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URBAN GROWTH DYNAMISM IN THE NARMADA VALLEY (M. P.) AN ANALYSIS OF MIGRATION STREAMS

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ABSTRACT : The present paper analyses the pattern of migration as the fundamental process of growth of towns in the Narmada Valley. Introductory section highlights the significance of role of migration as the crucial process in growth of towns. Next section is devoted to an examination of conceptual implication, nature, scope and limitation of census data on migration, particularly from the angle of analysis of growth of towns. The study concentrates on the growth of towns during the decade 1961–71. The proportion of immigrants in the urban population is then analysed and compared with that for the state of Madhya Pradesh. This is followed by pattern of migration during 1961–71 which is matched with the pattern of growth of towns during the same period.

Migration is an important part of any study of urbanization. Practically in all the countries, the rate of increase in the size of the cities, as revealed by the census reports, shows that in majority of cases migration has played a dynamic role in the process of urbanization. In other words the city populations have grown more as a result of net favourable balance of migration (excess of in-migration over out-migration) rather than of the natural rate of increase in their population (excess of births over deaths).

The growth of population over a given area during a given period of time is brought about by two factors : the excess of births over deaths (called natural growh of population) and the excess of persons coming in to settle over these going-out of that area in a given period. The latter process is called the net migration. For fundamental biological reasons, the rate of births and deaths vary quite gradually through time and more particularly through space. Hence, their role in differentiating the rate of population growth from one part to another is really very limited. In India even the rural and urban sectors do not differ significantly from one another in respect of the natural growth rate of population. On the other hand, the movement of people from one place to another is a much unpredictable and variable process in respect of its volume, direction and distance of movement as well as the duration of stay and many other elements forming patterns of migration. This highly variable and fickle nature makes the process of migration a key factor in temporal as well as spatial variations in the growth of population,

The process of migration, that leads to the phenomenon of concentration of inhabitancy over limited stretches called towns, where people live in large congregation mostly supporting themselves by extra agricultural pursuits. This concentrations of a substantial portion of population over

a few spots is the key to the process of urbanization. All this attests to the crucial importance of migration in the study of urbanization. Moreover this migrant section of society is age and sex selective, and often has a different cultural and behavioural pattern than that of the local populace. It is, in fact, the migrants that give a cosmopolitan look to the urban society. Thus migration brings about marked changes in the demographic and socio-economic structure as well as in the behavioural patterns of the society, (Hope, Tisdale, 1942).

One finds thus that, except for the addition of some new towns or the deletion of some old ones and changes in the municipal boundaries, the differences in the growth rates of towns are largely the function of varying patterns of net migration to them. As such, an analysis of migrational streams assumes cardinal importance in any study which attempts to explain growth of towns and of urbanisation.

For all these macro-level studies (as geographical studies mostly are) the basic information on migration is obtained from the census reports which furnish tables either on place of birth or the place of last residence. This renders the concepts and definitions employed by and the nature of, census data on migration critically important for studies based on them. Consequently, it is necessary to examine the nature, scope, and limitation of as well as the concepts involved in the census data on migration.

The nature and problems of data on migration

Excepting only in micro-level studies of migration in individual towns, based on migration data accumulated directly through field work, for macro-level studies migration figures can be estimated only indirectly through a study of the data relating to the place of birth or to the place of last residence. This leads to two distinct definitions of a migrant (1) one who was born outside place of enumeration, and migrant, (2) one who had his place of last residence outside the place of enumeration. Adoption of one definition or the other leads to major differences in the results.

In our country the collection and tabulation of borate data on migration was started with the 1961 census and was continued in the 1971 census also. The migrant population has been categorised into following classes, on the basis of source areas of migration ;

Categorisation of migrants by source areas :

Total migrants

A. Migrants from within the country

B. Migrants from outside the country

A. I From within the state of enumeration.

A. II From outside the state of enumeration.

i. e. from other states of the country.

