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CONTENT

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URBANIZATION IN PUNJAB (INDIA): 1901-1911

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Abstract

Based on census data, this study deals with the pace of urbanization in Punjab during 1901-1911. As this decade was marked by high mortality due to frequent outbreaks of plague, malaria, and other fevers most of the urban centres suffered a decline in their population. The study mainly addresses three aspects of urbanization: (i) growth of population by size-class of urban centres; (ii) growth of religious communities by size-class of urban places; and (iii) spatial pattern of urbanization.

Generalities

Despite the prevalence of good agricultural conditions (Census of India, 1911, p. 48) and notable development of the means of transport and communications, Punjab experienced a heavy decline in its urban population (- 13.00 per cent) during the first decade of the twentieth century. Since rural population had also come down by 10.46 per cent, the proportion of urban dwellers in the state in 1911 (12.08 per cent) was only a little lower than the one in 1901 (12.39 per cent). Decrease in urban population stemmed from heavy mortality from plague throughout the decade. The worst year regarding plague mortality was 1907 followed by 1904 and 1905 in that order (Census of India, 1911, pp. 41-42). Smallpox also took a heavy toll of life. Besides, malaria and other fevers had also attacked the population vigorously. It is noteworthy that almost all the districts of Punjab were afflicted by plague and other fevers. The largest decrease in population due to plague and malaria was recorded in the area comprising the then districts of "Ambala, Ludhiana, Amritsar Jalandhar, and in the Kalsia, Nabha, Kapurthala and Patiala states" (Census of India 1911, p. 59).

It bears emphasis that the decade was characterized by good agricultural conditions. A notable extension in area under agriculture was recorded in Firozpur district and the Phulkian states. Besides, the area also benefited from remittances worth lakhs of rupees from colonizers from the Indian Punjab who had gone to settle in the Lyallpur Canal colony now located in Pakistan.

The development of railway network continued its pace during this period also. Amritsar-Lahore, Amritsar-Patti, Ludhiana-Firozpur Cantt., and Ludhiana-Dhuri-Sangrur railway lines were completed during the decennial period.

The decade 1901-1911 not only recorded a heavy fall (-13.00 per cent) in urban population, it also suffered notable decrease in the number of towns from 77 to 65 (Table 1). At the time of 1911 census, 17 of the towns from 1901 Census were declassified, while one town, Khanpur, was made a part of Hoshiarpur town at the new census. The following were the declassified towns with their respective population figures as in 1901: Moga (6725), Jandiala (6620), Banur (5610), Machhiwara (5588), Payal (5515), Vairoval (5439), Hadya (5414), Alawalpur (4423), Sri Hargobindpur (4380), Gardhiwala (3652), Mukerian (3589), Hadiabad (3039), Mudki

Table - 1
Punjab: Growth of Urban Population (1901-1911)

Population	Urban Population		Per cent Growth		
	1901	1911	Unadjusted	Adjusted*	Adjusted**
1	2	3	4	5	6
Total	**934766**	**813224**	**-13.00**	**-6.02**	**-8.59**
Christians	5911	8095	+36.95	+38.42	+38.35
Hindus	375005	305622	-18.50	-12.14	-15.26
Jains	9776	7927	-18.91	-13.99	-14.98
Muslims	467680	405071	-13.39	-7.52	-9.38
Sikhs	76307	86343	+13.15	+34.33	+29.37
Others	87	166	+90.80	+90.80	+90.80

** excluding population of declassified towns.*
*** excluding population of declassified as well as new towns.*

(2977), Balanwali (2298), Sheikhupur (1508), Makhu (1355), and Dalha (1342).

The cantonments at Amritsar, Jalandhar, and Firozpur were treated as separate towns for the first time at the 1911 census. Besides these cantonments, three other settlements namely Abohar, Jaitu, and Jalalabad gained urban status for the first time in 1911 with populations of 9492, 7694, and 5096 persons respectively.

Punjab's urban population decreased from 934766 to 813234 persons during 1901-1911 giving a decline rate of (-)13.00 per cent (Table 1). The highest growth rate was recorded by the Christians (+ 36.95 per cent) followed by Sikhs (+ 13.15 per cent). Whereas the Christians gained chiefly through religious conversions from amongst the weaker sections of the Hindus, the Sikh's higher growth was mainly attributable to the definitional change[1] at the 1911 census under which every person was allowed to declare himself/herself the follower of whatever religion he/she liked leading to the reclassification of a large number of persons as Sikhs who were enumerated as Hindus in 1901. In addition, the establishment of the Chief Khalsa Dewan in 1902, with its headquarters at Amritsar probably also played an important role during this period to motivate people to adopt the Sikh faith (Kaur, 1979, p. 68). Most of the converts came from the *Sahajdhari* Sikhs and the *Mazhbi* caste. Column 4 of Table 1 reveals that the population of the Muslims, the Hindus and the Jains declined considerably, i.e. by 13.39, 18.50 and 18.91 per cent respectively. Adjusted growth rates in column 5 and 6 again emphasize the much higher growth rates of the Christians and the Sikhs as compared with the other three religious communities.

Table 2 relates to distribution of urban centres by growth rates of population during 1901-1911. The general population recorded a decline in

Table - 2
Punjab: Classification of Urban Centres by Growth Rate (1901-1911)

Growth Rate (in percentage)	Number of Urban Centres					
	Total	Christians	Hindus	Jains	Muslims	Sikhs
40+	-	28	1	6	-	28
30-39.99	1	1	1	1	-	3
20-29.99	1	2	1	2	2	2
10-19.99	4	1	1	-	2	4
0-9.99	2	3	3	5	8	6
Decrease	51	17	52	31	47	16
No urban population	-	7	-	14	-	-
New towns	6	6	6	6	6	6
Total	**65**	**65**	**65**	**65**	**65**	**65**

more than three-fourths (51 in all) of the urban centres, while its growth rate was above 20 per cent in two towns only. Almost the same distribution pattern of urban centres was found in case of the two major religious communities i.e. the Muslims and the Hindus. However, the Sikhs, the Christians and the Jains registered quite a different growth rate pattern in this regard. In case of both the Sikhs and the Christians, the distribution of the towns as per growth rates was duo-modal i.e., the concentration of urban centres was found in above 40 per cent growth category as well as in the category that recorded a decrease in population. In this respect the Jains occupied the middle position between the Muslims and the Hindus on one side and the Sikhs and the Christians on the other.

Change in Urban Sex Ratio

Punjab's urban sex ratio declined by 64 females per thousand males from 804 in 1901 to 740 in 1911 (Table 3). It was mainly the result of greater female mortality from plague which stemmed from the following factors: (a) confinement of females to the house where chances of catching plague were considerably higher; (b) their nursing the sick without taking adequate rest and food; (c) their handling of soiled clothes; and (d) assemblage of a larger number of females around the sick than was customary for men. Similarly women's assemblage around the dead body was larger and also of longer duration as compared that of men.

Table 3 reveals that with the exception of the Christians, all other religious communities

Table - 3
Punjab: Change in Urban Sex Ratio (1901-1911)

Population group	Sex Ratio		Change
	1901	1911	
Total	**804**	**740**	**-64**
Christians	411	489	+78
Hindus	775	719	-56
Jains	861	801	-60
Muslims	856	784	-72
Sikhs	680	645	-35

registered a notable fall in sex ratio during the decade. Relatively low decline in sex ratio of the Sikhs could be associated with their greater concentration in smaller towns, particularly in the Western Malwa, which registered a quite low incidence of this killer disease. Notable increase in the female proportion among the Christians should be appreciated in terms of their very low sex ratio in the base year population to which some addition of female family members was overdue. Besides, the Christian population of Punjab at that time largely consisted of the British who were only a little affected by plague.

Amritsar retained its distinction of being the only Class I city in the state, and its share in the total urban population went up from 17.38 to 18.61 per cent during this decade (Table 4). Patiala town went down to Class III during this period. Thus, the upper three classes made a gain of one town only i.e., from 7 to 8 during 1901-1911, while the lower three classes (IV, V and VI) suffered a loss of 13 towns. As in the previous decennial period, all the declassified as well as new towns belonged to Class V and VI. The loss of towns was the largest (9 in all) in Class V (Table 4).

Table - 4
Punjab: Distribution of Population by Size-class of Urban Centres (1901 and 1911)

Size-class	Number		Per cent of urban Population		Per cent of urban centres	
	1901	1911	1901	1911	1901	1911
I	1	1	17.38	18.61	1.30	1.54
II	2	1	12.97	6.81	2.60	1.54
III	4	6	15.67	18.16	5.19	9.23
IV	14	11	20.12	23.65	18.18	16.92
V	38	29	27.47	24.60	49.35	44.62
VI	18	17	6.38	8.18	23.38	26.15
Total	**77**	**65**	**100.00**	**100.00**	**100.00**	**100.00**

Interestingly the combined share of urban population in Classes I, II and III had come down from 46.02 per cent to 43.58 per cent during the decade attributable to a greater rise in population of the towns of size-categories IV, V and VI (Table 4). This decline occurred despite the fact the proportion of urban centres in these three categories together had improved from 9.09 to 12.31 per cent during the same period. The rise in the population share of the Class IV, V and VI was connected with the fact that all the 8 towns which recorded a population increase during this period belonged to these three categories.

Population Growth by Size-class of Urban Centres

Table 5 depicts growth of urban population by size-class of urban centres. According to unadjusted figures population increase was reported in Class III and Class VI towns only which was mainly connected with transfer of towns from one category to another during the decade. This point becomes clear from column 3 in which growth rates have been worked out by keeping the towns in the same category which they belonged to in the preceding census year. As per this column all the size-classes experienced a decrease in population during this decade. Class VI ranked first in decline of population (- 40.46 per cent) which was followed by Class V (- 29.85 per cent). All the towns declassified in 1911 belonged to these two categories which accounted for their precipitous decline in population. Another point emerging from column 2 of Table 5 is that population decline in the upper three classes was distinctly lower as compared to that in the lower three classes.

Keeping the other adjustment as in column 3, growth rates given in column 4 were obtained by deducting population of new towns in 1901, while column 5 was prepared after subtracting population of declassified towns from the base year, and that of the new towns from the terminal year. From both these columns it can be deduced that population decline and urban size-class were inversely correlated. Thus, despite the leveling effect of the epidemics, larger urban centres recorded a lower rate of decrease in population as compared to the towns of small size-categories. In other words, there was an incipient tendency towards crystallization of size-growth relationship in the state.

Population Growth by Religious Communities

Concomitant with inter-religion differentials in growth rates, Punjab's urban population underwent a perceptible change in its religious structure during 1901-1911 (Table 6). The highest increase in percentage points was recorded by the Sikhs (+2.46) followed by the Christians (+0.37), and the Muslims (+0.22). As

Table - 5
Punjab: Growth of Urban Population by Size-class of Urban Centres (1901-1911)

Size-class	Per Cent Growth			
	Unadjusted	Adjusted (with the same towns as in the base year)	Adjusted (with the same towns in the base year and without new towns)	Adjusted (with the same towns as in the base year, and without new towns and declassified towns)
1	2	3	4	5
I	-6.83	-6.83	-5.96	-5.96
II	-54.36	-4.11	-4.11	-4.11
III	+31.28	-0.79	-0.79	-0.79
IV	-21.48	-14.46	-14.46	-14.46
V	-22.12	-21.17	-29.85	-16.56
VI	+11.49	-40.46	-40.46	+27.21
Total	**-13.00**	**-13.00**	**-15.39**	**-8.25**

Table - 6
Change in the Proportion of Religious Communities by Size-class of Urban Centres (1901-1911)

Size-Class	Change in percentage					Change in diversification index
	Christians	Hindus	Jains	Muslims	Sikhs	
1	2	3	4	5	6	7
I (100000)+	-0.12	-1.71	+0.10	-0.62	+2.32	+0.01
II (50,000-99,999)	-1.07	-11.20	-0.04	+14.55	-2.19	-0.09
III (20,000-49,999)	+0.25	+1.91	-0.29	-7.20	+5.30	+0.07
IV (10,000-19,999)	+1.02	-0.61	-0.27	-3.41	+3.25	+0.03
V (5000-9999)	+0.48	-3.39	+0.31	+0.21	+2.39	+0.02
VI (Below 5000)	+0.76	-4.53	-1.82	+6.27	-0.68	-0.01
Total	**+0.37**	**-2.54**	**-0.08**	**+0.22**	**+2.46**	**+0.02**

mentioned earlier the increase in the proportion of these communities took place mainly through proselytism from the Hindus whose share in urban population accordingly came down by 2.54 percentage points.

Table 6 reveals that the Sikhs registered an increase in their proportion in most of the size-classes of urban centres. The decline in their population share in Class II was attributable to down-gradation of Patiala town which had a high percentage of people of this community. Similarly, a minor decrease in their proportion in Class VI population was related to declassification of towns wherein they had a little higher concentration.

The Christians experienced an increase in their share of population in Class III to VI towns which stemmed from the considerably stepped up pace of religious conversions to this faith in smaller towns.

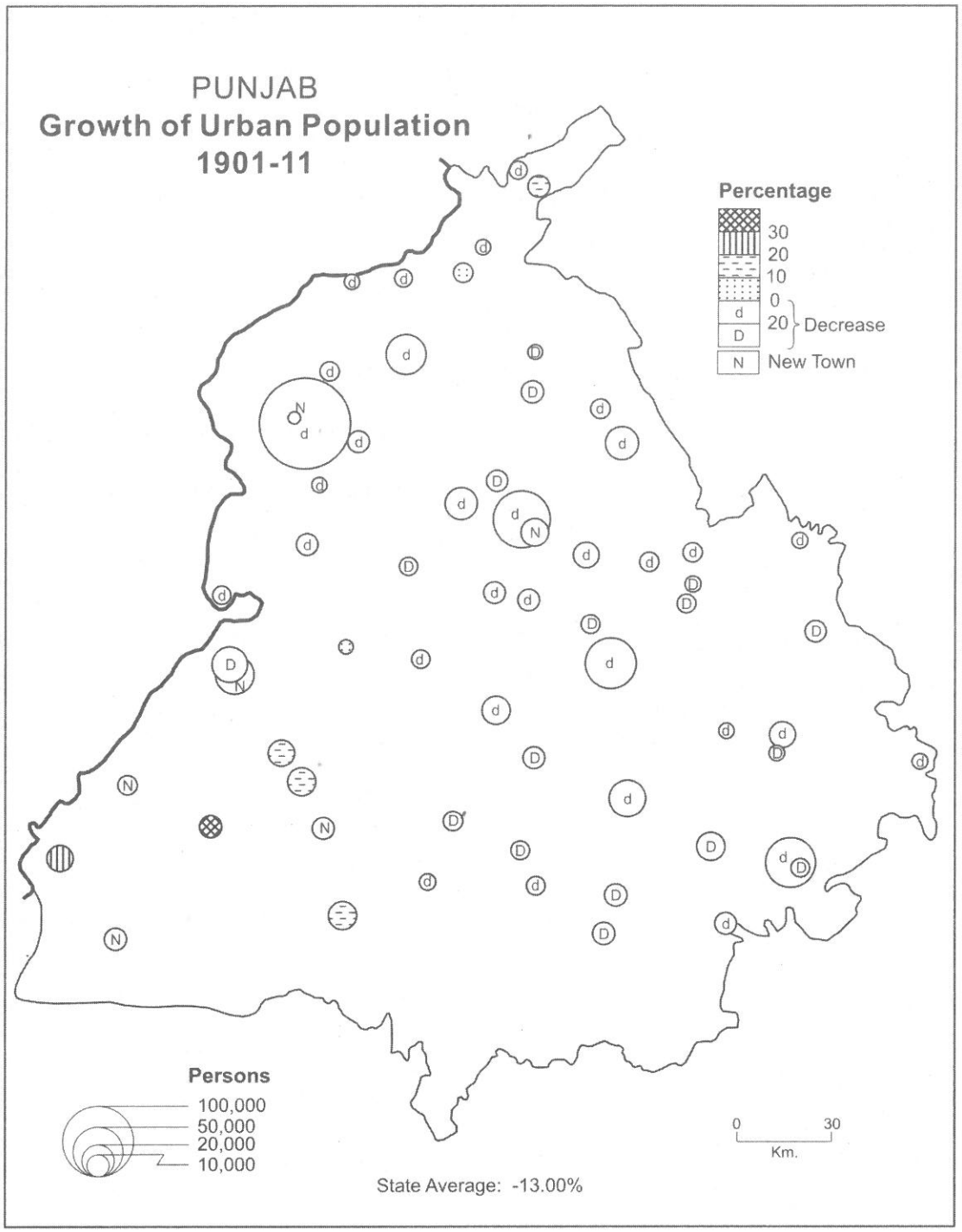
The decennial changes in the proportion of the Hindus, the Muslims, and the Jains were mainly connected with shifting of towns from one class to another.

The decade witnessed a slight increase (+ 0.02 percentage point) in the religious diversification of urban population of the state. Except for Class II and VI, all other urban size-classes experienced a gain in this regard. The highest increase (+ 0.07) was recorded in Class III towns.

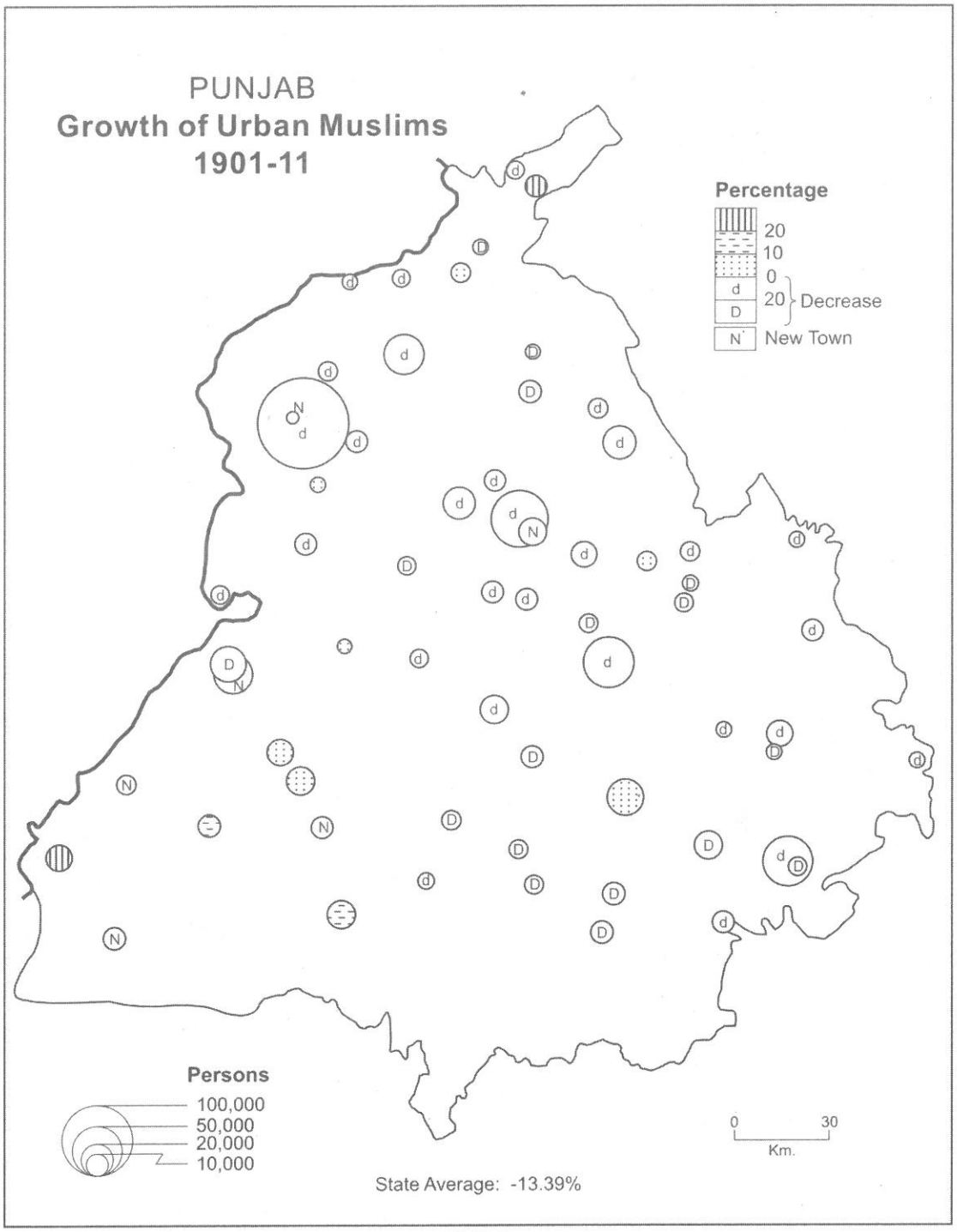
Spatial Patterns

With an average growth rate of (-) 13.00 per cent in the urban population Punjab recorded large variations in this regard ranging from (+) 38.27 per cent in Mukatsar to (-) 43.83 in Dasua. An increase in population was recorded in the following 8 towns only; Mukatsar (38.27 per cent), Fazilka (29.16 per cent), Pathankot (15.04 per cent), Bathinda (14.05 per cent), Faridkot (12.19 per cent), Kotkapura (11.82 per cent), Zira (9.42 per cent) and Gurdaspur (8.40 per cent). Significantly, six of these eight towns were located in western Malwa region which had been experiencing a faster pace of urbanization ever since the introduction of the Sirhind Canal irrigation in the 1880s. Not only the area experienced better agricultural conditions but it was also less affected by plague and malaria which had proved so fatal in other parts of the state (Gosal. 1966, p. 10). It is important to note that the Muslims, the Hindus, the Sikhs and the Jains all recorded a population increase in these towns (Maps1 to 4). Significantly, the three new urban places namely Abohar, Jalalabad and Jaitu, listed as new towns at the 1911 census, were located in this area. These towns grew up in consequence of canal irrigation and the opening of new railways which mostly served as collection centres for the agricultural surplus of the area. Abohar had also been able to attract much of wheat trade from Fazilka during this decade.

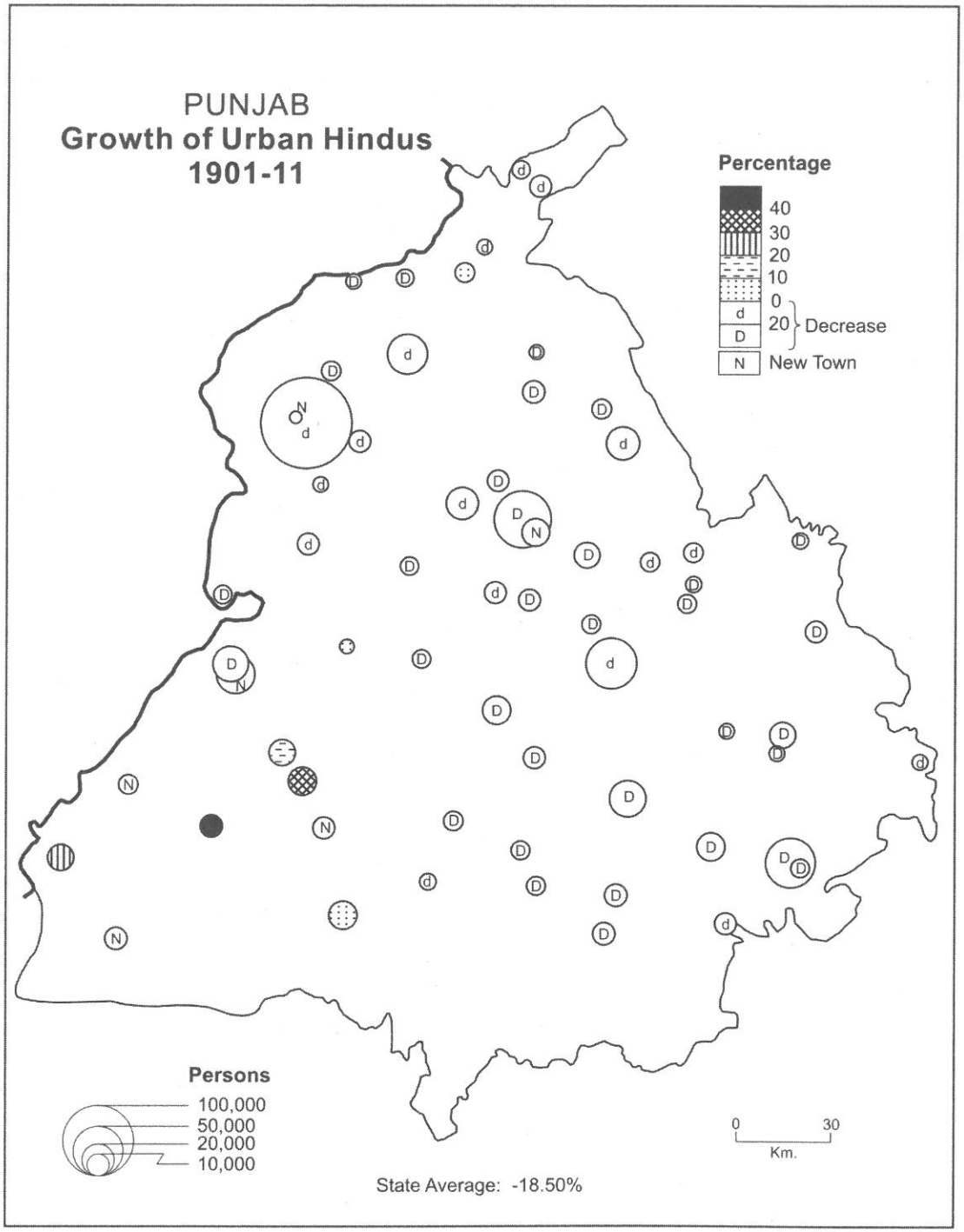
Pathankot town recorded a notable increase as was also the case in the previous decade. The main instigator of its growth was its position as a


PUNJAB
Growth of Urban Population
1901-11
Percentage
30
20
10
0
20
Decrease
d
D
N
New Town
Persons
100,000
50,000
20,000
10,000
0
30
Km.
State Average: -13.00%

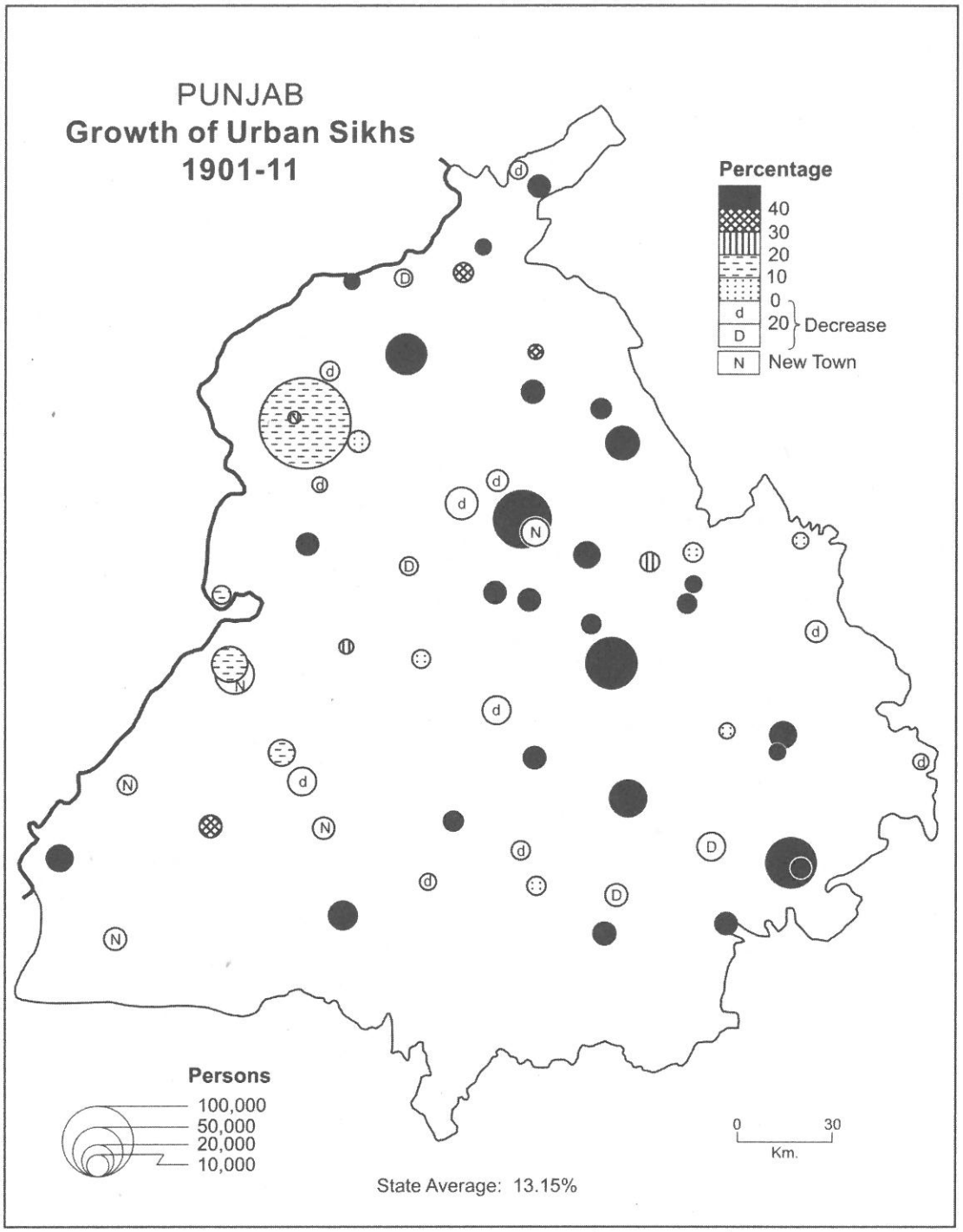
MAP 1


PUNJAB
Growth of Urban Muslims
1901-11
Percentage
20
10
0
20
Decrease
New Town
Persons
100,000
50,000
20,000
10,000
0
30
Km.
State Average: -13.39%

MAP 2


PUNJAB
Growth of Urban Hindus
1901-11
Percentage
40
30
20
10
0
d
20
D
Decrease
N
New Town
Persons
100,000
50,000
20,000
10,000
0
30
Km.
State Average: -18.50%

MAP 3


PUNJAB
Growth of Urban Sikhs
1901-11
Percentage
40
30
20
10
0
d
D
20
Decrease
N
New Town
Persons
100,000
50,000
20,000
10,000
0
30
Km.
State Average: 13.15%

MAP 4

railhead which had made it "the depot for all trade to and from the hills" located to its north and east.

