"TRENDS AND PATTERN OF MIGRATION AND ECONOMIC DEVELOPMENT: AN INTER-STATE ANALYSIS"

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CERTIFICATE

I, Sourabh Ghosh, certify that the dissertation entitled "TRENDS AND PATTERN OF MIGRATION AND ECONOMIC DEVELOPMENT: AN INTER-STATE ANALYSIS" for the degree of MASTER OF PHILOSOPHY is my bonafide work and may be placed before the examiners for evaluation.

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*I dedicate this work to
my parents
and my respected supervisor,
Prof. Amitabh Kundu*

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At the onset I would like to convey my heartfelt gratitude to my supervisor, Prof. Amitabh Kundu who not only guided me but looked after me almost with a parental attitude.

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Migration is a demographic process, which is expected to ensure balance between demand and supply of labour force through redistribution of population in a country. To understand the dynamics of population growth of a country properly, the study of migration would therefore be extremely important. Spatial movement of human beings is important because of its multidimensional implications on population and the regions through which this movement takes place. The main driving force behind migration is a better standard of leaving away from home. In the recent decades migration has been taking place amidst increasing global economic, political and social integration.

The process of globalisation is increasingly breaking the economic barriers to trade and investment in the direction of making the national production system a part of the global economy. As a result, capital can move to any country and commodities can be produced anywhere. Even natural resources can be transported over long distances for being processed without any prohibitive cost. The result can be seen as several multinational companies are producing commodities in the less developed countries. The emphasis is on the production activities being allowed to move to the regions where labour and natural resources are unutilised or under-utilised. It is assumed that it is far more costly and difficult to move labour to centres of production and make provisions for them rather than shifting the production base. Economic liberalisation is therefore expected to reduce economic inequality at the global level through acceleration of growth in less developed countries, which in turn would reduce outmigration of labour. The policy of liberalisation, which implies greater movement of capital and natural resources, may be associated with increasing immobility of workforce and population. It is true that during the past couple of decades when

constraints to movement of capital/commodities have been removed or relaxed, constraints to the movement of people and in particular labour have been strengthened.

According to Walz and Wellisch (1998)[1] , as economic integration takes place, the countries liberalise trade flows among themselves by creating a free trade area. After this, nearly all free trade areas are very reluctant to open their borders for free movement of people. From this we can say that free trade is largely preferred over free migration. The basic difference between free trade and free migration is that the former integration does not change the international allocation of unskilled residents as recipients of welfare programs while the latter increases the number of unskilled residents in the host country and lowers the same in the country from where they have migrated. Since unskilled immigrant workers cannot be excluded from welfare benefits, part of the national income of the host country is redistributed to them— the outcome of which is not desirable for the host country.

Getting back to the aspect of globalisation and its effect on migration, it was expected that structural reforms and associated strategy would accelerate rural-urban migration, which again would boost pace of urbanisation. The proponents of reform often argued that linking India to the global economy would lead to a massive inflow of foreign capital as also a rise in indigenous investment. This in turn would give an impetus to the process of urbanisation since much of the investment and consequent increase in employment would be within and around existing urban centers. Even if industrial units were located in rural areas the location would acquire urban status in a few years. Critics of globalisation felt that employment generation in the formal

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[1] Walz, U and Wellish, D (1998): *'Why do rich countries prefer free trade over free migration? The role of modern welfare state'*, European Economic Review, No.42, 1998.

urban economy might not be high due to the capital-intensive techniques used in the process of industrialisation. Besides, a low rate of infrastructure investment in the public sector would slow down agricultural growth. This, together with an open trade policy would destabilize the agrarian economy causing unemployment and an exodus from rural areas. This again would lead to rapid growth in urban population. However data from population census proves otherwise.

Private sector units have high capital intensity and low potential for employment generation. The public sector units also have registered a drop in the work force. Moreover, the growth of employment in the unorganized sector seems to be reaching saturation point as suggested by data from Economic Census and NSS (Kundu, 2001)[2]. The gap between real wages of casual workers in urban and rural areas has also gone down, further dampening rural-urban migration in the 90s.

Privatisation of land and civic services, are strengthening legal system relating to pollution and land-use have restricted the functioning of the informal market that had helped people in low income groups to a large extent. The stricter implementations of planning norms and frequent invocation of legal systems for eviction have also slowed down the immigration of poor people displaced from the agrarian economy. Besides, the lack of access to basic amenities due to a reduction in public expenditure on urban development and social sectors is also adversely affecting the pace of urbanisation. It is only a few large cities with strong economic bases and capability of raising resources, which are in a position to fund investment in infrastructure and basic amenities. The rest of the cities would lag behind in this respect giving rise to increasing disparity in the urban economy itself.

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[2] Kundu, A (2001): '_Brakes on the Urban Sprawl_', Financial Times, July, 2001.

It has been found out that in recent decades migration has gone down inspite of increase in regional disparity. One reason that has been put forward is the various developmental programs that have been launched by state governments. Availability of education, health and other services has also stabilized the population in backward regions. A better explanation can possibly be found in terms of growing assertion of regional identity, education upto high school in regional languages, adoption of Master Plans and land-use restrictions at city level directly or indirectly discourage migration (Kundu, 1986)[3]. Also, development of state capitals and few other big cities giving rise to increasing intrastate disparity, led to increased intra-state migration. The problem of decline in the rate of outmigration from the backward states and their absorption within the states becomes far more serious as these states have high rates of natural growth.

An attempt has been made in this study to examine whether there has been a slowing down of population mobility over the past two decades. Both male and female migrants have been considered. The migration patterns have then been analysed at all-India and state level as well using data from the NSS migration tables and by relating it to aspects of socio-economic development.

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[3] Kundu, A (1986): '*Migration, Urbanisation and Inter-Regional Inequality*', EPW, November 15, 1986.

Literature Survey

One of the earliest models of migration to have been formulated was by E.G.Ravenstein[4]. He formulated what he called 'laws of migration'. According to him, development of manufacturing industry and commerce and increase in the means of locomotion leads to increased migration. Moreover, migration takes place from the agricultural areas to the centres of industry and commerce.

Ravenstein's laws of migration were developed upon by G.K.Zipf[5] whose 'Gravity Model' suggested that interaction between two cities would be directly proportional to the product of their population and inversely proportional to the distance between the two cities. Samuel A. Stouffer[6] offered an explanation that the flow of migrants between two places is determined by opportunities at origin and destination and by intervening opportunities between the two.

Mabogunje's[7] model identifies migration in terms of a system of interlocking and mutually dependent forces with reference to rural to urban migration.

S.E. Lee[8] in his model defined the idea of migration between two places as a response to various 'pushes' at the origin and 'pulls' at the destination and also incorporates the intervening opportunities.

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[4] in (ed) By Johnston, Gragory,Pratt & Watts, (2000) 'The Dictionary of Human Geography', 4th edition,.Blakwell Publishers Inc, USA.
[5] ibid
[6] ibid
[7] ibid
[8] ibid

Arthur Lewis[9] found that with sufficient wage differentials in the rural and urban areas and with unlimited supply of labour in rural areas having marginal product of labour almost equal to zero, the labour resources get transferred to the urban areas which keep on absorbing and attracting them unless the wages in the urban areas are sufficiently lowered down. Such migration would generate some profit to the capitalist, who re-invests it. This increases production and more migrant labour is employed. This would generate more profit for re-investment. This process of expansion of the modern urban sector and employment is assumed to continue until all surplus labour is absorbed in the urban industrial sector.

Ranis and Fei[10] later extended the Lewis model and provided a schematic description of how the labour and the corresponding agricultural surplus are transferred in the process of development. According to this model, development proceeds via the transfer of labour and agricultural surplus from the traditional agricultural sector to the modern industrial sector. The ability to expand the industrial sector is partly determined by production conditions in agriculture which goes through the phase of commercialization. During this phase, the industrial wage has to go up more sharply so as to compensate for the higher wage foregone in the agricultural sector (due to declining agricultural surplus). Therefore, without the existence of a surplus in the agricultural sector, it is difficult to create growth in the modern industrial sector.

The above models have a built in tendency for migration to increase over time both in absolute and in relative terms in response to levels of economic development. Although the Lewis model and the

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[9] *Development Economics*, by Debraj Ray,Oxford University Press, New Delhi.
[10] ibid

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Lewis-Ranis-Fei models conform to the experiences of the west, they are at variance with the pattern of migration that takes place in underdeveloped countries like India. It has been observed that that in many underdeveloped countries, even when capital and profits of the industry increases, employment and output have remained constant. Moreover the assumption of surplus labour in rural areas and full employment in urban areas do not reconcile with the reality of open unemployment and no surplus labour in rural areas. The assumption of constant real wage also seems to be very much unrealistic.

In the Indian rural context, Alagh-Bhaduri-Bhalla's [11] work supports the kind of analysis mentioned above. They argue that higher investment and concentration of modern agricultural inputs in a few pockets and consequent productivity and wage differentials will attract migrant workers from other regions. This emphasis on wage differentials and assumption of full or near full employment are unrealistic in the context of institutional and economic structure in most underdeveloped countries like India. In case of India, Dandekar and Rath's [12] study points out that the poorest ten percent of urban areas are worse off than the poorest ten percent of rural areas. Bardhan[13] notes that during sixties the percentage of people below the even the barest minimum acceptable level of living had gone up by forty percent in India as a whole and by one hundred and forty three percent for Haryana and Punjab, the states where effect of Green Revolution was most pronounced. The real wage of agricultural labourers in these states had gone down as well. Therefore the question to be addressed is why people migrate even when their joining the ranks of the jobless and the poor is very much on the cards.

[11] Alagh, Y K , Bhaduri A, Bhalla G S (1978), '*Agricultural growth and manpower absorption in India*', Labour Absorption in Indian Agriculture—some explanatory investigation, ILO, Geneva.

[12] Dandekar V M and Rath N (1971), Poverty in India, Indian School of Political Economy, Pune.

[13] Bardhan, P K (1970), '*Green Revolution and Agricultural Labourers*', EPW, Vol 5, Nos. 29-31, July 1970.

Also why do people continue to migrate to the green revolution areas where there is tendency of falling real wage rates. We can get an answer to these questions partly from the model of Todaro and later its extension better known as the Harris-Todaro model.

Todaro's[14] model points out that under conditions of unemployment in the urban areas of developing countries, migrants discount their expected gains according to their contemplated period of unemployment. He uses the concept of expected gains which is defined as the product of urban wages by probability of getting the job. He argues that the decision to migrate should be represented on the basis of a permanent income calculation and expects the income to rise over time. As long as the present value of the net stream of the expected urban income over the migrant's planning horizon exceeds that of the expected rural income, the decision to migrate would be taken by the person under consideration. Todaro argues that rural-urban migration would act as the equilibrating force and this is based on the assumption of inflexibility of the urban wages downwards.

The Harris-Todaro[15] model which is a development over the Todaro model of migration identifies two sectors, the rural and the urban or modern, and a third sector which is the urban informal sector where a migrant gets absorbed if he fails to get a job in the formal sector. The wage in the informal sector is lower than that of the agricultural sector. So in this model the agricultural wage is not compared with the expected wage in the urban formal sector only. Here the expected wage in the urban informal sector is also taken into consideration while calculating the final equilibrium condition. Therefore in this model, migration proceeds in response to the rural-urban differences in expected wage

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[14] Todaro, M P (1976), Internal migration in developing countries—A review of theory, evidence, methodology and research priority, International Labour Office, Geneva.

[15] *Development Economics*, by Debraj Ray, Oxford University Press, New Delhi.

earnings. This arises out of the provision of politically determined minimum wage in urban areas, with employment rate acting as the equilibrating force. Through this model they tried to explain the curious phenomenon of high level of rural-urban migration and even its acceleration in the face of positive marginal products in agriculture and increasing levels of urban unemployment in the less developed countries. However, some doubts about the expected income differential being the all important determining variable in understanding the rural-urban migration for employment were raised by Sundaram (1983)[16] who found negligible and declining migration of rural job seekers to urban India during 1963-64 to 1973-74 inspite of sizeable and non-declining expected wage differentials.

Ashish Bose[17] has rejected the pull-push theories of migration as mentioned above. He points out that due to high urban birth rates and rapidly declining death rates, push factor operates in urban areas also, which he calls the 'push back' factor. Another type of push back factor pointed out by him is the absence of social security in urban areas. According to him, personal relations play an important role in an individual's decision to migrate.

Kundu (1986)[18] highlights the slowing down of the inter-state mobility in India, especially for the male population, in the face of rising disparity in terms of per capita income and labour productivity. In the light of this trend, he has mentioned about the dangers of the policy of unbalanced development and the strategy of agricultural development which have accentuated horizontal and vertical inequalities. The study

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[16] Sundaram, K (1983), '_Rural-Urban Migration: An Economic Model and Indian evidence_', Mimeo, April 1983.

[17] Bose Ashish (1983), '_Migration in India: Trends and Policies and Internal Migration_' in (ed) by Oberai, A.S. and Martin S.T, New York Press.

[18] Kundu, A (1986): '_Migration, Urbanisation and Inter-Regional Inequality_', EPW, November 15, 1986.

by Kundu and Gupta (2001)[19] tries to analyse whether regional disparity in India has gone down with economic growth over the years and how has that affected population mobility. Only male migrants have been considered in this study since female mobility in India is attributed largely to marriage, joining the family and other social factors. Besides, female migration is likely to change over a long period of time with changes in social customs and practices whereas male migration responds directly to the changing economic scenario. The study has shown that indeed with economic development, migration has gone down for males.

A study by Srivastava (1998)[20] points out that the recent trends in population mobility indicate a decline in the rates of migration. However it is pointed out that the main sources of data, the Census and NSS, underestimate labour mobility as they provide low estimates of labour circulation and commuting. Besides, labour migration is principally to the rural and urban sectors.

From above we find that clearly the opinion regarding response of people translating to migration is divided. Some are of the opinion that migration should ultimately go up in response to either perceived better living conditions at the destination or expected wage differential which again suggests that expected earning in the destination is higher than that prevailing at the source. The second group is clearly of the other opinion, which says that migration is not going to respond positively to all forms of economic development. Besides they have criticized the former opinion on the grounds that it is not at all viable in a third world country like situation. Besides, figures from the Population

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[19] Kundu, A and Gupta,S (2001) '_Declining Population Mobility, Liberalisation and Growing Regional Imbalances_''in (ed) by Amitabh Kundu, (2001) '_Inequality, Mobility and Urbanisation_', ICSSR, Manak, New Delhi.

[20] Srivastava, R (1998): '_Migration and the Labour Market in India_', IJLE, vol. 41, No.4, 1998.

Census of India also show that indeed migration has gone down. It is in this light that I would like to place my study to check whether this trend is present in India basing on migration figures provided by the migration tables of NSS 38th, 43rd, 49th and 55th rounds.

Objectives

The major objectives of the present study may be cited as follows:

(a) Investigate the general pattern of migration.

(b) Analyse the pattern of change in the different streams of migration.

(c) Determining the pattern of inter-state and intra-state inmigration.

(d) Analysis of responsiveness of migrants to economic and non-economic factors.

(e) Working out correlations of migration with different developmental indicators and discussing their implications.

Database

The NSS, Migration in India (38th, 43rd, 49th and 55th rounds) are the sources of data on internal migration in India. The data identifies migrants by place of last residence. As far as developmental indicators are concerned, figures of infrastructure facilities have been collected from Profiles of Districts, CMIE, October 2000. The source of figures of per capita income and poverty is Planning Commission. Employment figures have been collected from various rounds of Key results of Employment and Unemployment in India of NSS corresponding to those of the migration rounds. Besides, population figures have been collected from Economic Survey, 2002 and National Human Development Report, 2001 as well.

