal relationships. These Canonical (causal) relationships are statistically highly powerful and practically very meaningful.

### **MAJOR FINDINGS OF FACTOR AND CANONICAL MODELS :**

The study incorporates findings of a few factor analyses, and about 3 canonical analysis, done at various levels of investigation. Only a few major findings are very briefly mentioned :

#### **Part I : All-India Findings : District Level Analysis**

##### **(1) Causal Linkages Between Migration and Socio-economic situations–cum -Investment Variables : Factor Analysis-Cum Canonical Analysis at District Level.**

(A) **Factor Results (district Level)** : At initial step, factor analysis of socio-economic variables–cum–investment variables of 443 districts of India (for which complete data were available) has yielded the following 6 main factors or components, depicting the main economic structure of all districts of India .

- A. More economic development, higher urbanization, more manufacturing, more bank deposit, and more bank credit dimension (explains 30 %).
- B. General literacy, more bank credit to agriculture, and livestock dimension(explains12 %).
- C. More service and construction workers, less agricultural labourers, and less net sown area dimension (10.4%).
- D. Higher work participation and forested areas ( 8.5 %).
- E. Household industry and high population growth areas (5.7%).
- F. Mining dimension ( 5.2 %).

(B) **Canonical Results** : Factor scores were also generated on each of these six dimensions for each district; and these factor scores become inputs for the next linking step, the canonical analysis. Here, volume and rate of in-migration and out–migration at the district level were treated as the Dependent matrix, and those 6 factor scores on those six economic structure-cum-investment variables became the Independent Matrix. And a final canonical analysis is performed on these two matrices--- which has generated four Canonical Linkage equations, linking each time, a specific migration variable(s) (from Dependent matrix) with a specific set of Socio-economic variable (s) , or factors, with which it was causally linked. Thus, the following four final Canonical linkage equations were generated. These are statistically significant, and are also practically very meaningful. (Table 3)

- (a) High volume of In-migration occurs in those districts where more economic development-cum-high urbanization-cum-high investment prevail (Canonical Equation No 1: Canonical Correlation 0.74).
- (b) High volume of Out-migration occurs from those districts where service and construction were less, and where general literacy and agricultural investment were also less ( Canonical Linkage equation 2; Canonical Correlation is 0.53).
- (c) In-migration rate is high in those districts where general literacy is high and investment to agriculture is more (Canonical Linkage equation No 3; Canonical Correlation is 0.52)
- (d) Higher Out-migration rate occurs in those districts where mining is less, and population growth rate is more (Canonical Equation No 4; Canonical Correlation 0.14).

These canonical linkages are not emerging as simple statements, rather emerge as precisely measured General Rules or Laws of Migration Behaviour of people (in India ). As in Physics, one law emerges that ‘light always travels in a straight line’, or ‘water always flows downhill’; similarly, in this Migration-Urbanization research, the laws, or rules or Canons that have emerged -- mathematically states that :”In-migration occurs into economically more developed districts or regions“, or “Out-migration occurs from economically backward districts or regions”, and so forth. So these must be considered and understood in this perspective. (2) Secondly, these canonical linkages do, in fact, mathematically prove and confirm the truth, no matter though they may appear sometimes as axiomatic truth. Besides, such rules and laws do have great practical significance for planning ---- they do indicate the great need for reducing regional disparities between districts (or states or cities), if we are really desirous of redirecting migration streams to more desirable destinations, or want to arrest crowding of migrants in already overburdened districts and cities.

**Table 3: Canonical Structure Matrix: District-level Canonical Results between Four Migration Variables and six Factor Scores of Socio-economic Variables**

	CANONICAL VARIATE PAIRS			
	1.	2.	3.	4.
<b>A. Dependent matrix (Migration Variables)</b>				
	<b>Canonical Loadings</b>			
1. Volume of In-migration	<b>0.96</b>	-0.48	-0.44	0.38
2. Volume of Out-migration	0.18	<b>0.77</b>	0.08	-0.29
3. In-migration rate	-0.12	0.15	<b>0.87</b>	-0.47
4. Out-migration rate	-0.19	-0.40	0.20	<b>0.75</b>
<b>B. Independent Matrix (Socio-economic variables)</b>				
1. Economic Development Urbanisation, Capital Investment	<b>0.93</b>	-0.23	-0.03	0.20
2. General Literacy, Agricultural Investment	0.09	0.31	<b>0.90</b>	-0.17
3. Service, Construction	-0.25	<b>-0.79</b>	0.15	-0.15
4. Percent Workers, Forest Area	-0.02	-0.26	0.36	<b>0.52</b>
5. Household, Population Growth	0.08	0.33	-0.19	-0.09
6. Mining	0.23	-0.18	0.03	<b>-0.79</b>
<b>C. CANONICAL CORRELATION</b>	<b>0.74</b>	<b>0.53</b>	<b>0.52</b>	<b>0.14</b>
<b>D. Meaning of CANONICAL Relationships</b>	In-mig ration high where economic dev. high although ag. inv. more	Out-mig ration high where service constn. less ag inv. more	In-mig ration rate high, where lite - racy high pop. growth more	Out-mig- ration rate high, mining less forest more
<b>E. TRACE CORRELATION</b>	<b>= 0.5269918</b>			
WILKS LAMBDA	= 0.2350845			
CHI SQUARE	= 633.4171000			
Significance	= 0.001			

**Part II: State Level Analysis :** Causal Canonical Linkages between volume and rate of in-migration variables, in the one hand and socio-economic variables and investment variables, on the other, are done according to two analytical strategies, by Taking the raw variables in both Dependent (migration) and Independent matrices (Socio-economic Matrices) (Table 4 ).