The other parts of the state experienced a decline in urban population during this decade (Map 1). In 32 of the urban centres the rate of population change was between (-) 2.44 and (-) 20.00 per cent while in 19 others the decline was even more than (-) 20 per cent. The morality toll from plague and malaria was so pervasive that all urban centres irrespective of their size suffered a decrease in their population. However, two points deserve to be emphasized in this regard: (i) none of the urban centres in Majha region recorded more than (-) 20 per cent decrease in population which was connected with lesser impact of the killer diseases of the decade; and (ii) smaller towns, especially those by-passed by railway lines, were characterized by a greater decline in population as compared to the larger ones. In the then emerging spatial structure of economy, the larger urban centres came to gain an upper hand in having increasingly better and greater rail, road, and political connectivity.

In Amritsar, the largest urban centre of the study area, "The plague coupled with an epidemic of malaria took a very heavy toll" of life (Gauba, 1988, p. 237). However, the rates of population decrease in Amritsar (-) 6.83 per cent, Jalandhar (-) 18.28 per cent, and Firozpur (-) 49.98 per cent need to be appreciated in the light of the fact that cantonment areas of these urban centres were treated as separate towns for the first time at the 1911 census. If 1911 population of these cantonments is added to the main urban centres, then the growth rate of Amritsar improves slightly to (-) 95.96 per cent instead of (-) 6.83 , while those of Jalandhar and Firozpur come to (+) 2.34 per cent and (+) 3.03 per cent respectively.

The main urban religious communities of the state, i.e. the Muslims and the Hindus, had almost the same pattern of spatial growth of urban population during 1901-1911 which resembled closely to that of the general population (Maps 1, 2 and 3). The main differentiating factor between the growth patterns of these two communities was that the number of towns with more than 20 per cent decline was much larger (35) in case of the Hindus than was the case with the Muslims (18). Relatively high rate of decrease of the Hindus resulted from depletion of their ranks through religious conversions particularly to Christianity and Sikhism during the decade.

The spatial pattern of growth of the Sikhs was strikingly different from those of the Muslims and the Hindus (Map 4). With the exception of 16 towns, the Sikh population registered a high increase in most of the urban centres which was the result of two factors: (i) reclassification of many persons as Sikhs in 1911 who were counted as Hindus due to a stringent definition of a Sikh at the 1901 census; and (ii) acceleration in proselytism to Sikhism from the Hindus. It is significant to note that their high growth rate (above 40 per cent) was mostly found in areas where they had a relatively low proportion in 1901. Most of the towns of Majha, Bist-Doab and eastern Malwa belonged to this category.

The Christians continued to grow relatively rapidly through religious conversions from the Hindus. In large towns their growth rate was very high. It is to be noted that the Christian population's decrease in Amritsar, Jalandhar and Firozpur was connected with classification of Cantonment areas of these urban centres as separate towns which had a greater concentration of people from this faith. If the 1911 population of cantonments is merged with the urban centres from which these had been separated, then the growth rate of Christians in Amritsar, Jalandhar and Firozpur comes to (+) 2.17, (-) 6.68 and (+) 39.13 per cent respectively.

In spatial terms, the pattern of growth of Jain population largely resembled that of the Muslims and the Hindus. In western Malwa region, urban Jains registered a notable increase during this decade which was related to the magnetic pull of these prosperous towns to the business instinct of these people. It is also important to note that the Jains recorded 22.56 per cent growth rate in Amritsar city which was the highest as compared to the growth rates of other religious communities. During the previous two decades also, this community had recorded the

highest growth rate in urban areas of the state.

Thus, the spatial patterns of urban population growth in Punjab during 1901-1911 were mainly sculptured by mortality impact of plague and malaria. The pace of religious conversions was the main factor responsible for spatial variations in the growth rate of the Sikhs and the Christians. However, in case of the Sikhs, another factor, i.e. adoption of less rigorous definition of a Sikh was another important factor in this regard.

Conclusions

Consequent upon severe ravages of plague, malaria, and also other fevers, Punjab recorded a notable decline in population both in rural and urban areas during 1901-1911. It merits attention that the urban population suffered a decline despite the fact that the decade was marked by good agricultural conditions as well as rapid strides in the construction of new railway lines. Even the number of towns had come down from 77 to 65 during this period.

The Christians and the Sikhs experienced relatively high growth rates during this decade. Whereas high growth rate in case of the former was the result of religious conversions to this fold that of the latter stemmed from both religious proselytism as well as to the definitional change which led to reclassification of many as Sikhs who were counted as Hindus in 1901. On the other hand, the Muslims, the Hindus and the Jains all registered a decline in their population in urban areas.

The decade witnessed a significant fall in urban sex ratio connected with greater female mortality from plague which occurred quite frequently in large parts of the state. The decline in urban female proportion was experienced by all the religious communities except the Christians.

Adjusted growth rates obtained by keeping urban centres in the same size-class which they belonged to in the base year as well as deducting the population of the towns added to or declassified from the list during the decade reveals that smaller size-categories suffered a greater decrease in population during the decade. However, increase of population in Class VI was attributable to relatively less impact of the killer plague owing chiefly to much less crowding in the small towns.

The decade was marked by striking spatial variations in urban population growth in Punjab. Western Malwa region stood distinguished in having recorded a significant increase of urban population. This region was not only less affected by plague and malaria but was also characterized by better agricultural conditions. Pathankot and Gurdaspur were the only two other towns which had registered a population increase during this period.

In the rest of the state, urban population went down during this period consequent upon higher mortality from plague, malaria and other fevers. It deserves emphasis that small towns were specially noted for a greater decline of population.

The spatial patterns of growth of urban Muslims and Hindus were not much different from that of the general urban population. However, the Sikhs showed a notable departure in this regard which mainly sprang both from a less stringent definition of a Sikh at the 1911 census as also from the stepped up pace of religious conversions to Sikhism.

The growth patterns of urban Christians were mainly influenced by variations in rate of proselytism to this religion. On the other hand, the spatial pattern of change of the urban Jains was the result of magnetic pull of prosperous towns for this primarily trading community.

In brief, the spatial fabric of urban population growth in Punjab during 1901-1911 was primarily modeled by mortality impact of plague and malaria. In addition, religious conversions had also contributed significantly in this respect.

Note

1. At the 1901 census only those persons were counted as Sikh who were wearing unshorn hair

and strictly observed other rules of conduct of Sikhism. However, as per the 1911 census every person was allowed to declare himself/herself the follower of whatever religion he/she liked.

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REGIONAL BACKWARDNESS IN INDIA: AN EXPLORATION OF DEMOGRAPHIC INDICATORS

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Abstract

This paper makes a modest attempt to identify demographic indicators which could effectively capture regional backwardness in India. These demographic indicators reflect economic and non-material dimensions like education, health and access to basic amenities and thus allow for a more holistic treatment. Here, eight indicators have been selected based on the criteria of lack of economic well-being, quality of living space, household amenities, literacy and education at the household or population level. These have been analysed at the district level with data obtained from Census of India, 2011. It is discerned that the Backward Area Development Programmes, which have been a sterling feature of the Indian planning strategy since the Fourth Plan (1969-74), have not been successful in achieving their objective. All the strategies, policies and programmes even after more than six decades of regional development planning do not seem to have made any appreciable dent on the state of backwardness in areas concentrated in North-east, East and Central India. Infact a north - south transect shows large parts of the eastern half of the country seething in backwardness. The onus is completely on the governments and bureaucracy that do not seem to have the will or requisite skill to implement area-based programmes.

Key Words: Regional backwardness, Indian Planning, India, Area-based Programmes, Census of India.

Background

India on the eve of Independence from centuries of British rule inherited a distorted spatial structure of development. There were development enclaves in vast sea of underdevelopment and poverty. Growth had occurred where capitalism had made inroads. India was not alone with such a condition. How the West European Capitalism turned several economies in Asia, Africa and Latin American countries into satellites to metropolitan centres located far away in developed countries of Western Europe is well documented in the literature.

After Independence, the disparities in India accentuated further with Green Revolution that began in 1966 deepening at a few regions with assured irrigation supply. Simultaneously there was a sharp fall in the public sector investment in industry with its adverse effect on backward regions. Moreover the adoption of growth - oriented economic policies favored the already developed regions and pockets therein. A rise in regional disparity experienced during 1965-80 was followed by a slight reduction during the eighties with the spread of the Green Revolution to newer areas following an extension of irrigation.

Early 1990s saw the country adopt liberalisation, privatisation and globalisation. The development trajectory of India particularly since then has shown a tendency towards rise in regional disparity partly explained by a much enhanced role

of private sector, and preference of the multinationals for investment in more developed parts of the country under the new economic regime. All this led to prosperity confining to areas with good infrastructural facilities, connectivity, security of life, law and order, and good governance. The public sector did render spatial justice but its operational efficiency left much to be desired. However, backward areas were not only confined to poorer states but could also be found in the most developed states.

Incidentally, the adoption of economic policy in favour of market in 1991 was quickly followed by two landmark provisions of the 73rd and 74th Amendments of the Constitution. The economy had liberalised and democracy decentralised. The latter was the result of democratic institutions attaining functionality not only at the national and state levels but also at the local panchayat (rural) and nagar palika (urban) levels. Democracy at the grassroots had begun to evolve. This idea of local self-governance for development, however, has roots in history in the erstwhile princely state of Mysore where, as early as in 1874, 'local fund committees' were constituted in every district to take up construction of roads and subsidiary works (Krishan, 2001). Interest in endogenous local development through a 'bottom-up' planning process, which underscores democratic decentralisation and the participation of technical expertise and civil society, began to find notable space in the discourse on regional development. This held much hope considering the political dimensions of territories.

The saga of Indian democracy is that even the six decades of development planning with strong commitment to balanced regional development has failed to have an appreciable dent on regional and sub-regional backwardness, where needed. These could not fundamentally alter the situation that motivated these efforts. The results of regional planning were at best seen as modest. The Planning Commission has now been disbanded and replaced by *NITI Ayog*—National Institution for Transforming India—that will act more like a think tank or forum, say its supporters, in contrast with the Commission which imposed five-year-plans and allocated resources to hit set economic targets.

Modern development theorists say that the development impulses did not 'trickle down' in the absence of appropriate institutions coupled with the lack of development infrastructure in such regions and or sub-regions within them.

Disparities began to be recognised in terms of supra-state such as North India and South India, inter-state namely Punjab and Bihar. However things did not stop here. There were found numerous pockets of underdevelopment even in the developed states like Punjab, Haryana, Gujarat and Maharashtra. Take the case of Maharashtra. The Human Development Index of Maharashtra was 1.0 for Mumbai and it was as low as 0.21 for Gadchiroli (Government of Maharashtra, 2002, p.131). In fact, most of the districts of Marathwada and Vidarbha display low levels of attainment. This is when Maharashtra is one of the developed states of the country with a high per capita income. The situation is true for several other states too. Similarly, in poorer states, there are districts with high development indicators.

Various constitutional measures, administrative interventions and planning strategies adopted by both the Union and State governments have not been successful to realise people's regional or sub-regional aspirations, resulting in violent protest movements organised by the regional and or sub-regional identities leading to law and order problems, administrative break-downs and at times culminating into demand for separate statehood to meet sub-regional aspirations. Several movements in different parts of the country may it be Telangana Movement in Andhra Pradesh, Harit Pradesh in Uttar Pradesh, Vidharbha and Marathwada in Maharashtra, Bundelkhand in Uttar Pradesh and Madhya Pradesh, Gorkhaland in West Bengal, Bodoland in Assam, Kalinga in Odisha and several others should be seen from this perspective. The emergence of several states, Uttarakhand, Jharkhand, Chhatisgarh, Telengana since the turn of the present century is the finale of a combination

of aspirations, ideologies and identities.

20th century is replete with instances of governments, planners, commissions, economists and geographers evincing concern for the development of depressed areas, devising means to identify backward or lagging regions and formulate strategy to balance regional development. It is as true of Central Asian Republics such as Uzbekistan, Tadjekistan, Kirgizia, and Turkemania (Gidadhubli, 1978, p. 43) as of United Kingdom (Dutt, 1989, p. 193).

India is one of the few developing countries to adopt area-based development policies. Noteworthy contributions of geographers in the field have come in the form of research papers and books. Moonis Raza, L. S Bhat, K.V.Sundaram, C.D. Deshpande, R.P. Misra are some to enrich the field by way of suggesting models, strategies etc. Majority of the contributions relate to the country as a whole, sub national context or states/regions. Krishan (1991) and Misra (1983) have highlighted rural-urban linkages and integration for micro-level development. Raza (1989, 1978) and Raza and Singh (1983) laid greater emphasis on the development of backward areas and were especially live to the problem of mountainous areas and hilly regions. Lead sector development strategy was suggested. Agro-climatic zones, sub-zones, and watersheds were suggested as suitable planning unit (Papola, 1998, p. 30). The significant works that have appeared on the subject have been succinctly cited in the book Addressing Regional Backwardness which itself is an analysis of area development programmes in India (Mohan, 2005).

Way back, the theme of the 20th Indian Geography Congress (Dec. 28-30, 1998) held at Gorakhpur, Uttar Pradesh was 'Backward Area Development'. Three key research issues identified were (i) definition of backwardness and backward areas, identifying indicators of backwardness as well as criteria and methods of delineation of backward areas, (ii) backward area typology in terms of characteristics and problems and priorities to be addressed, (iii) development strategies: policy options and investment packages for their development.

A large number of studies have advocated transfer of authority from national functional organization to local and regional territorial bodies in order to reduce spatial disparity as traditional policy instruments such as economic subsidies and incentives are not sufficient. Also the achievement of greater regional equity was seen with additional emphasis on 'place prosperity' along with the enhancement of 'people prosperity'. Education was seen to play an important role in depressed areas. In order to understand its backwardness and work for the development of a region it was considered important to have knowledge of its location, extent, and economic organisation of problem area.

Concept of Backwardness

As an idea, backwardness is shown to be associated with the historical development of Western notions of progress and change which have produced a dichotomy between tradition and modernity. As a condition, backwardness is identified in a number of theoretical models which variously locate the sources of backwardness in history, natural laws, and tradition. There is a predominant tendency to link tradition and backwardness with resistance to change in these models. Largely the idea of backwardness has become encrusted with Western ethnocentrism, with stereotypic and inaccurate images of traditional societies, and with an obstacle approach to tradition which automatically links backwardness with resistance to change.

Here, backwardness is seen as referring to a state of condition of physicality, society, economy and polity in space at a particular point in time. It is therefore multi - dimensional. Backwardness is always with reference to some forwardness on certain parameters. It is thus a relative concept.

The concept of backwardness holds immense relevance for the processes of planned development. Its relevance is that an area is backward if it is in need of special measures, in order to utilise its development potential to the full. In this context, special measures are not merely a

question of finance but will involve directional departures or changes in the complex of policies, programmes, technologies, and institutional arrangements in various sectors of development.

Socio-economic backwardness is not unsurmountable, but it does not get eradicated automatically. It can be altered with intervention from within and outside to attack various dimensions of backwardness. Backwardness should be viewed more in terms of failure of people in their economic struggles and pursuits (Myint, 1954). Failure of people living in an area or a region may be attributed to a number of reasons and factors including un-utilisation and/or under-utilisation of resources. Critical role of local or regional infrastructure can be contextualised within this understanding of backwardness. It is important not to undermine the political dimension of local spaces. It aims at in-depth enquiry into the problematic of the persistence of backwardness in certain pockets, despite intervention of sorts. Economic performance and achievement of people of an area may be significantly constrained by deficient infrastructure even when there is same degree of resource utilisation. There exists, in fact, a surfeit of literature favouring strong as well as weak linkages between infrastructure and development (Majumder, 2008; Bhatia, 1999; Wanmali and Islam, 1995).

It is also true that regional inequality accompanies the process of economic development and is inbuilt in spatial evolution of a country. There are pockets of poverty and low levels of development in the richest countries, just as there are pockets of wealth and high levels of development in the poorest countries. Each country has a particular combination of problems in its various regions and the keys to development are regionally unique (Grigg, 1973, p. 6). It would naturally call for spatially differentiated analysis of the stages of development pertaining to individual regions within those countries. However, backwardness is not antithetical of development. An area could be backward fundamentally, with physical constraints or in some sector such as industry, damage to ecology, socially. All such areas need special interjections to carve out a journey for their growth and development in tune with the aspirations of its stakeholders.

The course of Indian planning since its initiation and its concern to address the issue of regional backwardness has been briefly touched upon in the following discussion.

Regional Backwardness and Indian Planning

To redress the issue of rising regional disparities perhaps for the first time in Fourth Five Year Plan (1966 - 1971) the Indian planning directed its effort towards spatial planning besides sectoral. The importance of area-specific development strategies that are based on regional context, including resources began to be realized. Recognizing the urgent need for such context specific development strategy, the Government of India has taken several initiatives in the past to deal with the issue of backwardness. These find mention below.

The first attempt was made in 1960 to identify backward areas for the purposes of rural industrialization. In 1968, the Planning Commission of India appointed two working groups to identify criteria for identification of backward areas that would qualify for special treatment for industries to be set up in such regions (popularly known as Pande Committee) and for recommending fiscal and financial incentives in the backward areas (Wanchoo Committee). The Pande Committee identified industrially backward states and union territories and backward districts in the backward districts. Improving upon it, the National Development Council later identified backward districts in developed states also. A detail of the indicators used in the identification of backward areas by various committees constituted from time to time can be referred to in the report of Government of India (2005; 2013).

Besides programmes aimed at industrialization of the backward areas and fiscal devolution area development, programmes came

to be focused for specific problem areas. With overall shift in development paradigm to address development from below, location specific strategies based on cause of backwardness of the particular region under consideration were advocated. The immediate cause of backwardness could be economic, socio-cultural, physical constraints or disability, peripheral location, and strategic or border location.

The National Committee of India on the Development of Backward Areas, set up in 1978, had recommended through the use of the problem area approach that the following types of problem areas be treated as backward for purpose of planning: (i) Chronically drought prone areas, (ii) Desert areas, (iii) Tribal areas, (iv) Hill areas, (v) Chronically flood affected areas, and (vi) Coastal areas affected by salinity. These areas were classified as fundamental backward areas. The basis of declaration of areas as backward was (i) physical hardship or disability such as drought prone areas, desert areas, hill areas, (ii) socially backward areas as those with majority tribal population. Besides North-Eastern region and Border Areas also formed categories requiring special attention. Needless to say, that an area may suffer from the handicap of more than one type of fundamental backwardness. The committee had recommended Block as the primary unit for identification of backward areas.

A committee of the Government of India's Ministry of Rural Areas and Employment, the previous name for the Ministry of Rural Development, had conducted one of the most elaborate exercises for the identification of backward districts in 1997. Headed by EAS Sarma, who was then Principal Advisor to the Planning Commission, the Committee used a composite method with differing weights for parameters such as: incidence of poverty, education, health, water supply, transport and communications, and degree of industrialization. The Sarma Committee's list of 100 most backward districts included 38 districts from undivided Bihar, 19 from undivided Madhya Pradesh, 17 from undivided Uttar Pradesh, 10 from Maharashtra, and a smaller number of districts from other states There were no districts from Gujarat, Goa, Kerala, Punjab, Andhra Pradesh and Tamil Nadu. The Committee did not consider the northeastern states and Jammu and Kashmir as it felt "they had problems which were specific and peculiar to them".

In addition, the Backward Classes Commission (Government of India, 1980) tried to identify the backward classes in India. The criteria for judging the relative backwardness of various castes or occupation groups were described as social, educational and economic, in that order of importance. The criteria and indicators used by the Commission were:

Social:

1. Castes/classes considered to be socially backward by others.
2. Castes/classes which mainly depend on manual labour for their livelihood.
3. Castes/classes where at least 25 per cent females and 10 per cent males, above the state average, get married at an age below 17 years in rural areas or at least 10 per cent females and 5 per cent males do so in urban areas.
4. Castes/classes where participation of females in work is at least 25 per cent above the state average.

Educational:

1. Castes/classes where the number of children in the age-group 5-15 who have never attended school is at least 25 per cent above the state average.
2. Castes/classes in which the student drop-out rate in the age group 5-15 is at least 25 per cent above the state average.
3. Castes/classes amongst whom the proportion of matriculates is at least 25 per cent below the state average.

Economic:

1. Castes/classes whose average value of family assets is at least 25 per cent below the state average.

2. Castes/classes in which the number of families living in *kuccha* houses is at least 25 per cent above the state average.
3. Castes/classes for whom the source of drinking water is located at a distance of more than half a kilometre for over 50 per cent of the households.
4. Castes/classes where the number of households which had taken consumption loan is at least 25 per cent above the state average.

The Commission worked out that 52 per cent of India's population belonged to the backward classes. Scheduled Castes and Tribes made another 22.6 per cent. Forward castes and communities were placed at 25.4 per cent (17.6 per cent among the Hindus and 7.8 per cent among other religious groups) of the total population (Krishan, 1999).

In 2002, the Planning Commission drew up another list of 100 backward districts specific to the *Rashtriya Sam Vikas Yojana* (RSVY) programme drawn up under the Tenth Plan. It covered one or more backward districts in all states of the country except Delhi, Goa, Bihar and Orissa. The first two were excluded because did not have backward districts. The other two were excluded because the RSVY Programme had special components for Bihar and the Kalahandi-Balangir Koraput (KBK) region of Orissa.

Non-government organisations have also attempted to draw up lists of the backward districts. Bibek Debroy and Laveesh Bhandari in their report, Deprivation in the New Millennium (2003), had used six indicators derived from the UN Millennium Development Goals: poverty, hunger, infant mortality, immunization, and literacy and elementary school enrolment. They considered districts, which figured in the bottom quarter under four of these six criteria as the 'most backward' districts in the country. The list has 69 districts. Most of them are located in the states of Bihar, Uttar Pradesh, Orissa and Jharkhand. Other than these states, the 'most backward' districts are found only in Arunachal Pradesh (3 districts), Karnataka (1) and Madhya Pradesh (5).

Under the above initiatives of the Tenth Five Year Plan (2002-07), a programme called the *Rashtriya Sam Vikas Yojana* (RSVY) was launched in 132 selected districts (including 100 backward districts and 32 districts affected by Left-wing extremism) in 2003-04. The main objective of the RSVY was to put in place programmes and policies with the joint efforts of the Centre and States, which would remove barriers to growth, accelerate the development process and improve the quality of life of the people. This was intended to be achieved by improving agricultural productivity, mitigating unemployment and by filling critical gaps in social and physical infrastructure.

The 100 backward districts were selected on the basis of an Index of Backwardness comprising the following three parameters wherein equal weight was accorded to each of them: (a) Value of the output per agricultural worker; (b) Agricultural wage rate; and (c) Percentage of the SC/ST population in the district.

Most of them fell in the backward states, concentrated in North-east, East and Central India. The 32 districts affected by Left-wing extremism were selected on the basis of the intensity of extremism as suggested by the Ministry of Home Affairs of the Government of India. Later on, the number was increased to 115 backward districts and 32 Left-wing extremism affected districts.

Backward districts on demographic parameters were identified by Ram and Shekhar (2006) in a study sponsored by the National Commission on Population. The report made use of data obtained from Census of India and National Family Health Survey to study the district level variations in thirteen key indicators of development and computed a Composite Index to rank the districts in the scale of socio-economic development. According to this scale, Chennai in Tamil Nadu is the most developed district and East Kemeng in Arunachal Pradesh is the least developed district in India. Not surprisingly, many

districts in north India score very low in the scale.

A change in policy prescription came with setting up a Backward Districts Grant Fund, which was launched in 2007 to promote decentralized development planning at the grassroot level through the institutions of local self-government. 250 districts across 27 states were identified for the purpose. It also included districts that were backward in developed states to bridge critical gaps in local infrastructure and other development requirements that were not being adequately met otherwise. The 250 selected districts included the RSVY and Left-wing extremism affected districts. The selected districts overlapped with some other area programmes like the multi-sectoral development plan of the Minority-concentrated districts. The programme terminated the RSVY but allowed the completion of the works proposed under the RSVY. The funds were also transferred to the BRGF.

The focus came to be on the preparation of the district and village level plans, resource mobilization, and strengthening of the planning capacity of both the *Gram Panchayat* and the district level *Panchayats* in the BRGF districts.

Another exercise was an Index of Backwardness proposed by the Committee for Evolving a Composite Development Index of States (Government of India, 2013) headed by Raghuram Rajan for the balanced development of different regions and an effort to reduce the regional disparities. States were differentiated on 'Need' criteria based on a simple index of (under) development. The Underdevelopment Index proposed was an average of the following ten sub-components: (i) monthly per capita consumption expenditure, (ii) education, (iii) health, (iv) household amenities, (v) poverty rate, (vi) female literacy, (vii) percent of SC-ST population, (viii) urbanization rate, (viii) financial inclusion, and (x) connectivity. Less developed states rank higher on the index and would get larger allocations based on the need criteria.

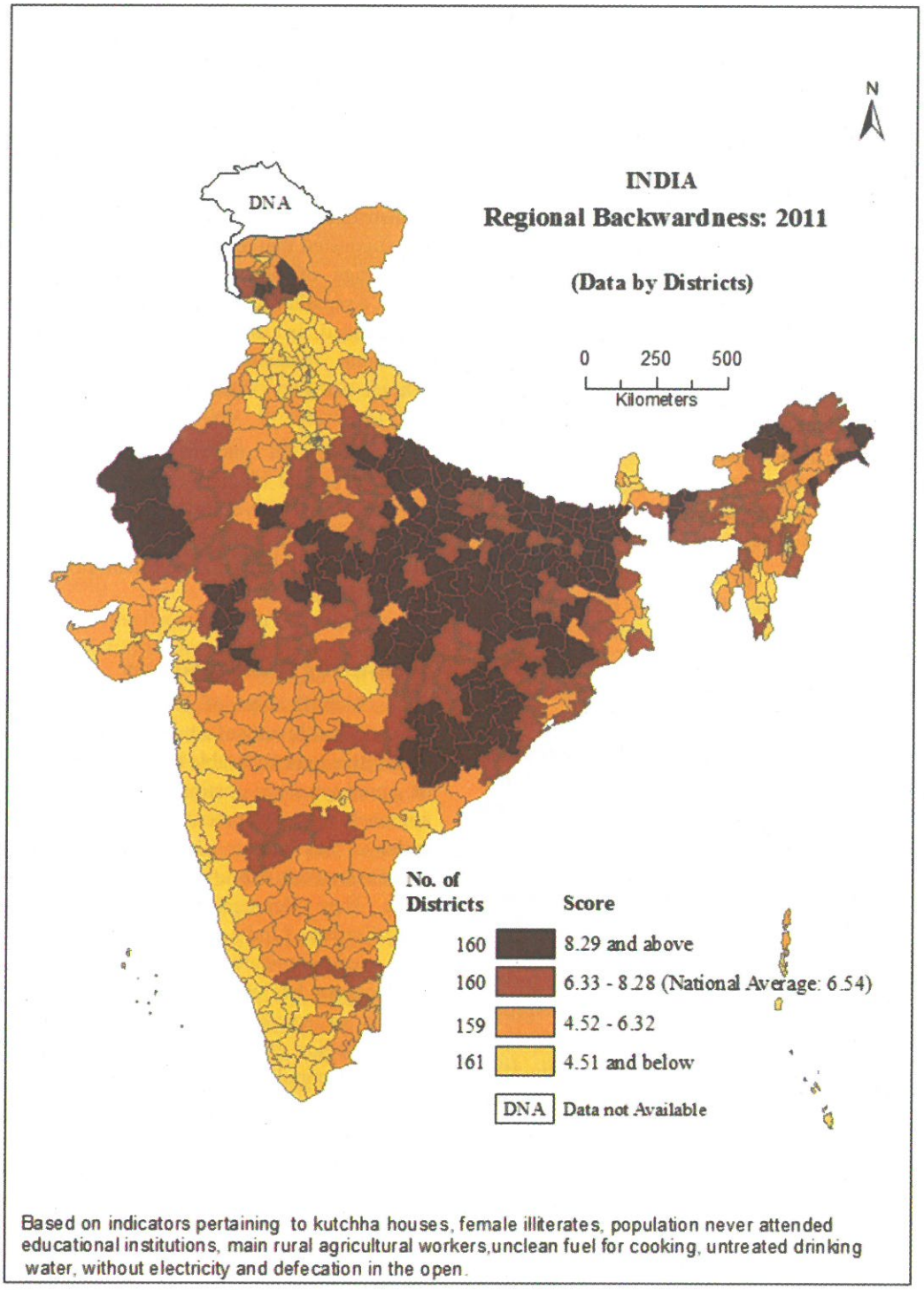
Before the 14th Finance Commission too in 2014, the States had argued for factors like inadequate infrastructure and communication facilities, cost of living and cost disability, administrative efficiency, revenue raising capacity as well as historical factors like lack of capital, absence of scientific knowledge and industrial technology and absence of marketing and financial institutions for consideration in determining inter-se distribution of finances. Some of these States had suggested that apart from earmarking certain percentage of devolution for special category States, a separate devolution procedure should also be adopted in order to reduce the existing horizontal inequality between them and the general category States (Government of India, 2015).

With such concerns manifest for different levels of spatial hierarchy, the outcomes should have been impressive. But the situation is far from it. It is apparent from the exercise carried out below that the governments and administrators have not walked the talk.

Measuring Backwardness

Identification of backward areas at the lowest possible rung of administrative hierarchy is imperative to be fully able to materialize the tenets of *panchayati raj* institutions for a bottom-up approach to development planning. The present endeavor has been to identify parameters which could effectively capture regional backwardness in India. Here 'demographic indicators' obtained from Census of India at the level of districts have been used to indicate regional backwardness. The 2011 census has brought out data on significant aspects of social, educational, economic, and demographics at disaggregated level. The data pertains to population or households.

It is contented that just as the concept of development is now much more comprehensive and favors the use of non-material dimensions like education, health and access to basic amenities which are inequality adjusted captured by the Human Development Index (HDI), the backwardness status should also be determined on the basis of comprehensive parameters.



Source: Census of India: 2011

Fig. 1

Table - 1: Number of Districts with above all-India Backwardness Score: 2011

State	Based on Backwardness Score	Total districts in the State	Percentage
Chhattisgarh	18	18	100.0
Bihar	37	38	97.4
Odisha	28	30	93.3
Jharkhand	21	24	87.5
Madhya Pradesh	43	50	86.0
Uttar Pradesh	58	71	81.7
Arunachal Pradesh	12	16	75.0
Meghalaya	5	7	71.4
Rajasthan	23	33	69.7
Assam	17	27	63.0
West Bengal	9	19	47.4
Jammu & Kashmir	8	22	36.4
Nagaland	3	11	27.3
Karnataka	6	30	20.0
Gujarat	5	26	19.2
Andhra Pradesh	3	23	13.0
Mizoram	1	8	12.5
Manipur	1	9	11.1
Maharashtra	3	35	8.6
Haryana	1	21	4.8
Tamil Nadu	1	32	3.1

Source: Computed by the author

In the present paper, the criteria selected hinges on lack of economic well-being, quality of living space, household amenities, literacy and education. Eight indicators are used to represent different aspects. Poor quality of living space is reflective of lack of economic well-being; poor amenities are unfavorable for health of individuals and lead to despoiling of environment; demographic attributes signifying heavy dependence on agriculture as a means of living and lack of non-farm employment in rural areas; and lack of opportunities and freedom of choices is indicated through poor literacy rates and educational backwardness. Although revealing and sensitive to changes in economic conditions, and considered to be a flash indicator of the health conditions of the poor, data on infant mortality could not be used as these are not available at the district level. The list of indicators is by no means exhaustive but indicative enough to present a vivid picture of the extent of prevailing backwardness. The indicators used are:

(i) Percentage of households living in *kuccha* houses,

(ii) Percentage of households defecating in the open,

(iii) Percentage of households without access to treated drinking water,

(iv) Percentage of households without electricity as primary source of lighting,

(v) Percentage of households using unclean fuel for cooking,

(vi) Percentage of rural main agricultural workers,

(vii) Percent female illiterates,

(viii) Percent of population never attended educational institutions (excluding 0-4 age-group).