A. I. a. From within the district of enumeration.

A. I. b. From outside the district of enumeration. i. e. From other districts of the state of enumeration.

The migrants have been further classified on the basis of rural or urban area of origin, sex and the duration of stay in the place of enumeration. For the present work, classification on the basis of the duration of stay in the place of enumeration is of cardinal importance because it makes possible estimating the volume of migration over or during a specified period of time, say the last decade. A comparison with the growth rate of population furnished the most fruitful exercise.

However, these data are fraught with many weaknesses and inadequacies, which affect their usefulness from the point of view of many research purposes. In particular for an assessment of the role of migration in the growth of the towns, from which angle they are examined here in detail, they were found wanting for the following reasons :

(1) Whereas the 1961 census presented data on the place of birth, the 1971 census

presented data on the place of last residence. This conceptual change has rendered the migration data at the two points of time quite incomparable.

(2) Migration data have been tabulated district-wise separately for the rural and urban areas, and not for individual towns. This has seriously impaired the value of these data for a study of the growth of individual towns. Even for different size classes of town, such data have not been furnished, except for class I towns, indivis dually.

(3) Whereas there is ample data on emigration, there are only very scanty data available on emigration. (i) portrait of population BI General Report-2, 1971, tabulating persons born in rural/urban areas of this state, and enumerated in each of other states and union territories and (ii) A ppendix-II to the main Table D-I, tabulating persons born in rutal urban area of a district and enumerated in each of the other districts of the state. However, these tables present notable problems.

(a) Data are presented on the place of birth, so that they are hardly comparable with the data on immigration :

(b) These tables are not complementary to each other, and

(c) emigrants have not been classified by the duration of stay in the place of enumeration, so that out migration during the decade cannot be estimated.

Thus, it is possible merely to estimate the total and decade-proportion of immigration in the urban areas of the districts and in the class I towns individually, along with source areas of immigrants, and duration of stay.

Pattern of Migration

Distribution of per cent. proportion of migrants in the total population.

In the eight district included in the Narmada valley region for the present purpose, just over 2/5 of total urban population is migrant, i. e. had its place of last residence out its present place of enumeration, which is some what smaller than the figure for M. P. as a whole (Table I). Out of these, little below half come to their present place with decade 1961-71 which is a little higher figure that for M. P. There is but moderate variation in the per cent proportion of total migrants from district to district and it shows a general trend of increase from western to the eastern part. Hoshangabad and Betul districts show markedly higher figures. More minutely, it is pretty high in the middle Narmada valley, and again moderate in the eastern part of the region. Much the same trend is shown by the per cent proportion of migrants during the 1961-71 decade in the total migrants. Only in Jhabua district it is highest 59 per cent against total migration rate of 42 per cent In Dhar district also it as high as 51.2 per cent against total migration rate of only 36 per cent. So also Khargone gives a high decade rate of 50 per cent against 38.4 per cent total migration. In these three western district there has been a faster or larger net immigration than in the prior preceding 1961, implying that before that date their migration rate must have been markedly poorer still, particularly in Dhar and Khargone districts, while in Jhabua this dynamism must have started a little earlier, Dhar district not much improved their lot in this respect during this decade, and particularly Khandwa district has been very slow, while towns of other districts have been growing attracting migrants only slightly faster than before. The rate of decade migration show a fairly good direct relationship with total migra tionrate.

Pattern of Immigration during 1961-71

Volume of immigration during the last decade is a significant indicator of urban growth dynamics in the districts concerned during the same period. High proportion of immigrants coming from long distance marks a higher level of migrational pull of the towns of these distirict Towns of the districts of Narmada Valley as a whole have received about 20 per cent of their total

Table I

Proportion of Immigrants in the urban population of Narmada Valley

S. No.	District.	Immigrants as % total urban pop.	Decade migrants as % total migrants
1	2	3	4
1.	Jhabua	42.2	59.1
2.	Dhar	35.9	51.2
3.	Khargone	38.4	49.9
4.	Khandwa	34.5	36.7
5.	Hoshangabad	50.8	55.7
6.	Betul	50.7	56.9
7.	Jabalpur	41.4	46.1
8.	Narsimhapur	44.9	51.2

Source : Based on census of India, 1971, MP. Pt. II-C (ii) Table DII (unpublished).