**The model of State-Level analysis connecting Migration and Socio-economic variables yielded the following four Canonical Linkages (Table 4) :**

1. High volume of out-migration occurs from the states where proportion of cultivators are less, agricultural labourers less, and trade-and commerce are also less prevalent (Canonical Equation No. 1; Canonical Correlation 0.99)
2. High volume of In-migration occurs into those states where share of manufacturing is high, per capita income is also high, and moderate level of credit to agriculture are also present (Canonical Equation No 2; Canonical Correlation 0.98).
3. High rate of out-migration prevails from the states where per capita income is less, credit to Small scale industries are less, and investment to industries are moderate (Canonical Correlation 0.97).
4. High rate of In-migration occurs into the states where proportion of cultivators are more and transport workers are also more (Canonical Correlation 0.84).

The Trace correlation or General statistical overlap between the Dependent and Independent matrices is very high, 0.97, explaining more than 87 percent of total variance in the dependent (Migration ) matrix. This is simply remarkable. Plus, the various canonical linkages are not only statistically very powerful, but are also practically meaningful. They indicate useful planning directives for reducing regional disparities. in the level of development between states, and to reduce concomitant massive migration from backward and neglected states (Orissa, UP, Bihar) to relatively favoured or developed states (Punjab, Haryana, and Maharashtra).

**Table 4: Canonical Structure Matrix: State-level Canonical Results between Four Migration Variables and 16 Socio-Economic variables**

	CANONICAL VARIATE PAIRS			
	1	2	3	4
<b>A. Dependent matrix</b>				
<b>(Migration Variables)</b>				
1. Volume of In-migration	0.29	0.79	0.15	-0.03
2. Rate of In-migration	0.74	0.01	-0.59	0.70
3. Volume of Out-migration	<b>-0.60</b>	-0.58	-0.08	0.63
4. Rate of Out-migration	0.05	-0.15	0.79	-0.33
<b>B. Independent Matrix</b>				
<b>(Socio-economic variables)</b>				
1.PCI	0.00	0.39	-0.32	-0.12
2.POP growth	0.03	0.11	0.09	0.09
3.Urbanisation	0.10	0.00	-0.00	0.24
4.Literacy	-0.04	0.12	0.21	0.02
5.Cultivators	-0.75	0.23	-0.27	0.65
6.Agri.Labourers	-0.46	-0.00	-0.19	0.34
7.Manufacturing	-0.00	0.47	0.03	0.03
8.Trade-Commerce	-0.36	-0.08	-0.23	-0.01
9.Transport	-0.20	0.22	0.21	0.40
10.Service	0.02	-0.36	0.07	0.22
11.Forested area	-0.03	0.21	-0.22	-0.14
12.Value of ag. products	-0.06	0.01	-0.04	0.06
13.Food production	0.14	0.07	0.28	0.11
14.Credit to Ag.	-0.04	0.20	0.22	-0.02
15.Credit to SSI	0.13	-0.50	-0.48	-0.28
16.Credit to Industry	0.01	-0.13	0.47	0.22
<b>C. CANONICAL CORRELATION = 0.99                      0.98                      0.97                      0.88</b>				
<b>D. Meaning of CANONICAL Relationships</b>				
	High out-migration where cultivators less, agricultural labourers less, T/C less	High in migration where MNF high PCI high moderate credit to, agriculture	High out-migration rate where PCI lessm SSI less, industrial investment moderate	High in migration rate and high volume of out-migration where cultivators agricultural labourers high
<b>E. TRACE CORRELATION = 0.9653058</b>				
WILKS LAMBDA	=	0.000000		
CHI SQUARE	=	230.0918000		
Significance	=	0.0001		

### **Part III: Analysis of Migration to the Million Cities:**

**Migration of males to 22 Million Cities were analyzed by performing a series of canonical analyses Here we present only findings of the analysis of the male migration (Tables 5)**

**(A) Canonical Linkages between Reasons for Migration of the Males and Economic structure of Million Cities-cum- Investment made therein, have generated following seven canonical equations ( Using raw socio-economic variables without factoring upon them) (Table 5):**

1. Migration for employment, business, and education occur to large sized million cities, where manufacturing and service sectors predominate, and where bank deposit is also high (Canonical Correlation 0.99).
2. Migration for employment, business, and education occur to smaller million cities, where manufacturing and service sectors are more, but where little bank deposit gone (Canonical correlation 0.98).
3. Migration for education occurs to manufacturing centers, service centers and also partly to household industry centers (Canonical correlation 0.97).
4. Lifetime migration occur more where manufacturing is more, and bank deposit is also more. This also happen in smaller million cities (Canonical correlation 0.85).
5. Employment migration prevails to transport centers and where investment to small scale industries are more ( Canonical correlation 0.75).
6. Lifetime migration and also employment migration are more to transport centers, and where in investment to industries are also more (Canonical correlation is 0.62).
7. Recent migration and other kinds of migration also occur to other centers, not specifically to manufacturing or service centers. (Canonical Correlation 0.51).