The indicators were standardized and a composite score of eight weighted indicators was arrived to depict areas with condition of backwardness. The weights were obtained from First Principal Component. The scores were then

mapped using GIS (Fig. 1). The districts with high scores would be ranked as backward on this index. Four categories have been devised based on quartile method. The national average is 6.54. There are 303 districts which are more backward than the all-India average.

The country's outer regions, coinciding largely with the coastal areas, are more developed than the interior mainland, which continues to remain backward. Backwardness is perhaps rooted in a higher order of structural inequality, political apathy, and administrative failure. Equally critical has been the negative role of resource—population imbalance, high frequency of devastating floods, and gross inadequacy of infrastructure. These are the areas inhabited by scheduled castes and scheduled tribes. Part of this acutely backward region constitutes the 'red corridor' or Naxal affected districts.

Of the states large parts of which are backward, there are three special category states namely Arunachal Pradesh, Meghalaya and Assam having majority districts as backward. These along with Jammu & Kashmir, Nagaland, Mizoram, and Manipur are other special category states containing districts with more than average score on backwardness (Table 1). The remaining states in this category are better placed. These are Himachal Pradesh, Uttarakhand in northwest India and Sikkim, and Tripura in the north-east.

To recall, the concept of a special category state was first introduced in 1969 when the Fifth Finance Commission sought to provide certain disadvantaged states with preferential treatment in the form of central assistance and tax breaks. The National Development Council (NDC) has accorded the status of Special Category State (SCS) to eleven, out of twenty-eight states, which have been characterized by a number of features necessitating special consideration. The rationale for special status is that these states, because of inherent features, have a low resource base and cannot mobilize resources for development. Some of the features required for special status are: (i) hilly and difficult terrain; (ii) low population density or sizeable share of tribal population; (iii) strategic location along borders with neighboring countries; (iv) economic and infrastructural backwardness; and (v) non-viable nature of state finances. States under this category have a low resource base and are not in a position to mobilize resources for their developmental needs even though the per capita income of some of these states is relatively high. Moreover, a number of these states were constituted out of former small Union Territories or districts of some other states, necessarily involving creation of overheads and administrative infrastructure that was out of proportion to their resource base. At present there are eleven Special Category States namely, Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand.

The hundred most backward districts are largely concentrated in a large pocket in Bihar (27), Jharkhand (16), Odisha (14), Chattisgarh (7), and Madhya Pradesh (13) while some are found scattered in Arunachal Pradesh (2), Rajasthan (4) Nagaland (1), and West Bengal (1). The overall impact of the programmes for the redressal of backwardness initiated by the Government of India from time to time has been assessed as just modest. Why has this been so? It seems that our bureaucracy does not have the requisite skill to implement area-based programmes. Such programmes were implemented on the pattern of sectoral ones. Available funds often get distributed, in some form, among target populations in place of getting invested in beneficiary-oriented development projects (Krishan, 2001).

Conclusions

The issue of backwardness has frequently cropped up in Indian planning process necessitating identification of backward areas. There has been no dearth of committees set up from time to time to identify backward districts or blocks, with the idea of planning at the grassroots to reduce regional disparities and improve well-

being. The selection is obviously based on the purpose of identification such as industrial dispersal, financial devolution, or identification of backward classes or naming of problem areas, to cite some examples.

However, all such efforts are not translating into actions as is evident from identification and analysis of backwardness based on demographic indicators. The choice of indicators has been deliberate to provide a holistic view of backwardness. These indicators based on Census involving complete enumeration reveal complete failure of those in corridors of power to fulfill even the bare minimum conditions for a decent and dignified living.

A more concerted effort is required to take these areas off from such multiple deprivations. The policy interventions and strategies need to be adopted on context basis and not 'one size fits all' approach on states and different areas within states. What is their potential for development? What are the inhibiting factors which prevent this potential from being realised? How to remove or mitigate the inhibiting factor and realise the full potential for development are some of the questions that need to be addressed. Geographers need to contribute to alternative strategies that focus upon the endogenous mobilisation of resources and of regional innovative and adaptive capacities, that will have a strong grounding in the many geographies within our country.

Truism is that local systems are as complex as, if different from, national systems. The smallness, openness, complexity and dynamic character of local areas basically entail that local development planners should deal with unique, individual and path-dependent systems, in which unique events, history, characteristics and even personalities may play as important role in determining the success or failure of local development efforts as variables which are more amenable to analysis and modeling. It is important not to undermine the political dimension of local spaces.

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SOCIO-ECONOMIC TRANSFORMATION OF SCHEDULED CASTES IN NORTHWESTERN INDIA : A STUDY OF INTER AND INTRA-REGIONAL DIFFERENTIALS

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Abstract

The paper examines regional and sub-regional differentials in socio-economic transformation of Scheduled Castes (henceforth SC) population in Northwest India with the help of three indicators, namely literacy level, degree of urbanization and rural occupational transformation taking district as a unit of data mapping and analysis. Data on these indicators have been picked up from Census of India, covering a period of six census decades i.e. 1961 to 2011. A well known method, Deprivation Index, has been pressed into service to prepare a Composite Index of socio-economic transformation.

The size of SC population is massive in India. As per 2011 census, SC population was 201 million persons; higher than the total population of Brazil (199 million in 2012), the fifth largest area sized country in the world. SC population is highly concentrated in north Indian plains and coastal plains in Andhra Pradesh and Tamil Nadu. In Northwest India, every fifth person belongs to SC category of population, against the national average of one in every six persons. SC population share was about 23 per cent in total population of NW region, the highest share among all the regions of India. Within Northwest, SC population share in Punjab is the highest not only in the region but also for India as a whole. Punjab together with Haryana shared 83 per cent of total SC population in the region.

Among the 76 districts in NW India, Nawanshahr district of Punjab recorded 42.5 per cent of SCs in its total population; the second highest after Koch Bihar district (50.2 per cent) in West Bengal. The top twelve districts in SC population, making only about one-fifth of total districts together had more than two-fifths of total SC population in the region.

There is a large heterogeneity of SC castes in India. In NW India, the number of SC castes varied from a high of 57 in Himachal Pradesh to a low of 13 in Jammu & Kashmir. However, the five SC castes are common to all the states. Nine SC castes in the region, each having more than half a million persons, subsumed more than four-fifths of total SCs in the region.

SC population is lagging behind the general population in socio-economic transformation in different parts of India. There were, however, wide inter and intra-state disparities in their wellbeing. Within NW India, Jammu & Kashmir and Chandigarh (UT) recorded a high level of socio-economic development for SC population, both in 1961 and 2011. But Haryana performed well, especially in comparison to neighbouring Punjab, in terms of socio-economic change during 1961-2011. At the district level, with an index value of 0.994 Srinagar district was at the top and Mansa district (Punjab), with index value of only 0.306 at the bottom in the whole region. There were 17 districts in the region, where Development Index for SC population was less than the national average of 0.393. On the whole, 18 districts in the region, where index value was higher than 0.6 are categorized as 'high'. Intra-state disparity in wellbeing of SC population was the widest in Jammu & Kashmir and the

narrowest in Himachal Pradesh.

Finally, it is satisfying that the pace of socio-economic transformation among SCs has accelerated during post-Independence era, narrowing down the wide gap between SC and general population in the country. This speaks of the success of government sponsored programs and policies for their socio-economic transformation, initiated by the State in Independent India. The former dalit castes are now more awakened in social, political and economical terms. This trend is likely to continue in future, but with greater benefits to newly emerged elite class within the *'dalits'*. The government programmes and policies in future must concentrate not only on reducing the inter and intra-regional disparities in their socio-economic wellbeing but also addressing those found within 'scheduled' and 'non-scheduled' castes, on one hand, and 'creamy' and 'non-creamy' layers within the SCs.

Introduction

The State in independent India took various constitutional and administrative measures to safeguard the interests of the former oppressed groups of Indian society, "officially" termed as 'scheduled' castes and tribes. The abolition of untouchability and the reservation of seats in educational and democratic institutions along with that in the public sector enterprises have contributed significantly to their upward socio-economic mobility, resulting in higher educational attainments, occupational diversification, and residential mobility along with loosing the upper caste dominance.

Nevertheless, this has also exposed their internal differentials emanating from the caste, sub-caste, clan and class identities. For example, the relatively well-off and politically articulate scheduled castes (SCs) have cornered the major share of government largesse. This eventually consolidated the position of the elite groups or individuals within the *dalit* castes. Moreover, rivalries among the lower castes such as *Mahars* and *Mangs* in Maharashtra, *Malas* and *Madigas* in Andhra Pradesh, *Chamars* and *Chuhras* in the north Indian states have emerged as the impediments to political mobilization, further reinforcing cleavages. In fact, these castes and tribes have never been a homogeneous group.

Given the wide differences in historical background across regions and sub-regions in the country, some states have done better than others in terms of socio-economic upliftment of such castes and tribes. It is generally stated that not only a creamy layer has emerged within the 'scheduled' population but also inter-regional and sub-regional differentials in their socio-economic development have widened further.

Taking a cue from the above, the paper attempts to examine inter-regional and sub-regional differentials in socio-economic development of SC population in Northwestern region, comprising of Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir and Union Territory of Chandigarh (Fig.1). The region contains 8.3 per cent of the total SC population against its share of 6.0 per cent in the total population of India. Further, 22.9 per cent of total population of the Northwestern India, as a region, comprises of SCs against the national average of 16.6 per cent. Obviously, there is a higher concentration of SC population in this region.

It is hoped that an understanding of regional pattern of socio-economic transformation of SCs will help the state governments to evolve programmes and strategies for socio-economic upliftment of this segment of the Indian population, that remained historically deprived of their rights.

For measuring socio-economic transformation of SC population the three broad indicators of literacy, urbanization and (rural) occupational diversification have been picked up.

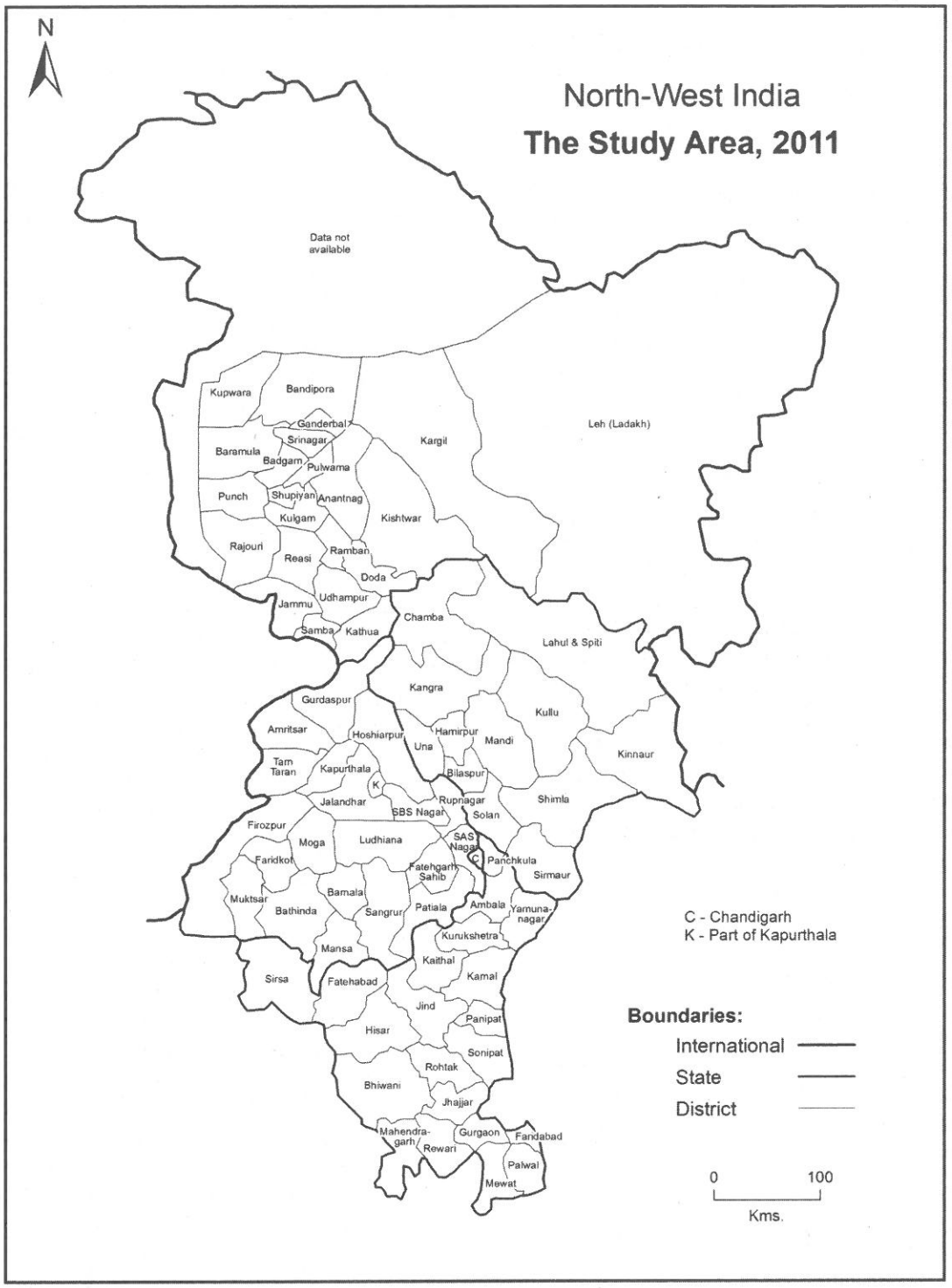
N
North-West India
The Study Area, 2011
Data not available
Kupwara
Bandipora
Ganderbal
Srinagar
Baramula
Badgam
Pulwama
Punch
Shupiyan
Anantnag
Kulgam
Kishtwar
Kargil
Leh (Ladakh)
Rajouri
Reasi
Ramban
Doda
Udhampur
Jammu
Samba
Kathua
Chamba
Lahul & Spiti
Kangra
Gurdaspur
Kullu
Amritsar
Hoshiarpur
Hamirpur
Una
Mandi
Kinnaur
Tam Taran
Kapurthala
K
Bilaspur
Jalandhar
SBS Nagar
Rupnagar
Solan
Shimla
Firozpur
Moga
Ludhiana
SAS Nagar
C
Panchkula
Faridkot
Fatehgarh Sahib
Sirmaur
Muktsar
Bathinda
Barnala
Sangrur
Patiala
Ambala
Yamuna-nagar
Kurukshetra
Mansa
Kaithal
Kamal
Sirsa
Fatehabad
Jind
Panipat
Hisar
Sonipat
Rohtak
Bhiwani
Jhajjar
Mahendra-garh
Rewari
Gurgaon
Faridabad
Palwal
Mewat
C - Chandigarh
K - Part of Kapurthala
Boundaries:
International
State
District
0
100
Kms.

Fig. 1

Increased literacy among such castes has created not only a greater awareness but also opened up the new avenues of employment opportunities especially in the public sector, concentrated mainly in urban areas. All the indicators are inextricably intertwined.

Data on these indicators have been picked up from the Census of India, published by the Registrar General and Census Commissioner of India, New Delhi. According to 2011 Census data, twenty-one states and three union territories together had 99.9 per cent of the total SC population in the country. For studying change in the socio-economic conditions of SCs a period spanning over five decades, from 1961 to 2011, has been selected. This period has been selected for two reasons. Firstly, a period of five decades is long enough to assess the impact of change in the socio-economic conditions of the SCs. Secondly, it was during the 1961 Census that for the first time detailed information about this segment of population was collected. The 2011 Census is the latest in the series. For computing a Composite Index of socio-economic transformation, the methodology evolved by the United Nations Development Programme (UNDP, 1999, p.134) for the construction of Human Development Index (HDI) has been pressed into service. Minimum and maximum limits for each indicator are 0 and 100, respectively.

The paper is divided into two sections. The first section examines demographic attributes of SC population in Northwestern India within the broad frame of India as a whole followed by inter and intra-state comparison within the region under study. The second section examines inter and intra-regional disparities in socio-economic development of SC population and changes therein in Northwestern India.

I

Scheduled Castes: A Demographic Profile

The term *dalit*, which stands literally for the oppressed, came into wider currency in the latter half of 19th century through the writings and speeches of Jyotiba Phule. He was the first reformer in the modern period to take up the cause of the untouchables in Maharashtra state (Gore, 1993, p.211). Castes having neither power nor privileges are equated with *dalits*. However, this group includes both 'touchable' and 'untouchables' castes. Such castes are officially termed now as 'scheduled castes'[1] in modern India.

A. The National Scenario

According to the 2011 Census, 201.4 million or 16.6 per cent of the total population of India is composed of SCs. Another 104.3 million persons are scheduled tribes. Thus 305.7 million or more than 25 per cent of the total population of India belonged to the scheduled population (castes and tribes). In other words, almost every fourth person of Indian society belongs either to a scheduled caste or a scheduled tribe. Separately, every sixth person in India is a scheduled caste. With the exception of Arunachal Pradesh, Nagaland states and the union territories of Andaman & Nicobar Islands and Lakshadweep, scheduled castes are notified in all the states and union territories of India. However, their distribution is highly uneven at the state level.

In some states, they are highly concentrated, against this they make up only a small fraction in total population. In Uttar Pradesh alone, there are 41.3 million or more than one-fifth (20.5 per cent) of the total SC population in the country. Next to it, West Bengal accounts for another 21.5 million or 10.7 per cent in total SC population. These two states together share about one-third of the India's SC population. Strikingly, six states namely, Uttar Pradesh, West Bengal, Bihar, Tamil Nadu, Andhra Pradesh and Maharashtra, each one having more than 13 million SC population, have more than three-fifths or 60.1 per cent of the total SC population in the country. In fact, roughly nine-tenths or 87.4 per cent of the total SC population resides only in twelve states namely, Uttar Pradesh, West Bengal,

Table - 1
India: Concentration and Dispersal Tendencies in Distribution of Scheduled Castes(SC) Population by States

Rank in 2011	Name of State/UT	SC Population 2011	SC Population 2001	Absolute Change	Rank in absolute change	Compound Annual Growth Rate (%)	Rank in annual growth
1	Uttar Pradesh	41,357,608	35,148,377	6,209,231	1	1.64	18
2	West Bengal	21,463,270	18,452,555	3,010,715	4	1.52	19
3	Bihar	16,567,325	13,048,608	3,518,717	2	2.42	6
4	Tamil Nadu	14,438,445	11,857,504	2,580,941	5	1.99	15
5	Andhra Pradesh	13,878,078	12,339,496	1,538,582	10	1.18	22
6	Maharashtra	13,275,898	9,881,656	3,394,242	3	3.00	5
7	Rajasthan	12,221,593	9,694,462	2,527,131	6	2.34	7
8	Madhya Pradesh	11,342,320	9,155,177	2,187,143	7	2.17	12
9	Karnataka	10,474,992	8,563,930	1,911,062	8	2.03	13
10	Punjab	8,860,179	7,028,723	1,831,456	9	2.34	8
11	Odisha	7,188,463	6,082,063	1,106,400	11	1.69	17
12	Haryana	5,113,615	4,091,110	1,022,505	12	2.26	9
13	Gujarat	4,074,447	3,592,715	481,732	15	1.27	21
14	Jharkhand	3,985,644	3,189,320	796,324	14	2.25	11
15	Chhattisgarh	3,274,269	2,418,722	855,547	13	3.07	4
16	Kerala	3,039,573	3,123,941	-84,368		-0.27	
17	Assam	2,231,321	1,825,949	405,372	16	2.03	14
18	Uttarakhand	1,892,516	1,517,186	375,330	17	2.24	10
19	Himachal Pradesh	1,729,252	1,502,170	227,082	18	1.42	20
20	Jammu & Kashmir	924,991	770,155	154,836	19	1.85	16
21	Tripura	654,918	555,724	99,194	20	1.66	18
22	Manipur	97,042	60,037	37,005	21	4.92	2
23	Sikkim	28,275	27,165	1,110	24	0.40	24
24	Goa	25,449	23,791	1,658	23	0.68	23
25	Meghalaya	17,355	11,139	6,216	22	4.53	3
26	Mizoram	1,218	272	946	25	16.17	1
27	Arunachal Pradesh	*	6,188	*		*	
28	Nagaland	*	*	*		*	
	Union Territory						
1	NCT of Delhi	2,812,309	2,343,255	469,054	1	1.84	5
2	Chandigarh	199,086	157,597	41,489	2	2.36	3
3	Puducherry	196,325	157,771	38,554	3	2.21	4
4	Dadra & Nagar Haveli	6,186	4,104	2,082	4	4.19	1
5	Daman & Diu	6,124	4,838	1,286	5	2.39	2
6	A&N Islands	*	*	*		*	
7	Lakshadweep	*	*	*		*	
	INDIA	**201,378,086**	**166,635,700**	**34,742,386**		**1.91**	

** Scheduled caste population has not been enumerated.*

Bihar, Tamil Nadu, Andhra Pradesh, Maharashtra, Rajasthan, Madhya Pradesh, Karnataka, Punjab, Odisha and Haryana. A majority of these states fall in north India. In comparative terms, four southern states (i.e., Andhra Pradesh, Tamil Nadu, Karnataka and Kerala) together have only about 21.0 per cent of the total SC population in India, whereas the share of the four northern states (Uttar Pradesh, West Bengal, Bihar and Rajasthan) tends to be as high as 45.5 per cent. Evidently, inter-state distribution of SC population in India is highly uneven, as there is a higher concentration of such

castes in the north Indian states (Table 1). It varies from a high of about 32.0 per cent in Punjab to a low of 0.1 per cent in Mizoram. National average being 16.6 per cent, eleven states (Punjab, Himachal Pradesh, West Bengal, Uttar Pradesh, Haryana, Tamil Nadu, Uttarakhand, Rajasthan, Tripura, Karnataka, and Odisha) and two union territories (Chandigarh and NCT Delhi) have SC population above the national average. Against this, eight states (Jammu & Kashmir, Assam, Gujarat, Sikkim, Manipur, Goa, Meghalaya, and Mizoram) along with the two union territories (Daman & Diu and Dadra & Nagar Haveli) had less than the national average of 16.6 per cent. As stated earlier, there is no SC population in Arunachal Pradesh, Nagaland, Lakshadweep and A& N Islands.

In each of the four states of Punjab, Himachal Pradesh, West Bengal and Uttar Pradesh, SCs constitute more than 20 per cent in their total population. In comparison, SC population makes only about one per cent or less in the total population of tribal population dominated states of Meghalaya, Sikkim and Mizoram. In fact, in areas dominated by the Christian, the Buddhist and the Muslim population, the SC population is conspicuously low. In the past, conversion of the low caste Hindus to Christianity, Buddhism and Islam in such areas is mainly responsible for the marginal distribution of SCs in these states.

Four states (Uttar Pradesh, West Bengal, Tamil Nadu, and Himachal Pradesh) have higher share of total SC population in comparison to their share in total population of the country. For example, Uttar Pradesh accounted for only 16.1 per cent of India's total population against 21.2 per cent of the total SC population. Similarly, the respective shares of West Bengal are 7.8 per cent and 11 per cent. Such inter-state variations in distribution of SC population are full of implications in the context of political mobilisation in a democratic setup in India based on adult franchise.

Yet another peculiarity of SC population distribution is the high degree of heterogeneity in terms of castes and sub-castes. In 2011, there were as many as 1241 sub-castes of SC. Earlier in 1951 this number was only 779. Obviously, over the years more castes have been enlisted in the SC list, mainly due to populist considerations; influenced by the attractive benefits, including reservation in legislative bodies, government jobs and educational institutions. The number of castes varies from a minimum of four in Sikkim to a maximum of 101 in Karnataka. In other words, SC population is most homogeneous in Sikkim and the least in Karnataka (Kant, 2005).

However, a few SC castes are numerically large and regionally concentrated. According to 2001 census, sixteen top ranking SC castes, each with million or more persons, accounted for 74.2 million or about 84.0 per cent of total SCs in India. The *Chamar* caste is numerically the largest and most widely distributed of all the SCs, followed by the *Mahar*, and the *Madiga*. With 32.5 million persons, the *Chamar* was the first ranking caste in 178 districts of the country. Its share varied from a high of 87.6 per cent in Bilarpur district (Chhattisgarh) to 20.1 per cent in Sahibganj district (Jharkhand). It was in absolute majority (having more than 50.0 per cent) in 107 districts. Nine such districts were in Haryana state.

The *Chamars* make one one-fourth in total SCs of India. In their spatial distribution, they are highly concentrated in north Indian states. While such castes as, the *Mahar*, the *Madiga*, the *Adi Dravida*, the *Pasi*, the *Rajbanshi*, the *Mala*, the *Namasudra*, the *Bagdi*, the *Megh*, the *Dusadh*, the *Mazhabi*, the *Pallan*, the *Pod*, and the *Mahyavansi*, which constituted the other numerically important SC castes, have only a regional dominance. The Chamars dominated in Punjab, Haryana, Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar; *Adi Dravida* and *Paraiyan* in Tamil Nadu; *Madigas* and *Malas* in Andhra Pradesh; *Dusadhs* in north Bihar; *Dhobis* in parts of Uttar Pradesh and Orissa; *Mahars* in Maharashtra; and *Adi* Karnataka in southern Karnataka.

B. The Regional Scenario

Northwestern region (including Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana and Chandigarh Union Territory) shared 16.83 million or 8.4 per cent in total SCs in India against only 6.1 per cent of their share in total population of India. Obviously, Northwestern region has a higher concentration of SCs in comparison to other regions. For example, SCs made 22.9 per cent in total population of Northwestern region against only 6.4 per cent in Northeastern India, 11 per cent in Western India, 16 per cent in Southern India, 18 per cent in Eastern India, and 19 per cent in Central India, the national average being 16.6 per cent.

Within Northwestern India (henceforth NW India), Punjab alone shared more than a half (52.7 per cent) or 8.86 million of the total 16.83 million SCs in the region. Another 5.11 million or 30.4 per cent were in Haryana. Both states together had 83.0 per cent of total SC population, against their share of 72.2 per cent in total regional population at 2011 Census. Earlier in 1961, the share of Punjab in total SC population of the region was as high as 55 per cent, and Haryana shared only about 26 per cent. Hence, their combined share in 1961 made about 81.0 per cent against 83 per cent in 2011; indicating faster growth of SC population in Haryana than Punjab during 1961-2011. Interestingly, unlike Haryana the share of Himachal Pradesh in regional total of SC population declined during the same period: from 12.7 per cent in 1961 to 10.3 per cent in 2011.

Against this, there has been a remarkable increase in share of Chandigarh (UT) in total regional SC population. It rose to 1.2 per cent in 2011 from 0.3 per cent in 1961. The same is well reflected in phenomenal growth of SCs in Chandigarh (UT) during 1961-2011: 6.44 per cent against the regional average of 2.63 per cent. The share of Jammu & Kashmir in regional total of SCs declined marginally to 5.50 per cent from 5.60 per cent during this period. Nevertheless, annual growth rate of SCs in Jammu & Kashmir (2.66 per cent) was higher than the regional average (2.63 per cent). In comparative terms, SC population had grown at the slowest in Himachal Pradesh and the fastest rate in Chandigarh (UT) in the whole region during 1961-2011 (Table 2). Chandigarh (UT) attracts SCs in lower categories of jobs pertaining to sanitation, garbage disposal and other menial activities. However, there is no evidence of heavy out-migration of SCs from Himachal Pradesh to

Table - 2
NW India: Some Demographic Characteristics of Scheduled Castes (SC) Population

States / U.T.	SC Population (000 person)		% in Total Population	% share in all India Population	Annual Growth Rate	Urban Population in (000 persons)		Annual Urban Growth Rate (%)
	2011	1961	2011	2011	1961-2011	2011	1961	1961-2011
Punjab	8860 (52.6)	2632 (55)	31.9	4.4	2.49	2363	341	4.11
Haryana	5113 (30.4)	1268 (26.4)	20.2	2.5	2.97	1393	350	2.33
Himachal Pradesh	1729 (10.3)	610 (12.7)	25.2	0.9	2.28	123	9.5	6.03
Jammu & Kashmir	925 (5.5)	269 (5.6)	7.4	0.5	2.66	174	21	4.74
Chandigarh	199 (1.2)	13 (0.3)	18.9	0.1	6.44	194	3.7	9.57
Regional Total	1683 (100)	4792 (100)	22.9	8.4	2.63	4247	725.2	3.58
All India	**201378**	**64511**	**16.6**	**100.0**	**2.40**	**47527**	**6899**	**4.06**

Note: Figures in parentheses indicate percentage share of individual State/UT in total scheduled castes population in the Northwestern region

Source: Calculated from (i) Census of India (1961), Special Tables on Scheduled Castes, Part V, Registrar General and Census Commissioner of India, New Delhi, and (ii) Census of India (2011), Special Tables on Scheduled Castes and Scheduled Tribes-on CD, Registrar General and Census Commissioner of India, New Delhi.