Methodology

The data on migration has been collected to study the underlying pattern of migration in the fifteen major states and at all-India level. Data on inter-state migrants has been classified according to gender, place to where they have migrated (rural/urban) and factors for migration to study the characteristics of migration. The factors have been broadly classified into two groups namely economic and non-economic factors. Data on intra-state migrants has been classified in the same as above. Data on the different streams of migration namely rural to rural, urban to rural, rural to urban and urban to urban has been expressed as percentage of total population at the destination. Data on return migrants has been collected from the 49th round as the other rounds do not provide information on this account. Besides, data on household migration has been collected, which has been provided by the 49th round of the NSS. Also figures showing classification of migrants according to MPCE classes have been collected from the four rounds. Here the data has been further classified into three groups namely Lower MPCE, Middle MPCE and Higher MPCE. The data on infrastructure has been used to construct a composite index. For this weightages had to be generated which has been done by using modified principle component analysis. Finally correlation analysis has been undertaken to find out whether development has affected migration and if so in what way.

There are some important concepts that require prior attention before we go on to the main study. In this chapter we have therefore tried to identify a few of them and tried to explain their significance. Also some of the concepts by themselves have undergone significant changes as their definition has changed over the rounds. One such important terminology is 'migrant'. According to the 38th and 43rd rounds a normally resident member of a sample household was treated as a migrant if the person's village/town of enumeration was different from his/her last usual place of resident (village/town). According to the 49th round, a person whose last usual place of resident was different from the place of enumeration on the date of enquiry has been considered as a migrant. And finally according to the 55th round, a member of the sample household was treated as a migrant if he/she had stayed continuously for at least six months or more in a place (village/town) other than the village/town where he/she was enumerated. From the definition of migrant that had been followed in the four rounds (38th, 43rd, 49th and 55th), we find that it is same for 38th and 43rd rounds. However the word 'normally' has been omitted from the definition that had been followed in the 49th and 55th rounds. This might lead to inflated figures in the latter two rounds when compared to the former two rounds, under the same categories. In the present study, a comparative analysis has been attempted across the three rounds 38th, 43rd and 55th rounds as we get most of the comparative data across these three rounds only. Data provided in the 49th round is mostly not comparable with the rest of the three rounds.

(LAST) USUAL PLACE OF RESIDENCE (UPR)

According to the 38th and 43rd rounds, the last UPR was defined as a village/town different from the village/town of enumeration, where the person had stayed continuously for at least six months immediately prior to moving his residence to the place of enumeration. According to the 49th round, the UPR has been defined as a place (village/town) where the person has stayed continuously for a period of six months or more. And finally according to the 55th round, UPR is defined as a place (village/town) where the person had stayed continuously for a period of six months or more. The village/town where the person had stayed continuously for a period of six months or more prior to moving to the place of enumeration (village/town) was referred to as the last UPR.

Household : A group of persons normally living together and taking food from a common kitchen constitutes a household. The word "normally" means that temporary visitors are excluded but temporary stay-aways are included. "Living together" is usually given more importance than "sharing food from a common kitchen" in drawing the boundaries of a household in case the two criteria are in conflict. However in the special case of a person taking food with his family but sleeping elsewhere e.g. in a different house due to shortage of space, the household formed by such a person's family members is taken to include the person also.

Household size : The number of normally resident members of a household is its size.

Migrant household : A household, which has moved to the place of enumeration during the last 365 days before the date of survey, has been classified as a migrant household.

Out-migrant : Any former member of a household who left the household for stay outside the state during the last five years before the date of survey has been considered as out-migrant provided he/she was alive and residing outside the state on the date of enquiry.

Return-migrant : A migrant place of enumeration was his/her UPR anytime before his/her last UPR has been considered as a return-migrant.

REASONS FOR LEAVING THE LAST UPR:

From the point of view of understanding the phenomenon of population movements, an analysis of the reasons for migration as ascertained from the individuals, identified as migrants, becomes very important. Broadly there are the pull factors and the push factors which induce migration. Pull factors are the ones, which attract migrants to a place due to availability of better opportunities, mostly economic. Push factors are those which act as disincentives for persons to remain where they are. These could be economic as well as non-economic factors.

In the 38th and 43rd rounds the reasons for migration are categorised as follows:

1. in search of employment
2. in search of better employment
3. under transfer of service/business contract
4. for pursuing studies
5. marriage
6. migration of parents or earning member
7. political changes/lack of security or social adjustment
8. natural calamities
9. others

The reasons under serial numbers 1, 2 and 3 are related to employment of the concerned migrants and can be classified as economic factors. Those under 5 and six can be classified as social factors and the ones under 7 and 8 as external factors.

In the 49th and 55th rounds the reasons for migration are classified as follows:

1. in search of employment
2. in search of better employment
3. to take up employment/better employment
4. transfer of service/contract
5. proximity to place of work
6. studies
7. acquisition of house/flat
8. housing problems
9. social/political problems
10. health
11. marriage
12. movement of parents/earning members
19. others

The reasons under serial numbers 1 to 5 are classified as economic factors. Those under 7, 8 and 10 are clubbed together under the category others. 11 and 12 are classified as social factor and 9 as external factor. This classification is done so as to bring in comparability among the data in all the four rounds.

One thing that is worth mentioning at this juncture is that all the figures of migration have been expressed as percentage of either total population or population at the destination (rural and urban) as is in the case of the different streams of migration. This has been done to get a better picture of the actual scenario.

However, one significant thing to be noted here is that data on migration is very neglected. It has been neglected to the extent that there is significant non-comparability of the data across the different rounds. As a result, many aspects can't be looked into greater detail due to the aspect of non-comparability. Even definitions are non-comparable. For example we have already mentioned about the definition of the term migrant. Then there is the problem of the various heads under which the data have been provided in the various rounds. In this respect also there is significant non-comparability across the rounds. For example data on outmigration has been provided in the 49th round only. Similarly data on return migration is found in the 49th round only. Therefore we cannot compare this aspect across the different rounds. Also we cannot calculate net inmigration at state as well as all-India level, which might have proved to be an important indicator. Besides we do not find detailed information about household migration except in the 49th round. Another important factor is that short-term migration has not been captured properly. It has been neglected in almost all the rounds except to some extent in the 55th round only. Information on this account might have proved to be very valuable as short-term migration is indeed a very important phenomenon in India, but it is otherwise. Information at state-level regarding usual activity status before and after migration has also not been captured properly in all the rounds. Besides NSS has identified migrants on the basis of place of last residence only. Here there also there has been a change in the definition as to who would be considered a migrant. On the contrary, census identifies migrants by a second criterion also, which is by place of birth and this criterion is devoid of any confusion as such.

In this chapter we would try to look into the macro aspects of migration, i.e. at all-India level. In this chapter we have tried to look at the trends of total migration expressed as percentage of total population. Then we have tried to focus on interstate and intrastate migration as well. The trends have been looked into for both males and females and for rural as well as urban area. Further more, we have tried to look at the factors contributing to migration and the different streams of migration as well. And lastly we have tried to classify the different categories of migrants according to the MPCE classes they belong to.

We start by first looking at the total migrants expressed as percentage of total population across the four rounds.

Table 3.1

MIGRANTS AS PERCENTAGE OF TOTAL POPULATION				
ALL INDIA	RU M	RU F	UR M	UR F
38TH RD	3.31	8.50	11.58	12.90
43RD RD	3.40	9.40	11.40	13.60
49TH RD	2.50	7.70	7.90	8.90
55TH RD	2.50	7.90	8.70	10.70

Source: NSS, Migration in India, 38th, 43rd, 49th and 55h rounds.

From Table 3.1 we find that for male migrants in rural area, the percentage of migrants to total population has gone up from the 38th round to 43rd round. Then the figure has dropped from the 43rd round to the 49th round and remained at the same level in the 55th round. In case of rural female migrants expressed as total population, the figure has gone up from 38th to 43rd round. But then it fell from 43rd round to 49th round. Finally the figure had gone up slightly from the 49th to 55th round. In case of urban male migrants as percentage of total population, the figure had gone down slightly from 38th to 43rd round. The figure had gone down significantly from 43rd to 49th round and then went up from

the level of 49th round in the 55th round. Finally in case of urban female migrants as percentage of total population, the figure had gone up from the level of 38th round to 43rd round. The figure then dipped significantly from the level of 43rd round in the 49th round. Finally the figure as reported in the 55th round is more than that reported in the 49th round.

However, in all the cases we can see that the percentage of migrants to total population as reported in the 49th and 55th rounds are significantly lower than those reported in the 38th and 43d round. We can see that there has been a significant decline in the percentage of migrants to total population when we compare the figures of prenineties NSS rounds with that of the nineties' rounds. However there is an increase in the percentage of migrants to total population when we compare the figures of 49th round with that of the 55h round.

INTER-STATE INMIGRATION

In this section we compare inter-state inmigrants expressed as percentage of total population across three rounds only ---38th, 43d and 55th rounds as the 49th round does not provide information on this account.

Table 3.2

INTER-STATE INMIGRANTS AS PERCENTAGE OF TOTAL POPULATION				
ALL INDIA	RU M	RU F	UR M	UR F
38TH RD	0.36	0.48	2.59	2.26
43RD RD	0.44	0.54	2.39	1.35
55TH RD	0.36	0.51	2.07	1.88

Source: NSS Migration in India, 38th, 43rd and 55th rounds.

From Table 3.2 we find that percentage of male inter-state inmigrant in rural areas as percentage of total population has gone up from 1983 to 1987. But then it has gone down to the level of the 38th round in the 55th round. In case of interstate female inmigrants in rural areas as percentage of total population, the figure has gone up from 1983

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to 1987 and then has gone down in 1999. In case of inter-state male inmigrants in urban areas as percentage of total population, the figure has gone down from 1983 to 1987. Then it finally rose from the level of 1987 in 1999.

We can also see that inter-state inmigration as percentage of total population has gone down from the level reported in the 43rd round in the 55th round except for urban female inter-state inmigrants as percentage of total population. However when we compare all the figures for the categories, we can see that there has been a decline in the percentage from the 38th to the 55th round.

INTRA-STATE MIGRATION

In this section, we look at the scenario of intra-state migration which is given by the sum total of intra-district and inter district but within state migration.

Table 3.3

INTRA-STATE MIGRANTS AS PERCENTAGE OF TOTAL POPULATION				
ALL INDIA	RU M	RU F	UR M	UR F
38TH RD	2.90	7.98	8.89	10.56
43RD RD	2.92	8.83	8.90	11.25
55TH RD	2.06	7.33	6.50	8.75

Source: NSS, Migration in India, 38th, 43rdand 55th rounds.

Table 3.3 gives us information about the intra-state migrants as percentage of total population. From the table we can see that for intra-state male migrants in rural areas as percentage of total population, the figure has gone up slightly in the 43rd round compared to that in the 38th round. Finally the figure has gone down in the 55th round compared to the 43rd round. In case of percentage of female intra-state

migrants in rural areas as percentage of total population, we can see that the figure has gone up in the 43rd round compared to that of the 38h round. For female intra-state inmigrants in urban areas expressed as percentage of total population, the figure has increased very slightly in the 43rd round compared to the figure of the 38th round. Finally the figure has gone down significantly in the 55th round compared to the figure of the 43rd round. Finally in the case of female intra-state inmigrants expressed as percentage of total population, we can see that the percentage has gone up in the 43rd round compared to the percentage of the 38th round. However, the percentage has gone down significantly in the 55th round compared to the percentage in the 43rd round.

From the above table we can say that intra-state migrants as percentage of total migrants in the 55th round is lower than the percentages recorded in the 38th as well as in the 43rd rounds.

FACTORS CONTRIBUTING TO MOVEMENT

In this section we concentrate on the factors contributing to migration. All the factors have been clubbed together under the two broad heads namely economic and non-economic factors.

Table 3.4

ECONOMIC FACTORS					NON-ECONOMIC FACTORS				
ALL INDIA	RU M	RU F	UR M	UR F	ALL INDIA	RU M	RU F	UR M	UR F
38TH RD	1.14	0.30	5.62	0.82	38TH RD	2.17	8.20	5.96	12.08
43RD RD	1.13	0.25	5.27	0.72	43RD RD	2.27	9.15	6.13	12.88
55TH RD	0.77	0.18	3.97	0.51	55TH RD	1.73	7.72	4.73	10.19

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

From Table 3.4 we find that percentage of migrants responding to economic factors has gone down systematically across the three rounds---38th, 43rd and 55th rounds. And this is true for all the categories of migrants namely rural male, rural female, urban male and

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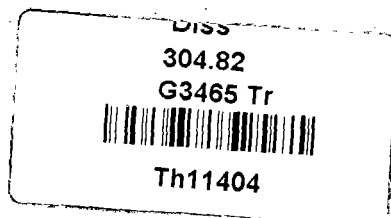
urban female migrants. However, when we look at the non-economic factors contributing to migration, we find that migrants responding to non-economic factors have gone up in the 43ᵈ round compared to the 38th round. Again we find that migrants responding to non-economic factors have gone up in the 55th round compared to the 43ʳᵈ round. And this is true for rural male, rural female, urban male and urban female migrants.

Therefore we find that males are responding less to economic factors. On the other hand their response to non-economic factors has gone down but not to the extent as that of economic factors. Females are also responding less to economic factors while their response to non-economic factors has gone down but not to the extent as in economic factors. From this we can say that contribution of non-economic factors to male and female migration has gone up while the contribution of economic factors to male and female migration has gone down over the three rounds.

STREAMS OF MIGRATION

This section deals with the various streams of migrants namely rural to rural, urban to rural, rural to urban and urban to urban migrants.

Table 3.5

MALES	R-R	U-R	R-U	U-U
38 RD	0.33	0.10	2.62	2.17
43 RD	0.34	0.10	2.50	2.07
55 RD	0.24	0.10	2.40	0.62
FEMALES	R-R	U-R	R-U	U-U
38 RD	1.00	0.50	2.95	2.40
43 RD	1.11	0.13	2.96	2.51
55 RD	0.96	0.14	1.99	1.75

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

Table 3.5 gives us information on the various streams of migration expressed as percentage of population at the destination. From the table we find that for males, rural to rural migration had gone up slightly in the 43rd round compared to the 38th round. But then it went down in the 55th round and settled at a level below that of 38th round. However, urban to rural migration had remained constant over the three rounds. But there has been a systematic decline in rural to urban and urban to urban migration over the three rounds.

In case of females, rural to rural, rural to urban and urban to urban migration had all gone up slightly in the 43rd round compared to the 38th round. But then they all settled at levels below that of the 38th round in the 55th round. Only urban to rural migration had gone down in the 43rd round but finally went up slightly in the 55th round compared to the 43rd round. However, this is lower than the level of the 38th round.

From the above account we can say that there has been overall significant decline in all the streams of migration when figures of the 38th and 55th rounds are compared. This is true for both male and female migrants. Besides the same trend is observable in majority of the cases when we compare the figures of the 43rd round with that of the 55th round.

CLASSIFICATION OF MIGRANTS ACCORDING TO MPCE CLASSES

The table below gives us break up of within district, across district within state and across state migrants according to Lower, Middle and Higher MPCE classes.