**Theoretical Implications :** Here, as various canonical linkages demonstrated, a specific kind of migration is found to be linked to a specific component of the economic structure the cities, and with a specific kind of capital investments. Thus, these three components of this migration-urbanization system of India are found to be causally linked, producing respective “Migration Fields”, as conceptually thought and canonically formulated. So time and again, these kinds of “Migration fields” are generated by a series of canonical linkage equations and a series of canonical tests. These prove the central notion of Migration Field Theory, thus propounded and briefly presented in this Monograph.

**Policy Implications :** Apart from this theoretical contribution, various substantive findings also have considerable policy implications, as they indicate that if we are seriously desirous of redirecting migration flows to more desirable destinations, instead of over-crowding into stinking slums of a few major mega cities (Calcutta, Bombay, New Delhi, Madras, and the like), then, we really need to develop a strong economic sectors of the urban economy, and also provide all growth efforts and investment in those hitherto neglected cities, instead of excessive polarization of these factors in to those over-congested Mega cities. Evidently, these policy prescriptions are substantiated by the above findings, and as such they have considerable importance.

**Table 5: Canonical Structure Matrix: Canonical Linkages between Reasons for Migration and Economic Structure of cities-cum-Investment Data, Million Cities, 1991 (Males)**

	CANONICAL VARIATE PAIRS						
	1.	2.	3.	4.	5.	6.	7.
<b>A. Dependent Matrix</b>							
<b>(Migration Variables)</b>							
1. Vol.of Migration (1981-91)	0.04	0.22	0.37	-0.69	-0.12	-0.55	<b>0.57</b>
2. Vol. of Lifetime Migrants	0.22	-0.25	-0.39	<b>0.64</b>	0.08	<b>0.50</b>	-0.56
<b>Reasons for migration</b>							
3. Employment	<b>0.61</b>	<b>0.66</b>	0.52	-0.12	<b>0.74</b>	<b>0.45</b>	-0.05
4. Business	<b>0.31</b>	<b>0.36</b>	0.27	0.01	0.21	0.26	-0.16
5. Education	<b>0.56</b>	<b>0.40</b>	<b>0.49</b>	-0.07	0.50	0.31	0.03
6. Family movement	0.28	0.23	0.23	-0.16	0.23	0.24	-0.37
7. Other reasons	0.31	0.33	0.28	-0.26	0.30	0.16	<b>0.44</b>
<b>B. Independent Matrix</b>							
<b>(Socio-economic Variables)</b>							
1. Total Population of city	0.36	-0.10	-0.04	-0.37	-0.18	0.18	0.10
2. Mining workers	-0.03	-0.06	-0.05	0.11	-0.24	-0.01	-0.03
3. Household Industry	0.41	0.24	<b>0.53</b>	0.28	0.25	0.07	-0.23
4. Manufacturing workers	<b>0.45</b>	<b>0.73</b>	<b>0.44</b>	<b>0.44</b>	0.14	0.23	<b>-0.55</b>
5. Construction	0.19	0.23	0.29	-0.01	0.09	-0.30	-0.06
6. Trade/Commerce	0.18	0.17	0.22	0.13	0.04	0.11	-0.16
7. Transport workers	0.15	0.19	0.10	0.08	<b>0.39</b>	<b>0.39</b>	-0.20
8. Service workers	<b>0.47</b>	<b>0.49</b>	<b>0.55</b>	0.34	0.12	0.06	<b>-0.64</b>
9. Bank Deposit	<b>0.40</b>	0.12	-0.13	<b>0.49</b>	0.11	-0.64	0.02
10.Credit to SSI	-0.13	-0.10	-0.21	0.25	<b>0.62</b>	-0.16	-0.33
11.Credit to Industry	-0.14	-0.08	0.10	-0.38	-0.5	<b>0.46</b>	0.21
<b>C. CANONICAL CORRELATIONS</b>							
	<b>0.99</b>	<b>0.98</b>	<b>0.98</b>	<b>0.85</b>	<b>0.75</b>	<b>0.62</b>	<b>0.51</b>
<b>D. Meaning of Canonical Linkages</b>							
	Migration for employment, business, education occurs to large size city, where MNF & service predominant & bank deposit is high	Migration for employment, business, education occurs, to small cities where MNF & service more but where little bank deposit	Educational migration to MNF centers, household industry center & service centers	Lifetime migration more where, more MNF, high, bank deposit more This also occurs in small cities.	Employment migration to transport centers & where SSI more	Lifetime migration & employment migration to transport center, where investment in industry is high	Recent migration & other migration not to MNF or service centers
<b>E. TRACE CORRELATION =</b>							
WILKS LAMBDA =	0.0000000						
CHI SQUARE =	205.21190						
Significance =	0.001						

## **Findings of Analysis of Class I cities of India**

### **Literacy and Illiteracy among the Migrants in selected 40 Class I Cities**

Table 6 shows the percentage and volume of migration according to literacy level of the selected 40 cities.