Table II
Pattern of Decade Immigration in Narmada Valley and M. P., 1961-71

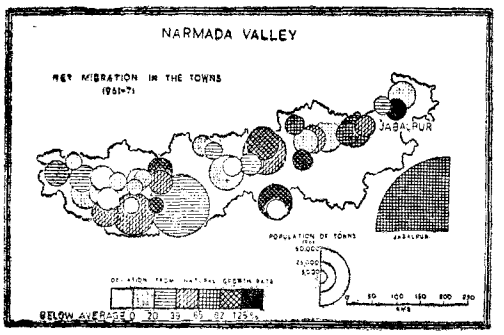
	Narmada Valley		Madhya Pradesh	
	Urban	Rural	Urban	Rural
A I a	10.8	21.9	8.9	25.1
A I b	22.3	11.5	23.3	12.8
A II	17.2	10.6	15.5	13.3
B	5.6		1.1	
	50.3	44.0	47.7	51.2

Source : Based on census of India, 1971, Madhya Pradesh Part II,C, Table D-II (unpublished).

migrants during this decade from the rural areas of the respective districts, and about 10 per cent from the urban areas (Table II). A much larger proportion (23.8per cent) of them came from outside the district of enumeration, but from within the state comprising of 11 per cent from rural and 22 per cent from ban areas. Over 25 per cent of its mmigrants 10 per cent. from rural areas and 15 per cent from urban areas have come from outside the state and only 5.6 per cent come from other countries.

Spatial Pattern of the Migrants (1961-71)

The highly dissected hilly pocket comprising the districts of Jhabua and Dhar, which are predominantly tribal, supplies a high proportion of immigrants from its rural areas, closely followed by the volume of immigrants coming from other towns of Madhya Pradesh (AIb urban)



whereas the high proportion of immigrants coming from the rural areas hardly calls for any explanation, the high proportion from urban areas of Madhya Pradesh required an explanation. Jhabua town has been a great deal of development activity. It stands on a highly important road from Indore to Ahmedabad. The population of this town has increased two fold during this decade. In Dhar a substantial proportion of the large A I b category is contributed by the adjacent Khargone district. The A II category of immigrants, those coming from other states of the country, is very small in Dhar, but quite substantial in Jhabua. Most of these have come from the adjacent areas of Gujarat state through which goes the road to Ahmedabad. B category is non-existent in both the districts.

Districts of Khandwa and Khargone should form one geographical unit. Yet, their patterns of migration during this decade are notably dissimilar. The pattern obtaining in Khargaone is rather similar to those of Jhabua and Dhar only the A-I b category is comparatively small due to very disfavourable exchange of migrants with Dhar. This is a direct consequence of several important common geographical elements of these districts a dissected rough terrain, heavy proportion of tribal population and general backwardness.

Khandwa, on the other hand, a more hospitable country, is more advanced, and is particularly more industrialised. It is more urbanized, and its principal town Khandwa is only a little below the mark of one lakh population size. It has thus a moderate proportion of category A I a, fairly good proportion of A I b, and a high proportion of category A II of migrants and non-Indian are also not quite negligible. The volume of migrants from outside Madhya Pradesh (A II) further increased due to its position on the border with Maharashtra and a major road and railway line from Indore Khandwa and further south to Maharashtra, and a very significant corridor-Burhanpur gap in the Satpura hill ranges on the south.