Table 3.6

38th RD			WITHIN DIST.	WITHIN STATE	ACROSS STATE
	RU M	LOWER MPCE	70.98	19.59	9.43
		MIDDLE MPCE	63.60	23.48	12.92
		HIGHER MPCE	56.59	28.58	14.83
	RU F	LOWER MPCE	79.27	15.44	5.30
		MIDDLE MPCE	72.39	21.87	5.74
		HIGHER MPCE	69.67	22.03	8.30
	UR M	LOWER MPCE	49.34	34.58	16.08
		MIDDLE MPCE	38.24	37.03	24.72
		HIGHER MPCE	32.14	35.13	32.73
	UR F	LOWER MPCE	55.13	31.62	13.25
		MIDDLE MPCE	37.91	41.67	20.42
		HIGHER MPCE	34.84	40.05	25.12
43rd RD					
	RU M	LOWER MPCE	68.74	19.18	12.08
		MIDDLE MPCE	60.43	24.54	15.03
		HIGHER MPCE	56.95	28.43	14.62
	RU F	LOWER MPCE	79.36	15.39	5.25
		MIDDLE MPCE	69.25	22.73	8.01
		HIGHER MPCE	63.43	25.96	10.61
	UR M	LOWER MPCE	49.12	33.31	17.57
		MIDDLE MPCE	32.88	41.95	25.18
		HIGHER MPCE	22.19	43.26	34.55
	UR F	LOWER MPCE	53.24	32.22	14.53
		MIDDLE MPCE	32.44	44.47	23.09
		HIGHER MPCE	24.54	45.24	30.22

49th RD					
	RU M	LOWER MPCE	56.79	31.88	11.34
		MIDDLE MPCE	60.09	27.40	12.51
		HIGHER MPCE	57.48	29.09	13.43
	RU F	LOWER MPCE	74.81	19.04	6.15
		MIDDLE MPCE	71.85	21.40	6.75
		HIGHER MPCE	63.51	25.87	10.62
	UR M	LOWER MPCE	53.09	31.50	15.40
		MIDDLE MPCE	30.90	41.48	27.62
		HIGHER MPCE	17.97	38.70	43.33
	UR F	LOWER MPCE	55.93	31.10	12.97
		MIDDLE MPCE	35.44	42.60	21.95
		HIGHER MPCE	15.72	39.38	44.90
55th RD					
	RU M	LOWER MPCE	53.56	22.14	24.30
		MIDDLE MPCE	56.20	24.10	19.71
		HIGHER MPCE	58.84	23.65	17.50
	RU F	LOWER MPCE	67.89	17.03	15.08
		MIDDLE MPCE	72.01	19.61	8.37
		HIGHER MPCE	69.52	23.73	6.75
	UR M	LOWER MPCE	46.76	43.70	9.54
		MIDDLE MPCE	49.65	31.90	18.46
		HIGHER MPCE	33.33	38.46	28.21
	UR F	LOWER MPCE	67.42	26.67	5.91
		MIDDLE MPCE	50.84	33.35	15.81
		HIGHER MPCE	37.65	41.46	20.89

Source: NSS, Migration in India, 38th, 43rd, 49th and 55th rounds.

From Table 3.6 we find that for intra-district movement as reported in the 38th there is a strict negative correlation between MPCE and rate of migration. By this we mean that those belonging to higher MPCE group migrate less. On the other hand for inter-state migration, we find a positive correlation between MPCE and rate of migration. However there is no such relation between MPCE and rate of migration in case of intra-state migration.

From the figures of the 43rd round, we find that for intra-district movement, there is negative correlation between MPCE and rate of migration. On the other hand in cases of intrastate and interstate migration, there is a positive correlation between the rates of migration and MPCE.

From the figures of 49th round, we find that there is no definite relation between intra-district migration rate and MPCE for rural males. However there is negative correlation between the rate of migration and MPCE in cases of rural females, urban males and urban females. In case of intra-state migration, there is no definite relation between rates of migration and MPCE in cases of rural males, urban males and urban females. In case of inter-state migration, there is a definite positive correlation between rates of migration and MPCE.

From the figures of 55th round, we find that for intra-district migration, there is no relation between rates of migration and MPCE. For intra-state migration, only positive correlation exists between rates of migration and MPCE in cases of rural females and urban females. In case of inter-state migration, positive correlation exists between rates of migration and MPCE for urban males and urban females.

From the above account we can conclude that there is some relation between the various forms of migration and MPCE. And this has changed across the four rounds. This is true for both males and females (rural and urban).

CONCLUSION

We find that mobility has gone down systematically in cases of rural and urban male migrants as well as rural female migrants as we move from the 38th to the 49th round. There is a slight increase in the percentage of female migrants as reported in the 55th round compared to the figure reported in the 49th round while that for rural males it has remained same and for urban males it has gone up. Therefore the percentage of male migrants in total population has also gone up in the 55th round compared to the 49th round.

In case of interstate inmigrants as percentage of population, we have a comparative analysis for the three rounds 38h, 43rd and 55th rounds only since 49th round does not provide information on this account. We find that there is an increase in the percentage of rural male and female interstate inmigrants in the 43rd round compared to the 38th round. However, the percentage of urban male and female interstate inmigrants has gone up in the 43rd round. Compared to the 43rd round, the percentage of male inmigrants in rural and urban areas and urban male interstate inmigrants has gone down except for the case of urban female interstate inmigrants. From here we can say that there has been an overall decline in interstate inmigrants from the 38th to the 55th rounds. Even in the case of intra state migration we find that there has been a decline in the percentage of such migrants although there had been an increase in the percentage from the 38th to the 43rd round. From here we can say that there is an overall tendency of decline in migrants expressed as percentage of population. As can be seen from the figures of the different streams of migration, we can say that there has been a decline in rural to rural, rural to urban and urban to urban migration. This is true for both males and females. Only there is a slight increase in

the urban to rural migration from 43rd to 55th round in case of females. For males it has remained the same for all the three rounds. This again suggests that there is a tendency of declining mobility especially among the males.

Coming to the aspect of factors contributing to migration (given by reasons for migration), we find that with time male migration is responding less to economic factors that to non-economic factors which include studies, social, external and other factors. On the other hand female migration is responding relatively more to non-economic factors. Therefore we can say that migration as a whole is responding more to non-economic factors than to economic factors.

In this chapter we try to address the various aspects of migration at state level. We have tried to look at the trends of total migration expressed as percentage of total population. Then we have focused on interstate and intrastate migrations that again have been expressed as percentage of total population of the respective states. The trends have been looked into for both males and females and for rural as well as urban area. Further more, we have tried to address the factors contributing to migration and the different streams of migration as well.

Comparison of migrants as percentage of total population

Table 4.1 gives us a comparative scenario of migrants expressed as percentage of total population across the four rounds—38th, 43rd, 49th and 55th. The figures are given for males and females for rural as well as urban areas.

Rural male migrants

From Table 1 we find that in case of rural male migrants, the percentage is high in case of Andhra Pradesh (AP), Tamil Nadu (TN), Karnataka, Kerala and Punjab as reported in the 38th and 43[d] rounds. Migration is highest in case of Maharashtra followed by Kerala and AP as has been reported in 38th round. Migration is lowest in case of Bihar followed by Assam and Uttar Pradesh (UP) as has been reported in the same round. From the figures of 43rd it can be seen that migration is highest in case of Kerala followed by TN and AP. On the other hand it is lowest in Assam followed by Bihar and UP. From the figures of the 49th round, we can see that migration has been highest in case of Gujarat followed by Kerala and TN. It has been lowest in Bihar followed by Assam

and UP. Finally from the figures of 55th round, we find that migration has been in case of Kerala followed by Maharashtra, TN and AP. On the other hand it has been lowest in case of Bihar followed by Assam and UP.

From above we find that migration has been high in case Kerala, Maharashtra, AP and TN in the four rounds under consideration. On the contrary it has been consistently low in states like Bihar, Assam and UP.

Rural female migrants

In the 38th round, in case of female rural migrants, we find that the percentage has been highest in Maharashtra, followed by Haryana, Punjab and AP. It has been lowest in Bihar followed by Assam and UP. From the figures of 43rd round we find that migration has been highest in Punjab followed by AP, Kerala and Rajasthan. Migration has been lowest in Assam followed by Bihar and Madhya Pradesh (MP). The figures of 49th round suggest that migration has been highest in Gujarat followed by Rajasthan and Maharashtra. On the contrary, migration has been lowest in case of Bihar followed by Assam and Karnataka. From the figures of the 55th round we find that migration has been highest in Maharashtra followed by Gujarat and Kerala.

From above we find that migration has been generally in Maharashtra, Haryana and AP in all the four rounds. On the contrary it has been low in Assam, Bihar and UP.

Urban male migrants

The figures of the 38th round suggest that migration has been highest in Orissa, Karnataka, Haryana and Punjab. It has been lowest in Bihar followed by Assam and Kerala. From the figures of 43rd round, we find that migration has been highest in Haryana followed by

Orissa and AP. It has been lowest in Bihar followed by Assam and MP. Figures of 49th round suggest that migration has been highest in Maharashtra followed by AP, Kerala and TN. However migration has been lowest in Bihar followed by UP, West Bengal (WB) and MP. Finally from the figures of the 55th round, we find that migration has been highest in Kerala followed by AP and Maharashtra. On the other hand migration has been lowest in Assam followed by Bihar and MP.

From above we find that migration has been high in Haryana, AP, Kerala and even in Orissa, which is a backward state. On the other hand migration has been low in backward states like Bihar and Assam in all the four rounds.

Urban female migrants

From the figures of the 38th round we find that migration has been highest in Haryana, followed by Punjab and AP. It has been lowest in Bihar followed by Assam and Kerala. The figures of the 43d round suggest that migration has been highest in Haryana followed by AP and Punjab. On the other hand it is lowest in Assam followed by Bihar and MP. From the figures of 49th round we find that migration has been highest in Rajasthan followed by Kerala and Maharashtra. It has lowest in Bihar, Assam and Karnataka. Finally from the figuresof 55th round we find that migration has been highest in Haryana followed by Kerala and Rajasthan. On the contrary, it has been lowest in Bihar followed by Assam and Orissa.

From above we find that migration has been high in Haryana and AP whereas it has been generally low in Assam and Bihar.

Table 4.1

MIGRANTS AS PERCENTAGE OF TOTAL POPULATION								
	RURAL MALE					RURAL FEMALE		
	38 RD	43 RD	49 RD	55 RD		38 RD	43 RD	49 RD	55 RD
AP	5.8	5.7	3.6	4.3	AP	12.1	11.8	7.6	7.9
ASS	1.3	0.8	1.4	0.9	ASS	4.5	2.7	4.9	3.2
BIH	0.8	0.9	0.7	0.4	BIH	1.0	3.8	3.5	4.8
GUJ	2.5	3.1	6.9	4.1	GUJ	6.9	10.2	11.0	10.0
HAR	3.0	1.5	1.3	1.4	HAR	11.7	10.2	7.7	9.4
KAR	4.2	5.0	2.0	3.1	KAR	9.5	10.1	5.0	8.9
KER	5.8	8.8	5.8	6.1	KER	8.6	11.8	8.6	9.8
MP	3.0	3.0	2.0	1.7	MP	8.6	9.2	9.0	8.3
MAH	6.1	5.4	4.1	5.4	MAH	12.7	12.0	9.8	10.5
ORI	3.5	3.3	1.6	3.0	ORI	9.6	9.8	5.9	6.1
PUN	4.2	4.5	1.7	2.2	PUN	11.7	11.9	7.4	7.6
RAJ	2.8	3.6	1.9	2.1	RAJ	10.9	11.7	9.2	9.3
TN	4.8	5.9	4.3	4.3	TN	9.4	9.8	7.2	8.2
UP	1.7	1.9	1.8	1.3	UP	8.1	10.3	8.5	8.5
WB	3.9	2.9	2.0	1.4	WB	8.5	9.8	8.4	7.5
	URBAN MALE					URBAN FEMALE		
	38 RD	43 RD	49 RD	55 RD		38 RD	43 RD	49 RD	55 RD
AP	14.5	16.2	10.3	11.7	AP	16.4	17.2	11.1	12.4
ASS	5.6	5.4	7.4	4.4	ASS	6.9	6.2	5.7	6.2
BIH	4.9	5.0	2.2	4.8	BIH	4.2	6.4	2.5	6.2
GUJ	11.9	10.0	7.8	8.7	GUJ	12.3	12.3	8.4	11.5
HAR	14.5	18.4	8.0	10.3	HAR	20.9	20.7	11.4	16.6
KAR	15.1	12.6	6.9	9.9	KAR	15.0	13.6	5.9	12.6
KER	8.7	11.8	10.1	11.8	KER	10.0	14.7	12.9	14.0
MP	11.6	8.8	7.2	6.0	MP	13.9	11.8	11.5	9.8
MAH	12.2	11.3	11.1	10.9	MAH	14.3	12.8	12.4	10.9
ORI	15.2	16.9	8.7	10.1	ORI	14.6	17.4	11.0	9.4
PUN	14.5	12.6	7.2	8.2	PUN	18.0	17.2	8.8	9.7
RAJ	9.4	10.5	8.3	9.0	RAJ	13.6	13.5	13.0	12.7
TN	12.9	14.0	10.1	8.9	TN	13.2	15.5	11.0	11.3
UP	9.2	10.6	5.8	9.1	UP	10.6	14.1	8.5	11.5
WB	10.2	9.9	5.8	7.2	WB	11.7	13.6	9.1	10.9

Source: NSS, Migration in India, 38th, 43rd, 49th and 55th rounds.

COMPARISON OF INTER-STATE INMIGRATION RATES AS REPORTED IN 38th, 43rd AND 55th ROUNDS.

In case of rural male inter-state inmigration, it has been generally high for Punjab, Maharashtra and Haryana in all the three rounds. These are the so called developed states. Very low male inmigration has taken place in rural areas in Assam and Bihar which are the less developed states. Among the other less developed states, male inmigration in rural areas is quite high in UP, Rajasthan and MP and has been very high in case of Orissa particularly as can been seen from its figure in the 55th round.

In case of rural female inter-state inmigration, it has been high in Haryana, Maharashtra and Punjab. Even MP and Rajasthan have reported high rates of female inmigration in rural areas. The less developed states of Assam and Bihar have reported very low rates of female inmigration.

In case of urban male inter-state inmigration, it has been very high in case of states like Haryana, Punjab, Maharashtra and Gujarat. These are the traditional developed states. In the 38th round WB reported high urban male inmigration. But then the rate has gone down considerably over the years.

In case of urban female inter-state inmigration, it has been generally high in Haryana, Maharashtra and Punjab. Besides, the same has been quite high in Gujarat and Rajasthan.

Among the less developed states, there are considerable employment opportunities in MP due to the presence of a large number of mines. As a result inmigration in general has been very high in case of

MP. In Rajasthan too mining and quarrying activity is quite prevalent which again provides employment opportunities. This serves as a huge incentive to inmigration.

WB is one state where inmigration in urban areas has gone down considerably and the same in rural areas has not improved considerably. This again has got to do with the employment opportunities that the state presents. Punjab, Haryana and Gujarat are the states that generally provide ample employment opportunities and as a result have experienced high inmigration.

In case of rural male inmigration, we find it has gone up in case of Bihar, Gujarat, MP, Maharashtra, Orissa, TN and WB when we compare figures of 38th and 55th rounds. The same has gone up in case of AP, Assam, Haryana, Karnataka, Punjab and Rajasthan. A special mention of Orissa has to be made since it is strictly a less developed state. The figure for Kerala had gone up as reported in the 43rd round but then had gone back to the level reported in the 38h round, in the 55th round.

In case of rural female inmigration, we find that it has gone up in case of AP, Gujarat, Haryana, Kerala, MP, Maharashtra, TN, UP and WB when we compare figures of 38th and 55h rounds. It has gone down in case of Bihar, Karnataka, Orissa, Punjab and Rajasthan.

In case of urban male inmigration, we find that it has gone up in case of AP, Haryana, Kerala, Maharashtra and Rajasthan when we compare figures of 38th and 55th round. However, the figure for Haryana went up steeply in the 43rd round but then fell less steeply. As a result we say that the inmigration for Haryana has gone up when we compare

the figures of the 38th and 55th rounds. The same has fallen in case of Assam, Bihar, Gujarat, Karnataka, MP, Orissa, Punjab, TN, UP and WB.

In case of urban female inmigration, we find that it has gone up in case of AP, Assam, Bihar, Haryana, Kerala and Maharashtra when we compare figures of 38th and 55th rounds. It has fallen in case of Gujarat, Karnataka, MP, Orissa, Punjab, Rajasthan, TN, UP and WB. The fall has been drastic in case of Punjab but still it has been high compared to the other states. All the above information can be had by referring to Table 4.2.