1. In the category of migrants of 0-5 years, as many as 21 cities show more than 25% male migrants to be illiterate (Hyderabad, Vishakhapatnam, Vijaywada, Jamshedpur, Chandigarh, Delhi, Ahmadabad, Surat, Vadodara, Rajkot, Faridabad, Kozhikode, Gwalior, Durg-Bhilainagar, Greater Bombay, Pune, Ludhiana, Amritsar, Jalandhar, Jodhpur, Calcutta). 7 cities have more than 30% male migrants who are illiterate. Among them Ludhiana (42.6%) leads the camp, followed by Amritsar (34.99%) and Jalandhar (33.35 %)

2. The situation in case of female migrants is worse. 12 cities show more than 40% of the female migrants in last five years (1985-91) to be illiterate (Hyderabad, Vishakhapatnam, Vijaywada, Delhi, Surat, Faridabad, Gwalior, Durg-Bhilai nagar, Greater Bombay, Auranagabad, Jodhpur, Agra.). And, in some of the cities nearly half the female migrants are illiterate[ Surat (48.13%)]. Alarmingly, out of the total 40 cities, 34 cities have more than 30% female migrants who are illiterate

In sum, the majority of these migrants to Class I cities are illiterate and unskilled, and are absorbed in low-grade production –processing work. These testify the phenomena of distress migration and urban decay prevailing in India.



**Table 6: Percentage and Volume of Migration according to Literacy level (0-5 years Durations), Selected cities, 1991**

Sr.No.	City/UA	Population, 1991	Duration of residence 0-5 years				
			Total Migrants		Illiterates %		
			Total	Total	Literates %	Males	Females
1	Hyderabad	4,280,261	321,965	71.01	57.20	28.99	42.80
2	Vishakhapatnam	1,051,918	134,320	72.58	59.40	27.42	40.60
3	Vijayawada	845,305	76,270	70.33	59.46	29.67	40.54
4	Guwahati City	577,591	72,544	78.16	62.36	21.84	37.64
5	Patna	1,098,572	83,763	80.75	68.76	19.25	31.24
6	Jamshedpur	834,535	59,534	73.71	62.27	26.29	37.73
7	Chandigarh	574,646	100,745	72.90	68.33	27.10	31.67
8	Delhi	8,375,188	770,369	69.41	57.35	30.59	42.65
9	Ahmadabad	3,297,655	193,423	71.00	63.69	29.00	36.31
10	Surat	1,517,076	214,223	66.41	51.87	33.59	48.13
11	Vadodra	1,115,265	104,240	73.06	66.70	26.94	33.30
12	Rajkot	651,007	56,606	74.55	67.63	25.45	32.37
13	Faridabad Complex	613,828	90,657	73.22	55.96	26.78	44.04
14	Bangalore	4,086,548	321,830	77.34	64.50	22.66	35.50
15	Mysore	652,246	66,610	81.32	71.81	18.68	28.19
16	Hubli-Dharwad	647,640	58,286	78.74	66.24	21.26	33.76
17	Kochi	1,139,543	87,390	79.69	83.27	20.31	16.73
18	Thiruvananthapuram	825,682	42,770	89.37	87.25	10.63	12.75
19	Kozhikode	800,913	52,830	70.80	76.30	29.20	23.70
20	Gwalior	720,068	44,090	72.62	59.75	27.38	40.25
21	Durg-Bhilai Nagar	688,670	91,368	69.92	55.51	30.08	44.49
22	Greater Bombay	12,571,720	845,538	69.61	56.44	30.39	43.56
23	Pune	2,485,014	191,885	70.26	61.19	29.74	38.81
24	Nagpur	1,661,409	70,738	78.87	69.66	21.13	30.34
25	Nashik	722,139	69,945	75.53	65.11	24.47	34.89
26	Aurangabad	592,052	45,930	78.60	58.70	21.40	41.30
27	Ludhiana	1,012,062	105,632	57.40	60.18	42.60	39.82
28	Amritsar	709,456	42,880	65.01	61.32	34.99	38.68
29	Jalandhar	519,530	38,724	66.65	65.20	33.35	34.80
30	Jaipur	1,514,425	112,913	77.00	60.15	23.00	39.85
31	Jodhpur	648,621	35,169	74.08	57.26	25.92	42.74
32	Madras	5,361,468	326,781	79.41	69.15	20.59	30.85
33	Coimbatore	1,135,549	82,410	81.57	70.53	18.43	29.47
34	Madurai	1,093,702	56,390	78.87	69.58	21.13	30.42
35	Kanpur	2,111,284	75,890	75.92	61.24	24.08	38.76
36	Lucknow	1,642,134	122,573	77.15	66.52	22.85	33.48
37	Varanasi	1,026,467	17,950	85.59	65.30	14.41	34.70
38	Agra	955,694	24,180	78.80	56.43	21.20	43.57
39	Allahabad	858,213	16,680	88.52	67.79	11.48	32.21
40	Calcutta	10,916,272	378,315	71.85	64.76	28.15	35.24