Further east, Hoshangabad and Narsimhapur constitute another geographical unit-the rich fertile plain of the middle Narmada Valley. Their pattern of immigration during this decade is therefore, markedly similar-except in respect of migrants from the rural areas of the districts. The redistribution of population among towns is rathar small, particularly in Narsimhapur district, which is somawhat less dynamic in industrial development. The volume of AI b is normal and almost equal in both the districts. This category in both these districts got somewhat depleted due to a notable net out-migration to Sehore and Jabalpur districts respectively. It should be noted that the physical lineaments have almost predetermined the movements of goods and people to the north from Hoshangabad (through the famous Barkherda gap) to Bhopal city, and to the east to Jabalpur city through the corridor of the Narmada Valley. The immigration from outside the state is fairly high in Hoshangabad due to its better and more dynamic disposition towards industrial development also. On the other hand Narsimhapur being comparatively poor in this respect has had very little immigration from outside M. P.

In the extreme east, the pattern of Jabalpur district is overwhelmingly the pattern

determined by a big city – Jabalpur. Obviously, therefore, the proportion of migrants coming from longer distances is going higher and higher. Apart from the other small proportion of category AI a (Rural), the very small share of AI a (urban) shows that the migration from smaller towns of the district to Jabalpur city has not been vary large. Category AI b is fairly large which was richly fed by adjacent districts like Damoh, Narsimhapur, Mandla and Seoni. A noticeable proportion of non-Indian migrants is also, as expected present in Jabalpur due to its large size.

Migration and the growth of Towns, 1961-71

It has been noted before that the major machanism of the population growth of towns, assuming that their boundaries have not been changed, is the net gain of in-migrants over the volume of out-migrants. This is particularly so because urban areas cannot compete with the country-side in the rate of natural increase. And, if the degree of urbanization has also to grow along with the growth of towns, net in-migration remains the only way of its realisation. However, the available statistics of migration, particularly of out migration, are much too inadequate to help this analysis. Besides, reliable town-wise vital statistics are also hard to obtain. This paucity of appropriate data presents a serious hurdle in evaluating the role of migration in the growth of towns and urbanization.

Estimation of Net Migration – An Indirect Method

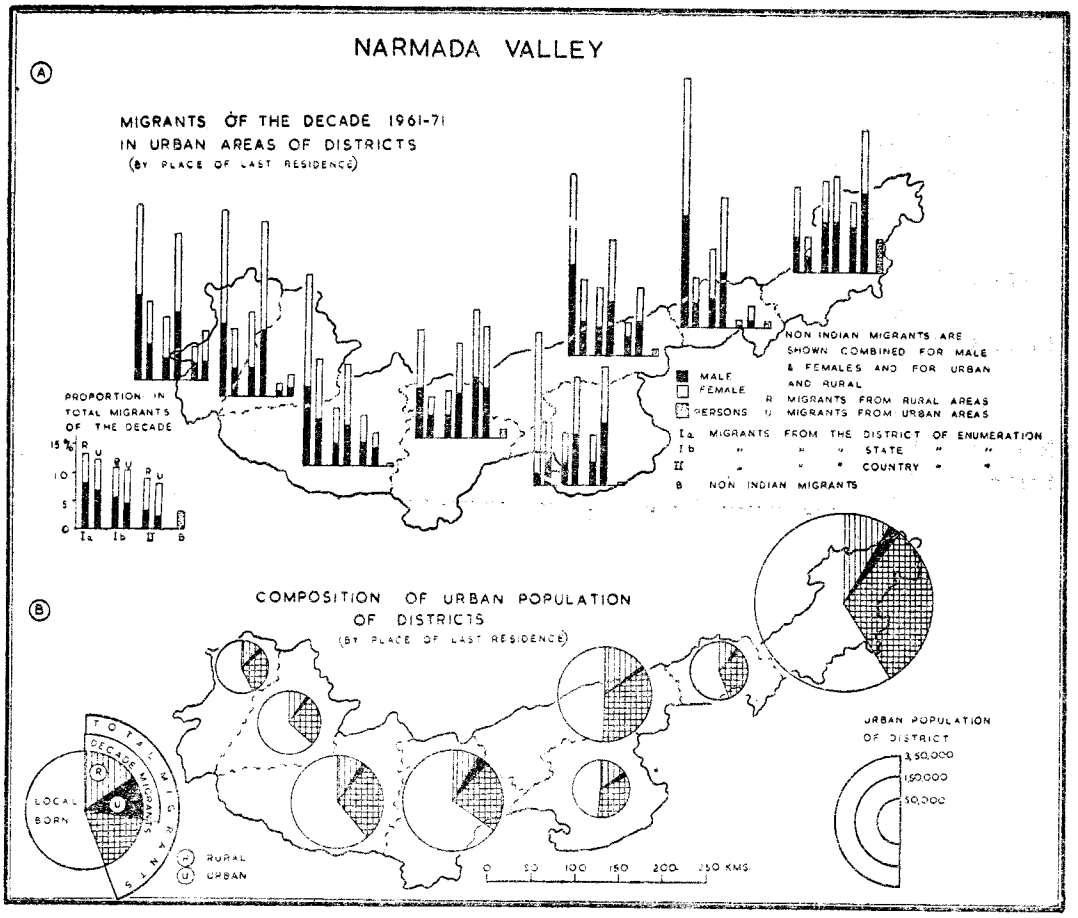
Notwithstanding the methodological hurdles noted above, the problem can easily be dealt with in a round-about way, with the help of a little more processing of whatever data is available on the growth of towns. Unlike the notable difference in the rates of natural growth of rural and urban areas in the industrial countries of the west, the rate of natural growth of population is practically equal in rural and urban areas of India.