Table 4.2

INTER-STATE INMIGRANTS AS PERCENTAGE OF TOTAL POPULATION							
RURAL MALES					**RURAL FEMALES**		
	38 RD	**43 RD**	**55 RD**			**38 RD**	**43 RD**	**55 RD**
AP	0.22	0.36	0.19		**AP**	0.39	0.45	0.49
ASS	0.07	0.09	0.06		**ASS**	0.05	0.01	0.05
BIH	0.06	0.17	0.11		**BIH**	0.09	0.12	0.08
GUJ	0.05	0.27	0.36		**GUJ**	0.08	0.45	0.76
HAR	0.92	0.47	0.89		**HAR**	1.83	1.87	2.32
KAR	0.48	0.75	0.28		**KAR**	0.63	0.89	0.56
KER	0.74	1.09	0.74		**KER**	0.45	0.81	0.68
MP	0.26	0.25	0.31		**MP**	0.58	0.58	0.70
MAH	0.46	0.42	0.66		**MAH**	0.55	0.70	0.90
ORI	0.23	0.23	0.71		**ORI**	0.24	0.25	0.16
PUN	1.02	2.26	0.70		**PUN**	0.88	1.84	0.74
RAJ	0.51	0.62	0.30		**RAJ**	1.01	0.88	0.56
TN	0.29	0.44	0.35		**TN**	0.40	0.43	0.63
UP	0.34	0.40	0.34		**UP**	0.39	0.46	0.47
WB	0.27	0.26	0.35		**WB**	0.34	0.35	0.38
	URBAN MALES					**URBAN FEMALES**		
	38 RD	**43 RD**	**55 RD**			**38 RD**	**43 RD**	**55 RD**
AP	0.80	1.77	0.97		**AP**	0.75	1.31	0.84
ASS	0.46	0.80	0.36		**ASS**	0.21	1.29	0.35
BIH	0.42	0.42	0.20		**BIH**	0.69	0.38	0.71
GUJ	2.38	3.47	2.19		**GUJ**	1.81	2.57	1.68
HAR	4.67	10.29	6.67		**HAR**	4.93	9.21	5.59
KAR	3.10	1.42	1.92		**KAR**	3.17	1.88	2.41
KER	1.31	1.58	1.45		**KER**	0.80	1.29	1.26
MP	2.13	0.99	1.63		**MP**	2.28	1.95	1.38
MAH	2.82	2.49	4.19		**MAH**	2.59	2.00	3.54
ORI	1.08	2.04	0.73		**ORI**	1.12	1.83	0.89
PUN	7.47	5.85	5.75		**PUN**	6.89	5.21	2.83
RAJ	1.25	1.76	1.63		**RAJ**	1.65	1.84	1.46
TN	1.44	1.72	1.08		**TN**	1.19	1.78	1.02
UP	1.89	1.07	1.43		**UP**	1.65	1.38	1.16
WB	3.06	2.67	1.41		**WB**	1.93	2.57	0.91

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

COMPARISON OF INTRA-STATE MIGRATION RATES AS REPORTED IN 38th, 43rd AND 55th ROUNDS

In case of rural male intra-state migration, it has been generally high in states like AP, Kerala, Maharashtra and TN. Rural male intra-state migration in Gujarat and Karnataka have been quite high also. Intra-state migration has generally gone down as can be seen from the figures reported in the three rounds. In cases such as Karnataka, Kerala, Rajasthan, TN and UP, the figure has gone up from 38th to 43rd round but has gone below the level of 38th round, in the 55h round. The decline has been very significant in case of Kerala. AP, Haryana and WB have experienced a systematic decline in rural male intra-state migration over the three rounds.

In case of rural female intra-state migration, it has been generally high in almost all the states except Assam and Bihar. We find a decline in the migration rates in all the states except Bihar and UP by comparing the figures of 38th and 55h rounds. In states like AP, Bihar, Gujarat, Karnataka, Kerala, Orissa, Punjab, Rajasthan, TN, UP and WB, the figure has gone up from 38h to 43rd round but has fallen below the level of 38th round, in the 55th round.

In case of urban male intra-state migration, the figure is generally high in AP, Karnataka, Kerala, Orissa and TN. We find a decline in the intra-state migration rate in all the states except Bihar and UP as we compare the figures reported in the 38th and 55th rounds. The decline in intra-state migration is very significant in Haryana. Other states that have experienced significant decline in migration rate are AP, Karnataka, MP, Orissa, Punjab and TN. The states that have experienced systematic increase in migration rate over the three rounds are Bihar and MP. In states like AP, Orissa, Punjab, Rajasthan, TN, UP and WB the figure has

gone up from 38th to 43rd round but finally has gone down below the level in 38th round, in the 55th round.

In case of urban female intra-state migration, it has been high in AP, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Orissa, Rajasthan, TN, UP and WB. Comparing figures of 38th and 55h rounds we find that there has been a decline in the intra-state migration rates in almost all the states except Bihar, Kerala and UP. We again find that the figures have gone up from the 38h to 43rd round but have gone down below the level of the 38th round, in the 55th round in AP, Orissa, Punjab, TN and WB. There has been a systematic decline in the intra-state migration rate over the three rounds in Gujarat, Haryana, Karnataka, MP, Maharashtra and Rajasthan. All the above information can be had by referring to Table 4.3.

Table 4.3

INTRA-STATE MIGRANTS AS PERCENTAGE OF TOTAL POPULATION							
RURAL MALES					**RURAL FEMALES**		
	38 RD	**43 RD**	**55 RD**		**38 RD**	**43 RD**	**55 RD**
AP	5.58	5.34	4.09	**AP**	11.70	11.34	7.50
AS	1.23	0.71	0.84	**AS**	4.45	2.69	3.16
BIH	0.74	0.73	0.28	**BIH**	0.91	3.67	4.73
GUJ	2.46	2.83	3.67	**GUJ**	6.82	9.74	9.55
HAR	2.08	0.93	0.51	**HAR**	9.87	8.19	6.62
KAR	3.72	4.25	2.80	**KAR**	8.87	9.21	8.21
KER	5.02	7.17	4.23	**KER**	8.14	10.84	8.86
MP	2.75	2.73	1.39	**MP**	8.03	8.61	7.55
MAH	5.50	4.99	4.72	**MAH**	12.12	11.30	9.67
OR	3.28	3.07	2.30	**OR**	9.36	9.55	5.94
PUN	2.97	2.12	1.37	**PUN**	10.80	9.97	6.83
RAJ	2.26	2.93	1.79	**RAJ**	9.89	10.79	8.73
TN	4.32	5.42	3.76	**TN**	8.78	9.31	7.64
UP	1.36	1.46	1.24	**UP**	7.69	9.82	8.00
WB	3.42	2.52	1.00	**WB**	7.96	9.36	6.97
	URBAN MALES				**URBAN FEMALES**		
	38 RD	**43 RD**	**55 RD**		**38 RD**	**43 RD**	**55 RD**
AP	13.70	14.37	9.68	**AP**	15.65	15.81	11.25
AS	5.12	4.48	4.05	**AS**	6.69	4.76	4.80
BIH	4.48	4.50	4.57	**BIH**	3.52	5.98	4.73
GUJ	9.51	6.51	6.47	**GUJ**	10.48	9.63	8.28
HAR	9.79	7.99	3.51	**HAR**	15.88	11.30	7.36
KAR	11.97	11.14	7.96	**KAR**	11.84	11.70	8.77
KER	7.33	9.90	9.47	**KER**	9.20	13.26	11.55
MP	9.48	7.79	4.35	**MP**	11.59	9.83	6.33
MAH	9.38	8.71	6.55	**MAH**	11.71	10.71	7.33
OR	14.12	14.84	9.11	**OR**	13.48	15.54	8.79
PUN	6.63	6.70	2.42	**PUN**	10.82	11.92	5.99
RAJ	7.99	8.58	7.32	**RAJ**	11.95	11.64	9.23
TN	11.13	12.19	7.62	**TN**	11.68	13.66	9.89
UP	7.28	9.46	7.57	**UP**	8.91	12.59	10.06
WB	6.95	7.17	5.62	**WB**	9.54	11.00	7.94

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

Factors responsible for migration (38ᵗʰ, 43ʳᵈ and 55ᵗʰ rounds).

The factors related to employment of the migrants are classified as economic factors. Those not related to employment are clubbed under the head non-economic factors. These include studies, social factors, external factors and other factors.

Table 4.4

	ECONOMIC FACTORS				NON-ECONOMIC FACTORS			
	38 RU M	38 RU F	38 UR M	38 UR F	38 RU M	38 RU F	38 UR M	38 UR F
AP	1.84	0.62	6.18	0.64	3.91	11.49	8.32	15.79
ASS	0.52	0.10	3.19	0.79	0.77	4.40	2.37	6.10
BIH	0.29	0.06	2.33	0.47	0.47	0.98	2.59	3.76
GUJ	0.97	0.14	5.80	0.68	1.49	6.64	6.14	11.62
HAR	1.06	0.04	8.29	1.36	1.89	11.63	6.23	19.56
KAR	1.51	0.36	7.31	0.88	2.69	9.17	7.79	14.08
KER	1.18	0.45	3.35	1.80	4.60	8.13	5.24	8.19
MP	1.20	0.47	5.78	1.30	1.83	8.07	5.81	12.57
MAH	2.11	0.47	6.07	0.37	3.95	12.25	6.13	13.94
ORI	1.68	0.31	8.06	1.05	1.76	9.23	7.04	13.54
PUN	1.41	0.07	8.30	0.74	2.82	11.67	6.22	17.25
RAJ	1.24	0.27	4.26	0.57	1.53	10.58	5.14	13.07
TN	1.65	0.49	6.11	1.19	3.13	8.91	6.80	11.98
UP	0.47	0.15	4.04	0.27	1.17	7.65	5.19	10.35
WB	0.98	0.19	4.71	1.20	2.89	7.59	5.48	10.54
	43 RU M	43 RU F	43 UR M	43 UR F	43 RU M	43 RU F	43 UR M	43 UR F
AP	1.68	0.47	6.48	1.07	4.02	11.34	9.72	16.13
ASS	0.50	0.08	2.71	0.14	0.30	2.61	2.69	6.06
BIH	0.28	0.03	1.57	0.22	0.62	3.77	3.44	6.18
GUJ	1.24	0.30	5.59	0.31	1.85	9.91	4.41	11.99
HAR	0.50	0.07	10.18	0.77	1.01	10.14	8.22	19.93
KAR	1.82	0.34	5.42	0.67	3.19	9.77	7.18	12.93
KER	2.11	0.47	4.07	1.25	6.70	11.33	7.75	13.45
MP	1.17	0.44	4.03	0.86	1.83	8.76	4.77	10.94
MAH	2.05	0.44	5.22	0.82	3.35	11.56	6.09	11.98
ORI	1.38	0.19	8.69	0.75	1.92	9.61	8.21	16.65
PUN	1.76	0.20	6.29	0.60	2.74	11.71	6.31	16.60
RAJ	1.32	0.19	4.68	1.00	2.28	11.51	5.82	12.50
TN	1.80	0.61	6.76	0.87	4.10	9.20	7.25	14.63
UP	0.45	0.09	5.10	0.39	1.46	10.21	5.50	13.71
WB	0.80	0.13	3.67	0.75	2.10	9.68	6.22	12.85

	ECONOMIC FACTORS				NON-ECONOMIC FACTORS			
	55 RU M	55 RU F	55 UR M	55 UR F		55 RU M	55 RU F	55 UR M	55 UR F
AP	1.03	0.42	4.72	0.61		3.27	7.45	6.92	11.79
ASS	0.26	0.06	2.42	0.73		0.64	3.10	1.98	5.47
BIH	0.10	0.01	1.61	0.36		0.30	4.77	3.19	5.84
GUJ	1.21	0.10	4.05	0.51		2.89	9.90	4.64	10.99
HAR	0.53	0.02	5.43	0.17		0.87	9.36	4.83	16.43
KAR	1.12	0.29	4.90	0.96		1.98	8.58	5.00	11.64
KER	1.45	0.28	3.15	0.78		4.65	9.38	8.50	13.22
MP	0.47	0.23	2.60	0.32		1.23	8.03	3.35	9.48
MAH	2.12	0.56	5.54	0.56		3.28	9.85	5.36	10.34
ORI	0.68	0.05	3.82	0.49		2.32	6.01	6.29	8.91
PUN	1.21	0.06	6.22	0.32		0.99	7.51	1.89	9.38
RAJ	0.83	0.11	4.30	0.64		1.27	9.20	4.69	12.07
TN	1.39	0.37	3.93	0.51		2.91	7.75	4.72	10.79
UP	0.33	0.03	4.11	0.19		0.97	8.38	5.02	11.31
WB	0.32	0.01	2.69	0.78		1.08	7.31	4.49	10.12

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

RU M = percentage of rural male migrants

RU F= percentage of rural female migrants

UR M = percentage of urban male migrants

UR F = percentage of urban female migrants

The figures in Table 4.4 have been expressed as percentage of total population to have a clearer picture of how migration has responded to the economic and non-economic factors. By comparing figures of 38th and 55th rounds we find that there is a decline in the response of rural male migrants to economic factors in all the states except Gujarat and Kerala. In case of rural female migrants, there is decline in response to economic factors throughout except in Maharashtra. In case of urban male migrants, in UP only there has been an increase in response to economic factors. For urban female migrants, we find that there is an increase in response to economic factors in Karnataka and Rajasthan only. Therefore we find that there is a decline in response to economic factors for all the categories of migrants in almost all the states. As far as non-economic factors are concerned, in

case of rural males, response has gone up in Gujarat, Kerala, and Orissa only. In case of rural female migrants response to non-economic factors has gone up in Bihar, Gujarat, Kerala and UP. In case of urban male migrants, response to non-economic factors has gone up in Bihar and Kerala only. In case of urban female migrants the response has gone up in Bihar, Kerala and UP.

When we compare the figures of 38th and 43rd rounds, we find that there has been an increase in response of rural male migrants to economic factors in Gujarat, Karnataka, Kerala, Punjab, Rajasthan and TN. In case of rural female migrants there has been an increase in response of rural male migrants to economic factors in Gujarat, Karnataka, Kerala, Punjab and TN. In case of urban male migrants, there has been in increase in response to economic factors in AP, Haryana, Kerala, Orissa, Rajasthan, TN and UP. In case of urban female migrants, the increase in response to economic factors can be seen in the case of AP, Maharashtra, Rajasthan and UP. In the case of noneconomic factors, we find that the response of rural male migrants has gone up in the case of AP, Bihar, Gujarat, Karnataka, Kerala, Orissa, Rajasthan, TN and UP. In case of rural female migrants, the response to noneconomic factors has gone up in Bihar, Gujarat, Karnataka, Kerala, MP, Orissa, Punjab, Rajasthan, TN, UP and WB. In case of urban male migrants, the response to non-economic factors has gone up in AP, Assam, Bihar, Haryana, Kerala, Orissa, Punjab, Rajasthan, TN, UP and WB. In case of urban female migrants, response to non-economic factors has gone up in AP, Assam, Bihar, Gujarat, Haryana, Kerala, Orissa, TN, UP and WB. Comparing figures of 43rd and 55th rounds we find that response of rural male migrants to economic factors has gone up in Haryana and Maharashtra only while in case of rural female migrants the same has gone up in Maharashtra only. In case of urban male migrants, the figure has gone up in Bihar and Maharashtra only. In case of urban female migrants, the figure has gone up in Assam, Bihar, Gujarat and

Karnataka. Response to non-economic factors in case of rural male migrants has gone up in Assam and Gujarat only. In case of rural female migrants, the figure has gone up in Assam and Bihar. In case of urban male migrants the figure has gone up in Bihar and Kerala while that for urban female migrants it has gone up in Bihar, Kerala and UP .

Therefore we find that there has been increase in response to economic as well as non-economic factors in very few states. On the contrary, response to both the factors has declined in majority of the states as we compare the figures of 38th and 55th, 38h and 43rd and finally 43rd and 55th rounds separately.

Household Migration (49ᵗʰ round)

We start by looking at the general scenario of household migration for both rural and urban areas in fifteen major states as has been captured in the 49ᵗʰ round of NSS.