### Summary of Results

Results of analysis done at 22 Metropolitan cities and class I city level indicate that:

1. Firstly, (a) majority of the migrants are illiterate and unskilled, (b) these illiterate and unskilled rural migrants are absorbed in very low quality urban informal sectors of metropolises, (c) these migrants are attracted to largest metropolises, where large amount of investment/growth efforts have gone in, but where new migrants are not absorbed in urban organized sectors (where investments gone), rather are absorbed in poor quality unorganized sectors. These oppressive situations lead to proliferation of low quality migration and low quality urbanization in Indian Metropolises.
2. Secondly, Canonical linkage equations generated at 22 million city level reiterated above findings. .
3. Thirdly, Canonical linkage analysis at State level show that : (a) in-migration of landless agricultural laborers are occurring from very backward states to relatively prosperous states of India, where more agricultural and industrial investments have recently gone in, .and (b) out migration of laborers are occurring from comparatively neglected and backward states where poverty are rampant and investment for rural development were negligible.
4. Fourthly, Canonical results at district level reiterate the findings of state level, with clear indicators of under-development and lack of planning for the poor at district level.

### **Further On Policy Implications and Future Scene**

**Apart from various canonical and factor results, and multitudes of Regression results, investigations were also made about the characteristics of migrants to Million cities and to 299 class I cities; which have revealed the following basic trends:**

1. **Most such cities indicate that migrants largely come from far flung rural areas;**
2. **Most of these migrants are either illiterate, or having less than primary education;**
3. **Most of these migrants are absorbed in low-grade production process work, or low grade sales and services -- where wages are low, competition severe, and insecurity predominate. So it is very low quality migration of poor and illiterate people; who are compelled to crowd in city slums as low grade workers.**
4. **It leads to tremendous waste of human and national potentials.**
5. **Most such cities are also having poor tertiary sectors as the main component of their economic structure , not manufacturing sectors or strong secondary sectors.**
6. **In sum, the patterns of poverty-induced migration of masses of illiterate and unskilled migration occurs to Indian metropolises and class I cities, even in 1981-91 decade, and these leads to acute urban involution and acute urban decay.**

### **Concluding Remarks**

In sum, in the setting of ongoing globalization, liberalization, and privatization, more and more such poverty-induced migration and urban involution will, occur in India in future---- because under globalization survival and existence of the poor people are hurt most, under liberalization cheap imports of goods are adversely affecting the poor and rural people's lives and their economy, and under privatization, considerable stringencies and retrenchments of the workers are going on. All these negative processes are adversely affecting the lives and livelihood of the poor peasants, farmers, agricultural labourers, artisans, and village operatives; as well a urban slum dwellers. Unless and until their economy and subsistence are adequately protected, there will be considerably much more such kinds of poverty-induced migration and urban involution in India in future. Of course, 1991 census migration data did not adequately equip us to investigate the ongoing globalization-privatization and liberalization processes, as these were strengthened after 1991; but the main socio-economic forces of underdevelopment and poverty were prevalent since Independence and much before, and which continued uninterrupted even during planning era., and such phenomena were amply present before 1991. Evidently, these processes are now strengthened, and will adversely affect migration-urbanization in India with much more vigorous forms in the next century, specially in coming 2-3 decades. Some literature are already showings such signs of adverse affects on Lives of laborers and their migration. Hence, tremendous research in these directions are very much warranted, and much more planning and policy –oriented research will be urgently required..

## **Part III**

### **SOCIO-ECONOMIC AND SPATIAL PROCESSES UNDERLYING MIGRATION IN INDIA**

### **Section I: Process of Rural Neglect and Regional Disparities :**

This section discusses the macro socio-economic processes of underlying migration in developing countries, like India and other similarly-placed Third World nations. (Mukherji, 1990, pp. 283-304; 1993, pp. 1-91).The discussion is brief:

1. First, there has been prolonged rural neglect in the one hand, and urban development bias, on the other, which have created and maintained persistent regional disparities in India. These acute regional disparities between various regions and consequent spatial disorganisation of the national space lie at the root of the problems of massive poverty-induced migration of workers and peasants from relatively backward regions to relatively developed regions in India.
2. Second, excessive pressure of population on limited amount of cultivable land have enhanced land inequality. These have led to process of marginalisation of vast majority of cultivators, who eventually were relegated to share-croppers, tenant-farmers, or landless agricultural labourers.
3. Third, neglect of the indigenous crafts and industries in villages have generated many workers unemployed and compelled to migrate.
4. The end result of such process of continuous exploitation of the peasants, workers, labourers, and village artisans was the initiation of the process of massive exodus of these pauperized groups from the marginalised countryside to the filth and dirt of slums in the coastal ports (Calcutta, Bombay, Madras, etc.) and capitals (Delhi, Lucknow, Patna, Ahmedabad, Hyderabad, etc.). The same macro socio-economic-political processes and the same patterns of labour migration which existed in India at the time of Independence (1947) still can be seen in year 2001. There has not been much changes in these fronts.
5. The social processes of unequal development over spaces and across communities have brought out conflicting and exploitative production relations and social relations between the owning class and non-owning class and have aggravated socio-economic inequalities between them. Concentration of means of production (land, labour, capital) among a privileged few have led to unjust prosperity of a small segment of owning class in the one hand, and released an army of surplus labour and unemployed, on the other. As concentration of capital and wealth continued unchecked, the more and more peasants/workers became marginalised. Finally, a massive exodus of such refugee labourers took place from pauperized villages to urban slums and to other relatively developed zones.
6. Spatial dimension of unequal socio-economic development, on the other hand, have created disorganisation and disintegration of the spatial structure of the economy. Spatial organisation usually means the entire system of spatial arrangements of settlements (rural and urban) in a country, economic activities of peoples and places, trade linkages and transport network between them, land use etc., the functional attributes of places and people, and the complex inter-relationships between all those variegated elements. Spatial disorganisation, on the other hand, implies distortions, disequilibriums, disharmony, antagonism, decay, dependency and lack of internal cohesion and consolidation in that spatial organisation of the country.
7. Certain new ports/cities emerged and grew up at the expenses of other towns/cities: and certain specific regions became favoured and prosperous, to the neglect of the interior regions of the country. Consequently, marked regional disparities and imbalances have sprung up and the gulf between growing regions and lagging regions widened. Under such a situation, evidently, labour migration of males and females occurred, and is still occurring, from neglected regions to relatively favoured regions. These are the end results of spatial disorganisation ---created by prolonged rural neglect and prolonged urban development bias and persistent regional disparities.
8. Besides, two crucial distortions occurred : (a) a distortion towards mushroom growth of low-grade tertiary activities; and (b) a distortion towards growth of only light branches of industries, and low level technology.
9. The linkages between rural and urban areas are severely disarticulated, so also between industry and agriculture, Consequently, internal contradictions flourished. Growth of the economy is retarded. Urban growth have occurred without development. Parasitic urban centers have grown and multiplied, without industrial strength and without a strong economic base.
10. In the final analysis, there has been migration of poor rural labourers, in the one hand, to a few coastal ports and parasitic urban centers, on the other. Labourers are leaving rural areas and moving into such urban centers. Since there has been only limited employment opportunities in town under capital-intensive industrialisation, the labour migrants could find salvage only in urban informal sectors, like vendors, hawkers, domestic servants, construction workers, rag-pickers, and so forth
11. Urban unemployment has also been overflowing, creating concurrently a dangerous involutionary situation.

12. Thus, migration of people, both males and females, in a developing economy like this is taking place from rural poverty to urban poverty, from one stress region to another, compounding further poverty. It tells a poignantly sad story. And the waste of human and national potential is massive .