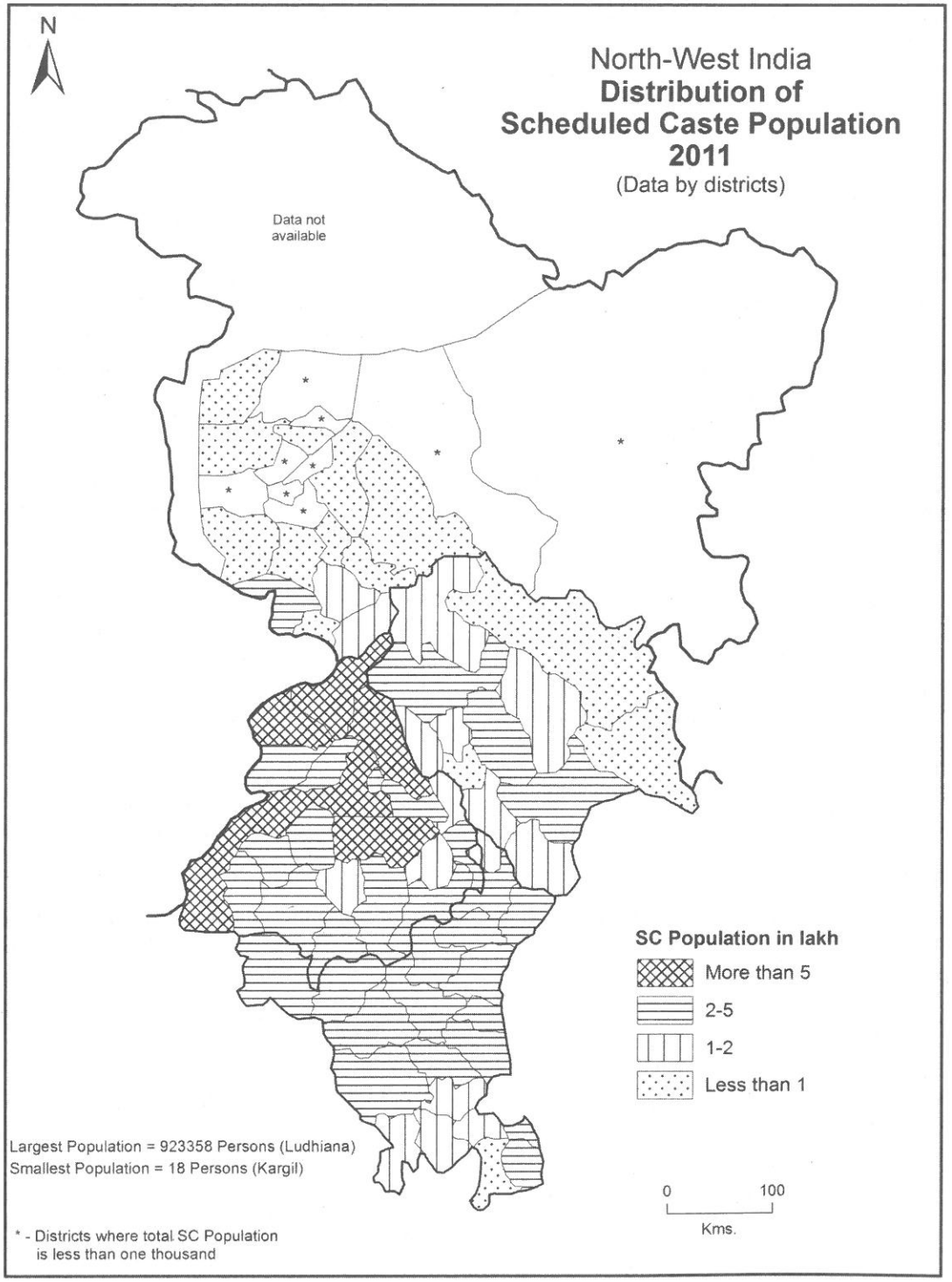
N
North-West India
Distribution of
Scheduled Caste Population
2011
(Data by districts)
Data not
available
SC Population in lakh
More than 5
2-5
1-2
Less than 1
Largest Population = 923358 Persons (Ludhiana)
Smallest Population = 18 Persons (Kargil)
0
100
Kms.
* - Districts where total SC Population
is less than one thousand

Fig. 2

explain the slow growth of SCs in the state. In fact the scheduled tribes in Kinnuar and Lahul & Spiti districts of Himachal Pradesh, in substantial number, reported themselves as SCs before the Census Enumerators in 2001, while reporting as Scheduled Tribes at the time 1991 Census. Notably, SC population in NW region grew at a faster rate than the national average during 1961-2011. Annual compound growth rate of SC population in the former was 2.63 per cent in comparison to 2.40 per cent in the latter. Secondly, SC population in the NW region grew at a much high rate (2.63 per cent) than the non-SC population (1.68 per cent) in the region.

All the seventy-sixty districts in NW India recorded SC population at 2011 Census. However, there were wide variations in its distribution. It varied from a high of 9.2 lakh persons in Ludhiana district (Punjab) to a low of only 18 persons in Kargil district (Jammu & Kashmir). There was a very high concentration of SC population in a few districts. Six districts namely, Ludhiana, Firozpur, Jalandhar, Amritsar, Gurdaspur and Hoshiarpur, all in Punjab and each one having more than 5.0 lakh SCs, accounted for about 30.0 per cent of total SC population in the region (Fig.2). Another thirteen districts, each with SC population between 5.0 and 3.0 lakh persons had another 26.0 per cent of total SC population in the region. In this way, 19 of 76 districts, forming only one-fourth of total districts in the region, contained more than a half (56.6 per cent) of the total SC population. The dominant majority of such districts were located in Punjab. Twelve of total 20 districts in the state fall in this category. Of the remaining, five were from Haryana and one each from Jammu & Kashmir and Himachal Pradesh. Another 17 districts, each having more than two lakh SC population, accounted for another about one-third of total SC population in the region. These districts were mainly from Haryana and Punjab. In this way, less than a half or 47 per cent of total districts in the NW region had more than four-fifths (81.6 per cent) of total SC population.

In contrast, the remaining 40 districts, making more than a half or 52.6 per cent of the total districts in the region, had less than one-fifth or 18.4 per cent of total SC population in NW region. A dominant majority of districts in this category were located either in Jammu & Kashmir or Himachal Pradesh, where the tribal population resides in substantial numbers. For historical reasons, SC population is relatively less in areas dominated by Tribal, Christian and Muslim population in the country.

Within the Northwest states, Punjab, Haryana and Chandigarh (U.T.) do not notify schedule tribes. Tribal population residing in their respective territories is enumerated under the general category of population at the time of Census enumeration. Against this, Himachal Pradesh and Jammu & Kashmir notify both castes and tribes.

In proportional terms, Nawanshahr district (renamed as Shahid Bhagat Singh Nagar, Punjab) recorded as high as 42.5 per cent share of SC population in its total population, against the regional average of 22.9 per cent. This share was not only the highest among all the districts in the NW region but also the second highest, after Koch Bihar (50.2 per cent) in West Bengal, in the whole country. Sixteen districts in the region had more than 30.0 per cent share of SC population in their total population. Fourteen of them belonged to Punjab; and one each to Haryana and Himachal Pradesh. In the country as a whole, there are 186 districts, where SC population constituted one-fifth or more in total population at 2011 Census. Out of these 46 districts, located in NW region, were distributed in the following manner: all the 20 districts in Punjab, 10 of 12 in Himachal Pradesh, 12 of 21 in Haryana and four of 22 districts in Jammu & Kashmir (Kant, 2012, pp.25-26). At the level of Individual states, Nawanshahr (42.5 per cent), Sirmaur (30.3 per cent), Faridabad (30.2 per cent), and Samba (28.8 per cent) had the highest share of SC population in Punjab, Himachal Pradesh, Haryana and Jammu & Kashmir, respectively. Chandigarh (UT) had 18.9 per cent share of SC population. Against this, Kulgam

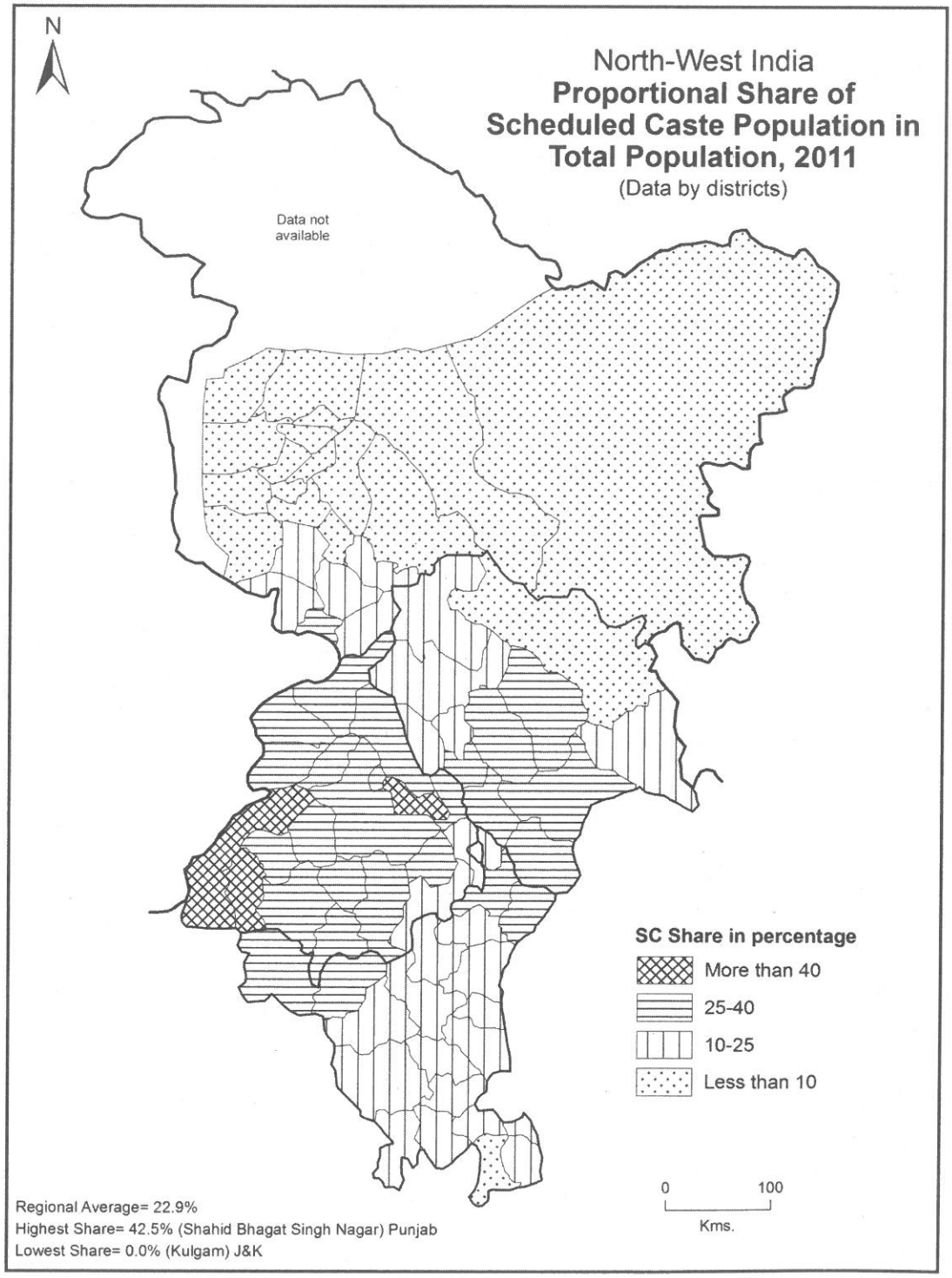
N
North-West India
Proportional Share of
Scheduled Caste Population in
Total Population, 2011
(Data by districts)
Data not
available
SC Share in percentage
More than 40
25-40
10-25
Less than 10
0
100
Kms.
Regional Average= 22.9%
Highest Share= 42.5% (Shahid Bhagat Singh Nagar) Punjab
Lowest Share= 0.0% (Kulgam) J&K

Fig. 3

(negligible share) in Jammu & Kashmir, Mewat (6.9 per cent) in Haryana, (Lahul & Spiti (7.1 per cent) in Himachal Pradesh, and Sahibzada Ajit Singh Nagar/Mohali (21.7 per cent) in Punjab recorded the lowest shares of SC population in respective states.

Eighteen of the 76 districts in the region recorded less than 10.0 per cent share of SCs in their total population (Fig.3). This group includes 16 of 22 districts in Jammu & Kashmir. Of the remaining two districts, one was Mewat (6.9 per cent) in Haryana, and the other one Lahul & Spiti (7.1 per cent) in Himachal Pradesh.

Within the NW region, SC population was highly concentrated in Punjab and the least in Jammu & Kashmir. All the 20 districts in Punjab had SC share of more than 20.0 per cent in total population. Against this, there were only four (Samba, Udhampur, Jammu, and Kathua) of total 22 districts in Jammu & Kashmir fall in this category. Interestingly, all the four districts were from the Jammu region of the state. In districts falling under the Kashmir Valley along with Leh (Ladakh) district, the proportional share of SC population ranged from low to very low share. Kashmir Valley is dominated by the Muslims. In the past, there has been religious conversion of such castes belonging to the Hindu fold to Christianity and Islam. Indian Constitution allows the notification of castes belonging to Hinduism, Sikhism and Buddhism as SC castes. The same is not allowed in case of such castes belonging to the Christianity or Islam.

Hence, the geographical distribution of SC population in India finds association with Hindu, Sikh and Buddhist population in areas dominated by agricultural and pastoral economy. In the past, SCs were mostly engaged in menial jobs, providing services to upper castes in agricultural and rural economy under a system known as *Jajmani* System. They were mostly working as agricultural labourers, scavengers, disposers of dead animals, and skin and hide workers. There is, of course, a noticeable change in situation now with change in environment and ecology, life style, and the initiatives and actions of the welfare state in independent India supplemented by the individual efforts.

C. Caste Level Scenario

In NW India, the number of SC sub-castes ranged from a high of 57 in Himachal Pradesh to a low of 13 in Jammu & Kashmir. The number of SC castes was 39 in Punjab, 37 in Haryana and 36 in Union Territory of Chandigarh (Table 3). After the conduct of 2001 Census, one more caste (Barwala) was added in Himachal Pradesh list, and two more (Mochi and Mahatam/Rai Sikh) in Punjab. There has been no such increase in Haryana, Jammu & Kashmir and Chandigarh (U.T.).

There are, however, five SC castes, which are common to all the states in NW India. These include *Batwal / Barwala, Chamar / Ramdasi / Ravidasi, Doom, Megh / Julaha / Ḳabirpanthi and Balmiki / Chura/Bhangi.* Further, as many as 30

Table - 3
NW Region: Distribution of SC Sub-Castes by State/UT (2011)

Name of State/UT	Number of SC Sub-Castes
1. Jammu & Kashmir	13
2. Punjab	39
3. Haryana	37
4. Himachal Pradesh	57
5. Chandigarh (UT)	36
NW Region	**182** (63 if common castes excluded-see Appx. I)
All- India	1241

Source: Census of India (2011), Special Tables on Scheduled Castes and Scheduled Tribes-on CD, Registrar General and Census Commissioner of India, New Delhi.

Table-4
NW India: Nine Numerically Largest Scheduled Castes (SC) Population (2011)
(Each having more than half a million persons)

Serial Number	Name of SC Caste	Population	% in total SC population
1	Chamar etc.	5,238,096	31.1
2	Mazhabi	2,779,228	16.5
3	Balmiki etc.	1,926,020	11.5
4	Ad Dharmi	1,029,160	06.1
5	Dhanak	673,711	04.0
6	Megh/Kabirpanthi/Julaha	656,730	03.9
7	Kori/Koli	628,193	03.7
8	Mahatam/Rai Sikh	516,695	03.1
9	Dumna/Doom	508,694	03.0
	Total	**13,956,527**	**82.9**
	Total SC population	16,827,123	100.0

Source: Census of India (2011), Special Tables on Scheduled Castes and Scheduled Tribes-on CD, Registrar General and Census Commissioner of India, New Delhi.

castes are common in Haryana, Punjab, Himachal Pradesh and Chandigarh (UT). Against this, as many as 19 castes are notified only in Himachal Pradesh; two in Haryana and Punjab; and six in Jammu & Kashmir (See Appendix I). In overall, in spite of homogeneity of SC castes in NW India, that too for historical regions, there are well marked inter-states differentials. In fact, inclusion or exclusion of different castes in the 'scheduled' category of castes makes an interesting story. For illustration, castes, namely *Jogi, Lohar* and *Teli* are generally categorized as 'other backward castes' (OBC) in majority of North Indian States, but these castes find place in the scheduled lists of SC castes in Himachal Pradesh.

Though there are 63 SC castes in NW India but only a few castes are numerically large and spatially wide spread. The nine SC castes, each having more than half a million persons, together constitute more than four-fifths of total SC population in the region. These include *Chamar, Mazhabi, Balmiki, Ad Dharmi, Dhanak, Megh / Kabirpanthi / Julaha, Kori / Koli, Mahatam / Rai Sikh and Dumna / Doom*. Their total number makes 13.96 million or 82.9 per cent in total SC population of 16.83 million in NW region in 2011 (Table 4).

Within these castes also, *Chamar* is the largest and the most widely distributed SC caste in the region. They made 5.24 million or 31.1 per cent in total SC population in NW India at 2011 Census. Further, they constituted between 40 to 90 per cent in total SC population in areas of their concentrations. Numerically, they dominate in whole of Haryana and northeastern Punjab (in Gurdaspur, SBS Nagar (Nawanshahr), Kapurthala, Jalandhar, and Hoshiapur districts). Such a geographical distribution of castes carries great significance in political mobility and gaining of political power. Those embraced Sikh religion are called *Ramdasia*, after Guru Ramdas and those in Hindu fold are also known as *Ravidasi,* after saint Ravidas. The *Raigars* have generally the lowest position among the *Chamars*. They were traditionally engaged as tanners and leather workers, but they have now shifted to wage labour or working in government/private jobs. The *Mazhabis*, the second largest SC caste in region and making 2.78 million or 16.5 per cent in total SC population, were mainly concentrated in Punjab. In fact, those *Balmikis / Chuhras* converted to Sikhism are known as *Mazhabis*. They are mostly working as agricultural labourers / wage labourers in rural areas. Many joined army services or working as industrial labourers or in government services. The *Balmikis*, which is the third largest SC caste with 1.93 million persons or 11.5 per cent in total SC population in the region, are also known as *Chuhras* and *Bhangis*. Their

traditional occupation is scavenging. In urban areas they are mostly engaged in sweeping and sanitation activities. The combined strength of the *Balmikis* and *Mazhabis* comes to about 28.0 per cent. The main difference between the two is that the latter refuse to touch night soil. They are also widely distributed in the region.

With 1.03 million persons, making 6.1 per cent of total SC population in NW India, the *Ad-Dharmis* makes the fourth largest caste in the region. They are mainly concentrated in doaba region of Punjab, comprising of Jalandhar, Nawanshahr, Hoshiarpur, Balachaur, Kaputhala, and Ropar districts. Though this caste originated from the *Chamar* community and skin tanning is their main occupation, they called themselves *Ad-Dharmis* under the influence of the movement launched by the *Ad-Dharmi Mandal* (Singh, 2003, p.20). The combined strength of *Ad-Dharmis* and the *Charmars,* the community from which *Ad-Dharmis* originated, comes to more than one-third or 37.3 per cent of all SC castes in NW region. *Ad-Dharmis* are the followers of Guru Ravidas; hence also known as *Ravidasia* in Punjab. Better education has resulted in job opportunities among the *Ad-Dharmis*. Several are employed in government jobs as teachers or administrators. Some others are engaged in business or employed in defense services. *Ad-Dharmis* along with *Chamars* have modified and diversified their heredity skills to process the hides and skins to the extent that some have even entered into the manufacturing of leather goods for export (Judge and Bal, 2009, p.160).

The *Dhanak*, the fifth largest SC caste, has a total strength of 0.67 million or 4.0 per cent in total SC population in NW region. More than 86.0 per cent of total *Dhanaks* in the region were in Haryana and another more than 13.0 per cent in Punjab. Traditionally, *Dhanaks* are scavengers and weavers. The main difference between and a *Dhanak* and a *Balmiki / Chuhra* is that the former while doing general scavenging will not remove night soil. Most of them are engaged in collection and cleaning of grains and then filling it into bags in grain markets. Some of them are also engaged as weavers. Modern education is making in-roads among youths, who are not attracted to white-collar jobs in public and private sectors both. The *Megh / Kabirpanthis / Julahas*, the sixth largest SC caste in the region with total strength of 0.66 million or 3.9 per cent, are distributed in all the four states and Chandigarh Union Territory in the region. *Kabirpanthis* are Hindu by religion and the followers of saint Kabir, while the *Julahas* can be both Hindus and Muslims. The *Julahas* and the *Chamars* have the same origin with a difference of occupation (Singh, 2003, p.253). Their traditional occupation is weaving, but the youths among them are now attracted to modern education and white-collar jobs. Education and literacy is now picking up among the *Megh / Kabirpanthis / Julahas*. The *Kori / Koli* caste, which subsumes another 0.63 million or 3.7 per cent of total SC population in the region, are mostly concentrated in Himachal Pradesh distantly followed by Haryana. They got their name from dragging the dead cattle and took to removing of carcasses of cattle (Singh, 2003, p.287). It is stated that the *Koris* migrated to this region from eastern Uttar Pradesh. They were engaged in the trade and work of hides and weaving. Gradually, they are leaving the work of hides to concentrate on weaving. Modern education and value system is fasting picking up among them. Some of them are well educated, employed in white-collar jobs. *Mahatam / Rai Sikh*, notified as SC castes in Punjab after 2001 Census, has a strength of 0.52 million persons, making 3.1 per cent in total SC population of the region. They got converted to Sikhism. The *Rai Sikh* community is highly diversified in economic, occupational, educational and religious terms. It has agricultural labourers, tenant cultivators, landowners and lawyers. Modern education is making in-roads among the youth of the community looking for white-collar jobs. *Mahatams*, who trace their earlier caste affiliation to the Rajputs, are now moving to white-collar jobs and defense services. The *Dumna / Doom*, which is the ninth ranking SC caste of the NW region with

the total strength of 0.51 million persons or 3.0 per cent in total SCs, are mainly concentrated in Punjab and Jammu & Kashmir states. These two states account for more than three-fourths or 77.9 per cent of the total *Dumnas / Dooms* in the region. They are also called as *Mirasis*. Traditionally, they are engaged in making sieves, winnowing fans, mats, grass ropes, baskets and other articles made of bamboo. The young girls and boys of the community have now started attending schools and colleges for higher education.

The SCs are predominantly rural by residence. In 2011, nearly 75.0 per cent or three-fourths were residing in rural areas, this proportion being 72.0 per cent for the country as a whole and only 65.0 per cent for non-SC population. Earlier in 1961, about nine out of each ten SCs (or 89.3 per cent) were rural by residence while this figure was two out of ten for the non-SC population. There have been wide inter-state variations in urban-rural distribution of SCs. In general, the states having a high degree of urban-industrialization and Union Territories have a higher proportion of SCs in urban areas.

In NW India, more than 25 per cent or one-fourth of SCs reside in urban areas. Though, it was slightly higher than the national average (23.6 per cent), but quite low in comparison to the non-SC population share (35.5 per cent) in the region. There are wide inter and intra-state variations within the region. SC urban population share varied from a high of 27.2 per cent in Haryana to a low of only 7.1 per cent in Himachal Pradesh. In Jammu & Kashmir also the share of urban SC was quite low (18. 8 per cent). However, Chandigarh (UT) had more than nine-tenths (97.5 per cent) of its SC population in urban area.

Earlier in 1961, only about 16 per cent of SCs were urban by residence in NW India. This share was only about 11 per cent for the country as a whole. Within the region, the share of urban SC in Himachal Pradesh was only about 4 per cent. This share was 8 per cent in Jammu & Kashmir and 9 per cent in Haryana. Evidently, Punjab was the only state in the region, where the share of urban SC population was higher (13 per cent) than the national average. Notwithstanding the low proportion of urban SCs in Himachal Pradesh, urban SC population in the state grew at an annual compound rate of 6 per cent during 1961-2011. Against this, annual growth rate of urban SCs was only 2.3 per cent in Haryana, 4.0 per cent in Punjab and about 5.0 per cent in Jammu & Kashmir. In case of Chandigarh (UT) it was as high as about 10 per cent.

In 2011, the share of urban SC population among 76 districts in NW India varied from a high of 100.0 per cent in Srinagar district to only 2.0 per cent in Doda district, both in Jammu & Kashmir. Within Punjab, Jalandhar district recorded the highest percentage (39.7 per cent) of urban SCs, against the lowest (10.0 per cent) share in Tarn Taran district. More urbanized and industrialized districts of Ludhiana, Jalandhar and Amritsar recorded a higher share of urban SCs, against this the low urban-industrial districts of Mansa, Moga, Muktsar, Firozpur, SBS Nagar (Nawanshahr) and Hoshiarpur recorded a lower share of urban SCs. Twelve of the 20 districts in the state had this proportion lower than the regional average. In Himachal Pradesh, where Shimla was the only district having urban SCs share in two digits (16.9 per cent), all other districts recorded urban SCs share lower than the regional average. In Kinnaur and Lahul & Spiti districts of the state any urban settlement is yet to come up. In Jammu & Kashmir, where the sharpest inter-district variations in the share of urban SCs can be witnessed, the values ranged from a high of 100.0 per cent in Srinagar district to only 2.0 per cent in Doda district. Here, proportional share of urban SCs in one-half of the districts was lesser than the regional average. In Haryana, while Faridabad district was at the top with 68.1 per cent and Fatehabad at the bottom with only 15.9 per cent, thirteen of the total 21 districts in the state had urban SC share lower than the regional average.

Evidently, SC population is still predominantly rural by residence. Nonetheless, some of the SC castes are highly urbanized. Nearly

a half of the urban SCs come from the *Chamars*, the *Chuhras*, the *Adi Dravida* and the *Bauri* castes in India. Within NW region, *Chura / Balmiki*, and *Megh / Julaha* in Jammu & Kashmir, *Dhanak*, *Pasi* and *Kabirpanthi* in Punjab, *Khatik*, *Megh*, *Ad Dharmi* and *Balmiki* in Chandigarh, *Ad Dharmi*, and *Khatik* in Haryana, *Balmiki*, *Pasi* and *Bauria* in Himachal Pradesh are more urbanized than other SC castes. In general, numerically large SC castes are less urbanized and *vice versa* in NW states. For example, numerically the largest SC caste (The *Chamar*) in Haryana has a very low degree of urbanization in comparison to the small sized *Darain* sub-caste, whose members are totally urbanized. Urban living and employment in tertiary sector have made them aware of their rights and induced awareness to fight against injustice. Being literate, it is easy for them to organize politically. Hence, numerically large and more urbanized SC castes enjoy the advantage over the others in the context of awareness and mobilization. *Chamars*, *Ad-Dharmis, Mazhabis* and *Balmikis* who are numerically large in north Indian states including Punjab and Haryana are placed in an advantageous position in comparison to the other SC castes of the region. Other such states in north India include Uttar Pradesh, Rajasthan, Bihar and Madhya Pradesh. The same applies to *Adi Dravida* in Tamil Nadu and *Bauri* in parts of Odisha, Bihar and West Bengal.

Briefly, there is a relatively higher concentration of SC population NW states, the region sharing 16.8 million or 8.4 per cent in total such population of the country against its share of only 6.1 per cent in total population in 2011. In NW region, SCs made about 23 per cent in total population, which was not only the highest among all the regions in the country but also it was much higher than the national average of 16.6 per cent. Within NW region, Punjab and Haryana states together shared 83 per cent of total SC population, against their share of 72.2 per cent in total population of the region. At the district level, SBS Nagar (Nawanshahr) district (Punjab) recorded 42.5 per cent share of SC population in its total population, which was the second highest share in the country as a whole. The twelve top ranking districts in SC population, making only about one-fifth of total districts in NW India, accounted for more than two-fifths of total SC population in the region. The number of SC castes varied from a high of 57 in Himachal Pradesh to a low of 13 in Jammu & Kashmir. The number of SC castes was 39 in Punjab, 37 in Haryana and 36 in Union Territory of Chandigarh. After 2001 Census, new castes were added in the SC list of Himachal Pradesh and in Punjab, against no change in Haryana, Jammu & Kashmir and Chandigarh (U.T.). There are, however, five SC castes, which are common to all the states in NW India. In all, there were 63 SC castes in region but nine of them, each having more than half a million persons, subsumed more than four-fifths of total SC population in the region.

II

Socio-Economic Transformation of Scheduled Castes

This section examines the inter and intra-state disparities in socio-economic development of SCs and the change therein during 1961-2011. Three indicators of literacy, degree of urbanization and rural occupational diversification have been picked for this purpose. For measuring the level of socio-economic development, a Development Index, based on the concept of Human Development Index, has been pressed into service, the index value ranges between 0 and 1. The former stands for no development while 1 stands for maximum socio-economic development.

Education plays a pivotal role in awakening an individual against socio-economic and political prejudices. The literacy level of SCs is not only much lower than that of non-SC population, but also varies widely across states. In 2011, SC literacy rate was 66.1 per cent against 73.0 per cent for general population in India. Earlier in 1961, it was only about one-third compared to that of the non-SC population literacy rate. Evidently, the

literacy rate of SCs has been growing fast in the post-Independence period, but is still much lower than that of non-SC population. Further, the national average being 66.1 per cent, it varied from a high of 88.7 per cent in Kerala to a low of 48.7 per cent in Bihar in 2011.

Fortunately, NW region average is higher (67.3 per cent) than the national average (66.1 per cent). Within the region, Himachal Pradesh topped in SC literacy rate with 78.9 per cent in 2011. Against this, Punjab was at the bottom with 64.8 per cent literacy rate of its SC population. Accordingly, the literacy index varied from a high of 0.789 (Himachal Pradesh) to a low of 0.648 (Punjab). While none of the states had an index value lower than the national average (0.661), Punjab and Haryana had lower than the regional average of 0.673. Earlier in 1961, except Haryana all other states in the region had literacy rate lower than the national average of 10.3 per cent (Table 5).

At the district level, SC literacy rates differed sharply, ranging from a high of 100.0 per cent in Pulwama and Shupiyan districts (Jammu & Kashmir) to a low of only 45.7 per cent in Ramban district in the same state. However, the total number of SCs both in Pulwama and Shupiyan districts is quite low. Though, 10 of the 22 districts in Jammu & Kashmir state ranked among the top ten districts in SC literacy in the region, but locationally all such districts fall either in Kashmir Valley or Ladakh region, where SCs are thinly populated. Majority of them may be adventitious persons, either stationed as defense personnel or central government employees. Majority of the districts in Himachal Pradesh also recorded high literacy rates for SCs. Ten of its twelve districts in 2011 had SC literacy rate between 75.0 and 86.0 per cent. However, such a distinction was available to only five districts of Hoshiarpur, Rupnagar, SBS Nagar (Nawanshahr), Jalandhar and SAS Nagar (Mohali) in Punjab and only one district (Gurgaon) in Haryana. Chandigarh (UT) also falls in this category. Within Punjab, Hoshiarpur ranked first with SC literacy rate of 82.5 per cent and Mansa district at the bottom with 48.7 per cent. Within Haryana, Gurgaon district topped with 76.3 per cent and Sirsa district ranked at bottom with 55.1 per cent. Interestingly, 22 or nearly 30 per cent of 76 districts in the region in 2011 had SC literacy rate lower than the national average (66.1 per cent); and the seventeen of such districts (11 from Punjab and 6 from Haryana) were from either Punjab or Haryana, nationally known states for their economic prosperity. Geographically speaking, most of the low SC literacy rate districts are located in southwestern

Table-5

NW India: Indicators of Socio-Economic Transformation of Scheduled Castes by States/UTs, 1961-2011

State/U.T.	Literacy rate (per cent)		Urbanization (per cent)		Rural non-agricultural workers(per cent)	
	1961	2011	1961	2011	1971	2011
Punjab	8.9	64.8	13.0	26.7	29.6	51.2
Haryana	11.0	66.9	9.0	27.3	17.7	46.9
Himachal Pradesh	9.2	78.9	3.9	7.1	13.0	41.8
Jammu & Kashmir	6.3	70.2	7.8	18.8	24.5	55.8
Chandigarh	24.4*	76.5	81.9*	97.5	93.6*	97.7
NW India	**-**	**67.3**	**-**	**25.2**	**-**	**49.0**
All India (SC population)	10.3	66.1	10.7	23.6	17.5	28.2
All India (General Population)	27.8	73.0	20.6	31.1	35.3	29.3

**For Chandigarh (UT), figures relate to 1971 Census, as figures for 1961 were not available*

***Source**: (i) Census of India (1961), Special Tables on Scheduled Castes, Part V, Registrar General and Census Commissioner of India, New Delhi, and (ii) Census of India (2001), Special Tables on Scheduled Castes and Scheduled Tribes-on CD, Registrar General and Census Commissioner of India, New Delhi.*

Note: Census data on Industrial Classification of workers for 1961 and 2001 are not comparable due to definitional change. Hence, to maintain comparability data for the third indicator relates to 1971 and 2001. Further, literacy figures for 1961 and 2011 are not strictly comparable, due to definitional change.

parts of these two states. This speaks of the failure of these two states to make economic achievements socially and spatially inclusive.