Table 4.5

Percentage of household according to migration status		
	Rural	Urban
AP	1.0	3.3
ASS	0.8	2.6
BIH	0.3	1.2
GUJ	5.3	3.0
HAR	0.3	2.2
KAR	0.6	3.0
KER	1.3	2.6
MP	0.6	2.5
MAH	1.2	2.1
ORI	0.6	2.1
PUN	0.8	1.9
RAJ	1.0	2.1
TN	1.0	3.5
UP	1.3	1.2
WB	0.9	1.2

Source: NSS, Migration in India, 49ᵗʰ round

From Table 4.5 we find that highest household migration in rural areas has taken place in Gujarat followed by Kerala and UP. Highest household migration in urban areas has taken place in TN followed by Andhra Pradesh and Gujarat and Karnataka both. Gujarat is the only state where household migration is high both in rural and urban areas. Another surprising element, which we find in case of Gujarat, is

that household migration in rural areas is more than that in urban areas.

We cannot undertake a comparative analysis of this as the other rounds----38th, 43rd and 55th, do not give any information on this account.

Return migrants as percentage of total population (49th Round)

Table 4.6

	Return migrants as percentage of total population			
	Rural Male	**Rural Female**	**Urban Male**	**Urban Female**
AP	0.86	1.55	1.88	1.81
ASS	0.50	0.44	1.66	1.05
BIH	1.53	0.30	0.34	0.46
GUJ	5.36	5.22	0.78	1.06
HAR	2.00	5.13	4.77	6.89
KAR	0.57	1.80	1.53	2.05
KER	3.34	3.91	2.40	2.05
MAH	0.54	1.63	0.96	1.34
MP	1.89	2.40	1.66	1.68
ORI	0.71	0.49	1.10	0.88
PUN	0.30	0.44	1.58	1.53
RAJ	1.09	0.64	2.24	1.85
TN	1.88	2.38	1.44	1.50
UP	0.59	1.24	1.09	3.12
WB	0.80	2.01	1.21	1.83

Source: NSS, Migration in India, 49th Round

Data on return migrants is available only in the 49th round. Therefore, a comparative analysis on this account is not possible. However, from Table 4.6 we find that in case of rural males, percentage of return migrants is highest in case Gujarat followed by Kerala and MP. The figure is lowest for Punjab followed by Assam and WB. In case of rural females the figure is highest in Gujarat followed by Haryana and Kerala. However it is lowest in Bihar followed by Assam and Punjab. In case of urban males, the figure is highest for Haryana followed by Kerala and Rajasthan. The figure is lowest in Bihar followed by Gujarat and

Maharashtra. Finally in case of urban males, we find that the figure is highest in Haryana followed by UP, Karnataka and Kerala. On the contrary it is lowest in Bihar followed by Orissa and Assam.

Streams of migration

By analysing the figures of 38th and 43rd rounds (refer to Table 4.7) we find that for male migrants, rural to rural migration has gone up in AP, Bihar, Karnataka, Kerala, Punjab, Rajasthan, TN and UP. In case of urban to rural migration, the figure has gone up in Karnataka, Kerala, Orissa, Punjab, Rajasthan, TN and UP. In case of rural to urban migration, the figure has gone up in AP, Assam, Bihar, Gujaat, Haryana, Kerala, TN and UP. In case of urban to urban migration the figure has gone up in Gujarat, Kerala, Maharashtra, Orissa, Rajasthan TN, UP and WB. In case of female migrants, rural to rural migration figure has gone up in AP, Bihar, Gujarat, Kamataka, Kerala, Orissa, Rajasthan, TN, UP and WB. In case of urban to rural migration, the figure has gone up in Bihar, Haryana, Kerala, MP, Maharashtra, Orissa, Punjab, Rajasthan, TN and UP. in case of rural to urban migration for females, the figure has gone up in Bihar, Gujarat, Haryana, Kerala, Orissa, TN, UP, WB. In case of urban to urban migration we find that the figure has gone up in AP, Gujarat, Kerala, Orissa, Rajasthan, TN, UP and WB.

Comparing 43d and 55th rounds for males we find that rural to rural migration has gone up in Assam and Gujarat only. In case of urban to rural migration, the figure has gone up in Gujarat, Haryana, Karnataka, Maharashtra, Orissa and WB. In case of rural to urban migration, the figure has gone down in all the fifteen states while urban to urban migration has gone up in Bihar only. In case of female

migration, rural to rural migration has gone up in Assam, Bihar and Gujarat. In case of urban to rural migration, the figure has gone up in AP, Bihar, Haryana, Kerala, Maharashtra, UP and WB. In case of rural to urban migration, the figure has gone up only in Assam while urban to urban migration has gone up in Bihar only.

Table 4.7

Male	R-R	U-R	R-U	U-U	Female	R-R	U-R	R-U	U-U
AP	0.6	0.16	3.49	2.48	38RD	1.41	0.19	4.21	2.55
ASS	0.14	0.01	2.23	3.22		0.49	0.01	3.56	3.19
BIH	0.07	0.02	2.29	1.62		0.11	0.01	1.76	1.59
GUJ	0.31	0.05	1.1	1.39		0.88	0.13	2.5	1.34
HAR	0.25	0.13	3.27	3.11		1.42	0.09	4.37	4.83
KAR	0.43	0.17	2.58	2.55		1.13	0.22	2.75	2.34
KER	0.59	0.14	2.36	1.77		0.98	0.1	2.93	1.86
MP	0.3	0.08	2.59	2.9		0.99	0.1	3.2	3.37
MAH	0.69	0.23	1.95	1.44		1.73	0.25	2.21	1.76
ORI	0.34	0.06	8.4	4.09		1.04	0.05	8.6	3.35
PUN	0.42	0.14	2.7	2.32		1.44	0.19	3.26	3.03
RAJ	0.26	0.09	2.79	1.51		1.15	0.1	3.89	2.45
TN	0.51	0.18	1.71	2.09		1.12	0.25	1.84	2.03
UP	0.15	0.05	2.79	2.2		0.94	0.06	3.24	2.5
WB	0.41	0.09	2	1.74		1.01	0.12	1.97	2.35
AP	0.63	0.13	3.97	2.38	43RD	1.43	0.15	4.12	2.61
ASS	0.08	0.01	3.14	1.76		0.29	0.01	3.21	2.4
BIH	0.08	0.02	2.59	1.23		0.42	0.02	3.48	1.47
GUJ	0.28	0.05	9.52	6.89		0.94	0.15	10.92	9.14
HAR	0.12	0.06	4.75	3.03		1.08	0.1	4.73	4.01
KAR	0.53	0.19	2.31	1.86		1.22	0.23	2.32	2.19
KER	0.86	0.22	3.06	1.93		1.31	0.21	4.13	2.2
MP	0.3	0.08	2.19	1.8		1.05	0.13	3	2.36
MAH	0.65	0.21	1.52	1.49		1.65	0.26	1.85	1.57
ORI	0.3	0.08	7.48	5.8		1.06	0.06	8.73	4.93
PUN	0.43	0.18	2.21	2.15		1.39	0.27	3.1	2.86
RAJ	0.33	0.13	2.67	2.01		1.31	0.19	3.36	2.73
TN	0.62	0.26	1.98	2.17		1.15	0.32	2.25	2.33
UP	0.16	0.07	3.2	2.32		1.18	0.09	4.04	3.29
WB	0.33	0.05	1.62	2.02		1.26	0.08	2.23	2.78

Male	R-R	U-R	R-U	U-U	Female	R-R	U-R	R-U	U-U
AP	0.49	0.12	2.15	1.7	55RD	0.91	0.22	2.43	1.72
ASS	0.09	0.01	2.69	0.93		0.36	0.01	3.3	1.65
BIH	0.03	0.02	1.78	1.41		0.54	0.03	1.89	2.24
GUJ	0.39	0.25	1.12	1.2		1.26	0.33	1.51	1.58
HAR	0.09	0.11	2.9	0.84		0.99	0.3	4.44	1.53
KAR	0.34	0.13	1.46	1.46		1.15	0.19	1.65	2.01
KER	0.55	0.17	1.73	1.83		1.15	0.22	2.83	1.73
MP	0.18	0.05	1.08	1.18		1.03	0.09	1.73	1.89
MAH	0.66	0.27	1.39	1.16		1.5	0.31	1.34	1.25
ORI	0.24	0.12	3.97	1.98		0.69	0.04	3.98	1.64
PUN	0.26	0.04	1.84	0.74		1.01	0.1	1.63	1.4
RAJ	0.18	0.09	1.69	1.87		1.14	0.1	2.61	2.51
TN	0.39	0.26	1.02	1.36		0.98	0.31	1.34	1.71
UP	0.11	0.05	2.4	1.61		0.99	0.1	2.87	2.16
WB	0.13	0.06	1.02	1.45		0.95	0.09	1.77	2.05

Source: NSS, Migration in India, 38th, 43rd and 55th rounds.

CONCLUSION

From the state-level figures of migrants expressed as percentage of total population, we find that the percentage of migrants in the 55th round is less compared to percentage in the 38th round except for Kerala. Besides we find that migration in rural areas is considerably less compared to that in the urban areas. This is true for both males and females. Comparing the figures for the fifteen major states across the four rounds, we find that migration in the eighties was far more compared to that in the nineties. This means that there has been considerable slow down in mobility in the nineties.

From the figures of inter-state inmigrants, we find that the percentage is always high in case of the developed states e.g. Punjab, Maharashtra and Haryana. On the other hand, inmigration is low in case of less developed states like Assam, Bihar and UP. The exception is MP which is a less developed state where inmigration is high. This is due to the numerous mines which exist in the state which provide good employment opportunities. On the other hand, West Bengal inspite of being a developed state to a certain extent has experienced low inmigration compared to the other developed states. From the figures of intrastate migration, we find that it has been generally high in states like Gujarat, AP, Maharashtra and Kerala and low in Assam and Bihar. We find that there is a decline in the figures of the 55th round compared to both 38th and 43rd rounds.

Coming to the factors responsible for migration, we find that male migration is increasingly responding more to non-economic factors than to economic factors. On the other hand female migration is responding more to non-economic factors compared to economic factors.

Where there is decline in response to both the factors, the decline in response to economic factors is more compared to non-economic factors. From here also we can say significance of non-economic factors contributing to migration has gone up.

In this chapter we try to look at how migration has responded to development across the different rounds. For this we have used developmental indicators like per capita income, poverty, development of infrastructure facilities and percentage of employment. In order to understand the complexity of temporal variations of migration, we have used correlation analysis.

Migration and Infrastructure

We know that migration takes place in response to changing economic scenario. This would include the effect of development of infrastructure on migration. The concept of infrastructure is essentially a flow of service out of a certain stock of infrastructure facilities created over a length of time. Depending on the nature of input services, infrastructure can be broadly classified into two types: physical and social. The former consists of railways, roads, telecommunication, housing, water supply, etc. they work as intermediate inputs to production, and improvement in these inputs in any geographical location attracts additional flows of resources. This raises the productivity of factors of production (capital and labour) and profitability of the producing units thereby permitting higher levels of output, income and employment. The positive contribution of physical infrastructure to economic growth and development comes through increases in investment, employment, output and income in a chain of cumulative causation.

Social infrastructure includes education, health, banking and other forms of financial facilities. Their contribution to production activity although indirect on some occasions, is no less important. Education opens up employment opportunities. Better health condition increases productivity of an individual and hence enhances his earning

potential. Therefore we find that development of infrastructure (physical and social) has a positive effect on employment and income opportunities of an individual. As a result, an individual will always be drawn to an area where there is better employment opportunity in particular and better living conditions in general.

In this section data on infrastructure has been collected from 'Profiles of Districts' volume of CMIE, 2001. Here an attempt has been made to construct a Composite Index of Infrastructure (CII). For this, weightages had to be generated and this has been done by using Modified Principle Component Analysis.

The indicators that have been used to construct the CII are as follows:

1. road length per 100 square kms.
2. railway route length per 100 square kms.
3. number of post offices per lakh population.
4. number of telephone connections per 100 persons.
5. number of banking branches per lakh population.
6. credit per capita.
7. number of primary health centres per lakh population.
8. number of hospitals and dispensary beds per lakh population.
9. number of primary schools per lakh population.
10. number of middle schools per lakh population.
11. power generation in MKW.
12. gross irrigated area as percentage of gross cropped area.

Table 5.1

COMPOSITE INDEX OF INFRASTRUCTURE---CII				
	CII83	CII87	CII93	CII99
AP	2.53	3.13	3.08	3.03
ASS	2.21	2.51	2.71	2.95
BIH	2.18	2.47	2.32	2.11
GUJ	3.62	3.86	4.23	4.27
HAR	2.66	3.09	3.11	3.01
KAR	4.68	3.62	3.77	3.80
KER	4.02	4.01	4.44	4.10
MP	2.16	2.64	2.64	2.70
MAH	4.15	4.85	4.54	5.23
ORI	2.85	3.24	3.22	3.23
PUN	4.87	4.52	5.24	4.27
RAJ	2.14	2.51	2.66	2.82
TN	3.69	3.80	4.02	4.08
UP	2.76	2.98	2.88	2.94
WB	2.79	3.42	2.77	3.13

Source: Profiles of Districts, CMIE, 2000.

The above table (Table 5.1) gives the values of CII corresponding to the years 1983, 1987 and 1999. We find that for the year 1983, the value of CII is high for Punjab, Karnataka, Maharashtra and Kerala. On the other hand it is low for Rajasthan, Bihar, MP and Assam. For the year 1987, the value of CII is high for Maharashtra, Punjab, Kerala and Gujrat. The value of CII is quite low for Bihar, Assam, Rajasthan and UP. Finally for the year 1999, the value of CII is high for Maharashtra, Punjab, Gujrat and Kerala. On the other hand it is quite low for Bihar, Assam and UP. Therefore we find that value of CII is generally high for the developed states and low for the backward states. And, this is true for all the three time periods. This means that the states which had low level of infrastructure development in 1983, still continue to remain at the bottom of the ladder in 1999. This again means that there had been very little investment in the backward states in the field of infrastructure, and most of the investment in infrastructure continues to take place in the developed states.

Next we look at the correlation between interstate inmigration (male and female) for both rural and urban areas and Composite Index of Infrastructure. This is given in Tables 5.2 and 5.3.

Correlation between male inter-state inmigration and CII   Table 5.2

	RUM83	URM83	RUM87	URM87	RUM99	URM99	CII83	CII87	CII99
RUM83	1.000								
URM83	.760**	1.000							
RUM87	.800**	.744**	1.000						
URM87	.676**	.728**	.350	1.000					
RUM99	.747**	.565*	.459	.689**	1.000				
URM99	.801**	.864**	.547*	.888**	.718**	1.000			
CII83	.509	.583*	.682**	.199	.444	.431	1.000		
CII87	.451	.544*	.550*	.267	.570*	.498	.888**	1.000	
CII99	.336	.398	.418	.176	.477	.416	.842**	.947**	1.000

Correlation between female inter-state inmigration and CII   Table5.3

	RUF83	URF83	RUF87	URF87	RUF99	URF99	CII83	CII87	CII99
RUF83	1.000								
URF83	.689**	1.000							
RUF87	.873**	.900**	1.000						
URF87	.839**	.780**	.836**	1.000					
RUF99	.859**	.605*	.775**	.877**	1.000				
URF99	.834**	.756**	.827**	.851**	.908**	1.000			
CII83	.073	.517*	.444	.152	.157	.349	1.000		
CII87	.052	.447	.378	.183	.235	.391	.888**	1.000	
CII99	.005	.315	.277	.100	.213	.352	.842**	.947**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

CII=Composite Index of Infrastructure

RUM=rural interstate male inmigrant

URM=urban interstate male inmigrant

RUF=rural interstate female inmigrant

URF=urban interstate female inmigrant

From Tables 5.2 and 5.3 we find that correlation between CII and inter-state male and female migration for both rural and urban areas is positive for all the years. Correlation between RUM and CII is significant for the year 1983 only. Correlation between URM and CII is

significant for the year 1983 only. On the other hand correlation between RUF and CII is positive for all the years but not significant. In addition correlation between URF and CII is positive for all the years but again not significant.

Migration and Per Capita Income (PCI)

PCI is a very important developmental indicator. In Table 4 we get the figures of PCI for the years 1983, 1987, 1993 and 1999 for the fifteen major states. The figures are in rupees only.