## **Section II: Regional Disparities continued in the Planned Era**

13. Unequal socio-economic and spatial processes of the past still continue today and still at present largely determine labour migration and urbanization in India, as the development measures taken during successive Five Year Plans (1951-2000) were not adequate to ameliorate the condition of acute poverty, spatial disorganisation, widespread unemployment, increasing land inequality, and the neglect of the poor farmers/labourers in stagnating states (U.P., Bihar, Rajasthan, etc.) So, even in the 1990s and till today there still has been considerable rural exodus of uprooted labourers (both males and females) from backward states to relatively favoured/prosperous states and to a few parasitic urban centers, coastal ports, and administrative capitals (like Calcutta, Bombay, Delhi, Madras, Hyderabad, Bangalore, Lucknow, Kanpur, Ahmedabad etc.)
14. But, these so-called metropolises fail to provide the migrants with proper and gainful employment even now; as they are engaged in very low-grade and poorly paid urban activities, These amply testify the strength of the conceptual framework presented.
15. Even after 50 years of planning, the country's economy continues to be oriented towards export, mainly of raw materials. Railways and roadways still feed mainly export centers or primary cities, instead of the interior areas within the country. Spatial disorganisation persists, in spite of a few ad-hoc attempts to correct it. Consequently, internal trade circuits remain stultified. Breaks in settlement hierarchy persists (notice that no big city ever emerged between the four largest metropolises, Calcutta, Delhi, Bombay, Madras ).
16. Investments and industries continue to be polarised, as in the past , only in a few selected and favoured nodes/ports. Rarely there has been vigorous attempts at rural development, or attempts for development of hitherto-neglected states and regions.
17. Numerous villages are therefore reeling under poverty, unemployment, and under-employment.
18. No wonder that these masses of illiterate, unskilled, and poor labourers keep crowding to the largest metropolises to find any job, no matter how unskilled or low the pay, nor how unbearable the filthy urban slums.
19. Small towns and cities of India still act (as they did earlier) primarily as agricultural collecting centers, as points of suctioning mechanism, for further onward movement of raw materials to coastal exporting centers, rather than as poles of development to diffuse development impulses to surrounding hinterlands. Evidently, these nodes lack those spatial linkages that are necessary for rural development.
20. Naturally, rural migrants (males and females) have to make quantum jump to coastal metropolises, by-passing such small towns. Because, like flow of capital and commodities to such coastal metropolises, the human labour are also compelled to move under the forces of the same mechanism.
21. The planning is not yet for the poor. As Desai stated: " the state instead of becoming a funnel to pump out resources from the rich for distributing them to the poor, in fact works in the opposite direction through an elaborate system of deficit financing, loans (foreign or internal ) and indirect taxation -- a system which hurts the poor most" (Desai, 1974, pp. 89-99).
22. Desai rightly remarked that, "under the mixed economy such items as agriculture, industry and trade were left to private sector, while creation of elaborate infrastructure and heavy and strategic industries were taken up by the state sector. But, such creation mainly helps them to make their super-profits" (Desai, 1974, pp 94-99).
23. As a consequence, whatever developmental planning has been attempted has actually increased the gulf between the rich and the poor; and whatever regional developmental programmes have been taken, are characterised by ad-hocism and maintenance of the status-quo. In fact, these have increased regional inequalities, instead of narrowing down (Misra, et al. 1974, pp 79-120).
24. In short, unemployment, poverty, inequality, and spatial disparities and imbalance persist even now and still impel the poverty-induced male and female labourers to migrate in between one area of stress to another.
25. This is the true conceptual explanation of such distress migration and lopsided urbanization in India. Proper understanding of such complex processes is necessary; based only upon that may we be able to find ways and means of reducing poverty and regional disparities, and consequently reduce the problems of distressed migration..

## **Part III**

### **Planning Strategies**

Though this paper makes dismal reading, but concludes with an optimistic note. There must be a way out of this vicious circle of underdevelopment and migration.

Crucial canonical findings, done at many levels (metropolises, state and district levels), generated many practically meaningful and statistically highly powerful findings --- and also generating useful strategies for planning for poor. Evidently, canonical linkages mainly indicate where the problems exist, and what are needed to be done to correct those problems; however, comprehensive planning strategies and policies are required to be recommended -- based on both those canonical findings and intuitive and careful thoughts. This are done as follows.

Policy alternatives call forth vast changes in the existing polarized investment patterns, concentrated industrial licensing policies, employment-generating capacities of towns, promoting pro-rural against pro-urban development policies, restructuring of spatial structure of economic activities of the entire national space, and changes in rural and regional development policies, and so forth. Set within these contexts, briefly, the following policies and strategies may be envisaged and implemented. These are merely suggestive, not exhaustive list of measures. Some of these focus upon urban development, some on rural development, and some other on regional development. All are very intimately connected . Due to shortage of space very brief discussion, often just listing of policies and strategies are given below. For more details, please see Mukherji (2001, pp. 65-226).

#### **1.The Need for More Effective Rural and Regional Development**

To save such metropolises, it is very necessary that all-round socio-economic development of all rural parts of interior of India, e.g. Maharashtra, Gujarat, UP, MP, Bihar, Orissa, Andhra Pradesh, West Bengal, Karnataka, etc. are urgently made, which are hitherto neglected, and from which massive migration of poverty-induced people occur to cities of Bombay, Calcutta, Delhi and so forth. Unless this is done the problems of distress displacements, and urban involution of metropolises and larger cities will continue unabated.

#### **2. Spatial Restructuring and Development of Small Towns-Intermediate Cities**

Restructuring of space economy of hinterland of large cities is thus urgently necessary. That is, the need for providing much greater capital investment, growth efforts, industrial licenses in rural areas, smaller towns, and intermediate cities, as well as making them as poles of development that will diffuse growth waves to surrounding villages, instead of present day excessive reliance only upon a few primate cities. Such spatial restructuring also implies development of and use of vast unutilised internal domestic markets within the country and internal orientation, rather than excessive dependence upon export activities, *For, development means internal development, not external dependency.*

#### **3.Massive Employment Generation**

The objective should be to generate massive employment, productive self-employment, and gainful employment, both for the migrants and the residents, by strengthening and expanding better and productive linkages between urban formal and informal sectors, and by increasing their productive efficiency and transfer of technology. No doubt, this is a difficult task. If short but effective training was given to them, and if they were properly utilised, in villages and cities, they could have been transformed into an army of skilled workers to raise both per capita productivity and national productivity.