Urbanization varied widely within the NW region. In 2011, proportion of urban SCs varied from a high of 27.3 per cent in Haryana to a low of 7.1 per cent in Himachal Pradesh, the national average being 23.6 per cent. For Chandigarh (UT), this share was as high as 97.7 per cent. Accordingly, the urbanization index ranged from 0.977 for Chandigarh to only 0.071 for Himachal Pradesh. The index value for national average being 0.236, Himachal Pradesh and Jammu & Kashmir faired quite lower than this.

Earlier in 1961, inter-state variations in this regard were still wider. Then, the index value varied from a high of 0.130 for Punjab to a low of 0.039 for Himachal Pradesh. Again, Chandigarh (UT) recorded a very high index value of 0.819. Then, Punjab was only state in the region to fare above the national average. In terms of change in SC urbanization index, NW region, as a whole, did better than the country as a whole during 1961-2011.

Of the 76 districts in the region, Srinagar (Jammu & Kashmir) had the highest (100.0 per cent), and Doda the lowest (2.0 per cent) share of urban SCs in 2011, both the districts are in the same state. In districts of Lahul & Spiti and Kinnaur in Himachal Pradesh, urban centers were yet to emerge. Chandigarh had the second highest share of 97.5 per cent in this context. On the whole, more than one-half districts in the region had urban SC share lower than the national average (23.6 per cent). As many as 13 districts of the region had a value of less than 10 per cent or less than one-half of the national average. Obviously, there were wide inter-district variations in this context. Within the region, Jammu & Kashmir had the sharpest inter-district variations in the share of urban SCs. The reverse was true of Himachal Pradesh. Srinagar (100.0 per cent) and Dada (2.0 per cent) in Jammu & Kashmir, Faridabad (68.1 per cent) and Mahendragarh (12.8 per cent) in Haryana, Jalandhar (39.7 per cent) and Tarn Taran (10.0 per cent) in Punjab, and Shimla (16.9 per cent) and Mandi (4.5 per cent) in Himachal Pradesh recorded the highest and lowest shares of urban SC population, respectively.

Occupational diversification, which plays an important role in raising the income level and social status of those working in non-farm occupations, especially in rural areas, was quite low among SCs in the region. They were lagging far behind the general population. In 2011, only about 28.2 per cent of total SC rural workers in the country were engaged in non-farm occupations, against 29.3 per cent of general workers in rural areas. However, the situation in the NW region was much better since about 49 per cent of total SC rural workers in the region were engaged in non-farm occupations. Nevertheless, this share was much lower than the share of rural workers for the general population in the region. Evidently, SCs were still predominantly linked with farming, working mainly as agricultural labourers and casual workers. In 2011, rural occupational diversification index varied from a high of 0.557 in Jammu & Kashmir to a low of 0.418 in Himachal Pradesh, regional average value being 0.489. In case of Chandigarh (UT), the index value was as high as 0.977.

At the district level, the share of SC rural workers in non-farm activities varied from a high of 100 per cent in Bandipore and Ganderbal districts (Jammu & Kashmir) to a low of 18.3 per cent in Kullu district (Himachal Pradesh). The SC population was completely urban in Srinagar and Kargil districts of Jammu & Kashmir. The top twenty districts, each having more than 75.0 per cent SC rural workers in non-farm occupations, were distributed in the following manner: eleven in Jammu & Kashmir, five in Haryana, three in Punjab and the remaining one in Chandigarh (UT). On the whole, in about three-fifths or 45 of total 76 districts in the region, one-half or more of SC rural workers were engaged in non-farm activities. On the other side of the scale, there were ten districts, where only less than 30.0 per cent SC rural workers were engaged in non-farm activities. Of such

Table-6:
NW India: Indices of Socio-Economic Transformation of Scheduled Castes by states / UTs (1961 and 2011)

States / U.T.	Literacy rate		Urbanization		Non-agricultural rural workers	
	1961	2011	1961	2011	1961	2011
Punjab	0.089	0.648	0.130	0.267	0.296	0.512
Haryana	0.110	0.669	0.090	0.273	0.177	0.469
Himachal Pradesh	0.092	0.789	0.039	0.071	0.130	0.418
Jammu & Kashmir	0.063	0.702	0.078	0.188	0.245	0.578
Chandigarh	0.244	0.765	0.819	0.975	0.936	0.977
Regional Average	-	**0.673**	-	**0.252**	-	**0.490**
All India (SC population)	0.103	0.661	0.107	0.236	0.175	0.282
NW Region General Population	0.278	0.688	0.206	0.316	0.353	0.514

districts, five were in Punjab, three in Haryana and the remaining two in Himachal Pradesh. Districts having higher share of SC rural workers in non-farm activities were either urban-industrialized districts or had border location, especially in Jammu & Kashmir. In Jammu & Kashmir, districts having a high proportion of SC rural workers in non-farm activities had SC population in small numbers. Secondly, almost all the SC workers in such districts were engaged in the category of 'other services' including trade, transport and services. This means that majority of SC rural workers in such districts of Jammu & Kashmir were engaged in government services, either stationed as paramilitary/armed forces personnel to guard the international border with Pakistan or working in administrative services run by the state/union government.

The Composite Index of socio-economic development of SC population arrived at by averaging the indices of literacy, urbanization, and rural occupational diversification both for 1961 and 2011, is highly revealing. Socio-economic development of SCs is quite low in comparison to the general population. In 2011, development index for SC population was 0.393 in comparison to 0.506 for general population. Earlier in 1961, the index value was less than a half that of the index for general population (Table 6). Evidently, the gap between the SCs and general population though has remained wide, but reduced considerably during 1961-2011.

There are, however, wide inter-state disparities in development of SCs in the region. Index value for Himachal Pradesh (0.426) was less

Table-7
NW India: Composite Index of Socio-Economic Transformation of Scheduled Castes and Change in Index Values (1961-2001)

States	1961	2011	Change (1961-2011)
1	2	3	4
Punjab	0.172(2)	0.475(3)	0.303(4)
Haryana	0.126(4)	0.470(4)	0.344(2)
Himachal Pradesh	0.087(5)	0.426(5)	0.339(3)
Jammu & Kashmir	0.137(3)	0.482(2)	0.345(1)
Chandigarh	0.666(1)	0.905(1)	0.239(5)
All-India (SC Population)	0.128	0.393	0.265
NW(General Population)	0.279	0.506	0.227

Note: Figures in parentheses indicate rank of the State/UT in the region.

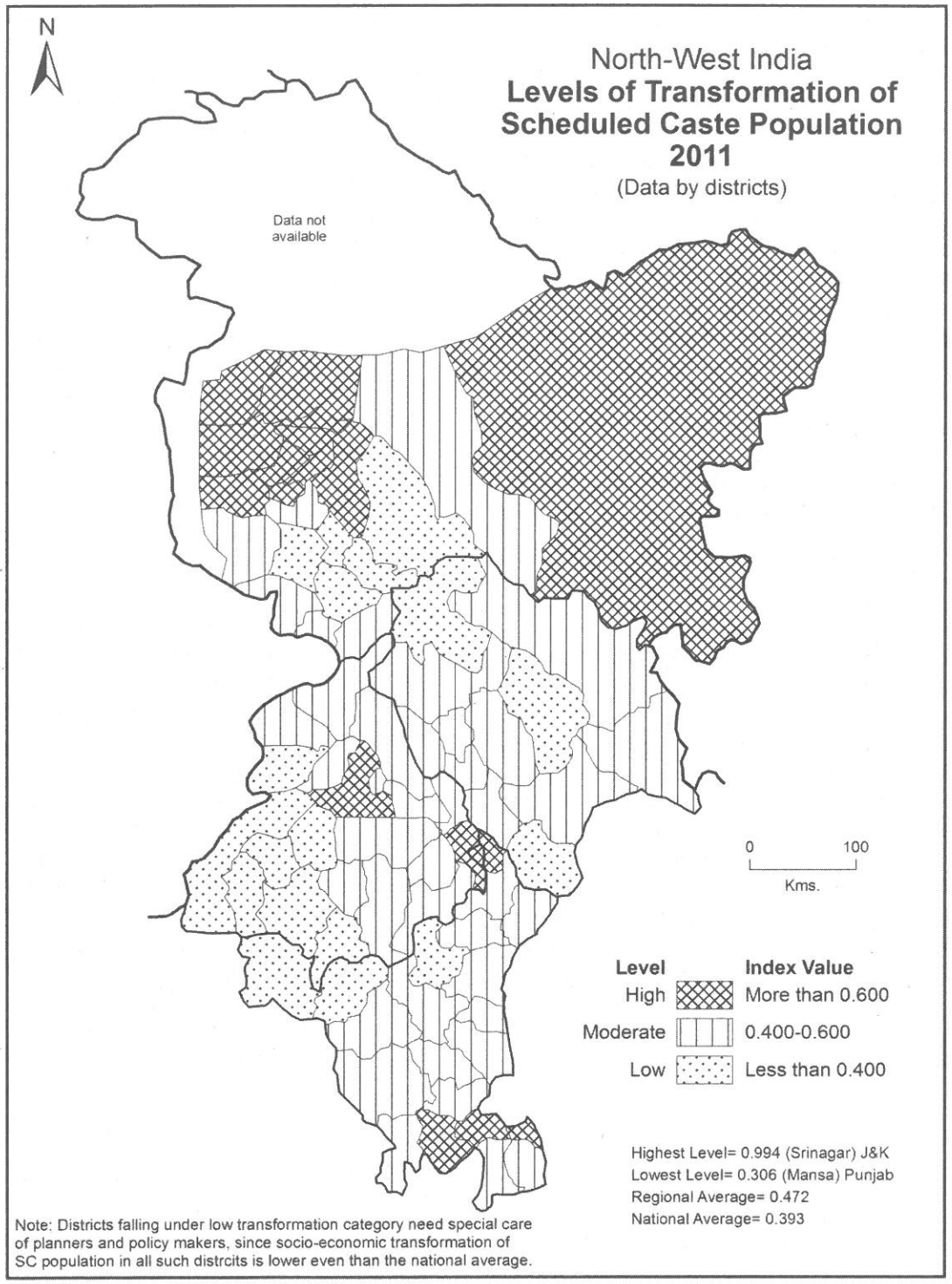
N
North-West India
Levels of Transformation of Scheduled Caste Population 2011
(Data by districts)
Data not available
0
100
Kms.
Level
Index Value
High
More than 0.600
Moderate
0.400-0.600
Low
Less than 0.400
Highest Level= 0.994 (Srinagar) J&K
Lowest Level= 0.306 (Mansa) Punjab
Regional Average= 0.472
National Average= 0.393
Note: Districts falling under low transformation category need special care of planners and policy makers, since socio-economic transformation of SC population in all such distrcits is lower even than the national average.

Fig. 4

than a half or 47 per cent of Chandigarh UT (0.905) in 2011. Jammu & Kashmir recorded the second highest index value of 0.482 next to Chandigarh (UT). Index value for Haryana was marginally lower than that of Punjab. In other words, SC population is marginally well-off in Punjab than in neighbouring Haryana. Happily, SCs in NW region enjoyed a much better level of socio-economic wellbeing than the SCs in the country as a whole (Table 7).

During, 1961-2011, SC development index value for the country as a whole rose to 0.393 in 2011 from 0.128 in 1961, suggesting a faster change in socio-economic wellbeing of SCs in post-Independence era. During this period, the Development Index value for the SC population increased by more than thrice. Against this, the index value for the general population increased only by about 80.0 percent: from 0.279 in 1961 to 0.506 in 2011. Evidently, socio-economic transformation of SCs has been faster than the general population in India. This clearly indicates the success of government programmes and policies initiated for the upliftment of the downtrodden sections of the society by the State in independent India. Within NW India, Jammu & Kashmir and Haryana performed much better than other states of the region, with increase in index values of 0.345 and 0.344, respectively. Against this, Chandigarh (UT) was at the bottom level with an increase in index value of only 0.239. With an increase of 0.339 in index value, Himachal Pradesh ranked third after Jammu & Kashmir and Haryana. Notably, increase in index value for Himachal Pradesh, having the lowest index value in 1961 in the whole region, was higher than that for Punjab. On the other side, Chandigarh, ranking at the top both in 1961 and 2011, recorded the lowest increase in index value (0.239). In other words, states where the development level of SC population was initially higher recorded relatively slow change during 1961-2011. In fact, after the attainment of a higher level of socio-economic development in any region, further increase becomes a challenging task.

At the district level, there were sharp variations in this regard. In 2011, the index value varied from a high of 0.994 for Srinagar (Jammu & Kashmir) to a low of only 0.306 for Mansa (Punjab). In other words, socio-economic condition of SCs in Srinagar district was better by more than three times in comparison to Mansa district. Of the 18 districts of NW India, where index value was higher than 0.6, the overwhelming majority (11 districts) belonged to Jammu & Kashmir. Of the remaining, four belonged to Haryana, two to Punjab, and one to Chandigarh (UT). In their geographical distribution, the majority of such districts were located along the Indo-Pak border (in Jammu & Kashmir), in Beas-Satluj doab (in Punjab), and in the vicinity of Chandigarh (UT) and the National Capital (in Haryana). In Punjab and Haryana, all such districts are urban-industrialized, where a variety of low paid jobs in informal sector and sanitation services provided by the municipal bodies attract the SC workers. In Jammu & Kashmir, in such districts SCs were relatively small in number, working either as employees of the state government or serving the Indian Armed Forces to guard the International border with Pakistan.

Against this, there were 18 districts where index value for SCs was less than 0.4. In their distribution, seven of such districts are in Punjab, five in Jammu & Kashmir, and three each in Haryana and Himachal Pradesh. Further, of the 40 districts, where Development Index value for SCs ranged between 0.6 and 0.4, as many as 25 districts were located either in Haryana or Punjab. In fact, fourteen of 21 in Haryana, eleven of 20 in Punjab, nine of 12 twelve in Himachal Pradesh and six of twenty-two districts in Jammu & Kashmir fall in this category. There were as many as 17 or more than one-fifth districts of the region, where Development Index value for SCs was lower even than the national average (0.393). In this category are included seven districts of Punjab, five of Jammu & Kashmir, three of Himachal Pradesh, and the remaining two of Haryana.

On the whole, 18 districts in the region,

Table-8
NW India: Classification of Districts by Level of Socio-Economic Development of Scheduled Castes Population (2011)

Index Value/Level	Name of the District
More than 0.600 (High)	Srinagar, Shupiyan, Pulwama, Baramula, Bandipore, Chandigarh, Badgam, Leh(Ladakh), Punch, Anantnag, Kupwara, Faridabad, Ganderbal, Gurgoan, Punchkula, SAS Nagar (Mohali), Jalandhar, Rewari. **(Total=18)**
0.600-0.400 (Moderate)	Ludhiana, Rupnagar, Kargil, Lahul& Spiti, SBS Nagar (Nawanshahr), Hoshiarpur, Rohtak, Jammu, Samba, Fatehgarh Sahib, Kulgam, Mahendragarh, Gurdaspur, Panipat, Mewat, Kangra, Una, Ambala, Jhajjar, Kinnaur, Palwal, Sonipat, Kapurthala Amritsar, Yamunanagar, Hamirpur, Patiala, Bilaspur, Solan, Rajouri, Sangrur, Kathua, Kurukshetra, Karnal, Bhiwani, Barnala Mandi, Jind, Shimla, Hisar. **(Total=40)**
Less Than 0.400 (Low)	Kaithal, Chamba, Doda, Reasi, Faridkot, Moga, Tarn Taran, Bathinda, Fatehabad, Udhampur, Sirmaur, Kishtwar, Firozpur, Kullu, Sirsa, Muktsar, Ramban, Mansa, **(Total=18)**

having Development Index value for SC population was higher than 0.6, are categorized as 'high', another 40 or more than one-half districts as 'moderate', and remaining 18 districts as 'low' in level of socio-economic development of SC population (Table 8 and Fig. 4).

Within the NW region, Srinagar district (0.994) was at the top and Ramban district (0.309) at the bottom, both in Jammu & Kashmir. Jalandhar (0.627) and Mansa (0.306) districts in Punjab, Faridabad (0.719) and Sirsa (0.323) districts in Haryana and Lahul & Spiti (0.582) and Kullu (0.331) districts in Himachal Pradesh held the respective positions. Intra-state disparity in socio-economic transformation of SCs was the widest in Jammu & Kashmir and the narrowest in Himachal Pradesh.

Briefly, the socio-economic transformation of SC population has been not only lower than the general population in the country as a whole including the NW region, but also displayed a wide inter and intra-state differentials. However, there has been a rapid transformation, even faster than the general population, in socio-economic conditions of SC population during the post-Independence period. This speaks of the positive impact of government policies and programmes initiated for the socio-economic upliftment of SC population in post-Independence period. However, some states have done well in comparison to other states. Union territories, on the whole, have done very well in this regard.

Within the NW region, Jammu & Kashmir and Chandigarh (UT) recorded a high level of socio-economic development among their SC population. However, Haryana recorded the highest change in socio-economic conditions of its SC population during 1961-2011. It performed much better in comparison to Punjab of which it was a part till 1966. At the district level, with an index value of 0.994 Srinagar was at the top and Mansa at the bottom (index value of only 0.306) in the whole region. There were 17 or one-fifth of the total districts in the region, where index of development for SC population was less than the national average of 0.393. On the whole, 18

districts in the region, where index value for SC population was higher than 0.6 are categorized as 'high', another 40 or more than one-half districts as 'moderate', and remaining 18 districts as 'low' in level of socio-economic development of SC population in 2011. Inter-district disparity in socio-economic transformation of SC population was the sharpest in Jammu & Kashmir and the least in Himachal Pradesh.

Concluding Remarks

The size of SC population in India is massive. In 2011, the total SC population was more than 201million persons, much higher than the total population of Brazil (199 million in 2012), the fifth largest area sized country in the world. With an exception of two states, in the northeast, and the two union territories, SCs were recorded in all states and union territories of the country. The SC population is highly concentrated in north Indian plains and the coastal plains of Andhra Pradesh and Tamil Nadu. In NW India, where 16.83 million or 8.4 per cent of total SC population in the country resides, every fifth person belongs to SC category of population. This ratio was of one in six for the country as a whole. SCs formed about 23 per cent in total population of Northwestern India, which was not only the highest share among all the regions in the country but also much higher than the national average of 16.6 per cent. Within Northwestern India, the share of SC population in Punjab was not only the highest in the region but also the highest among all the states in the country. Punjab together with Haryana shared 83 per cent of total SCs in the region. Among 76 districts in NW India, Nawanshahr district (Punjab) recorded 42.5 per cent SCs in its total population; the second highest share after Koch Bihar district (50.2 per cent) in West Bengal. Twelve top ranking districts in SC population, making only about one-fifth in total districts, together accounted for more than two-fifths of total SC population in the region.

There is a large heterogeneity of SC castes in India. There were as many as 1241 SC castes at the time of 2011 Census, the number varying from a maximum of 101 in Karnataka to a minimum of four in Sikkim. Within NW India, the number ranged from a high of 57 in Himachal Pradesh to a low of 13 in Jammu & Kashmir, this number being 39 in Punjab, 37 in Haryana and 36 in Chandigarh (UT). The SC castes such as *Batwal*, *Chamar / Ramdasi / Ravidasi, Doom, Megh / Julaha / Kabirpanthi* and *Chura / Bhangi* are common to all the states/UTs in the region. Further, as many as 30 castes are common in Haryana, Punjab, Himachal Pradesh and Chandigarh (UT). Against this, nineteen sub-castes are found exclusively in Himachal Pradesh, and six in Jammu & Kashmir. Nine SC castes, the *Chamars*, the *Mazhabi*, the *Balmiki / Chuhra*, the *Ad-Dharmi*, the *Dhanak*, the *Megh / Jalaha / Kabirpanthi*, the *Kori / Koli*, *Mahatam / Rai Sikh*, and *Dumna / Doom*, each having more than half a million persons together subsumed more than four-fifths or 82.9 per cent of all SC castes in the NW region. The *Jogis, Lohars* and *Telis* are generally categorized as 'other backward castes' (OBC) in majority of North Indian States, but categorized as SCs in Himachal Pradesh.

The SCs are lagging behind not only the general population in different parts of India including the NW, but also display a wide inter and intra-state variations in their wellbeing. However, there has been a rapid socio-economic transformation among SCs during the post-Independence period; even faster than that of the non-SC population. This speaks of the positive impact of government policies and programmes, initiated for their socio-economic development by the State in post-Independence India. Within NW India, Jammu & Kashmir and Chandigarh (UT) recorded a high level of development for their SC population in the whole region both in 1961 and 2011, but in terms of change in wellbeing of its SCs population during 1961-2011, Haryana performed very well, especially in comparison to neighbouring Punjab. At the district level, with an index value of 0.994 Srinagar district was at the top and Mansa district (Punjab), with index value of

only 0.306, at the bottom in the whole region. As many as 17 districts in the region had Development Index for SC population lower than the national average of 0.393. On the whole, 18 districts in the region having an index value of higher than 0.6 had 'high' development level for their SC population, another 40 or more than one-half districts were at 'moderate' level and remaining 18 districts at 'low' level in 2011. Intra-state disparity in wellbeing of SC population was the widest in Jammu & Kashmir and the narrowest in Himachal Pradesh.

Finally, it is satisfying to note that the pace of transformation in socio-economic conditions of SC population has accelerated during post-Independence era, narrowing down the wide gap between the SC and the general population in the country. In fact, the former *dalit* castes are now socially, politically and economically more awakened than before. This trend is likely to continue in future, but with the likelihood of greater benefits accruing to the newly emerged elite class within the *dalit* community. In future, therefore the focus of government policies and programmes oriented to the welfare of the SCs should aim not only to minimize the inter and intra-regional disparities in their socio-economic conditions but also those found between 'scheduled' and 'non-scheduled' castes, on one hand, and 'creamy' and 'non-creamy' layers within the SC castes.

Acknowledgement

The paper is part of a major research project entitled "Socio-economic Transformation of Scheduled Caste Population in India: A Comparative Analysis of Inter and Intra-Regional Differentials within Northwestern States', sponsored by the University Grants Commission, New Delhi. The financial support from the Commission is duly acknowledged.

Note

1. However, some scholars prefer to use this term in an ideological and political sense. According to Sharma (1995, p. 88) "the word *dalit* refers to ideological transformation of the scheduled castes indicating their heightened protests against the upper caste domination by way of rejection of the upper caste cognitive paradigms and creation of their own cultural idioms, literature and ethnic harmony". He further adds, "the process of the emergence of the word *dalit* is a part of journey which starts from *harijan* to `scheduled castes' and from scheduled castes to *dalit* (p.93).

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Appendix-I

NW Region: Distribution of Sub-Castes of 'Scheduled' Castes (2011)

Sc Castes Notified in all the five States/UTs	Batwal/Barwala, Chamar/Ramdasia/Ravidasi, Dumna/Doom, Megh/Julaha/Kabirpanthi, Chura/Bhangi **(5)**
Sc Castes Notified in Punjab, Haryana, Himachal Pradesh, And Chandigarh	Ad Dharmi, Bangali, Barar, Bauria/Bawaria, Bazigar, Bhanjara, Chanal, Dagi, Darain, Dhanak, Dhogri/Sigi, Gagra, Gandhila/Gandil/Gondola, Khatil, Kori/Koli, Mariya, Mazhabi, Nat, Od, Pasi, Perna, Pherera, Sanhai, Sanhal, Sansi, Sansio, Sapela, Sarera, Sikligar, Sirkiband **(30)**
Sc Castes Notified only in Punjab and Haryana	Deha/Dhaya/Dhea, Mochi **(2)**
Sc Castes Notified only in Punjab	Mahatam/Rai Sikh **(1)**
Sc Castes Notified only in Jammu & Kashmir	Basith, Dhyar, Gardi, Ratal, Saryara, Watal **(6)**
Sc Castes Notified only in Himachal Pradesh	Badhi/Nagalu, Bandhela, Bansi, Barad, Chhimbe/Dhobi, Darai, Daule, Dhaki, Dhaogri, Hali, Hesi, Jogi, Kamoh, Karoack, Lohar, Rehar, Sipi, Teli, Thathiar **(19)**
All States	**Total = 63**

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RURAL- URBAN MIGRATION IN WEST BENGAL (1991-2001): A SPATIAL PERSPECTIVE

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Abstract

In the present study an attempt has been made to describe rural-urban migration which emerged during 1991-2001 in West Bengal. It is based on published census data. The study pertains to the stream of rural-urban migration and its proportions at intra-district, inter-district and inter-state migration levels. The state recorded an overall increase in the proportion of rural-urban migrants as a result of increase in the number of towns as well as in the level of urbanization. The percentage of rural-urban intra-district and inter-district migrants has increased while that of the inter-state migrants decreased in the state during the study period.

Key Words: intra-district migration, inter-district migration, inter-state migration, migration stream, rural-urban migration.

Introduction

Migration has been a major source of human survival, adaptation, and growth across the centuries and millennia (Roy and Debnath, 2011). The flow of migration from one place to another deserves a special mention because many socio-economic and demographic conditions of the place of origin and place of destination depend upon the nature of flow of population which generally depends largely on the differential level of economic development of different regions (Reja and Das, 2013). The rural-urban migration is a movement of people from rural to urban areas. People always migrate from uncomfortable areas to comfortable ones because everyone wants to live in comfort (Kaur, 2009). Migration tends to take place largely within well defined streams (Lee, 1966; Kaur, 2009). Most of the migrants originate in the third world countries because they are predominantly very poor, landless and illiterate and therefore, they are 'pushed' from villages while the relatively well-off, better educated ones are more likely to be 'pulled' by urban centres which provide attractive economic opportunities (Lipton, 1980; Nazim and Siddiqui, 1996). The rural-urban migration is a response to diverse economic opportunities across places (Mitra and Murayama, 2008). It is found that in-migrants come across better employment opportunities and often achieve a higher standard of living in the in-migrating area. There is thus a universal propensity to shift into relatively flourishing regions. Rural-urban flow of population is qualitatively more noteworthy than the other flows of migration. It is associated with the growth of urban population, increase in number of towns/cities, urbanization, and industrialization. It is observed that while industrialization in most of the countries has led to economic development, there is a simultaneous regular flow of population and economic activity from rural to urban areas. As industries expand, new urban employment opportunities are created, while technological progress in agriculture reduces the demand for labour in the rural areas (Sjaastad, 1962). Lack of job opportunities in rural areas forces people to migrate from rural to urban areas (Greenwood, 1971). As a result, the rural-

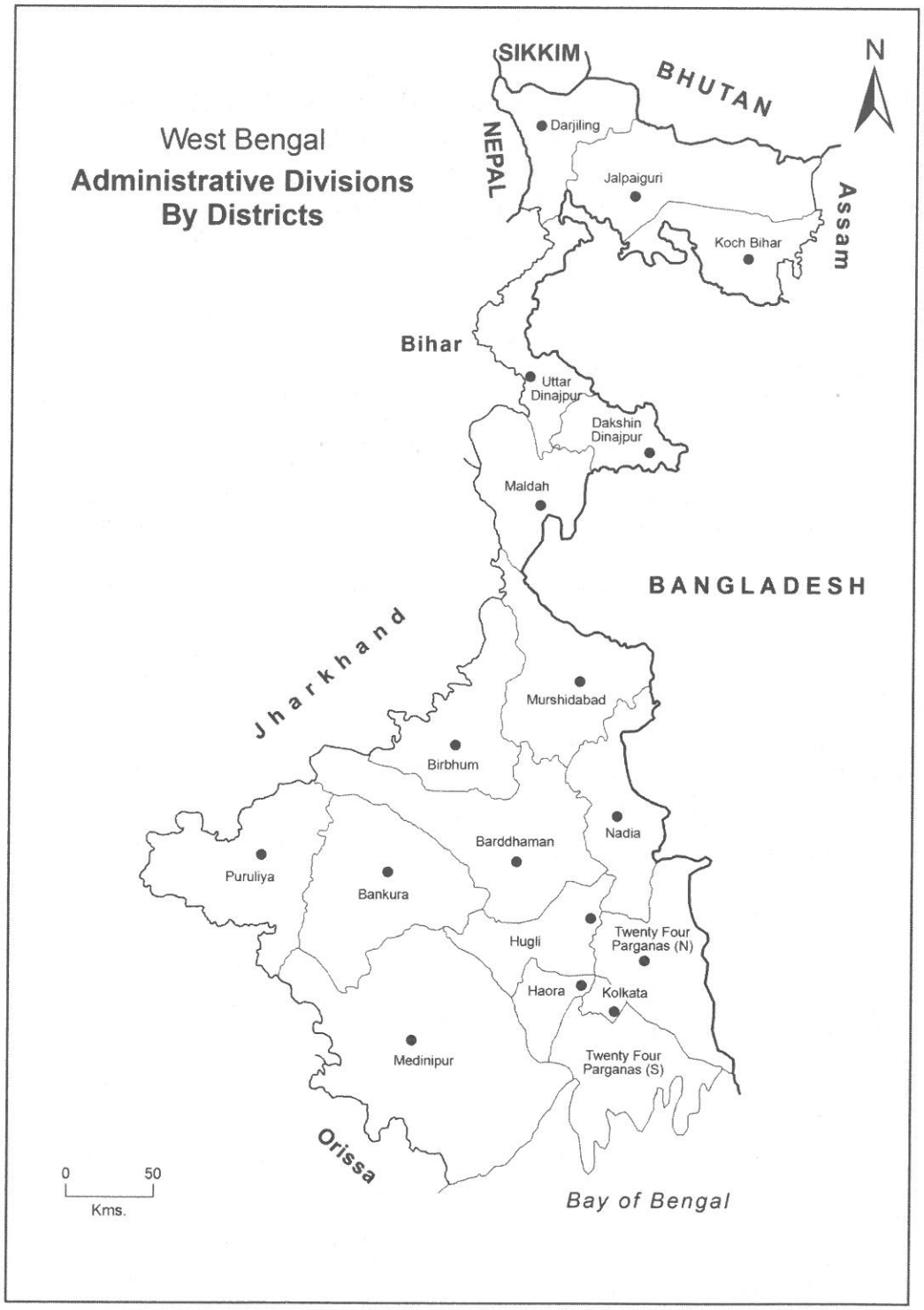
West Bengal
Administrative Divisions
By Districts
SIKKIM
BHUTAN
NEPAL
Assam
Bihar
BANGLADESH
Jharkhand
Orissa
Bay of Bengal
N
Darjiling
Jalpaiguri
Koch Bihar
Uttar Dinajpur
Dakshin Dinajpur
Maldah
Murshidabad
Birbhum
Barddhaman
Nadia
Puruliya
Bankura
Hugli
Twenty Four Parganas (N)
Haora
Kolkata
Medinipur
Twenty Four Parganas (S)
0
50
Kms.