Per Capita Income (PCI)   Table 5.4

	PCI-83	PCI-87	PCI-93	PCI-99
AP	2046	2849	6900	13853
ASS	1777	2962	5520	8700
BIH	1242	1935	3417	5923
GUJ	3162	3636	8945	18792
HAR	3133	4512	10526	19773
KAR	2285	3225	7216	15889
KER	2050	2994	6524	17756
MP	1746	2677	5508	10147
MAH	3185	4520	11799	22763
ORI	1772	2329	4662	8719
PUN	3605	5752	12936	20834
RAJ	1914	2370	5315	11045
TN	2024	3444	8051	17525
UP	1682	2399	4783	9261
WB	2189	3693	6247	12961

Source: Planning Commission

From Table 5.4 we find that PCI has gone up systematically for all the years as we move from 1983 to 1999. Punjab, Gujrat, Haryana and Maharashtra are the states to have high PCI for all the years. On the other hand, Assam, Bihar, Orissa, UP and MP are the states to have very low PCI.

First we look at the correlation between migrants (male and female) expressed as percentage of total population for both rural and urban areas and PCI given in Tables 5.5 to 5.8.

Correlation between rural male migrants and PCI Table 5.5

	MALE83	MALE87	MALE93	MALE99	PCI83	PCI87	PCI93	PCI99
MALE83	1.000							
MALE87	.885**	1.000						
MALE93	.502	.638*	1.000					
MALE99	.831**	.889**	.833*	1.000				
PCI83	.386	.198	.328	.315	1.000			
PCI87	.465	.273	.203	.267	.920**	1.000		
PCI93	.499	.297	.294	.371	.956**	.934**	1.000	
PCI99	.668**	.546*	.551*	.625*	.887**	.870**	.924**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban male migrants and PCI Table 5.6

	MALE83	MALE87	MALE93	MALE99	PCI83	PCI87	PCI93	PCI99
MALE83	1.000							
MALE87	.849**	1.000						
MALE93	.491	.566*	1.000					
MALE99	.625*	.784**	.709**	1.000				
PCI83	.540*	.374	.359	.362	1.000			
PCI87	.557*	.391	.319	.326	.920**	1.000		
PCI93	.544*	.394	.446	.370	.956**	.934**	1.000	
PCI99	.541*	.454	.589*	.573*	.887**	.870**	.924**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between rural female migrants and PCI   Table 5.7

	FEMALE83	FEMALE87	FEMALE93	FEMALE99	PCI83	PCI87	PCI93	PCI99
FEMALE83	1.000							
FEMALE87	.860**	1.000						
FEMALE93	.506	.679**	1.000					
FEMALE99	.647**	.845**	.775**	1.000				
PCI83	.574*	.509	.472	.525*	1.000			
PCI87	.621*	.561*	.428	.522*	.920**	1.000		
PCI93	.621*	.496	.387	.490	.956**	.934**	1.000	
PCI99	.641**	.627*	.500	.694**	.887**	.870**	.924**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban female migrants and PCI   Table 5.8

	FEMALE83	FEMALE87	FEMALE93	FEMALE99	PCI83	PCI87	PCI93	PCI99
FEMALE83	1.000							
FEMALE87	.873**	1.000						
FEMALE93	.565*	.631*	1.000					
FEMALE99	.671**	.760**	.626*	1.000				
PCI83	.653**	.470	.260	.399	1.000			
PCI87	.665**	.537*	.324	.396	.920**	1.000		
PCI93	.656**	.472	.294	.363	.956**	.934**	1.000	
PCI99	.608*	.515*	.427	.566*	.887**	.870**	.924**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

MALE=male migrant

FEMALE=female migrant

PCI=per capita income

We find that in case of rural male migrants the correlation is positive at all the four points of time (1983, 1987, 1993 and 1999) but is significant only in 1999. In case of urban male migrants the correlation is positive at all the four points of time but is significant as well only in 1983 and 1999. In case of rural and urban female migrants, the correlation is positive throughout and is significant in 1983, 1987 and

1999. Therefore we find that migration in general is positively related to PCI. One thing to be noted is that we have got more significant coefficients in case of female migrants (rural and urban) compared to male migrants.

Next we look at the correlation between inter-state inmigration (male and female) for both rural and urban areas and PCI. We can see this in Tables 5.9 and 5.10.

Correlation between inter-state rural inmigration and PCI   Table 5.9

	RUM83	RUF83	RUM87	RUF87	RUM99	RUF99	PCI83	PCI87	PCI99
RUM83	1.000								
RUF83	.796**	1.000							
RUM87	.791**	.355	1.000						
RUF87	.933**	.873**	.722**	1.000					
RUM99	.750**	.583*	.459	.679**	1.000				
RUF99	.647**	.859**	.179	.775**	.649**	1.000			
PCI83	.587*	.464	.543*	.713**	.597*	.622*	1.000		
PCI87	.701**	.514*	.637**	.754**	.675**	.601*	.920**	1.000	
PCI99	.607*	.434	.511*	.644**	.616*	.636**	.887**	.870**	1.000

Correlation between inter-state urban inmigration and PCI   Table 5.10

	URM83	URF83	URM87	URF87	URM99	URF99	PCI83	PCI87	PCI99
URM83	1.000								
URF83	.976**	1.000							
URM87	.726**	.753**	1.000						
URF87	.741**	.780**	.984**	1.000					
URM99	.864**	.895**	.888**	.882**	1.000				
URF99	.685**	.756**	.849**	.851**	.930**	1.000			
PCI83	.810**	.768**	.732**	.676**	.859**	.739**	1.000		
PCI87	.898**	.840**	.698**	.676**	.864**	.717**	.920**	1.000	
PCI99	.637*	.588*	.586*	.523*	.739**	.686**	.887**	.870**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

RUM=rural interstate male inmigrant

URM=urban interstate male inmigrant

RUF=rural interstate female inmigrant

URF=urban interstate female inmigrant

PCI=per capita income

From Tables 5.9 and 5.10 we find that correlation between interstate inmigration and PCI is positive for all the years. This is true for both male and female inmigrants, and for both rural and urban areas. Correlation between male inmigrants in rural as well as urban area and PCI is significant. On the other hand, correlation between female interstate inmigration rural area and PCI is significant in 1987 and 1999. However, correlation between female interstate inmigration and PCI is positive for all the three years.

Next we look at the correlation between intrastate migration and PCI. We find this in the Tables 5.11 and 5.12.

Correlation between intra-state male migration and PCI — Table 5.11

	RUMWS83	URMWS83	RUMWS87	URMWS87	RUMWS99	URMWS99	PCI83	PCI87	PCI99
RUMWS83	1.000								
URMWS83	.574*	1.000							
RUMWS87	.905**	.480	1.000						
URMWS87	.635*	.882**	.619*	1.000					
RUMWS99	.848**	.527*	.894**	.547*	1.000				
URMWS99	.567*	.592*	.719**	.790**	.677**	1.000			
PCI83	.278	.089	.068	-.132	.254	-.344	1.000		
PCI87	.327	.043	.119	-.085	.175	-.379	.920*	1.000	
PCI99	.576*	.201	.453	.075	.551*	-.065	.887*	.870*	1.000

Correlation between intra-state female migration and PCI — Table 5.12

	RUFWS83	URFWS83	RUFWS87	URFWS87	RUFWS99	URFWS99	PCI83	PCI87	PCI99
RUFWS83	1.000								
URFWS83	.848**	1.000							
RUFWS87	.838**	.653**	1.000						
URFWS87	.737**	.720**	.820**	1.000					
RUFWS99	.577*	.397	.853**	.485	1.000				
URFWS99	.496	.472	.737**	.816**	.605*	1.000			
PCI83	.552*	.416	.400	.113	.406	-.086	1.000		
PCI87	.589*	.381	.446	.200	.393	-.071	.920**	1.000	
PCI99	.625*	.456	.542*	.279	.587*	.201	.887**	.870**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

RUMWS=rural intrastate (within state) male migrant

RUFWS=rural intrastate female migrant

URMWS=urban intrastate male migrant

URFWS=urban intrastate female migrant

PCI=per capita income

From Table 5.11 we find that intrastate male migration in rural area is positive for all the three years and significant in 1999 only. However, it is not so for intrastate male migrants in urban areas. Correlation is positive only in 1983 but is negative in 1987 and 1999, and all the three figures are not significant.

Table 5.12 gives us correlation between intrastate female migration and PCI. We find that correlation between intrastate female migration in rural as well as urban areas and PCI is positive for all the three points of time. Correlation between intrastate female migration in rural area and PCI is significant in 1983 and 1999. Correlation between intrastate female migration in urban area and PCI is not significant at all the three points of time.

Migration and Poverty

Poverty is another important developmental indicator. In Table 5.13 we have figures of poverty expressed as percentage for the years 1983, 1987 and 1999 for the fifteen major states.

Poverty expressed as percentage of total population   Table 5.13

	POV-83	POV-87	POV-93	POV-99
AP	28.91	28.60	22.19	15.77
ASS	40.47	36.21	40.86	36.09
BIH	62.22	52.13	54.96	42.60
GUJ	32.79	31.54	24.21	14.07
HAR	21.37	16.64	25.05	8.47
KAR	38.24	37.53	33.16	20.04
KER	40.42	31.79	25.43	12.72
MP	49.78	43.07	42.52	37.43
MAH	43.44	40.41	36.86	25.02
ORI	65.29	55.58	48.56	47.15
PUN	16.18	13.20	11.77	6.16
RAJ	34.46	35.15	27.41	15.28
TN	51.66	43.39	35.03	21.12
UP	47.07	41.46	40.85	31.15
WB	54.85	44.72	35.66	27.02

Source: Planning Commission

From Table 5.13 we find that poverty has gone down systematically for all the states as we move from 1983 to 1999 except for Rajasthan where poverty had gone up slightly in 1987 but then had gone down significantly in 1999. Orissa, Bihar, MP and Assam are the states where poverty has been very high at all the three points of time. Punjab, Gujrat, Haryana and Karnataka are the states to have recorded a low level of poverty at all the three points of time.

First we look at how migration (male and female) for both rural and urban areas has responded to poverty. We find that in case of rural male migrants, correlation is negative but insignificant at all the four points of time (1983, 1987, 1993 and 1999). In case of urban male

migrants, the correlation is negative throughout but is significant only in 1999. We also find that correlation coefficients in case of urban male migrants are higher than those in case of rural male migrants at all the four points of time. Therefore we can say that urban male migration has responded more to poverty than rural male migrants. In case of female migration, the coefficients are negative throughout for both rural and urban female migrants. Also, the coefficients are significant in 1983 and 1999 for both rural and urban female migrants. (Refer to Tables 5.14 to 5.17).

Correlation between rural male migrant and poverty   Table 5.14

	MALE83	MALE87	MALE93	MALE99	POV83	POV87	POV93	POV99
MALE83	1.000							
MALE87	.885**	1.000						
MALE93	.502	.638*	1.000					
MALE99	.831**	.889**	.833**	1.000				
POV83	-.226	-.167	-.164	-.134	1.000			
POV87	-.229	-.170	-.143	-.106	.975**	1.000		
POV93	-.478	-.460	-.397	-.378	.896**	.894**	1.000	
POV99	-.460	-.465	-.423	-.393	.865**	.867**	.945**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban male migrant and poverty   Table 5.15

	MALE83	MALE87	MALE93	MALE99	POV83	POV87	POV93	POV99
MALE83	1.000							
MALE87	.849**	1.000						
MALE93	.491	.566*	1.000					
MALE99	.625*	.784**	.709**	1.000				
POV83	-.352	-.316	-.299	-.322	1.000			
POV87	-.327	-.340	-.261	-.295	.975**	1.000		
POV93	-.457	-.426	-.450	-.489	.896**	.894**	1.000	
POV99	-.383	-.410	-.405	-.524*	.865**	.867**	.945**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between rural female migrant and poverty   Table 5.16

	FEMALE83	FEMALE87	FEMALE93	FEMALE99	POV83	POV87	POV93	POV99
FEMALE83	1.000							
FEMALE87	.860**	1.000						
FEMALE93	.506	.679**	1.000					
FEMALE99	.647**	.845**	.775**	1.000				
POV83	-.514*	-.407	-.318	-.384	1.000			
POV87	-.478	-.381	-.286	-.343	.975**	1.000		
POV93	-.622*	-.639*	-.475	-.518*	.896**	.894**	1.000	
POV99	-.570*	-.621*	-.459	-.632*	.865**	.867**	.945**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban female migrant and poverty   Table 5.17

	FEMALE83	FEMALE87	FEMALE93	FEMALE99	POV83	POV87	POV93	POV99
FEMALE83	1.000							
FEMALE87	.873**	1.000						
FEMALE93	.565*	.631*	1.000					
FEMALE99	.671**	.760**	.626*	1.000				
POV83	-.602*	-.419	-.216	-.499	1.000			
POV87	-.595*	-.467	-.220	-.506	.975**	1.000		
POV93	-.624*	-.563*	-.404	-.583*	.896**	.894**	1.000	
POV99	-.576*	-.538*	-.374	-.707**	.865**	.867**	.945**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

MALE=male migrants

FEMALE=female migrants

POV=poverty

Next we look at correlation between interstate inmigration (male/female) for both rural and urban areas and POV in Tables 5.18 and 5.19.

Correlation between inter-state rural inmigration and POV   Table 5.18

	RUM83	RUF83	RUM87	RUF87	RUM99	RUF99	POV83	POV87	POV99
RUM83	1.000								
RUF83	.796**	1.000							
RUM87	.791**	.355	1.000						
RUF87	.933**	.873**	.722**	1.000					
RUM99	.750**	.583*	.459	.679**	1.000				
RUF99	.647**	.859**	.179	.775**	.649**	1.000			
POV83	-.637**	-.596*	-.591*	-.760**	-.282	-.585	1.000		
POV87	-.716**	-.628*	-.645**	-.812**	-.387	-.639*	.975**	1.000	
POV99	-.680**	-.573*	-.613*	-.736**	-.383	-.607*	.865**	.867**	1.000

Correlation between interstate urban inmigration and POV   Table 5.19

	URM83	URF83	URM87	URF87	URM99	URF99	POV83	POV87	POV99
URM83	1.000								
URF83	.976**	1.000							
URM87	.726**	.753**	1.000						
URF87	.741**	.780**	.984**	1.000					
URM99	.864**	.895**	.888**	.882**	1.000				
URF99	.685**	.756**	.849**	.851**	.930**	1.000			
POV83	-.617**	-.637*	-.632*	-.614*	-.695**	-.577*	1.000		
POV87	-.681**	-.684**	-.716**	-.699**	-.746**	-.603*	.975**	1.000	
POV99	-.571*	-.548*	-.589*	-.540*	-.627*	-.535*	.865**	.867**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

RUM=rural interstate male inmigrant

URM=urban interstate male inmigrant

RUF=rural interstate female inmigrant

URF=urban interstate female inmigrant

POV=poverty

From Tables 5.18 and 5.19 we find that correlation between interstate inmigration   and POV is negative throughout for both males and females and for both rural and urban areas at all the three points of time. Correlation between interstate male inmigration in rural area and

POV is significant 1983 and 1987. The same is significant between female interstate inmigration and POV at all the three points of time. In case of male and female interstate inmigration in urban area, correlation is significant at all the three points of time.