#### **4. Elimination of Urban Poverty**

Providing quick but useful training for their skill development and providing cheap and subsidized school and health care services to the urban poor, and slum dwellers, will reduce urban poverty, increase human resource development, generate self-employment or upgraded employment both in formal and informal sectors.

#### **5. Humanistic Urban Planning and Housing for Slum People**

Objective should be to give a better deal to the slum-dwellers and to ensure a more humanistic approach to urban planning. Concrete programmes should be made for construction of inexpensive, heavily-subsidized, low-rise

apartments for the slum dwellers within the slum areas; each apartment with 150-200 square feet and designed to accommodate a six or seven person family. Toilets and bathroom facilities can be centrally located and commonly operated. Goal will be to provide cheap housing and sanitary facilities to slum people within slums; instead of perpetuation of shelter problems. Metropolises, then, will become self-sustained, more habitable and egalitarian. Innovative and humanistic approach to problem of slum development is thus very urgently needed (Mukherji, 1995).

#### **6. Efficient Metropolitan Management Required**

Most important lesson that all the Mega cities of Asia Pacific must learn from Tokyo's experiences is as to how efficiently to manage the Mega city's administration, specially in urban housing, traffic, air and noise pollution, water supply, sewerage, medical and health care, and also promoting a more humane and energizing society.(Mukherji, 1997, pp.1-81, 2000, 150-181).

#### **7. Elimination of Rural Poverty**

Massive programmes for human resource development and poverty elimination, especially by generating more non-agricultural employment in the rural and neglected areas, must be urgently taken up which will reduce fertility and mortality levels, and also reduce distressed migration to city slums

#### **8. Irrigation Development**

Massive irrigation development programmes in rural areas (canal, river and well irrigation, reconstructing field drains and irrigation channels) together would not only add to the land capable of cultivation and to productivity, but would also create jobs for the landless laborers and seasonally unemployed. Irrigation is the main panacea for rural development and for agricultural development. Two-third of variations in the agricultural productivity depends solely upon the single factor, irrigation, and not upon fertilizers, or HYV seeds, or pesticides (Mukherji, 1981, 150-278). Massive efforts are thus necessary for the creation of the network of irrigation channels, deep tube-wells, pond irrigation, and water harvesting (storing rain water, preventing run-off and water seepage, and utilizing during dry seasons) -- the steps which will not only greatly raise agricultural productivity and create massive rural employment, but will also raise their levels of living and purchasing power, and rejuvenate the entire village systems. Thus, an innovative planning strategy for rural development and irrigation development is very urgently needed (Mukherji, 1983, 121-140; 1979a, 54-91).

#### **9. Rural Industrialization**

We have to ensure that raw materials are processed within rural areas, in semi-finished form, so that economic values are enhanced to products locally before these are transferred to urban centers for consumption. Many rural industries and cottage industries (e.g. rice-milling, indigenous sugar processing, oil-pressing, weaving, garment-making etc.) may be set up (with subsidies and under co-operative management) at centrally located villages, each serving 10 or 20 surrounding villages. This is most imperative for migration-influencing planning strategy (Mukherji, 1989, 342-373). Owing to shortage of space, following strategies are very briefly mentioned, Nevertheless, these are also crucial strategies.

**10. Change Rural-Urban Relations:** Change the present-day unequal rural-urban linkages and relations in favour of the rural areas, and reorient the present pro-metropolitan development bias towards pro-rural development focus.

**11. Banks for Rural regeneration:** Provide banking facilities and encourage investments for rural regeneration.

**12. Spatial Restructuring:** This is required for development of vast unutilised internal domestic markets within the country and for creating National Spatial Organization.

**13. Reduce Regional Disparities :** Evening out of spatial and socio-economic disparities between regions is urgently required so that "**per-capita civilization**" (school, safe drinking water, and health services) is available everywhere over the entire National space.

**14.Integration of industry and agriculture:** Such integration can be made by creating more agro industries and transferring some surplus rural labour to non-agricultural activities and small scale industries.

**15. Develop hitherto neglected Regions:** Focus upon neglected regions and enhance their potentials by utilising their local natural, mineral, biotic, and human resources.

**16. Develop inter-regional Economic Bonds:** Such bonds is required and can be achieved by proper extension of transport and communication links and their orientation towards the development of interior parts of the country, instead of present-day tendency only towards exporting centers, metropolises, and coastal ports.

**17. Provision of more development expenditure for backward districts/Regions:** More capital investment and development is called for backward and lagging regions/districts for their overall development and to arrest massive out-migration from them.

### CONCLUSION

In sum, as regards the syndrome of poverty, distressed migration and urban involution in India, we need to have new and novel research perspective, as well as new and alternative planning prescriptions. Concrete plans and their effective implementation for the benefits of the poor migrants is now absolutely necessary. Then only, we will be able to reduce poverty, human misery, agony and pain from the lives of the poor masses, and enthuse hopes and aspirations in their lives for their sojourn towards a life with human dignity and upward transformation.

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