There is also ample evidence to suggest that regional differences in the growth rates of dopulation in this country are quite incipient. On these grounds, one can reasonably estimate, at least approximately, the volume of net inmigration in the towns on the basis of their actual growth rates alone. Now, in view of the negligible volume of migration across the international boundary in this country, the actual growth rate of total population of India can safely be taken to represent the natural growth rate of the country (assuring also the regional variations to be very small). The actual growth rates of towns have therefore been complied relying on this postulate, in conjuction with the rate of natural growth and rate of the region (in fact, the total actual growth rate of total population of India, 1961–71 which works out at 22.2 per cent) as attempted by Gosal, G. S. (1967), expressing the excess of growth rate of towns over the natural growth rate as percentage of the former as workable measure of net in-migration in the towns.

Spatial pattern of Net Immigration and Growth of Towns, 1961–71

Through an analysis of data, there emerge following notable points in respect of net migration in the towns. In the north western districts of Jhabua and Dhar, the major part of the urban population falls outside the regional boundary. However, all the five towns of the region falling in these two districts have grown little. This is mainly because the major towns of these districts are outside the regional boundary. There was, thus, a net out-migration from these outside towns.

In Khargone district, there has been a moderate volume of net-immigration from several small towns to two large towns-Khargone and Sendhwa. A third small town Bhikangaon must have drawn a good volume of in-migration from rural areas of its tahsil. In this district, whereas Khargone is the highest central place of the district, the Sendhwa town benefited by inim-



migration due to its location on the national highway to Bombay. Thus, this border town must have drawn in-migrants from Maharashtra also.

In Khandwa district, which had a markedly different pattern of migration during this decade, a highly grown town - Barwaha drew a substantial number of migrants from Maheswar and Mandleshwar region. Falling south of the Narmada river, Sanawad did not attract so much migration from that area. Khandwa town is rather average in this respect.

In Betul district, the Betul town drew not only upon its own areas, but also on some areas in Maharashtra. Also near by town of Betul-Bazar, has supplied it with migrants and itself remained backward.

In the middle Narmada Plain, towns of both districts of Hoshangabad and Narsimhapur have grown fairly high drawing largely upon their own rural areas. However, in Hoshangabad district, larger towns drew from smaller towns. The small town of Pachmarhi, however, grew remarkably through net in-migration from Piparia. In Narsimhapur district, on the other hand, there has been only very small volume of redistribution of population among its own towns. This is strikingly in close consonance with the pattern of in-migration in this district during this decade. In Jabalpur district, a large part of migration has come from over long distances. In

redistribution of population, Panagar benefitted most, while Sehore and Patan suffered markedly.

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