Next we look at correlation between male and female intrastate migration and POV. This is given in Tables 5.20 and 5.21

Correlation between intra-state male migration and poverty   Table 5.20

	RUMWS83	URMWS83	RUMWS87	URMWS87	RUMWS99	URMWS99	POV83	POV87	POV99
RUMWS83	1.000								
URMWS83	.574*	1.000							
RUMWS87	.905**	.480	1.000						
URMWS87	.635*	.882**	.619*	1.000					
RUMWS99	.848**	.527*	.894**	.547*	1.000				
URMWS99	.567*	.592*	.719**	.790**	.677**	1.000			
POV83	-.115	.002	-.012	.128	-.091	.278	1.000		
POV87	-.098	.074	.009	.168	-.021	.352	.975**	1.000	
POV99	-.346	-.056	-.325	-.016	-.319	.037	.865**	.867**	1.000

Correlation between intra-state female migration and poverty   Table 5.21

	RUFWS83	URFWS83	RUFWS87	URFWS87	RUFWS99	URFWS99	POV83	POV87	POV99
RUFWS83	1.000								
URFWS83	.848**	1.000							
RUFWS87	.838**	.653**	1.000						
URFWS87	.737**	.720**	.820**	1.000					
RUFWS99	.577*	.397	.853**	.485	1.000				
URFWS99	.496	.472	.737**	.816**	.605*	1.000			
POV83	-.472	-.430	-.277	-.089	-.243	-.064	1.000		
POV87	-.426	-.390	-.233	-.089	-.169	-.034	.975**	1.000	
POV99	-.528*	-.438	-.512*	-.296	-.515*	-.358	.865**	.867**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

RUMWS=rural intrastate (within state) male migrant

RUFWS=rural intrastate female migrant

URMWS=urban intrastate male migrant

URFWS=urban intrastate female migrant

POV=poverty

From Tables 5.20 and 5.21 we find that correlation between intrastate male migrants in rural areas and POV is negative in 1983 and 1999 but positive in 1987. Correlation between intrastate male migrants in urban areas and POV is positive at all the three points of time. In case of female intrastate migration in rural area, the correlation is negative at all the three points of time but is significant as well in 1999. In case of female intrastate migration in urban area, the correlation is negative and insignificant at all the three points of time.

Migration and Employment

Tables 5.22 to 5.25 give us employment of males and females in the two major sectors namely agriculture and manufacturing and the rest of the sectors clubbed under the others category in rural and urban areas according to principle and subsidiary status (PS+SS). All the figures are expressed in terms of percentage of total employment. We find that percentage of males employed in agriculture in rural area has gone down significantly. The fall in percentage of employment in agriculture is very significant in case of Assam, Haryana, Kerala, Punjab and Rajasthan. Therefore we find that agriculture has undergone a significant decline as far as generation of employment is concerned in the rural area. The percentage of males employed in manufacturing sector has also gone down. Hence we find that employment scenario in the two sectors which generates maximum employment has worsened over the years in rural areas. There has not been much improvement in the other

sectors. Only significant improvement is noticeable in construction in the rural area.

In urban area, the employment scenario is even worse as far percentage of male employment in agriculture is concerned. There has been decline in all the states except WB where a very slight improvement is noticeable. There has been decline in the percentage of male employment in manufacturing sector as well. From here we can say that the employment scenario for males has worsened in general in rural and urban areas.

As far as female employment in agriculture in rural area is concerned, the figure has gone down for majority of the states. The decline has been most significant in WB. The figure has gone up slightly in states like AP, Assam, Haryana, Maharashtra, Orissa, Punjab and Rajasthan. Percentage of employment in manufacturing sector has gone down as well for most of the states. In WB the figure has gone up significantly.

In urban area, percentage of females employed in agriculture has gone down significantly. The decline is significant in Kerala, Haryana, Karnataka, Gujrat, Rajasthan, WB and TN. There has not been any improvement in any of the 15 major states under consideration. There has been significant decline in the manufacturing sector as well, the decline being significant in states like Haryana. There has been significant improvement in the employment figures of Kerala, Karnataka and Orissa.

Therefore we find that there has been significant decline in percentage of male as well as female employment in the two major sectors namely agriculture and manufacturing for both rural and urban area.

Table 5.22

38 RD	PS+SS	RURAL	MALE			PS+SS	RURAL	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	75.54	7.94	16.52		AP	82.64	7.38	10.04
ASS	79.71	2.97	17.33		ASS	77.1	12.18	10.71
BIH	80.5	6.12	13.41		BIH	87.95	5.92	6.15
GUJ	79.89	6.76	13.35		GUJ	92.7	3.63	4.15
HAR	72.46	7.19	20.35		HAR	89.01	6.43	4.53
KAR	82.36	5.35	12.31		KAR	88.31	6.45	5.23
KER	57.4	10.84	31.72		KER	67.44	19.8	12.72
MP	87.23	4.22	8.5		MP	93.92	3.81	2.27
MAH	77.58	7.31	15.13		MAH	91.97	3.47	4.56
ORI	77.48	8.72	13.77		ORI	78.15	12.3	9.56
PUN	73.78	7.78	18.45		PUN	89.69	5.57	4.73
RAJ	78.3	5.94	15.76		RAJ	91.96	3.04	5.01
TN	66.34	12.91	20.76		TN	79.9	10.42	9.65
UP	77.92	7.54	14.53		UP	88.77	6.01	5.24
WB	72.53	8.53	18.97		WB	76.12	15.53	8.34
	PS+SS	URBAN	MALE			PS+SS	URBAN	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	9.68	20.33	69.32		AP	28.07	24.77	47.14
ASS	13.31	10.69	76.04		ASS	9.99	27.81	62.21
BIH	12.22	19.54	68.24		BIH	29.26	18.76	52.01
GUJ	12.59	38.27	49.06		GUJ	31.23	22.03	46.78
HAR	15.53	22.08	62.42		HAR	44.84	21.77	33.4
KAR	13.89	23.64	62.47		KAR	33.29	26.58	40.12
KER	23.64	19.34	56.37		KER	45.06	16.96	37.97
MP	11.65	22.46	65.88		MP	34.22	23.96	41.79
MAH	6.63	33.29	60.08		MAH	23.25	28.25	48.49
ORI	11.58	19.66	68.76		ORI	27.31	19.78	52.9
PUN	10.19	23.52	66.26		PUN	22.58	23.26	54.16
RAJ	14.93	20.35	64.67		RAJ	51.33	29.45	19.22
TN	11.45	32.01	56.59		TN	30.15	33.9	35.92
UP	10.14	25.22	64.59		UP	20.35	33.28	46.35
WB	3.16	35.3	61.54		WB	14.43	29.33	56.26

Source: NSS, Key Results of Employment and Unemployment,38th round.

Table 5.23

43 RD	PS+SS	RURAL	MALE			PS+SS	RURAL	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	74.1	7.9	17.9		AP	82.1	7.7	10.2
ASS	76.5	2	20.4		ASS	82.3	9.8	7.7
BIH	80	4.9	15		BIH	90.2	4.1	5.6
GUJ	68.6	9.2	21.7		GUJ	75.8	3.6	20.6
HAR	70.9	8.4	20.7		HAR	92.5	2.8	4.7
KAR	79.6	6.2	14.1		KAR	85.5	8.8	5.5
KER	54.2	10.4	35.4		KER	65.7	19	15.2
MP	85.3	4.9	9.8		MP	91.1	5	3.9
MAH	75.8	7.1	16.9		MAH	91.4	2.7	5.8
ORI	74.9	6.1	18.9		ORI	78	11.4	10.5
PUN	68.8	9.7	20.6		PUN	91.6	2.8	5.5
RAJ	65.2	7.7	26.9		RAJ	83.3	4.1	12.6
TN	65.2	13.4	21.4		TN	77.1	12.9	10
UP	78.9	7.2	13.9		UP	91.3	3.8	4.8
WB	72.2	9.1	18.6		WB	70.8	19.6	9.6

	PS+SS	URBAN	MALE			PS+SS	URBAN	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	10.7	20.3	68.1		AP	31.6	27.8	40.3
ASS	6.8	9.1	83.5		ASS	22.2	12.9	62.6
BIH	14	20.9	64.7		BIH	34.9	20.4	43.1
GUJ	6.3	33.3	38.7		GUJ	22.6	23.8	52.1
HAR	5.5	30.4	63.5		HAR	31.5	17.4	51.1
KAR	14.7	24.7	59.8		KAR	39.2	32.3	28.4
KER	19.1	20	60.3		KER	40.2	17.6	41.8
MP	11.5	21.6	66.5		MP	26.5	28.7	44.5
MAH	7	29	63.3		MAH	26.8	23.3	49.8
ORI	10.3	15.7	73.9		ORI	26.2	23	50.3
PUN	7.3	29.6	62.4		PUN	43.5	16.6	39.9
RAJ	9.1	19.5	71.3		RAJ	54.2	17.7	28
TN	7.5	31	61.4		TN	20.7	40.4	38.7
UP	11.5	22.9	65.6		UP	31	24.2	44.8
WB	4.7	32.1	63		WB	15.4	26.9	57.5

Source: NSS, Key Results of Employment and Unemployment, 43rd round.

Table 5.24

49 RD	PS+SS	RURAL	MALE			PS+SS	RURAL	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	75.6	6.5	18		AP	83.7	7.4	8.8
ASS	78.2	2.2	19.6		ASS	83.2	8.7	8
BIH	82	3.4	14.6		BIH	91.9	3.9	4
GUJ	71.1	12.3	16.6		GUJ	90.6	4.1	5.2
HAR	60.9	5.3	33.6		HAR	93.2	1.4	5.5
KAR	78.8	5.4	15.7		KAR	84.6	8.4	6.9
KER	53.2	9.7	37.3		KER	63	19.2	17.7
MP	87.2	3.2	9.5		MP	93.9	3.2	3
MAH	75.3	6.6	18.2		MAH	91.2	3	5.8
ORI	78.7	5.7	15.5		ORI	85	7.5	7.6
PUN	68.1	6.2	25.7		PUN	92.7	1.3	5.9
RAJ	69.6	5.3	25		RAJ	93	1.4	5.7
TN	64	12.8	23.4		TN	78.5	12.9	8.5
UP	76.3	7	16.7		UP	90	4.7	5.1
WB	64.7	11.7	23.5		WB	58.9	30	11.2
	PS+SS	URBAN	MALE			PS+SS	URBAN	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	11.3	17.7	60.8		AP	30.8	22.7	46.5
ASS	2.9	9.5	62.3		ASS	2.9	16.5	80.6
BIH	11	16	57.6		BIH	15.7	21.8	67.8
GUJ	4.9	33.7	49.8		GUJ	20.9	20.2	58.9
HAR	6	26.1	52.4		HAR	32	19.5	48.5
KAR	12.5	21.6	50.2		KAR	29.6	28.1	42.4
KER	22.3	16.3	56		KER	33.3	25.1	41.5
MP	12.6	16.6	54		MP	30.1	18.8	50.8
MAH	6.4	27	56.8		MAH	19.1	17.8	63.1
ORI	12.5	16.2	55.6		ORI	27.7	18.2	54
PUN	6.5	26.4	51.8		PUN	27.6	10.2	62
RAJ	8.2	19.9	58.7		RAJ	42.6	17.3	40.1
TN	8.3	27.9	55.8		TN	21.7	35.2	43
UP	12.1	22.2	50.7		UP	30.4	31.3	38.4
WB	4.4	30.2	54.1		WB	8.6	30.5	60.9

Source: NSS, Key Results of Employment and Unemployment, NSS 49th round.

Table 5.25

55 RD	PS+SS	RURAL	MALE			PS+SS	RURAL	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	74.4	5.3	20.3		AP	84.3	6	9.7
ASS	64.7	2.9	32.4		ASS	79.4	8.3	12.4
BIH	79	5.3	15.8		BIH	85.7	8.5	5.8
GUJ	71.4	10.1	18.5		GUJ	92	2.2	5.6
HAR	59.6	9.2	30		HAR	92.1	2	5.9
KAR	78.5	5.2	16.6		KAR	87.8	5.7	6.6
KER	42.8	9.4	47.7		KER	59.8	19.3	21
MP	84.2	3.9	12.2		MP	91.6	4.2	4.4
MAH	73.8	7	19		MAH	93.9	2.2	3.9
ORI	77	5.6	18.5		ORI	80.4	12.9	6.7
PUN	63.7	7.7	27.7		PUN	90.6	2.3	7.1
RAJ	67.3	5.4	27.3		RAJ	91.9	2.8	5.2
TN	62.2	13.8	23.9		TN	75.9	14.2	9.9
UP	71.8	8.3	19.9		UP	87.5	6.4	6
WB	66.4	10.9	22.6		WB	54.1	36.1	9.9
	PS+SS	URBAN	MALE			PS+SS	URBAN	FEMALE
	agriculture	manufacturing	others			agriculture	manufacturing	others
AP	7.1	18.5	74.4		AP	16.8	22.2	60.9
ASS	5.9	7.5	86.5		ASS	6.2	5.9	87.8
BIH	9.1	17.7	73.3		BIH	22.7	18.8	58.5
GUJ	7.3	26.6	66.1		GUJ	18.6	16.2	65.3
HAR	6	22.1	71.8		HAR	27.6	12.2	60.2
KAR	8.2	21.7	70.2		KAR	19	30.7	50.2
KER	7.4	17.4	75.1		KER	14.6	27.2	58.2
MP	11.9	16.8	71.3		MP	29.8	23.5	46.6
MAH	3.5	25.1	71.3		MAH	15.4	15.6	68.9
ORI	11.1	17.3	71.5		ORI	19.8	27.5	52.7
PUN	6.5	24.2	69.4		PUN	20.1	13.4	66.4
RAJ	6.6	20.6	72.9		RAJ	37.9	22.8	39.1
TN	6.6	26.6	66.9		TN	15.2	32.6	52
UP	7.6	24.3	68.2		UP	17.1	32.8	50
WB	3.2	25.2	71.6		WB	2.3	28.6	69.1

Source: NSS, Key Results of Employment and Unemployment, NSS 55th round.

First we look at the correlation between employment according to principle and subsidiary status and migration for both males and females in rural as well as urban areas. We get this from Tables 5.26 to 5.41.

38th Round

It can be seen that correlation between male migration in rural and urban areas and employment in agriculture is negative but is significant only in case of rural male migrants. On the other hand in case of manufacturing sector, correlation is positive but significant for both rural and urban areas. However the correlation between male inmigration in rural area and in the others category is positive but negative in case of urban area. In case of female migration, correlation between that and employment in agriculture in rural and urban areas is positive but insignificant. On the other hand, correlation between female migration and employment in manufacturing sector as well as others category is negative in case of rural area. On the other hand, in case of urban female migrants, correlation is positive for manufacturing sector but negative for others category. However, all the coefficients are insignificant. (Refer to Tables 5.26, 5.30, 5.34 & 5.38).

43rd Round

From the correlation matrix it can be seen that correlation between male migration and employment in agriculture in the rural area is negative and significant but for urban area it is negative and insignificant. However, the correlation is positive in case of manufacturing sector and is significant for rural area. For the others category, correlation is negative for urban area but is positive and significant for rural area. In case of female migration correlation is positive for employment in agricultural sector for both rural and urban area. On the other hand it is negative in case of manufacturing sector

for rural area but positive for urban area. Both the coefficients are however insignificant. In case of the others category, correlation is positive and insignificant for rural area but negative and insignificant for urban area. (Refer to Tables 5.27, 5.31, 5.35 & 5.39).

49th Round

It can be seen that correlation between male migration and employment in agriculture is negative for both rural and urban areas. In case of manufacturing sector, the correlation is positive and significant for rural area but is only positive for urban area. Also the correlation between male migration and employment in the others category is positive and insignificant for both rural and urban areas. For female migration, correlation is negative in case of rural area but is positive and significant in case of urban area. In case of manufacturing sector, the correlation is negative and insignificant for both rural and urban areas. Finally in case of employment in the others category, the correlation is positive and insignificant in case of rural area but is positive and significant in case of urban area. (Refer to Tables 5.28, 5.32, 5.36 & 5.40).

55th Round

It can be seen that correlation between male migration in rural and urban areas and employment in agriculture is negative but not significant. On the other hand the correlation between migration and employment in manufacturing sector is positive but insignificant for both rural and urban areas. However the correlation between male migration in rural area and employment in the others category is positive but negative in case of urban area. In case of female migration, correlation between migration and employment in agriculture in rural and urban areas is positive but insignificant. On the other hand, correlation between female migration and employment in manufacturing sector is

negative and insignificant in rural area but is positive and insignificant in case of urban area. Finally correlation between female migration and employment in others category in rural and urban areas is negative except in the case of rural area but insignificant. (Refer to Tables 5.29, 5.33, 5.37 & 5.41).