Fig. 1

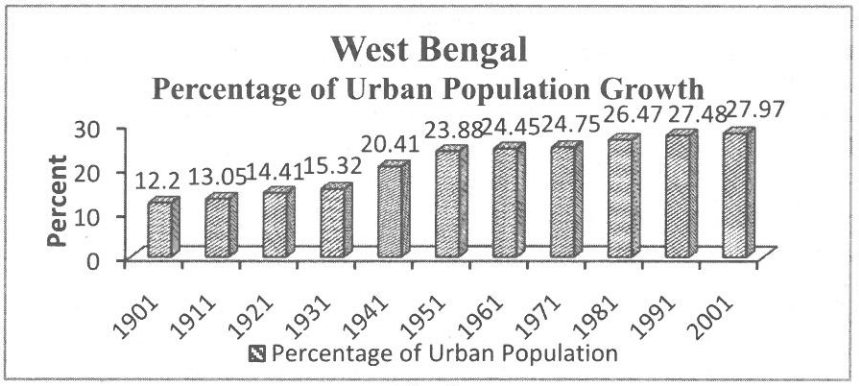

Fig. 2

urban migration is regarded as an associated feature of economic development. Rural-urban migration is the process which influences urbanization and social change. It is continuously increasing in recent years as more and more young men travel to work in construction and urban services in the expanding informal sector (Srivastava and Bhattacharyya, 2003). The volume of migration also depends on the physical distance between the place of origin and place of destination (Kamble, *et al.*, 2005).

Objectives

The Objectives of the study are: (i) to highlight the changing pattern of rural-urban migration stream in West Bengal during 1991-2001, and (ii) to examine the rural-urban migration pattern by distance i.e. intra-district, inter-district and inter-state in West Bengal.

Study Area

West Bengal, the fourth-most populated state of India, contributes 7.8 per cent of India's population. It extends from 21°25'N to 26°50'N latitudes and 86°30'E to 89°58'E longitudes covering an area of 88,968 km². It is delimited by the countries of Nepal, Bhutan, and Bangladesh, and the Indian states of Orissa, Jharkhand, Bihar, Sikkim, and Assam (Fig.1). The state can be divided into three main physiographic regions i.e., the Himalayan or sub- Himalayan plain region, the delta region and the *rahr* plain. The decennial growth rate of its population during 2001- 2011 was 13.93 per cent. The sex ratio was 947 females per 1000 males. It registered a population density of 1029 person/km² and was the second-most densely populated state in India. About 68.11 per cent of its population lives in rural areas and the remaining in urban areas. The proportion of people living below the poverty line in 1999-2000 was 31.9 per cent.

Migration is a dynamic event which changes over time and space in its number, patterns and trends (Gosal, 1961). West Bengal is regarded as one of the most urbanized states in India with

Table - 1
West Bengal : Per Cent Urban Population in Different Size-Class of Towns (2001)

Size Class of Towns	No of Towns	Urban Population	Percentage in Total Urban Population
I	27	31352756	89.42
II	16	976655	2.78
III	43	1340823	3.82
IV	49	712380	2.03
V	83	580001	1.65
VI	21	96001	0.27
Total	**239**	**35058616**	**100**

Source: Census of India, General Population Tables (2001).

Table - 2
West Bengal :Percentage of Migrants by Migration Streams (1991 and 2001)

West Bengal	1991			2001		
	Persons	Males	Females	Persons	Males	Females
Rural-Rural	68.35	45.99	76.4	57.24	32.94	66.17
Rural-Urban	18.13	33.01	12.77	20.28	35.43	14.72
Urban-Rural	4.69	5.72	4.32	4.45	4.35	4.49
Urban-Urban	8.83	15.28	6.51	18.03	27.29	14.62

Source: Census of India, Migration Tables of West Bengal (1991 and 2001).

27.97 per cent of its population recorded as urban which has shown a growth to the extent of 27.48 per cent during the last decade. The proportion of urban population in West Bengal is continuously increasing. Fig. 2 reveals that the proportion of urban population has increased from 12.2 per cent in 1901 to 27.97 per cent in 2001 in the state. Since independence, the state has witnessed a steadily increasing rate in urbanization and the percentage of urban population has always been higher than the national average. The urban growth rate in the state became prominent during the decade 1941 to 1951 due to historical reasons. At present in West Bengal nearly one out of every three persons is an urbanite.

Rural-urban migration stream has increased in West Bengal between 1991 and 2001 and gained prominence with the increase in the level of urbanization specially. The percentage of urban population in the 27 Class I cities was as high as 89.42 per cent of the total urban population in the state while the share of urban population in small urban centers was quite low. (Table 1).

An ILO study indicates that all twelve of the world's fastest growing cities are situated in the developing countries (Brigg, 1973). This growth has been due to rather rapid rate of overall population increase, but an important contributory factor has been the massive increase in the number of migrants arriving from the surrounding rural areas (Lewis, 1954). It may be inferred that with generation of employment opportunities in urban areas, migration from rural areas continuously increases and about half of the urban population growth is due to rural-urban migration (Oberai and Singh, 1983).

Methodology

The present study focuses on the rural-urban migration stream in West Bengal based on the data from two census years, 1991 and 2001. A person is considered as a migrant by place of last residence if the place in which he/she enumerated during the census is other than his place of immediate last residence (Census of India). Based on rural and urban nature of the place of

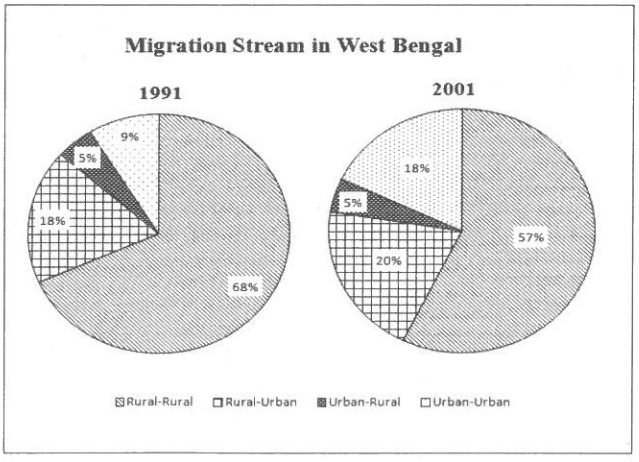

Fig. 3

Table - 3
West Bengal : Proportion of Rural-Urban Migrants by Distance (1991)

District	Intra-District			Inter-district			Inter-state		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Darjiling	19.64	15.67	24.51	30.51	27.67	34.02	49.85	56.66	41.47
Jalpaiguri	54.83	49.26	59.84	22.24	22.73	21.80	22.92	28.00	18.36
Koch Bihar	68.65	64.10	71.73	13.91	13.78	14.00	17.43	22.13	14.27
Uttar Dinajpur	61.60	51.23	57.29	20.59	20.06	21.21	24.80	28.72	21.51
Dakshin Dinajpur	82.25	78.14	84.65	12.18	12.10	12.05	5.57	9.77	3.31
Maldah	60.05	60.13	59.98	25.85	24.74	26.81	14.10	15.13	13.21
Murshidabad	79.00	75.43	80.68	15.77	16.48	15.44	5.23	8.10	3.88
Birbhum	60.58	58.84	61.78	25.89	26.93	25.19	13.54	14.23	13.07
Barddhaman	26.94	20.21	33.55	26.98	25.44	28.49	46.09	54.35	37.96
Nadia	58.11	53.73	60.89	33.30	32.60	33.75	8.59	13.68	5.36
North 24 Parganas	31.84	23.62	40.56	27.88	24.44	31.55	40.28	51.94	27.89
Hugli	39.57	29.01	49.08	24.99	21.39	28.23	35.43	49.60	22.69
Bankura	72.13	66.99	74.48	22.49	24.54	21.55	5.39	8.47	3.97
Puruliya	54.94	49.52	58.10	20.10	22.45	18.74	24.95	28.03	23.16
Medinipur	71.36	70.41	71.96	17.55	16.23	18.39	11.09	13.36	9.65
Haora	41.08	25.42	54.29	21.89	19.63	23.80	37.03	54.95	21.91
Kolkata	0.00	0.00	0.00	39.02	31.74	51.86	60.98	68.26	48.14
South 24 Parganas	58.66	44.45	67.65	22.76	24.00	21.97	18.59	31.55	10.38
WEST BENGAL	**37.88**	**27.83**	**47.23**	**26.47**	**24.61**	**28.21**	**35.65**	**47.56**	**24.57**

Source: Census of India, Migration Table of West Bengal (1991).

enumeration and place of last residence, internal migration is classified into four migration streams: rural to urban, rural to rural, urban to urban, and urban to rural. Based on distance internal migration is further classified into: (i) intra-district i.e. last residence outside the place of enumeration but within the same district; (ii) inter-district i.e. last residence outside the district of enumeration but within the same state and (iii) inter-state i.e. last residence in India but beyond the state of enumeration.

This paper is based on the district level data for eighteen districts that existed 2001. West Dinajpur was divided into two districts viz., Uttar Dinajpur and Dakshin Dinajpur after 1991. To make the data comparable with 2001 Uttar Dinajpur and Dakshin Dinajpur have been included in 1991 by interpolation method.

Changing Trend of Migration Streams in West Bengal (1991-2001)

Table 2 and Fig. 3 shows that in 1991 rural-rural migration was the highest (68.35 per cent), followed by rural-urban (18.13 per cent), urban-urban (8.83 per cent) and urban-rural (4.69 per cent) in West Bengal. These figures are observed to have changed in 2001 as rural- rural migration declined to 57.24 per cent, urban-urban migration increased to 18.03 per cent, rural-urban migration increased to 20.28 per cent, whereas urban-rural migration rate was almost the same (4.45 per cent). Table 2 also depicts migration streams by gender in

Table - 4
West Bengal :Proportion of Rural-Urban Migrants by Distance (2001)

District	Intra-District			Inter-district			Inter-state		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Darjiling	12.31	11.11	13.79	32.51	28.76	37.14	55.18	60.13	49.06
Jalpaiguri	41.62	36.40	46.30	31.11	31.09	31.15	27.27	32.52	22.60
Koch Bihar	63.76	63.93	63.65	18.92	16.34	20.59	17.32	19.73	15.77
Uttar Dinajpur	41.25	41.29	41.21	33.15	30.69	35.13	25.60	28.02	23.66
Dakshin Dinajpur	71.02	69.20	72.08	22.41	20.33	23.62	6.57	10.47	4.31
Maldah	63.87	62.53	64.91	23.34	22.00	24.39	12.79	15.47	10.70
Murshidabad	80.41	74.39	82.73	14.98	18.06	13.80	4.60	7.56	3.47
Birbhum	65.98	63.34	67.70	22.33	23.14	21.81	11.68	13.52	10.49
Barddhaman	31.36	23.21	37.98	27.77	27.17	28.27	40.87	49.63	33.76
Nadia	62.38	57.83	64.92	29.76	29.43	29.94	7.86	12.74	5.13
North 24 Parganas	38.66	31.28	45.80	30.33	28.31	32.28	31.01	40.40	21.92
Hugli	34.49	24.66	43.19	28.58	25.35	31.44	36.93	49.99	25.37
Puruliya	53.49	48.75	55.73	20.41	21.77	19.77	26.10	29.48	24.49
Medinipur	75.75	70.72	78.46	14.47	15.28	14.03	9.78	13.99	7.52
Haora	36.10	19.77	51.04	22.31	20.53	23.94	41.59	59.70	25.03
Kolkata	0.00	0.00	0.00	39.20	31.75	53.79	60.80	68.25	46.21
South 24 Parganas	59.65	47.20	68.35	21.18	23.06	19.86	19.18	29.73	11.79
Bankura	69.49	65.26	71.25	25.43	26.47	25.00	5.07	8.27	3.74
WEST BENGAL	**38.34**	**27.52**	**48.00**	**27.71**	**26.48**	**28.81**	**33.95**	**46.00**	**23.19**

Source: Census of India, Migration Table of West Bengal (2001).

West Bengal for the year 1991 and 2001. From 1991 to 2001, rural-urban migration increased from 18.13 per cent to 20.28 per cent, male rural-urban migration increased from 33.01 per cent to 35.43 per cent, and female rural urban migration increased from 12.77 per cent to 14.72 per cent. The male rural-urban migration registered a rise of 2.42 per cent points and that of females 1.95 per cent points. Krishan (2007) has observed that rural-migrants are motivated to move toward urban areas propelled by the employment opportunities, higher wages, and better quality of living and impelled by the push of hard situation at home, actual or perceived.

Pattern of Rural-Urban Migration by Distance in 1991 and 2001

There is a considerable disparity in rural-urban migration among the districts in West Bengal. Tables 3 and 4 show the rural-urban migration at (a) intra-district, (b) inter-district and (c) inter-state levels for the years 1991 and 2001 respectively.

(a) Intra-district rural-urban migration (1991-2001)

Decadal growth rate of rural-urban migration in West Bengal shows an increasing trend. It has been observed earlier that rural-urban migration stream occupies second rank among the four flows of migration in the state in 2001 and rural-urban migration increased from 18.13 per

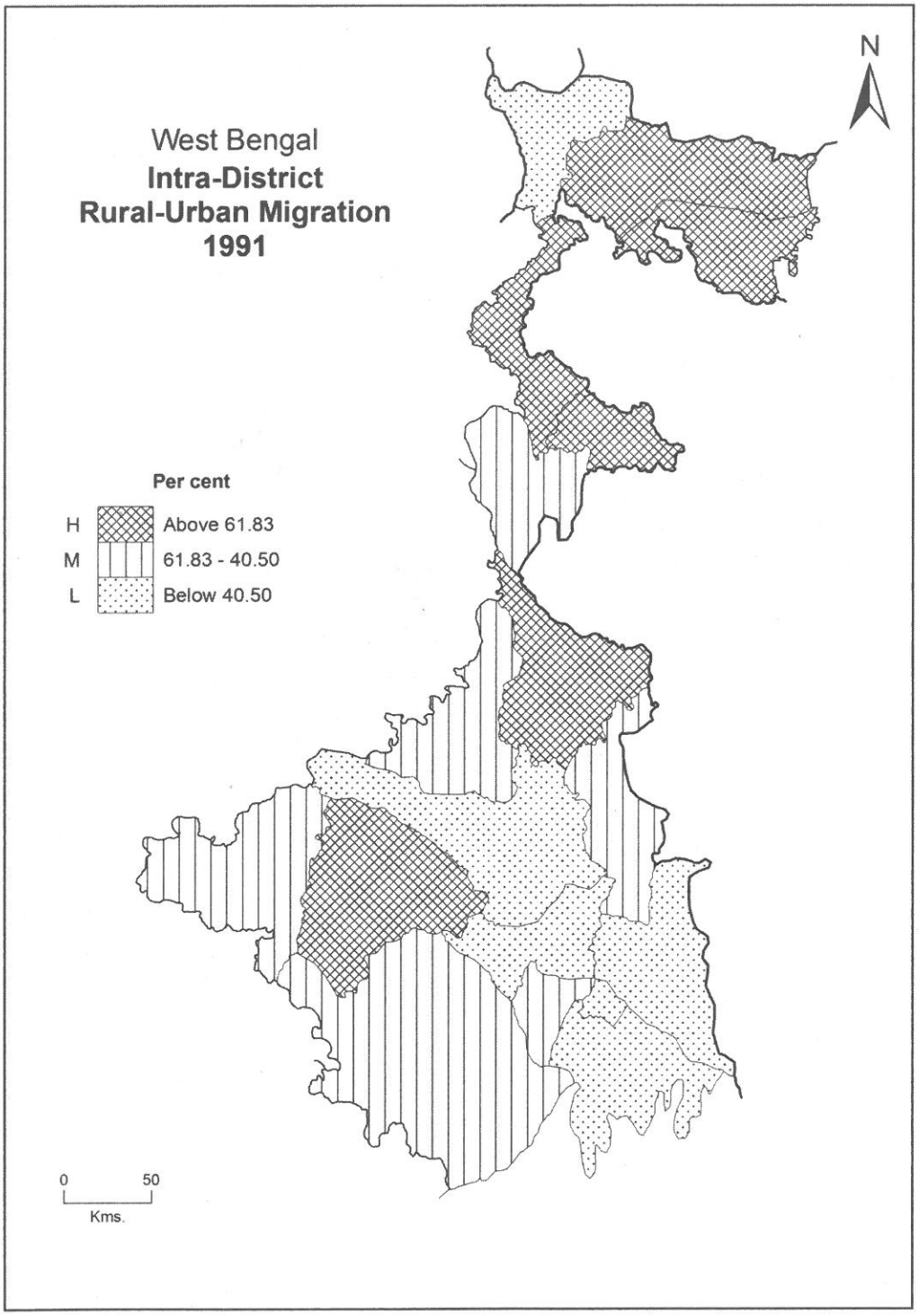
West Bengal
Intra-District
Rural-Urban Migration
1991
N
Per cent
H
Above 61.83
M
61.83 - 40.50
L
Below 40.50
0
50
Kms.

Fig. 4

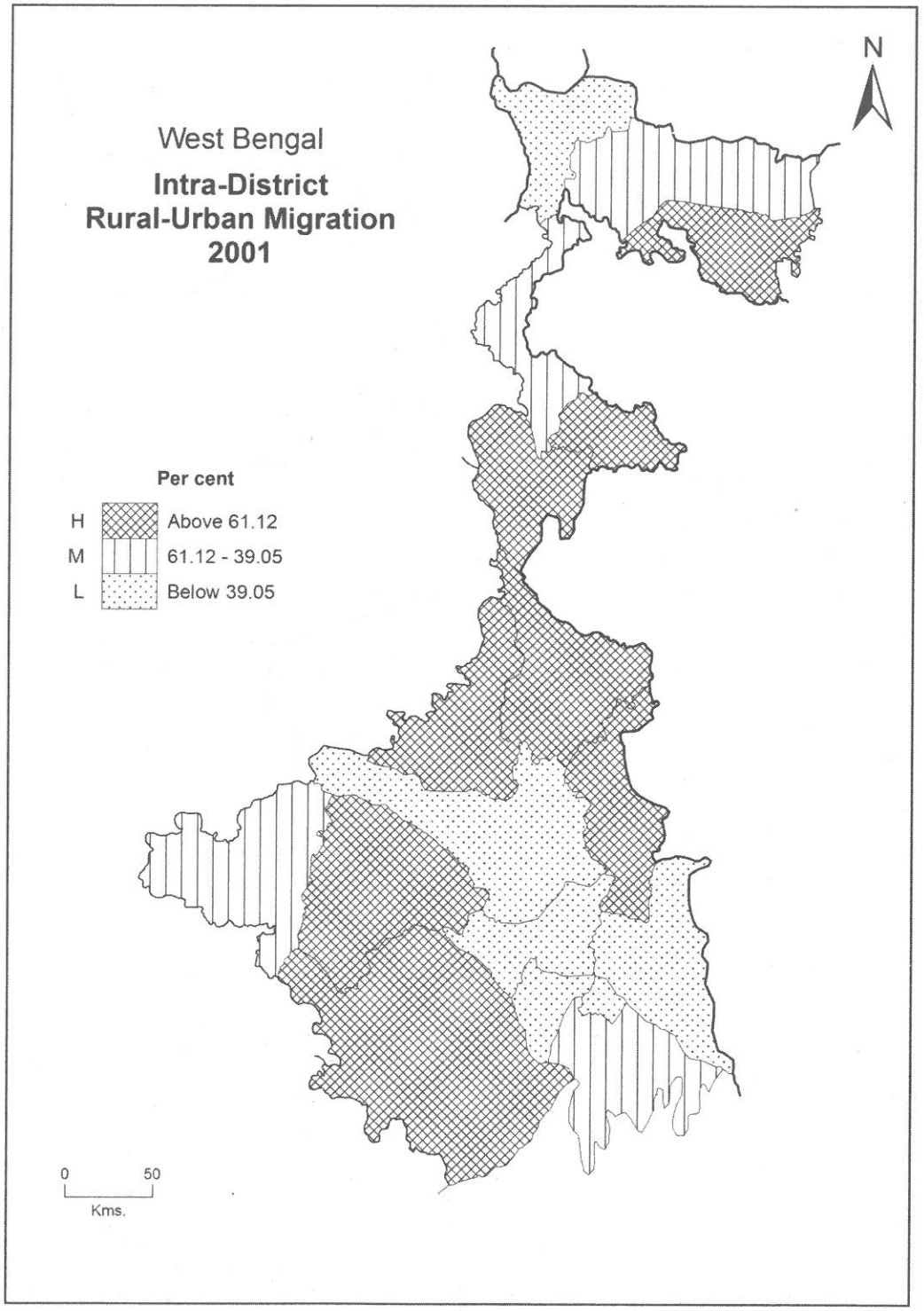
West Bengal
Intra-District
Rural-Urban Migration
2001
N
Per cent
H Above 61.12
M 61.12 - 39.05
L Below 39.05
0 50
Kms.

Fig. 5

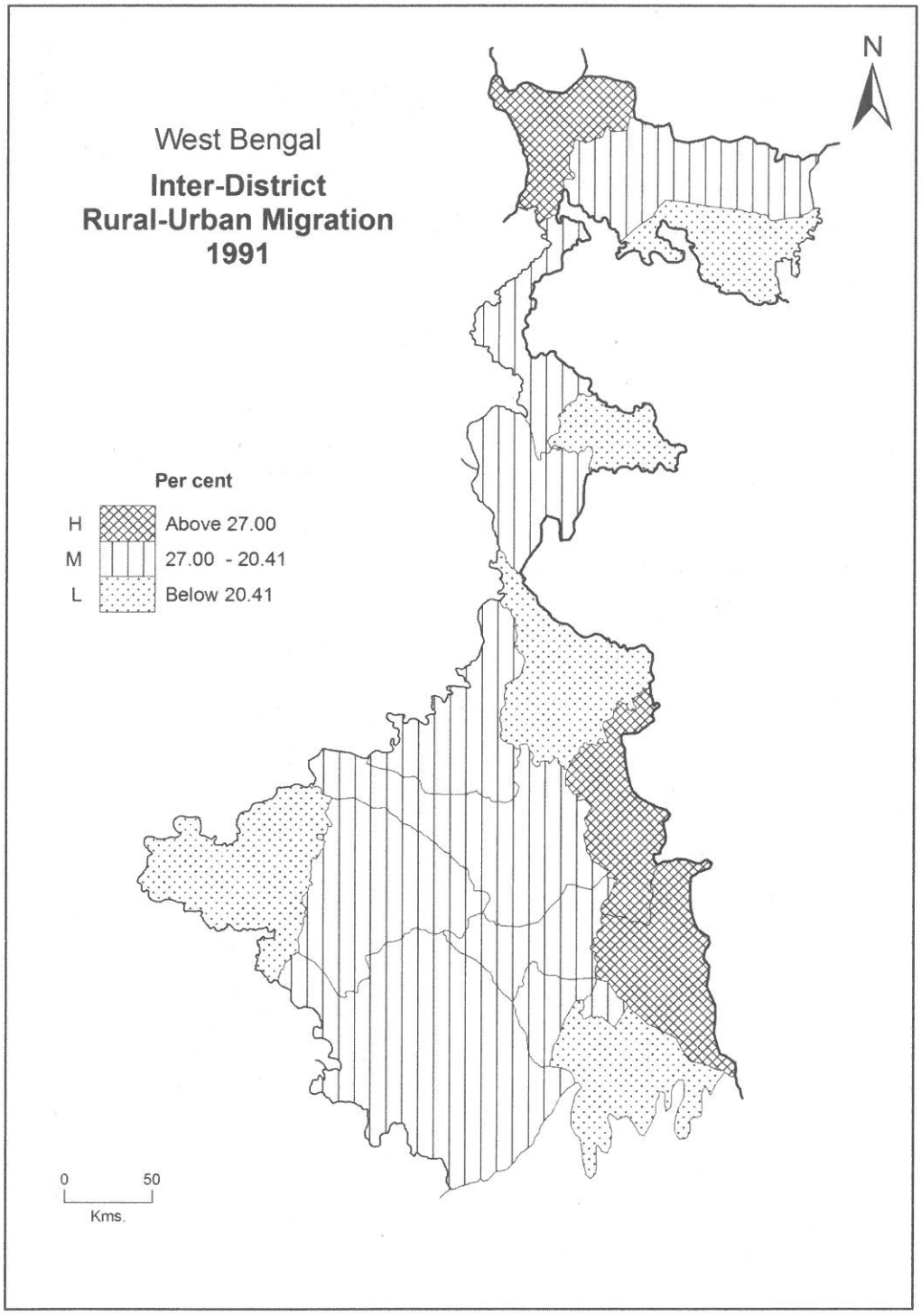
West Bengal
Inter-District
Rural-Urban Migration
1991
N
Per cent
H Above 27.00
M 27.00 - 20.41
L Below 20.41
0 50
Kms.

Fig. 6

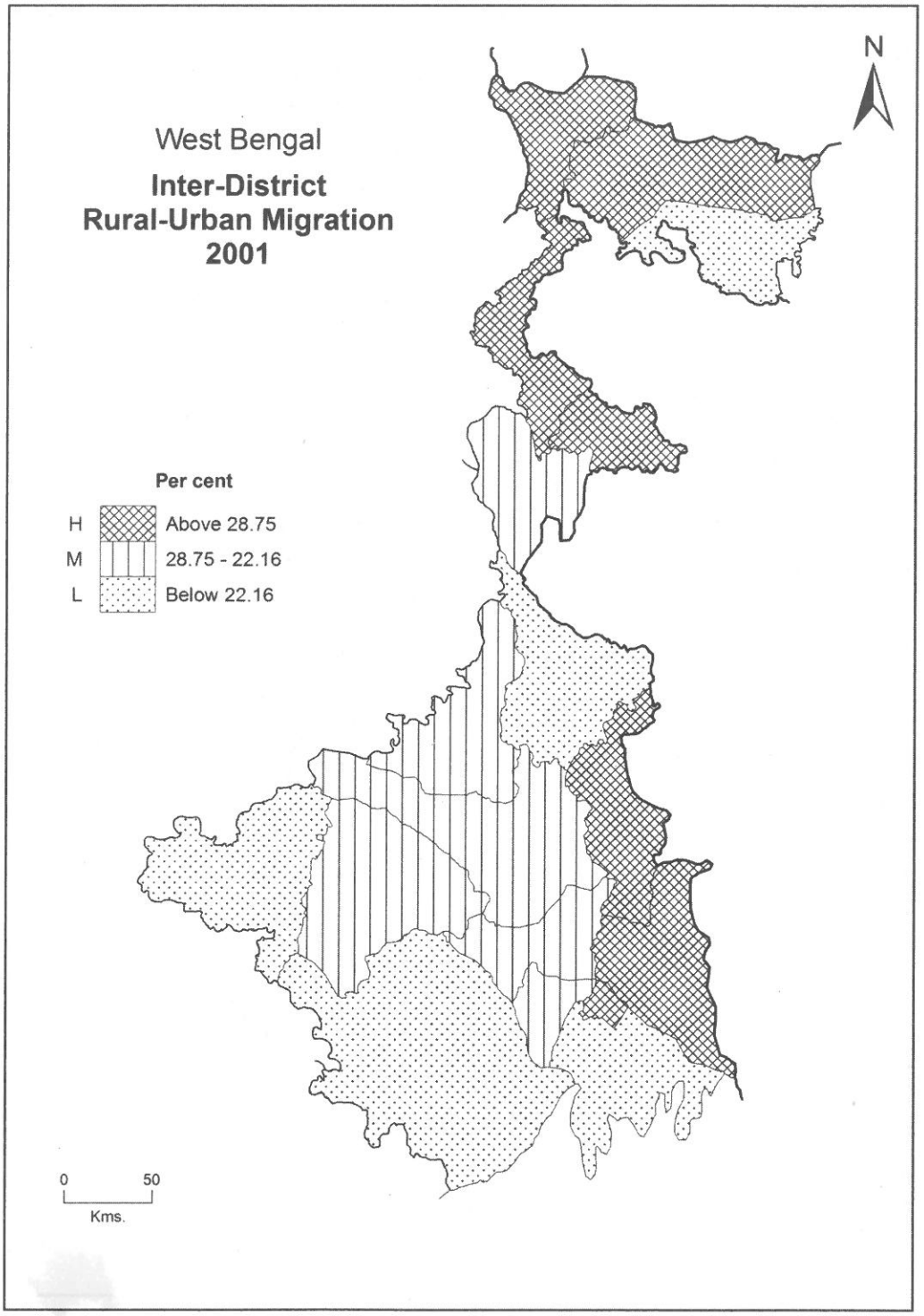
West Bengal
Inter-District
Rural-Urban Migration
2001
N
Per cent
H Above 28.75
M 28.75 - 22.16
L Below 22.16
0 50
Kms.

Fig. 7

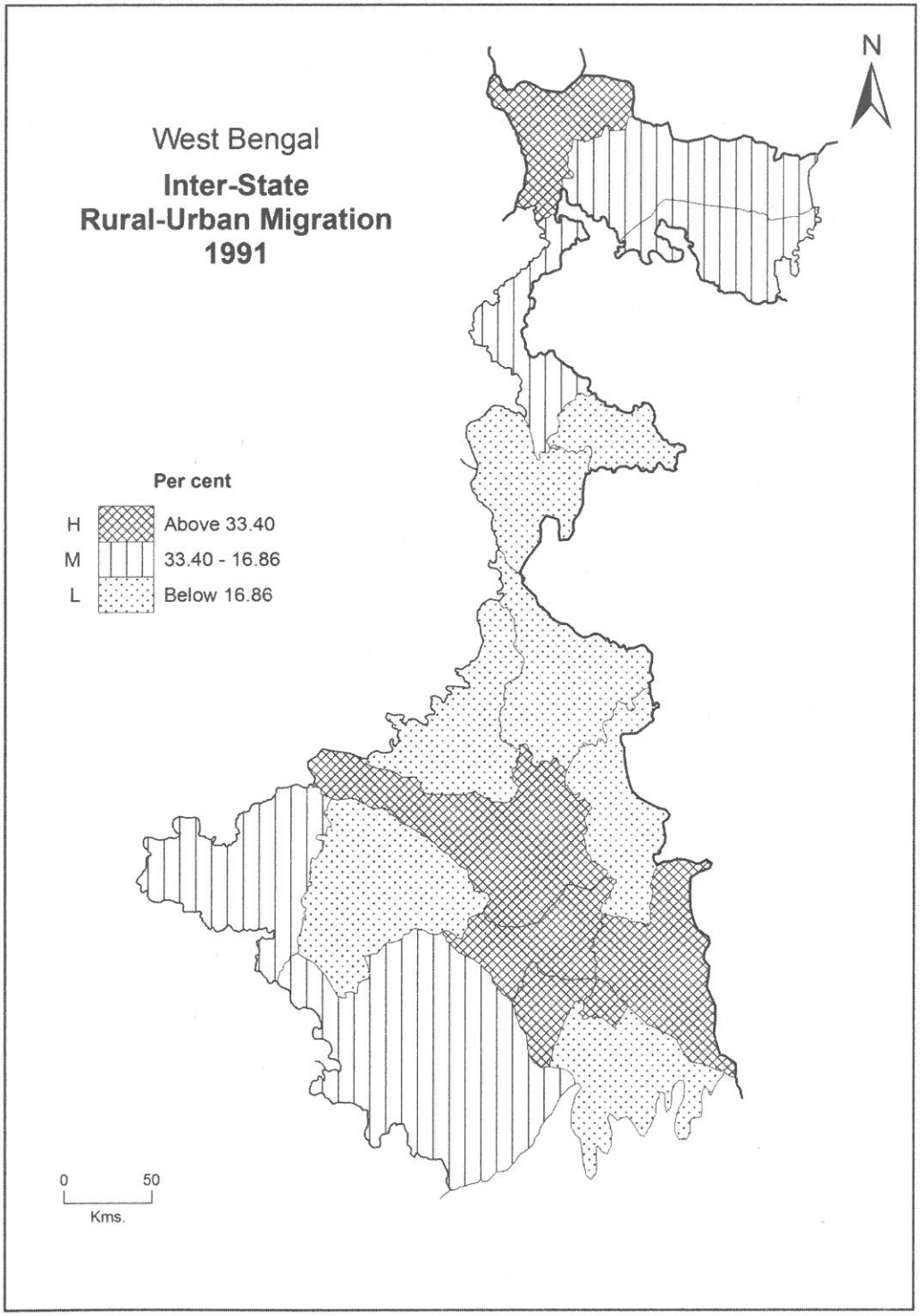
West Bengal
Inter-State
Rural-Urban Migration
1991
N
Per cent
H Above 33.40
M 33.40 - 16.86
L Below 16.86
0 50
Kms.

Fig. 8

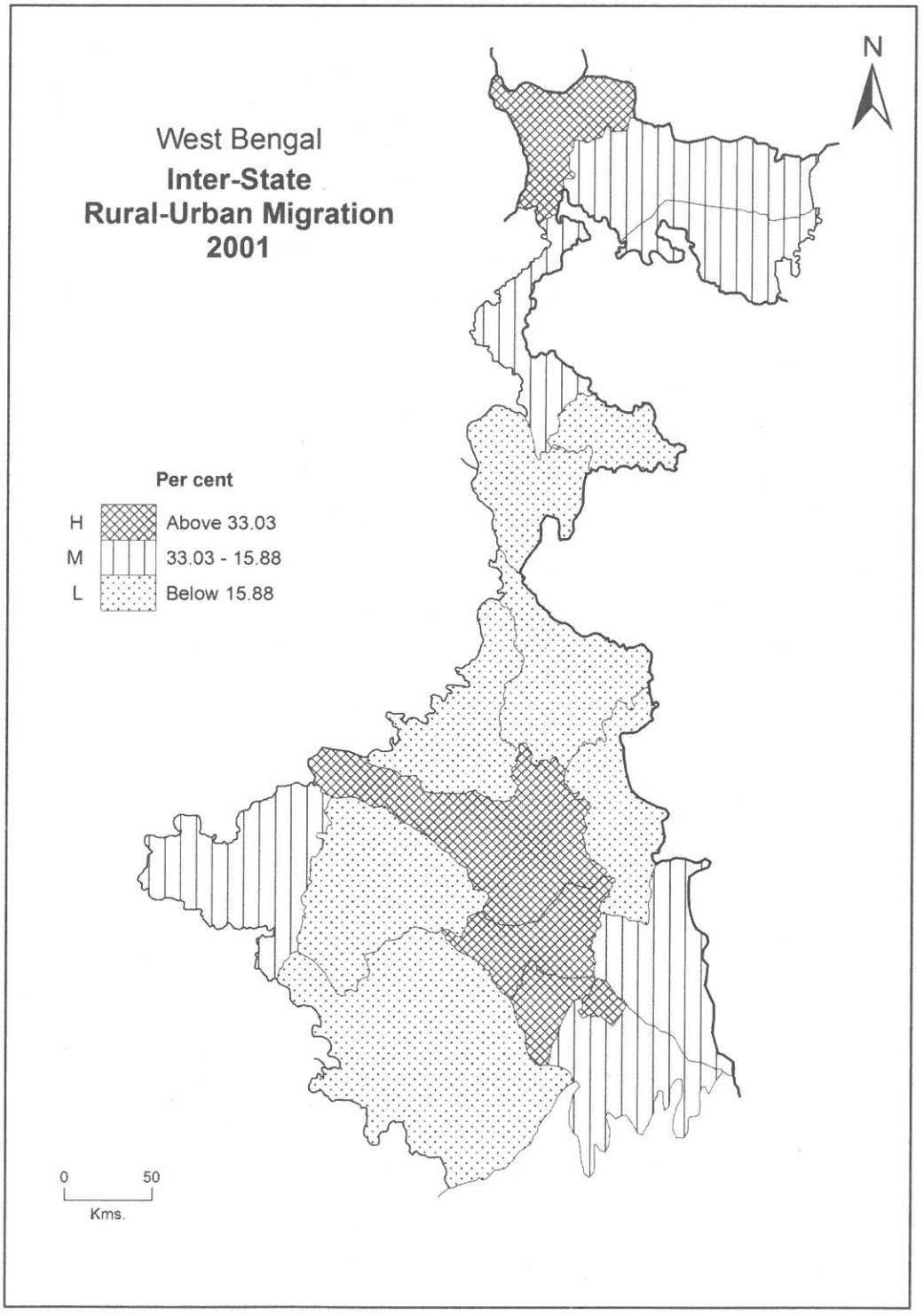
West Bengal
Inter-State
Rural-Urban Migration
2001
N
Per cent
H Above 33.03
M 33.03 - 15.88
L Below 15.88
0 50
Kms.

Fig. 9

cent in 1991 to 20.28 per cent in 2001. At the district level rural-rural migration is basically female dominant because of marriage migration.

In 1991 district wise distribution of intra-district rural-urban migration shows that the highest proportion of migrants is found in Dakshin Dinajpur (82.25 per cent). In Kolkata there is no intra-district rural-urban migration because of its urban character. For identification of spatial patterns the values of districts have been arranged in three categories of high (above 61.83 per cent), medium (61.83-40.50 per cent) and low (less than 40.50 per cent). There are four districts of northern Bengal which form a region of high intra-district rural-urban migration, namely Koch Bihar, Jalpaiguri, Uttar Dinajpur, and Dakshin Dinajpur. The other two districts in this category are Murshidabad and Bankura which occur as isolated patches (Fig 4). Three districts of southern part Puruliya, Medinipur, and Haora form a region of medium intra-district rural-urban migration zone. The other three districts in this category, namely Nadia, Birbhum and Maldah, located in central West Bengal form another area around Murshidabad which has a high value. The two pockets of medium value districts are separated by a region of low values which includes five districts of Barddhaman, Hugli, Nadia, South 24 Parganas and Kolkata. Only Darjiling district with a low value is located in the extreme north of the state.

Intra-district male rural-urban migration was highest in Dakshin Dinajpur (78.14 per cent) followed by Murshidabad (75.4 per cent), Medinipur (70.41 per cent), Bankura (66.9 per cent), and Koch Bihar (64.10 per cent) in 1991 (Table 3). Female migration was also highest in Dakshin Dinajpur (84.65 per cent) followed by Murshidabad (80.68 per cent), Bankura (74.48 per cent), Medinipur (71.36 per cent) and Koch Bihar (71.73 per cent).

In 2001, highest intra-district rural-urban migration was recorded in Murshidabad (80.41 per cent) and there is no value found in Kolkata (Table 4). The category of high intra-district rural-urban migration (above 61.12 per cent) included eight districts of West Bengal (Fig 5). They form two major contiguous regions: one in the central part comprised of five districts (Dakshin Dinajpur, Maldah, Murshidabad, Birbhum, and Nadia); and the other in southern part (Mednipur and Bankura). Koch Bihar, also included in this category is located in the northern part of the state. They are separated by a prominent region of low values. Four districts having medium values of intra-district rural-urban migration are scattered over northern and southern margins of West Bengal. Highest values for male intra-district rural-urban migration in 2001 was registered in Murshidabad (74.39 per cent), followed by Medinipur (70.72 per cent), Dakshin Dinajpur (69.20 per cent), Bankura (71.25 per cent), Koch Bihar (63.93 per cent), and Birbhum (63.34 per cent) as shown in Table 4. Highest female migration is also found in Murshidabad (82.73 per cent) followed by Medinipur (78.46 per cent), Dakshin Dinajpur (72.08 per cent), South 24 Parganas (68.35 per cent), Birbhum (67.70 per cent), Nadia (64.92 per cent).

(b) Inter-district rural-urban migration (1991-2001)

In 1991, the district wise proportion of inter-district rural-urban migration varies from the highest in Kolkata (39.02 per cent) to lowest in Dakshin Dinajpur (12.18 per cent). Three categories of districts on the basis of proportion of inter-district rural-urban migration can be identified; (i) high (above 27.00 per cent), (ii) medium (between 27.00 to 20.41 per cent), and (iii) low (less than 20.41 per cent). There are three districts namely, Kolkata, North 24 Parganas, and Nadia having high values of above 28.75 per cent which create an identifiable region on south eastern margin of the state (Fig 6). The fourth district in this group, Darjiling (30.51 per cent) is located in the extreme north of the state (Fig.6). Half of the districts of the state have medium values of inter-district rural-urban migration. They form a major linear belt stretching from Jalpaiguri in north to Medinipur in the south. The only interruption in this linear belt is formed by Murshidabad district which has a low value. The other districts having low values are scattered on the eastern and southern margins of the state. Male inter-district rural-urban migration was highest in Nadia (32.60 per cent), followed by Kolkata (31.7 per cent), Darjiling (27.67 per cent), Barddhaman (25.44 per cent), and South 24 Parganas (24 per cent). Female inter-district rural-urban migration was highest in Kolkata (51.86 per cent), followed by Darjiling (34.02 per cent), Nadia (33.75 per cent), North 24 Parganas (31.55 per cent), Barddhaman (28.49 per cent).

Table 4 shows that in 2001 the highest inter-district rural-urban migration was recorded in Kolkata (39.20 per cent) and the lowest in Medinipur (14.47 per cent). The regions of high (above 28.75 per cent), medium (from 28.75 to 22.16 per cent), and low (less than 22.16 per cent) proportions of inter-district rural-urban migration are depicted in Fig.7. Highest value districts (above 28.75 per cent) form two regions: one lies in northern part and includes the four districts of Darjiling, Jalpaiguri, Uttar Dinajpur, and Dakshin Dinajpur; and the other region which lies in south eastern part comprises of the three districts of Kolkata, Nadia, and North 24 Parganas. Five districts having medium values form a compact region of inter-district rural-urban migration in southern half of the state and one district, Maldah, located to its north is separated by Murshidabad which has a low value (Fig.7). Another three districts of low value form a compact region in the southern part of the state. The fifth district with a low value, Koch Bihar, is located in the northern part of the state.

Male inter-district rural-urban migration was highest in Kolkata (31.75 per cent), followed by Jalpaiguri (31.09 per cent), Uttar Dinajpur (30.69 per cent), Darjiling (28.76 per cent), and North 24 Parganas (28.31 per cent). Female inter-district rural-urban migration was highest in Kolkata (53.79), followed by Darjiling (37.14 per cent), Uttar Dinajpur (35.13 per cent), North 24 Parganas (32.28 per cent), and Hugli (31.44 per cent).

(c) Inter-state rural-urban migration (1991-2001)

Table 3 shows that in 1991 inter-state rural-urban migration was highest in Kolkata (60.98 per cent) and lowest in Murshidabad (5.23 per cent). The regions of high (above 33.40 per cent), medium (from 33.40 to 16.86 per cent), and low (less than 16.86 per cent) proportions of inter-state rural-urban migration are depicted in Fig.8. Six districts, namely, Barddhaman, Hugli, Haora, North 24 Parganas, Kolkata, and Darjiling had high values of inter-state migration (Fig 8). Except Darjiling, which is located in the extreme north, all others form a compact region in the southern half of the state. Puruliya and Medinipur constitute a small region of medium values (from 33.40 to 16.86 per cent) in the southern part of the state, while another three (Jalpaiguri, Koch Bihar, and Uttar Dinajpur) form a contiguous block in the north of the state. There are seven districts having low values. Out of these five districts form a north-south extending stretch in the central part of the state, while South 24 Parganas and Bankura occur as isolated pockets. Table 4 shows that male inter-state rural-urban migration was highest in Kolkata (68.26 per cent) followed by Darjiling (56.6 per cent), Medinipur (54.9 per cent), Barddhaman (54.35 per cent), and North 24 Parganas (51.94 per cent). Female migration was highest in Kolkata (48.14 per cent) followed by Darjiling (41.47 per cent), Barddhaman (37.96 per cent), North 24 Parganas (27.89 per cent), and Puruliya (23.16 per cent).

Table 4 shows that rural-urban inter-state migration in 2001 was highest in Kolkata (60.80 per cent) and lowest in Bankura (5.07 per cent). On the basis of proportion of rural-urban inter-state migration all the districts in the state have been grouped into three categories similar to those in 1991. Fig. 9 shows that high values of inter-state rural-urban migration are found in all the districts as in 1991 except for North 24 Parganas. Thus the region of high values is identified at the same location as was observed in 1991. The districts with medium values are located in northern part (Jalpaiguri, Koch Bihar, and Uttar Dinajpur) and the remaining three on the margins in southern part (Fig. 9). Five districts with low values stretch from north to south in the central part of the state while another two are located between the areas of high and medium values in the south. Male rural-urban inter-state migration was highest in Kolkata (68.25 per cent) followed by Darjiling (60.13 per cent), Haora (59.70 per cent), Hugli (49.99 per cent), and Barddhaman (49.63 per cent). Female migration was highest in Darjiling (49.06 per cent), followed by Kolkata (46.21 per cent), Barddhaman (33.76 per cent), Hugli (25.37 per cent), and Haora (25.03 per cent).

To summarise the district level rural-urban migration stream, in 1991 Dakshin Dinajpur recorded the highest proportion of intra-district rural-urban migration - total (82.25 per cent), male (78.14 per cent) and female (84.65 per cent) while in 2001 Murshidabad recorded 80.41 per cent for total, male (74.39 per cent), female (82.73 per cent) migrants. In 1991, the highest total inter-district rural-urban migration was recorded in

Kolkata (39.02 per cent) while the highest male inter-district rural-urban migration was registered in Nadia district (32.60 per cent) and female inter-district migration in Kolkata (51.86 per cent). Kolkata also recorded the highest inter-state rural-urban migration, 60.98 per cent for total, 68.2 per cent for male, and 48.14 per cent for female in 1991. In 2001 Kolkata recorded the highest inter-district migration for total (39.20 per cent), male (31.75 per cent) and female (53.79 per cent). It also recorded the highest total inter-state migration (60.80 per cent) and for males (68.25 per cent). However the highest proportion of inter-state female migrants (49.1 per cent) was recorded in Darjiling district.

At the aggregate level in 1991 intra-district rural urban migration was the highest (37.88 per cent) as compared to inter-state (35.65 per cent) which ranked second and inter-district (26.47 per cent) which ranked third (Table 3). Male rural-urban migration was highest at the inter-state level (47.56 per cent), followed by intra-district (27.83 per cent) and inter-district (24.61 per cent) levels. Female rural-urban migration was highest at intra-district (47.23 per cent) followed by inter-district (28.21 per cent) and inter-state (24.57 per cent) level. In 2001 intra-district rural-urban migration is observed to be more dominant (38.34 per cent) followed by inter-state (33.95 per cent), and inter-district (27.71 per cent) migration (Table 4). This ranking is similar to the one identified in 1991. The highest male rural-urban migration has been noted in inter-state stream (46 per cent) whereas highest proportion of female migrants has been observed in intra-district stream. The overall ranking of male and female rural-urban migrants does not show any change from 1991 although there is a change in relative proportions in 1991 and 2001 e.g. intra-district rural-urban migration has increased from 37.88 per cent in 1991 to 38.34 per cent in 2001; inter-district values have increased from 26.47 per cent in 1991 to 27.71 per cent in 2001 while inter-state migration has decreased from 35.65 per cent in 1991 to 33.95 per cent in 2001 (Tables 3 and 4). Thus, intra-district and inter-district rural-urban migration has increased while inter-state rural-urban migration has decreased during 1991 and 2001.

Table 5 shows the growth rate of rural-urban migration in West Bengal during 1991 and 2001. Highest percentage growth of rural-urban migration was registered at inter-district level for total, as well as male and female migration. The second highest growth rates were recorded for intra-district total, male and female migration while inter-state level rural-urban migration recorded the lowest growth rates. Male and female rural-urban migration was highest at inter-district level and lowest at the inter-state level. Female rural-urban migration is higher than the male migration at intra-district and inter-state levels.

Conclusion

The present study shows that there has been

Table - 5
West Bengal : Per Cent Growth of Rural-Urban Migration (1991-2001)

Rural-Urban Migration Stream		1991	2001	Per Cent Growth
Intra-District	Persons	1033358	1305662	26.35
	Males	365901	442324	20.89
	Females	667457	863338	29.35
Inter-district	Persons	722170	943802	30.69
	Males	323485	425636	31.58
	Females	398685	518166	29.97
Inter-state	Persons	972418	1156265	18.91
	Males	625218	739258	18.24
	Females	347200	417007	20.11

Source: Census of India, Migration Table of West Bengal (1991 and 2001).

a change in the rural-urban migration stream in West Bengal from 1991 to 2001. Proportion of rural-rural, urban-rural migration shows a decreasing trend, and rural-urban, urban to urban migration an increasing trend in the state. Emergence of new towns, increasing transport and communications, increasing employment opportunities in urban areas are the major factors for the increase of proportion of rural-urban, urban-urban migration during the study period. Inter-state rural-urban migration has decreased during 1991-2001 but intra-district and inter-district rural-urban migration shows an increasing trend because of improvement of transport and communications facilities, introduction of various policy programmes for economic development in different districts of West Bengal.

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FEMALE FOETICIDE IN INDIA–THE PROBLEM AND ITS CURE

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Abstract

Over the last few decades, the child sex ratio in the age group 0-6 years has been falling sharply, which is mainly due to female foeticide. It is an open secret now that the advent of technology for checking the possibility of genetic disorders or abnormalities, if any, during pregnancy is being misused to detect the sex of a baby and then abort it if it happens to be a female. Neither education nor ban on sex detection tests is acting as a force to stop female foeticide. It has been argued that this problem is a social menace and has many dimensions that need to be tackled from different perspectives. The concerned medical practitioners, different ministries concerned, education departments, politicians, religious leaders, judiciary, police, NGOs, media and the society as a whole have to own responsibility to work out collaborative strategies and take collective actions to address this shocking problem. The present paper is a modest attempt in examining the problem from different perspectives and it offers some collective measures to address the prevalent practices of sex selective abortions.

Introduction

The child sex ratio in the age group 0-6 years has been continuously declining sharply over the last few decades, which is mainly due to female foeticide. In 1991 census, the sex ratio (0-6 years) was recorded 945 at the national level; it has fallen down to 918 in 2011. These figures are continuously declining both in urban as well as in rural areas in every census count despite various steps taken by the government and non-government organizations (Table 1).

It is evident from the state level data that the decline in child sex ratio was not uniform across

Table-1
India : Sex Ratio (0-6 age group), 1981-2011

Census	Total	Rural	Urban
1981	962	963	931
1991	945	948	935
2001	927	934	906
2011	918	923	905

Source: Census of India

Table - 2
India : Child Sex Ratio by Religious Communities and Residence, 2011

Religious Communities	Total	Rural	Urban
All	**918**	**923**	**905**
Hindu	913	920	894
Muslim	943	944	940
Christians	958	957	959
Sikhs	828	828	830
Buddhists	933	938	925
Jain	889	869	895
Others	974	976	941

Source: Census of India, 2011.

the country. It was generally high in the north-western states of Punjab, Haryana, Gujarat, Himachal Pradesh, Delhi and union territory of Chandigarh. The data also reveals that states that had passed Regulation of Use of Pre – natal Diagnostic Techniques Act also recorded high decline in child sex ratio. For instance, Maharashtra, which has passed this Regulation as early as in 1988, much earlier than the Central Act, has recorded its child sex ratio of 918 which is lower than the national average of 943. Several other states like Haryana and Rajasthan that have passed a similar legislation also have child sex ratios below the national average. This is the aggregative picture which is far different from the situation prevailing at the regional and local levels. For instance, decline is sharper in the north-western states of the country as compared to north–eastern or southern states of the country.

The 2011 Census data also indicate unfavorable child sex ratio in all the religious communities (Table 2). Though the decline in the child sex ratio was highest among Sikhs followed by Jains, it was also very high among urban Hindus. However, it deserves mention that inter-religion differentials in this regard were not essentially connected with religion *per se*, but these stemmed from the concentration of a particular religious community in a specific social or cultural realm of the country.

Reasons for Decline in Child Sex Ratio

This sorry state of affairs is because of varied reasons like female foeticide ; female infanticide; abandoning of female infant; neglect; malnutrition; violence etc. However, for the last few decades, the main reason has been female foeticide. The technology developed to determine the abnormalities in foetus is being misused to terminate the female foetus. Illegal use of techniques such as ultra – sound, CVS, and amniocentesis at about 16, 15 and 11 weeks respectively into the pregnancy, make it possible for doctors to identify the sex of the foetus. If the sex of the child is found to be female, the parents get the foetus aborted. Hence technology, which should have been an empowering tool, has worked against the girl child in most parts of the country. Thus the misuse of the new technology is creating new problems for the society. Consequently million female foetuses have got aborted in the past few decades. It is shameful that sex detection and sex selective abortions have now become a multi-million dollar business in India.

The Basic Issues

The Indian paradox is that on the one hand, the Indian constitution prohibits any discrimination based on sex; the religions give high place to women; the Indian economy is on boom; literacy rate is rising; and shining examples of Indian women on top positions in many fields. On the other hand, the girl child is not being allowed to be born; is being killed if somehow takes birth; is being dumped shamelessly; is being neglected/ exploited/ discriminated in socialisation if somehow remains alive. This raises many questions: (i) why does everyone want a son so much so that they are willing to kill their daughters in the womb itself?; (ii) why the female sex is becoming more and more unwanted despite notable progress of women at all fronts, with many of them at the top; the increasing number of girls being the 'real' partner / actors, be it the earning member, taking care of parents, successfully managing the business, etc.?; (iii) why the technology is being misused to detect the sex of a baby and then abort it, if it happens to be a female?; (iv) why education, affluence or special efforts made by both the government and the civil society have not given the desired results?; (v) why the female foetuses are aborted despite the fact that a law banning sex selective abortions has been in force for about two decades? These are some important issues that need a close examination from different perspectives - social, educational, medical, legal, political, religious, political and others and work out collaborative efforts of all concerned – civil society, medical practitioners concerned, different ministries concerned,

education departments, politicians, religious leaders, judiciary, police, NGOs etc.- to tackle this problem. Media and the society as a whole of course, own the major responsibility to solve this degrading problem with collaborative efforts. The present paper attempts to answer these questions based on both secondary as well as primary data and information and offer some collective measures to tackle the prevalent practices of sex selective abortions.

Methodology and Data collection

The present paper is primarily the outcome of analysis of secondary data and other information. The analysis is based on earlier research findings, efforts and initiatives of both the government and civil society that are now seen in action. Besides, some primary data was collected through face to face interaction from 50 couples in the reproductive age group. These couples were from Delhi and Punjab - 10 residing in South Delhi; 10 in West Delhi; 30 in Punjab. Out of 30 couples residing in Punjab, 10 were from Samana block of district Patiala; 10 from Rajpura and 10 from Patiala Town. The selection of areas for face to face interaction has been done keeping in view that these areas have been recording very low child sex ratio as per census reports. These couples were selected because they all were having one daughter at the time of interview. The author has personally interviewed these couples to ascertain their perceptions for this prevailing social menace in the society. All the 50 couples were graduate and above. Out of a total 50 couples, 23 women were working as either government servants or serving as a teacher in private schools. 23 males were shopkeepers and 2 government servants. 23 couples had nuclear families and 27 were having joint families.

The Social Reality

The decline in child sex ratio is mainly due to strong son preference in most parts of India. Though son preference is a trans-cultural phenomenon, it is more prevalent in certain communities and groups. The extreme low valuation of female life and the low status accorded to women in northern states of the country appears to have created more adverse conditions for females on account of the abuse of modern science and technology. Women have for thousands of years grown to hate their own species on account of values of the severely patriarchal culture, which disallows even food or rest and care to the mother of a daughter. Only by giving birth to sons they qualify for some concessions. Hence, women regardless of class and now even caste go in for sex detection and get female foetuses aborted. Both the social practices and cultural ethos that undervalue women are stronger in some regions than in others. In an almost contiguous belt extending from northwest India to parts of Rajasthan, Gujarat and Maharashtra, the under-evaluation of women is increasingly being replaced by not allowing female children to be born. The preference for sons leads to neglect of the daughters resulting in accepting girls as a liability to be shed at the earliest, soon after birth. During the last few decades, the situation has become worse. The girl child is seen as a liability to the extent that she is not even allowed to be born because her parents, her family does not want her. Aborting female foetus has emerged in preference to condemning an unwanted daughter to a lifetime of neglect and abuse.

Dhungana (2014) pointed out that there is a long tradition of son- preference in India. Technology which started in the 1980's with amniocentesis and became readily available has played a very significant role in the phenomenon of declining female sex ratio. Parents take steps to ensure the birth and survival of sons. Hence, society's continued son preference both in rural and urban areas has spurred on a medical mafia. Sharma (2001) stressed that discrimination against the girl child is very high in India. The important factor that lead to discrimination against the girl child is the prevalence of dowry. Besides, social myths in relation to son preference also make the girl child a burden for the parents, and thus have contributed to sex selective abortions and female

foeticide.

Dowry deaths claim lives of dozens of women everyday. For instance as many as 6,787 women were killed in the country in 2005 for bringing insufficient dowry (National Herald, March 12th, 2007). These socio-cultural factors compounded with easily available affordable procedures for sex detection during pregnancy have resulted in a high rate of female foeticide. Female foeticide has also become a menace in the country due to the harsh nature of patriarchy in many areas, greater responsibilities in bringing up daughters, and social pressure to bear sons. (Jain, 2006). Patel (2011) reached to the conclusion that fight against the use of pre-selection techniques for son preference is a major challenge. She mentioned that the Forum against Sex Determination and Sex Selection began its campaign in Mumbai against discriminatory abortions of female foetuses in April 1986. Thus, though the law against female foeticide was enacted about 30 years ago, its practice continues unabated. It is a major challenge to fight the use of pre-selection techniques for son preference without jeopardizing women's rights to safe abortion. The impact of two-child family norm also directly interferes with the reproductive rights in the family leading to sex selective abortions (Gurung, 2005). Goodkind, (2007) stressed that when fertility declines, preference for male children remains strong. Parents take steps to ensure the birth and survival of sons. Easy availability of pre-natal sex detection techniques helps parents to abandon baby girls. Though India has a history of skewed female sex ratio, what the country has witnessed today is the systematic extermination of the female child, with the ultrasound machine serving as an instrument of murder (Arvamudan, 2007).

The abortions of female foetuses have now spread even among Scheduled tribes, Christians and Muslims. This phenomenon has become common especially after techniques like sonography became widespread. This is mainly happening due to the spread of dowry with exorbitant demands. Despite gains in education and income of women, large sections of Indian society still consider daughters a liability. Hence, neglect of daughters, female infanticide and foeticide appear widespread in some parts of Indian society, and have pervaded groups and classes where they were hitherto unknown (The Adithi, an NGO, 1995). Atanu (2003) pointed out that the skewed sex ratio is the consequence of other underlying facts such as resource constraints; exorbitant cost of dowry for getting daughters married; female illiteracy, and so on. Poor families have severe resource constraints, ranging from calories to clothing to education. If sons have a greater net present value (due to their future earning capacity), girls are disadvantageous in the share that they get of the limited resources. The use of new techniques of sex determination grew widespread not only in towns, but also among rural areas with access to roads or transport system to the nearest town. In addition, there is the legally binding Code of Medical Ethics, constituted by the Indian Parliament in the Medical Council Act, 1956, which many doctors ignore. Though doctors are legally bound, many are involved in this heinous crime. Kulkarni (1986) reached to the conclusion that medical practitioners are of the view that sex determination tests are a humane service they provide to couples not wishing to have any more daughters, with a regrettable but unavoidable result of the preference for sons in Indian society which they are powerless to change and as a necessary weapon in the population control arsenal.

Field data

The analysis of responses collected through interviews indicates that people believe in small family norms and even if girls are not born, it is not considered a big loss. It is not only the rich, but now even the middle classes and the poor indulge in this crime. The respondents were of the view that the dowry system prevails in all communities. Marriage expenses vary depending on the community and the economic condition of the family. Heavy demands of dowry for getting

daughters married were stated by 48 couples as one of the main reasons for this menace. It was further elaborated that the rich landlord families in Punjab are also practicing female foeticide in order to keep family size small and property holdings intact besides dowry expenses. Aborting a female foetus is considered preferable to condemning an unwanted daughter to a lifetime of neglect and abuse. These attitudes were also echoed among 25 couples who had one daughter. Though they agreed that aborting female fetuses is a heinous act, they find it a better option not to have a daughter. Since the option is available, they were taking advantage of the situation. Otherwise, they believed that God is supreme and what the nature decides is acceptable to them. In response to the question for carrying the name of the family, only 10 couples feel it to be important. The most important observation was that dependence on a daughter in the old age is still considered as a curse especially in the Punjab sample. They did not show any inclination to accept this as a reality. The Delhi sample basically showed that disinclination towards un-wantedness of female child is basically due to the feeling of insecurity and a feeling of a liability. Parents feel that if both parents work, they feel always worried about their daughters in their absence. Small family means one child - preference is for a boy. If the option is two children, then they would prefer to have one daughter and one son. None of the couple felt happy if they would have two daughters.