Therefore, we find that migration in case of male is negatively related to employment in agriculture sector but is positively related to employment in manufacturing sector generally. The same is positively related to employment in others category in rural area but is negatively related to employment in urban area generally. In case of female migration, it is positively related to employment in agriculture sector but is negatively related to the same in manufacturing sector generally. In case of employment in the others category, for rural area we find a negative relation between employment and migration at two points of time and a positive relation at the rest two points of time. For urban area it is negatively related to employment at all the four points of time.

Correlation between rural male migrant and employment

Table 5.26

	MALE83	AGRI	MFG	OTHERS
MALE83	1.000			
AGRI	-.518*	1.000		
MFG	.566*	-.811**	1.000	
OTHERS	.431	-.963**	.622*	1.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 5.27

	MALE87	AGRI	MFG	OTHERS
MALE87	1.000			
AGRI	-.609*	1.000		
MFG	.606*	-.708**	1.000	
OTHERS	.518*	-.955**	.470	1.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 5.28

	MALE93	AGRI	MFG	OTHERS
MALE93	1.000			
AGRI	-.424	1.000		
MFG	.708**	-.620*	1.000	
OTHERS	.206	-.938**	.310	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 5.29

	MALE99	AGRI	MFG	OTHERS
MALE99	1.000			
AGRI	-.345	1.000		
MFG	.342	-.513*	1.000	
OTHERS	.288	-.954**	.235	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban male migrant and employment

Table 5.30

	MALE83	AGRI	MFG	OTHERS
MALE83	1.000			
AGRI	-.158	1.000		
MFG	.293	-.494	1.000	
OTHERS	-.224	-.149	-.786**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.31

	MALE87	AGRI	MFG	OTHERS
MALE87	1.000			
AGRI	-.111	1.000		
MFG	.276	-.415	1.000	
OTHERS	-.089	.015	-.772**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.32

	MALE93	AGRI	MFG	OTHERS
MALE93	1.000			
AGRI	.124	1.000		
MFG	.114	-.414	1.000	
OTHERS	.222	-.047	-.634*	1.000

* Correlation is significant at the 0.05 level (2-tailed).

Table 5.33

	MALE99	AGRI	MFG	OTHERS
MALE99	1.000			
AGRI	-.152	1.000		
MFG	.396	-.357	1.000	
OTHERS	-.355	-.106	-.891**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between rural female migrant and employment

Table 5.34

	FEMALE83	AGRI	MFG	OTHERS
FEMALE83	1.000			
AGRI	.153	1.000		
MFG	-.161	-.979**	1.000	
OTHERS	-.138	-.944**	.857**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.35

	FEMALE87	AGRI	MFG	OTHERS
FEMALE87	1.000			
AGRI	-.110	1.000		
MFG	-.010	-.854**	1.000	
OTHERS	.218	-.766**	.319	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.36

	FEMALE93	AGRI	MFG	OTHERS
FEMALE93	1.000			
AGRI	-.003	1.000		
MFG	-.010	-.976**	1.000	
OTHERS	.043	-.883**	.762**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.37

	FEMALE99	AGRI	MFG	OTHERS
FEMALE99	1.000			
AGRI	.182	1.000		
MFG	-.188	-.953**	1.000	
OTHERS	-.113	-.766**	.534*	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between rural female migration and employment

Table 5.38

	FEMALE83	AGRI	MFG	OTHERS
FEMALE83	1.000			
AGRI	.321	1.000		
MFG	.020	-.334	1.000	
OTHERS	-.348	-.895**	-.122	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.39

	FEMALE87	AGRI	MFG	OTHERS
FEMALE87	1.000			
AGRI	.147	1.000		
MFG	.166	-.374	1.000	
OTHERS	-.222	-.758**	-.319	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.40

	FEMALE93	AGRI	MFG	OTHERS
FEMALE93	1.000			
AGRI	.562*	1.000		
MFG	-.058	-.080	1.000	
OTHERS	-.518*	-.828**	-.482	1.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 5.41

	FEMALE99	AGRI	MFG	OTHERS
FEMALE99	1.000			
AGRI	.282	1.000		
MFG	.247	-.033	1.000	
OTHERS	-.380	-.721**	-.669**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

MALE=male migrant

FEMALE=female migrant

AGRI=employment in agriculture

MFG=employment in manufacturing sector

OTHERS=employment in other sectors

Next we look at the correlation between employment according to principle and subsidiary status and interstate inmigration for both males and females in rural as well as in urban areas.

38th Round

It can be seen that correlation between male interstate inmigration in rural and urban areas and employment in agriculture is negative but not significant. On the other hand the correlation between inmigration and is positive but insignificant for both rural and urban areas. However the correlation between male inmigration in rural area and in the others category is positive but negative in case of urban area. In case of female interstate inmigration, correlation between inmigration and employment in agriculture in rural and urban areas is positive but insignificant. On the other hand, correlation between interstate female inmigration in rural and urban areas and employment in manufacturing sector as well as others category is negative and insignificant. (Refer to Tables 5.42, 5.45, 5.48 & 5.51).

43rd Round

From the correlation matrix it can be seen that correlation between male interstate inmigration and employment in agriculture in the rural as well as urban area is negative. However, the correlation is positive in case of manufacturing sector and is significant for urban area. For the others category, correlation is negative for urban area but is positive for rural area. In case of female interstate inmigration correlation is positive for employment in agricultural sector for both rural and urban area. On the other hand it is negative in case of manufacturing sector for both rural and urban areas. In case of the others category, correlation is negative for rural area but positive for urban area.

However, all the figures are insignificant. (Refer to Tables 5.43, 5.46, 5.49, 5.52).

55th Round

It can be seen that correlation between male interstate inmigration in rural and urban areas and employment in agriculture is negative but not significant. On the other hand the correlation between inmigration and employment in manufacturing sector is positive but insignificant for both rural and urban areas. However the correlation between male inmigration in rural area and employment in the others category is positive but negative in case of urban area. In case of female interstate inmigration, correlation between inmigration and employment in agriculture in rural and urban areas is positive but insignificant. On the other hand, correlation between interstate female inmigration in rural and urban areas and employment in manufacturing sector is negative and insignificant. And finally correlation between interstate female inmigration and employment in others category in rural area is negative but is positive in case of urban area. However, all the figures are not significant. (Refer to Tables 5.44, 5.47, 5.50 & 5.53).

Therefore, we find that interstate inmigration in case of male is negatively related to employment in agriculture sector but is positively related to employment in manufacturing sector generally. In case of male inmigration, it is positively related to employment in others category in rural area but is negatively related to the same in urban area. In case of female interstate inmigration, it is positively related to employment in agriculture sector but is negatively related to the same in manufacturing sector. In case of employment in the others category, the relationship is necessarily negative for rural area but is positive at two of the three points of time in case of urban area.

Correlation between rural male interstate inmigrants and employment

Table 5.42

	RUM83	AGRI	MFG	OTHERS
RUM83	1.000			
AGRI	-.445	1.000		
MFG	.239	-.811**	1.000	
OTHERS	.484	-.963**	.622*	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 5.43

	RUM87	AGRI	MFG	OTHERS
RUM87	1.000			
AGRI	-.419	1.000		
MFG	.403	-.708**	1.000	
OTHERS	.334	-.955**	.470	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.44

	RUM99	AGRI	MFG	OTHERS
RUM99	1.000			
AGRI	-.453	1.000		
MFG	.357	-.513*	1.000	
OTHERS	.381	-.954**	.235	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban male interstate inmigrants and employment

Table 5.55

	URM83	AGRI	MFG	OTHERS
URM83	1.000			
AGRI	-.182	1.000		
MFG	.277	-.494	1.000	
OTHERS	-.179	-.149	-.786**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.46

	URM87	AGRI	MFG	OTHERS
URM87	1.000			
AGRI	-.481	1.000		
MFG	.512*	-.415	1.000	
OTHERS	-.236	.015	-.772**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 5.47

	URM99	AGRI	MFG	OTHERS
URM99	1.000			
AGRI	-.344	1.000		
MFG	.418	-.357	1.000	
OTHERS	-.283	-.106	-.891**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Correlation between rural female interstate inmigrants and employment

Table 5.48

	RUF83	AGRI	MFG	OTHERS
RUF83	1.000			
AGRI	.321	1.000		
MFG	-.270	-.979**	1.000	
OTHERS	-.391	-.944**	.857**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.49

	RUF87	AGRI	MFG	OTHERS
RUF87	1.000			
AGRI	.361	1.000		
MFG	-.340	-.854**	1.000	
OTHERS	-.235	-.766**	.319	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.50

	RUF99	AGRI	MFG	OTHERS
RUF99	1.000			
AGRI	.304	1.000		
MFG	-.319	-.953**	1.000	
OTHERS	-.172	-.766**	.534*	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between urban female interstate inmigrants and employment

Table 5.51

	URF83	AGRI	MFG	OTHERS
URF83	1.000			
AGRI	.104	1.000		
MFG	-.070	-.334	1.000	
OTHERS	-.076	-.895**	-.122	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.52

	URF87	AGRI	MFG	OTHERS
URF87	1.000			
AGRI	.069	1.000		
MFG	-.259	-.374	1.000	
OTHERS	.143	-.758**	-.319	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Table 5.53

	URF99	AGRI	MFG	OTHERS
URF99	1.000			
AGRI	.322	1.000		
MFG	-.349	-.033	1.000	
OTHERS	.003	-.721**	-.669**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

RUM=rural interstate male inmigrant

URM=urban interstate male inmigrant

RUF=rural interstate female inmigrant

URF=urban interstate female inmigrant

AGRI=employment in agriculture

MFG=employment in manufacturing sector

OTHERS=employment in other sectors

CONCLUSION

From the correlation results we find that migration is positively correlated to per capita income. On the other hand migration is negatively correlated to poverty. This is true for the results of correlation between interstate inmigration and the above two indicators. However intrastate migration is not necessarily related with per capita income and poverty. In some cases correlation with per capita income is negative and that with poverty is positive. In this chapter we had constructed a composite index of various infrastructure facilities, both physical and social. The correlation between interstate inmigration and composite index of infrastructure is positive for both males and females.

From the results of correlation between migration and employment, we find that migration in general is negatively related to employment in agriculture sector but is positively related to employment in manufacturing sector for males only. The same is positively related to employment in others category in rural area but is negatively related to employment in urban area generally. From the results of correlation between interstate inmigration and employment for males, we find that in case of agriculture, the correlation is negative but positive in case of manufacturing sector. The negative relation between migration and employment in agriculture is not according to standard wisdom since migration normally responds positively to employment opportunities. We can defend this by saying that employment in agriculture is an indicator of underdevelopment and treat employment in manufacturing sector as an indicator of development. Going by this logic, states where percentage of employment in agriculture is greater than that in manufacturing sector are considered to be somewhat backward. And we know that interstate inmigration in developed states is always greater than that in backward states barring a very few exceptions. Another thing that comes

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to the fore is that employment in any sector other than manufacturing is not a big enough incentive so as to induce migration. In case of female migration and employment in the agriculture sector we find a positive relationship. But there is no definite relationship between female migration and employment in manufacturing sector, as we get negative as well as positive correlations. With employment opportunities going down in the manufacturing sector as can be seen from the declining percentage of people employed in the manufacturing sector, migration is bound to get more restricted. This has also contributed in the decline of mobility to some extent.

In this study we have examined the various aspects of migration. We have done this at the all-India level and state level as well. At all-India we find that mobility has gone down systematically in cases of rural and urban male migrants as well as rural female migrants as we move from the 38th to the 49th round. There is a slight increase in the percentage of female migrants as reported in the 55th round compared to the figure reported in the 49th round while that for rural males it has remained same and for urban males it has gone up. Therefore the percentage of male migrants (rural and urban) in total population has also gone up in the 55th round compared to the 49th round.

In case of interstate inmigrants as percentage of population, we have a comparative analysis for the three rounds 38h, 43rd and 55th rounds only since 49th round does not provide information on this account. We find that there is an increase in the percentage of rural male and female interstate inmigrants in the 43rd round compared to the 38th round. However, the percentage of urban male and female interstate inmigrants has gone up in the 43rd round. Compared to the 43rd round, the percentage of male inmigrants in rural and urban areas and urban male interstate inmigrants has gone down except for the case of urban female interstate inmigrants. From here we can say that there has been an overall decline in interstate inmigrants from the 38th to the 55th rounds. Even in the case of intra state migration we find that there has been a decline in the percentage of such migrants although there had been an increase in the percentage from the 38th to the 43d round. From here we can say that there is an overall tendency of decline in migrants expressed as percentage of population.

From the state-level figures of migrants expressed as percentage of total population, we find that the percentage of migrants in the 55th round is less compared to percentage in the 38th round except for Kerala. Besides we find that migration in rural areas is considerably less compared to that in the urban areas. This is true for both males and females. Comparing the figures for the fifteen major states across the four rounds, we find that migration in the eighties was far more compared to that in the nineties. This means that there has been considerable slow down in mobility in the nineties.

From the figures of inter-state inmigrants, we find that the percentage has always remained high in case of the developed states e.g. Punjab, Maharashtra and Haryana. On the other hand, inmigration is low in case of less developed states like Assam, Bihar and UP. The exception is MP which is a less developed state where inmigration is high. This is due to the numerous mines which exist in the state which provide good employment opportunities. On the other hand, West Bengal inspite of being a developed state has experienced low inmigration compared to the other developed states. From the figures of intrastate migration, we find that it has been generally high in states like Gujarat, AP, Maharashtra and Kerala and low in Assam and Bihar. We find that there is a decline in the figures of the 55th round compared to both 38th and 43rd rounds.

Coming to the aspect of factors contributing to migration (given by reasons for migration), we find that with time male migration is responding less to economic factors than to non-economic factors which include studies, social, external and other factors. On the other hand female migration is responding relatively more to non-economic factors. Therefore we can say that migration as a whole is responding more to non-economic factors than to economic factors.

As can be seen from the figures of the different streams of migration, we can say that there has been a decline in rural to rural, rural to urban and urban to urban migration. This is true for both males and females. Only there is a slight increase in the urban to rural migration from 43rd to 55th round in case of females. For males it has remained the same for all the three rounds. This again suggests that there is a tendency of declining mobility especially among the males.

In chapter five, we have tried to find out how migration has responded to development using some developmental indicators. From the correlation results we find that migration is positively related to per capita income. On the other hand migration is negatively related to poverty. This is true for the results of correlation between interstate inmigration and the above two indicators. However intrastate migration is not necessarily related with per capita income and poverty in the same way as interstate migration is related. In some cases correlation with per capita income is negative and that with poverty is positive. In this chapter we had constructed a composite index of various infrastructure facilities, both physical and social. The correlation between interstate inmigration and composite index of infrastructure is positive for both males and females.

From the results of correlation between migration and employment and interstate inmigration and employment, we find that in case of agriculture, the correlation is negative in case of males. This is not according to standard wisdom since migration normally responds positively to employment opportunities. We can defend this by saying that employment in agriculture is an indicator of underdevelopment and treat employment in manufacturing sector as an indicator of development. Going by this logic, states where percentage of employment

in agriculture is greater than that in manufacturing sector are considered to be somewhat backward. And we know that interstate inmigration in developed states is always greater than that in backward states barring a very few exceptions. Another thing that comes to the fore is that employment in any sector other than manufacturing is not a big enough incentive so as to induce migration. With employment opportunities going down in the manufacturing sector as can be seen from the declining percentage of people employed in the manufacturing sector, migration is bound to get more restricted. This has also contributed in the decline of mobility to some extent.

To conclude, we can say that the declining mobility of population in the face of unbalanced developmental strategies that are being followed in India poses a serious threat to development as a whole. Therefore to ward of this threat, steps have to and must be taken to stall this declining trend in population mobility. If need be, policy of balanced regional development should be undertaken so as to disperse economic and employment opportunities to backward regions through a sustained and planned effort.

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