Legislation and Female Foeticide

The Government of India has passed Pre – Natal Diagnostic Techniques Act (Regulation and Prevention of Misuse), 1994. Section 6 (b) of the Act prohibits the determination of the sex of the foetus. Section 5 (2) of the Act prohibits any person conducting pre-natal diagnostic procedures from communicating to the pregnant woman or her relative, the sex of the foetus by means of words, signs or in any other manner. Section 20 (3) empowers the Appropriate Authority to suspend in public interest the registration of the clinic or laboratory without issuing any show-cause notice. Section 23 (3) lays down that any person who seeks the aid of a genetic counseling centre, a genetic laboratory or a genetic clinic or of a medical geneticist, gynecologist or registered medical practitioner, for applying pre-natal diagnostic technique on any pregnant woman (unless there is evidence she was compelled to undergo such diagnostic technique) for purposes other than those specified, shall be punishable with imprisonment for a term that may extend to three years and with a fine which may extend to Rupees 10,000/-. Any subsequent conviction may involve imprisonment which may extend to five years and a fine of up to Rs.50,000.

The Pre –Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 was amended in 2002. The new Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act 2002 or PCPNDT came into force on 14-2-2003. The new PCPNDT Act prohibits sex selection, before and after conception. People convicted under the Act face up to 3 years in jail and a fine of Rupees 10,000/-.

Initiatives against Female Foeticide

Besides legislation, the Union Government has also issued instructions to monitor the child sex ratio on a monthly basis to check the alarming fall in the number of girls as indicated in the census data. A cell has also been set up to check incidence of female foeticides; monitor implementation of anti-foeticide legislations; and suggest punitive measures. It has also been declared that all ultrasound clinics must be registered and all nursing homes and medical organizations must put up signboards stating that no sex determination is done on the premises.

The Delhi Medical Association (DMA) recommended that gynecologists should not abort foetuses between 12 to 20 weeks of pregnancy. On demand, it can be done with the consent of two gynecologists. The Federation of Obstetrics and Gynecological Societies of India (FOGSI), which

is an apex organization of obstetricians and gynecologists in the country has decided to observe July 1st as the 'Girl Child Day' to focus attention of all concerned on prenatal sex determination and female foeticide. On this day, all members of FOGSI take an oath to refrain from any activity that reveals the sex of the unborn child and make a resolution not to terminate any pregnancy wherein the sex of the unborn child was revealed. FOGSI has titled their mission "Say No to Female Foeticide" and decided to organize various awareness campaigns throughout the year and take a clear stand against this criminal activity.

The Punjab government has announced a reward of Rupees 2.5 lakhs to a *panchayat* or village that is able to raise the sex ratio from 800 to 850 or from 850 to 900 girls per 1000 boys. Villages which are able to level the number of girls to boys or cross it are rewarded Rupees 3 lakhs.

A number of non-governmental organizations (NGO's) have also initiated many efforts to address the problem of female foeticide. For instance, the All India Mahila Congress (AIMC) has launched nationwide awareness programmes in the form of *padyatras*, rallies, debates, seminars and press conferences all over the country against female foeticide with a view to mobilize male participation in addressing this social evil. Similarly, different religious bodies are also propagating publicly that killing female foetuses is a heinous crime against society and no religion gives its permission. Delhi Jain *Samaj* has launched *abhiyan* against female foeticide to create awareness among women so that they can recognize their self esteem and *Asstitva*. Jain *Mahasabha* celebrated the year 2005 as against Kanya Foeticide Abhiyan. Under this abhiyan, *nukkad natak*, awareness activities and *shivirs* were organized across the country. The Akal Takht - the chief religious body of the Sikh religion- passed an edict calling for the excommunication of any Sikh indulging in female foeticide / infanticide.

Sting operations are also in action in different parts of the country that expose doctors of both government and private clinics for carrying out this heinous practice of sex selective abortions.

The Ministry of Human Resource Development (MHRD), Government of India has proposed to support education of all girls from single-child families by way of waiving of fees and providing scholarships.

Killing of Female Foetuses Goes Unabated

Despite all these efforts and initiatives to stop this shocking practice, the number of reported cases of aborting female foetuses is increasing day by day. The media reports almost every day about the cases of aborted female fetuses (The Tribune, p. 4, April 6, 2006, (Chandigarh); The Tribune, August 11, 2006; The Times of India, p.14, June 15, 2005; The Tribune, p.14, July 31, 2006). A UNICEF Report (Dec., 2006) stated that 7000 fewer girls are born in India every day than the global average. In Feb. 2006, medical journal the *Lancet* published research indicating that one out of every 25 female foetuses – about 5, 00,000 a year – was aborted in India. Thus, foeticide had led to millions of girls missing over the last three decades. In August 2006, for instance, 35 female foetuses were found in a well in Patran town of district Patiala , Punjab, (Singh, 2006), and a dozen embryos in a pond in Aligarh (Uttar Pradesh). In the same year, female foetuses were also found in Bharatpur district of Rajasthan. The report shows that sex ratio predominantly in Rajput villages, Peethla and Adbala, of district Jaisalmair in Rajasthan has gone as low as 357 and 362 respectively. .

The above analysis clearly suggests that this social menace does not have a linear equation with economic prosperity or education. Legislation and various other steps taken in this direction have not been able to stop female foeticide. Inspite of strong propagation against female foeticide by almost all religious bodies in the country, the child sex ratio is continuously declining in all religious communities. Although different agencies are working towards this issue, yet the situation seems to be very grim. Correcting

India's skewed sex ratio seems to be an enormous task because this problem has received indirect social sanction inspite of laws to stop this problem. Banning sex determination tests is not enough. The efforts of the Government need to be internalized. It has to be every household's responsibility to ensure that the female foetus is not killed. It calls upon everyone to analyse where the cure of this menace is? What needs to be done to strengthen the implementation of laws? What steps should the Medical Council of India (MCI) take to address this problem? What role education, media and polity need to play in addressing this social menace? How NGOs and civil society can play more proactive role in addressing this problem? How can religious leaders perform the function of acting as a catalyst to change the society so far as female foeticide is concerned?

Suggestive Measures

1. The PCPNDT Act needs to be implemented and enforced with great vigour and zeal. In every district, a special group comprising expert, social workers, and leading NGOs of the area need to be formed to deal with the implementation of the law.
2. The government needs to act strongly against the doctors indulging in sex determination. There are media reports that around 2500 girls are eliminated every day by using illegal methods with the active role of medical practitioners. Both the government and private clinics conduct sex selective abortions. There is no strong action against these doctors despite legislation. In 2006, a TV channel sting operation exposed the rampant practice of sex selective abortions in Rajasthan. While 55 doctors were exposed indulging in practice of sex selective abortions. The cases were registered against only 29, of whom only 7 were suspended for a mere six months. On February 21st, 2007, the Rajasthan Medical Council let off 5 doctors with just a warning. A consortium for preventing incidences of female foeticide need to be formed involving persons from different dimensions of this problem to carry the issue forward and take suitable actions.
3. There is a strong need for auditing of ultra-sound clinics (sonographic centres).
4. The sex ratio at birth and gender differentials in infant mortality rate (IMR) should be included as human development and gender parity indicators.
5. Media should be more sensitive to the issue of female foeticide. The government should ensure that private as well as government channels allocate some time to telecast messages / programmes related to the repercussions of female foeticide.
6. The religious leaders need to play more proactive role in addressing this social evil.
7. There is a strong need to highlight women's contribution in all walks of life in the teaching/ learning materials. The contents in the text books should have more details regarding repercussions of sex selective abortions on moral and social health of the society. Schools should organize at least one Parent -Teacher Association meeting in a month focusing on this issue. Teachers should play more proactive role to train, guide and educate our youth to raise their voices against the practice of sex selective abortions and preparing both boys and girls to accept that son preference for family lineage is a social evil.
8. Special provisions should be made for those aged people who have only daughter/s.

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SEX RATIO OF SCHEDULED CASTE POPULATION IN PUNJAB: 2011

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Abstract

Based on Census 2011 data, this paper examines the contemporary state of sex ratio imbalance among Scheduled Caste population of Punjab state which has been historically oppressed under feudal society. An attempt has been made to identify the root causes associated with this differential through personal observations. The role of age old socio-cultural factors is crystal clear along with the option of smaller family norms in this regard. A little improvement in sex ratio during 2001-2011 is one of the welcome indications of the beginning of change in the mindset from 'son preference' to 'son-daughter equality'. Despite reduction in gender imbalance during 2001-2011, notable spatial variations do exist. The paper addresses two basic research questions: (i) Does caste play any role in determination of sex ratio in the state?, (ii) Why the sex ratio of the Scheduled Caste population varies spatially?.

Introduction

Many Asian countries have low sex ratio (females per 1000 males). Attempts have been made to identify the causes of this imbalance in India e.g. Agnihotri (2003), Arnold, et al., (2002), Bainister (2004), Bhat (2003), Gupta (1987), Action Aid (2008), Kishor (1993), Kusam (1993), Mayer (1999), Retherford and Roy, (2003), Sarna, (2003) etc. have attempted to explain the socio-economic, socio-cultural, and socio-religious factors affecting sex ratio at various levels.

However caste related *tehsil* level studies of sex ratio have been quite few. The present study seeks to identify the spatial variations in the sex ratio among the Scheduled Caste population of Punjab. Along with analysis of census data, personal observations from the study area have been used to get a closer view of this issue. Stereotyped escapes (migration, biological factors, and undercounting etc.) from the ground reality are not digitable, rather they are an indication of the presence of human factors which point out the change in behavioral pattern in certain socio-economic and cultural contexts. It is not only an important feature of the social landscape but it also influences the other demographic elements significantly and as such provides an additional means for analyzing the regional landscape (Trewartha,1953, p.88). The existing sex ratio in any area is determined by three basic factors : (i) sex ratio at the time of birth, (ii) differences in the mortality rates of the two sexes at different ages, and (iii) differences in the migratory pattern of the two sexes (Clarke, 1960, p.28). Sex ratio imbalances stem mainly from male-female differentials in survival rate, which in turn, are connected with various socio-economic, cultural and historical factors (Agnihotri, 2000, p.34). One of the most significant aspects of gender imbalance is evident in social consequences such as bride shortage. The availability of fewer women in marriageable age cohorts results in bride shortage and this is one of the most studied consequences in several Asian countries affected by skewed sex ratios (Larsen and Kaur, 2013, p.49). Rise in violence among unmarried young men has been

observed in some northern states in India because they have to compete for a limited number of women in the marriage market. It was expected that this shortage would lower the demand for dowry. But it has led to an increase in sex trafficking and greater sexual violence against women instead of lowering the demand of dowry. Increase in prostitution, violence and rape against women in recent years are the consequences of gender imbalances (Singh and Mohan, 2005, p.27). Since caste is a harsh reality of Indian social setup, it plays its discriminatory part in all spheres of life. Scheduled caste women have suffered and are suffering a lot not only because of caste, but due to gender too, from which there seems no escape. Earlier terminology used for this section of the society such as untouchables or depressed classes has been replaced by 'scheduled castes' and *dalits* which have given a new identity to this social segment (Kant, 2013, p.331). Historically this segment of the society suffered at the hands of upper castes. Sufferings can be visualized by taking a look at the widely respectable book like 'Ramcharitmanas', which mentions that "fools, the lower castes, animals and women deserve to be beaten like drums"...(Gill, 2013, p.289).

Sex ratio patterns in Punjab's population show considerable variations by districts as well as regions, social groups and location, i.e. rural / urban residence.

An Overview of Decadal Change in Sex Ratio after Independence

If we take a look at the decadal trends in sex ratio in the state in post- independence period, it becomes apparent that the sex ratio had increased during 1951-1981.This change was the highest (14 females/thousand males) during 1971-81; a sudden decline occurred during 1981-91, while it decreased by 6 points during 1991-2001. During 1991-2001 fifty per cent of the total districts of the state showed a decline in this regard. Ludhiana district recorded the maximum imbalance between the two sexes with a decline of 20 females/thousand males followed by Fatehgarh Sahib (-17 points). This decade has been identified as the most unfortunate in terms of sex ratio. Signs of improvement appeared during 2001-2011. Only Bathinda district reflected a negative change (-5 points) whereas rest of the districts witnessed an increase in the number of females. Notable improvement in the sex ratio of Ludhiana district deserves appreciation since it registered an increase of 45 females / thousand males followed by Shahid Bhagat Singh Nagar (40 points), S.A.S. Nagar (36 points), Hoshiarpur (27 points), Jalandhar (26 points), Kapurthala and Rupnagar (24 points each) and Fatehgarh Sahib (17 points). On the other hand eleven districts lagged behind the change in state average (17 points) in this respect. In 2011 the average sex ratio in the state was 895 females/thousand males. The table also shows the *tehsil* wise sex ratio of general population and population by area of residence (Table 1). Map 1 shows the administrative divisions in the state and Map 2 shows the spatial pattern of *tehsil* wise sex ratio of general population as per 2011 Census.

Sex Ratio of Scheduled Caste Population

The 2011 Census of Punjab reveals that the sex ratio of the Scheduled Caste population was 910 with 913 and 900 for rural and urban areas respectively. Table 2 reveals that Hoshiarpur district recorded the highest sex ratio (961). This district recorded relatively high sex ratio (968) in rural than in urban areas (925). Located to its south, S.B.S Nagar was next in rank with a figure of 962 in rural areas and 931 in urban areas. Interestingly a large number of *tehsils* of Doaba region only recorded relatively high sex ratio among the total as well as rural Scheduled Caste population (Maps 3 and 4).

Seven districts of the state recorded relatively high urban sex ratio than that of rural. Sangrur district topped the list in this regard with 24 points higher urban sex ratio than rural i.e. 909 and 885 respectively. Patiala district followed the trend by recording this urban-rural difference of 12 points. In fifty percent districts, rural sex ratio of scheduled caste population was relatively higher than that of the urbanites. Hoshiarpur district led by 43 points among all the districts followed by Jalandhar (40 points), S.B.S Nagar (31 points), Ludhiana (23 points), Firozpur (16 points), Fatehgarh Sahib (14 points), Gurdaspur (13 points), Amritsar (13 points) and Kapurthala (6 points) in this regard.

Table - 1
Punjab: Sex-Ratio of General Population (2011)

State/Distt/*Tehsil*	Total	Rural	Urban
Punjab	**895**	**907**	**875**
Gurdaspur	**895**	**915**	**848**
Dharkalan	919	919	916
Pathankot	865	913	814
Gurdaspur	910	924	850
Batala	904	908	896
Dera Baba Nanak	893	898	836
Kapurthala	**912**	**931**	**878**
Bhulath	973	974	970
Kapurthala	889	917	840
Sultanpur	922	925	904
Phagwara	915	930	900
Jalandhar	**915**	**952**	**884**
Shahkot	947	952	918
Nakodar	950	958	910
Phillaur	949	957	916
Jalalandhar-1	889	958	878
Jalandhar-II	934	939	915
Hoshiarpur	**961**	**973**	**919**
Dasua	976	981	946
Mukerian	978	990	928
Hoshiarpur	939	956	907
Garhshankar	966	970	922
S.B.S. Nagar	**954**	**962**	**924**
Nawashahr	966	976	933
Balachaur	929	935	898
Fatehgarh Sahib	**871**	**884**	**841**
BassiPathana	889	885	902
Fatehgarh Sahib	889	887	896
Amloh	835	870	794
Khamanon	898	900	876
Ludhiana	**873**	**897**	**857**
Samrala	905	906	899
Khanna	894	899	890
payal	876	892	813
Ludhiana-east	854	877	851
Ludhiana-west	896	900	886
Raikot	899	901	894
Jagraon	906	908	897
Moga	**893**	**894**	**890**
Nihalsinghwala	890	890	887
Bhagapurana	893	892	897
Moga	895	897	890
Firozpur	**893**	**902**	**870**
Zira	915	917	910
Firozpur	878	898	842
Jalalabad	907	913	876
Fazilka	902	909	874
Abohar	883	881	887
Muktsar	**896**	**899**	**890**
Malout	901	901	882
Giddarbaha	899	898	903
Muktsar	894	897	891
Faridkot	**890**	**900**	**873**
Faridkot	889	900	871
Jaito	895	900	880
Bathinda	**868**	**874**	**858**
Rampuraphul	888	890	877
Bathinda	878	903	851
Talwandi Sabo	827	812	876
Mansa	**883**	**881**	**890**
Sardulgarh	896	894	908
Budhlada	887	886	890
Mansa	874	869	887
Patiala	**891**	**891**	**891**
Samana	893	885	910
Nabha	881	888	865
Patiala	891	895	888
Patran	902	904	898
Rajpura	891	884	909
Amritsar	**889**	**904**	**891**
Ajnala	899	902	876
Amritsar-I	895	909	833
Amritsar-II	880	884	879
Bababakala	912	918	872
Rupnagar	**915**	**919**	**904**
Anandpur Sahib	936	939	905
Nangal	947	966	916
Rupnagar	892	890	895
Chamkaur Sahib	892	888	906
Tarn Taran	**900**	**884**	**889**
Tarn Taran	902	900	913
Patti	891	895	869
Khadoor Sahib	916	916	NA
S.A.S.Nagar	**879**	**867**	**889**
Kharar	879	877	880
S.A.S.Nagar	887	861	901
Derabassi	873	862	883
Sangrur	**885**	**884**	**887**
Malerkotla	896	894	898
Dhuri	885	884	889
Sangrur	877	880	871
Sunam	876	874	882
Lehra	884	884	882
Moonak	899	893	916
Barnala	**876**	**881**	**864**
Barnala	872	877	864
Tapa	882	887	864

Source: Census of India, 2011.

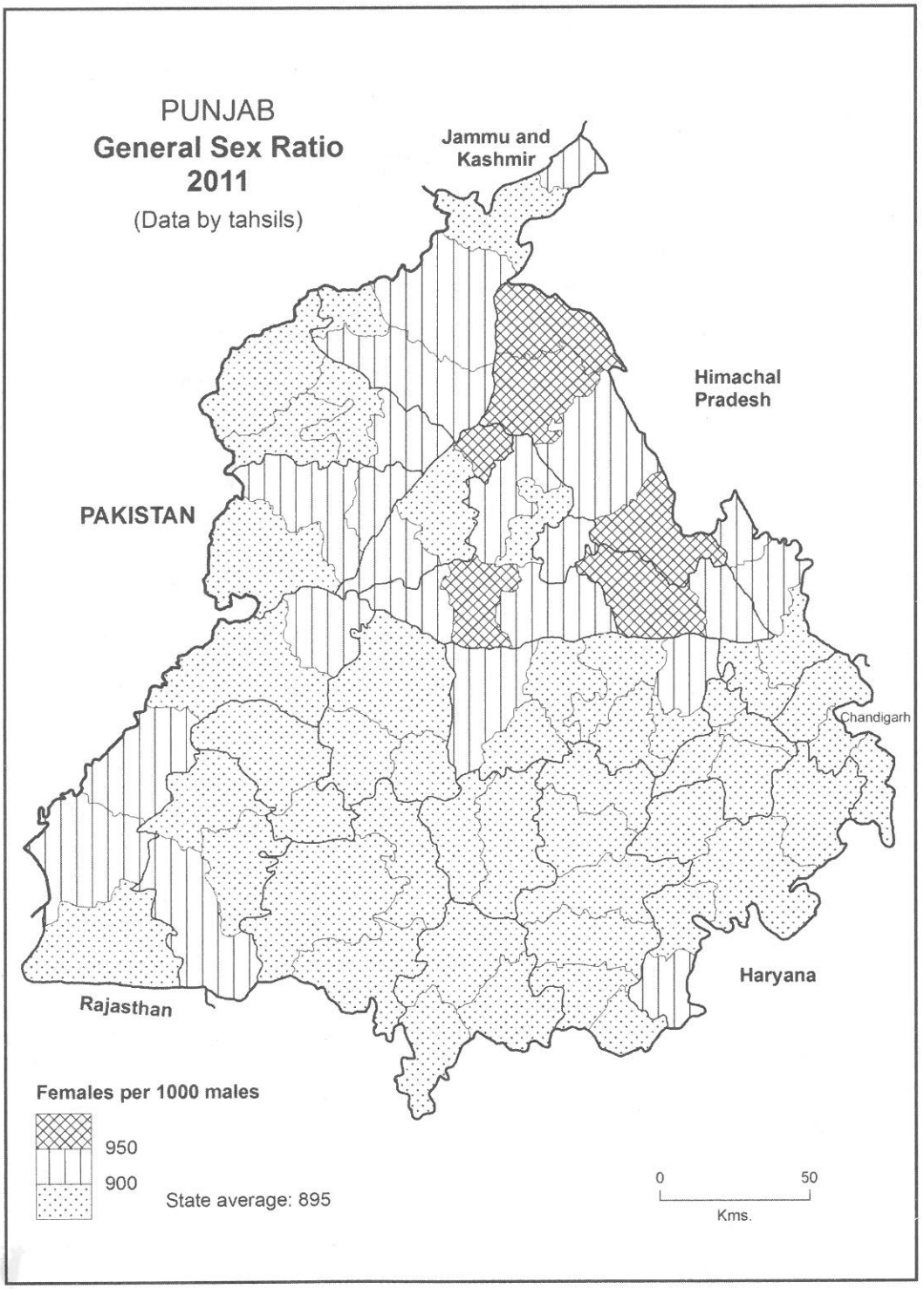
Table - 2
Punjab: Sex Ratio of Scheduled Caste Population (2011)

State/Distt/*Tehsil*	Total	Rural	Urban
Punjab	**910**	**913**	**900**
Gurdaspur	**904**	**907**	**894**
Dharkalan	934	935	923
Pathankot	901	908	887
Gurdaspur	915	914	921
Batala	894	897	885
Dera Baba Nanak	910	911	904
Kapurthala	**923**	**924**	**918**
Bhulath	933	938	900
Kapurthala	911	913	905
Sultanpur	922	923	911
Phagwara	936	939	930
Jalandhar	**933**	**949**	**909**
Shahkot	942	943	925
Nakodar	952	954	940
Phillaur	951	956	920
Jalalandhar-I	916	956	903
Jalandhar-II	933	931	943
Hoshiarpur	**961**	**968**	**925**
Dasua	967	969	955
Mukerian	966	977	920
Hoshiarpur	954	964	921
Garhshankar	964	970	910
S.B.S.Nagar	**957**	**962**	**931**
Nawashahr	962	969	865
Balachaur	939	942	923
FatehgarhSahib	**889**	**892**	**878**
BassiPathana	895	894	897
Fatehgarh Sahib	891	886	910
Amloh	871	883	838
Khamanon	914	912	931
Ludhiana	**893**	**902**	**879**
Samrala	909	908	913
Khanna	899	900	898
payal	894	901	856
Ludhiana-east	872	887	866
Ludhiana-west	908	907	911
Raikot	905	901	918
Jagraon	908	908	915
Moga	**889**	**888**	**890**
Nihalsinghwala	91	893	858
Bhagapurana	881	880	892
Moga	890	890	8627
Firozpur	**921**	**924**	**908**
Zira	923	923	923
Firozpur	921	928	896
Jalalabad	932	934	911
Fazilka	927	929	909
Abohar	894	887	912
Muktsar	**903**	**903**	**905**
Malout	904	906	895
Giddarbaha	907	903	927
Muktsar	900	899	904
Faridkot	**899**	**896**	**906**
Faridkot	898	893	911
Jaito	900	904	887
Bathinda	**901**	**900**	**905**
Rampuraphul	894	893	903
Bathinda	909	912	905
Talwandi Sabo	889	883	906
Mansa	**899**	**898**	**907**
Sardulgarh	906	904	931
Budhlada	901	900	912
Mansa	893	891	900
Patiala	**903**	**900**	**912**
Samana	908	905	918
Nabha	896	890	921
Patiala	905	905	905
Patran	915	915	916
Rajpura	895	889	927
Amritsar	**899**	**904**	**891**
Ajnala	904	906	890
Amritsar-I	902	903	897
Amritsar-II	889	889	890
Bababakala	916	916	918
Rupnagar	**918**	**916**	**924**
Anandpur Sahib	939	941	924
Nangal	940	945	935
Rupnagar	903	897	917
Chamkaur Sahib	905	902	923
TarnTaran	**900**	**899**	**905**
Tarn Taran	897	895	916
Patti	897	897	897
Khadoor Sahib	909	909	NA
S.A.S.Nagar(Mohali)	**890**	**887**	**896**
Kharar	897	893	902
S.A.S.Nagar	879	879	880
Derabassi	892	886	904
Sangrur	**890**	**885**	**909**
Malerkotla	903	901	914
Dhuri	883	879	902
Sangrur	887	879	907
Sunam	883	877	901
Lehra	886	883	900
Moonak	906	894	948
Barnala	**890**	**889**	**893**
Barnala	894	890	901
Tapa	885	888	872

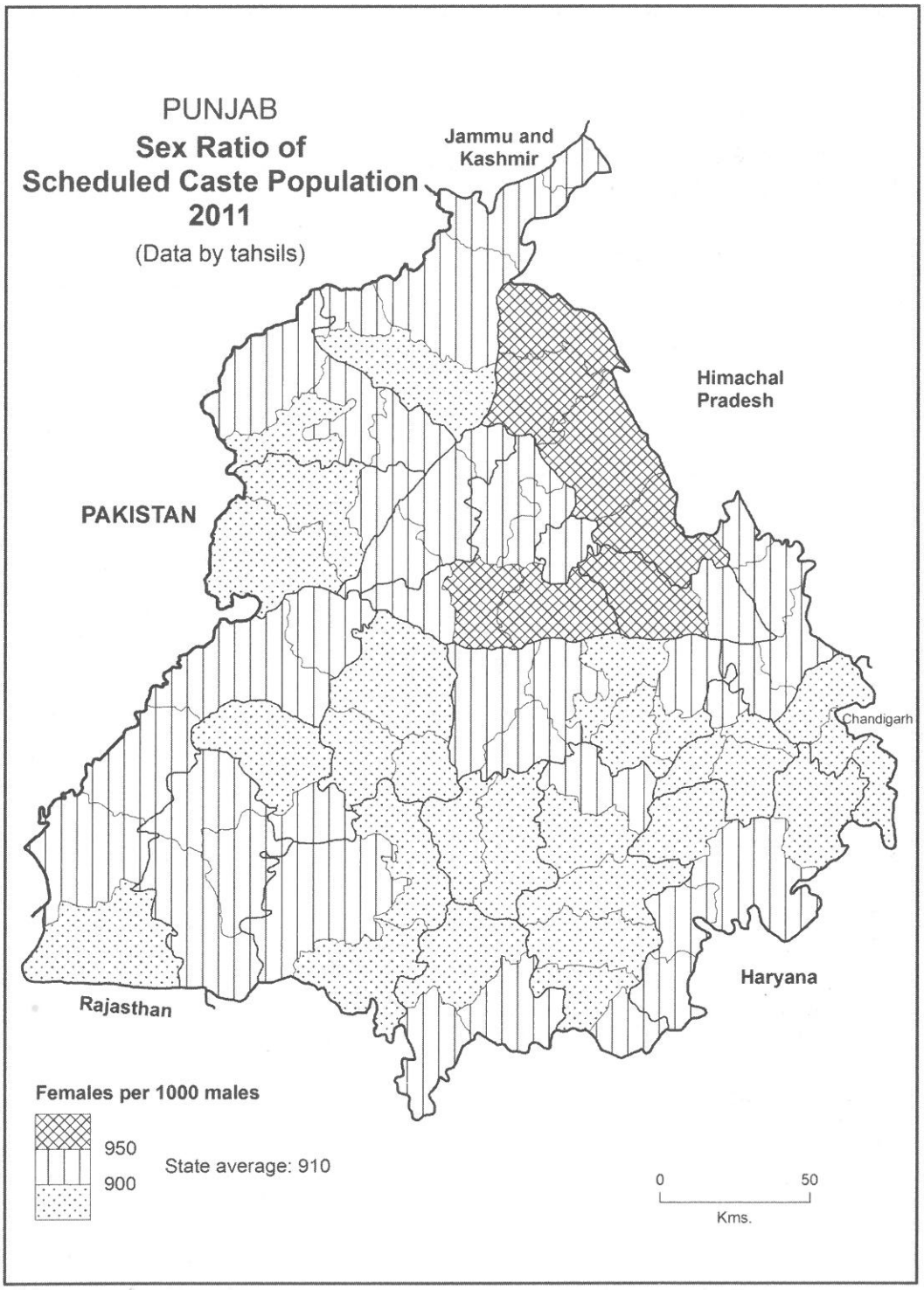
Source: Census of India, 2011.


PUNJAB
Administrative Divisions
2011
Jammu and Kashmir
Himachal Pradesh
PAKISTAN
Haryana
Rajasthan
Dhar Kalan
Pathankot
Gurdaspur
Dera Baba Nanak
Mukerian
Ajnala
Batala
Dasua
Amritsar
Amritsar-I
Amritsar-II
Baba Bakala
Hoshiarpur
Bhulath
Tarn Taran
Khadur Sahib
Kapurthala
Jalandhar-II
Jalandhar-I
K
Nangal
Patti
Sultanpur Lodhi
Phagwara
Garhshankar
Anandpur Sahib
Nakodar
Nawanshahr
SBS Nagar
Shahkot
Balachaur
Firozpur
Zira
Phillaur
Rupnagar
Ludhiana
Ludhiana (East)
Ludhiana (West)
Samrala
Chamkaur Sahib
Moga
Jagraon
Khamanon
Kharar
SAS Nagar
Chandigarh
Jalalabad
Faridkot
Raikot
Payal
Khanna
Bassi Pathana
Fatehgarh Sahib
SAS Nagar (Mohali)
Bagha Purana
Nihal Singhwala
Amloh
Muktsar
Malerkotla
Rajpura
Dera Bassi
Jaitu
Dhuri
Nabha
Fazilka
Barnala
Tapa
Patiala
Gidderbaha
Bathinda
Rampura Phul
Sangrur
Abohar
Malout
Sunam
Samana
Mansa
Talwandi Sabo
Lehra
Patran
Budhlada
Sardulgarh
Moonak
Boundaries:
International
State/U.T.
District
Tahsil
Headquarters:
State/U.T.
District
Tahsil
K - Part of Kapurthala
0
50
Kms.

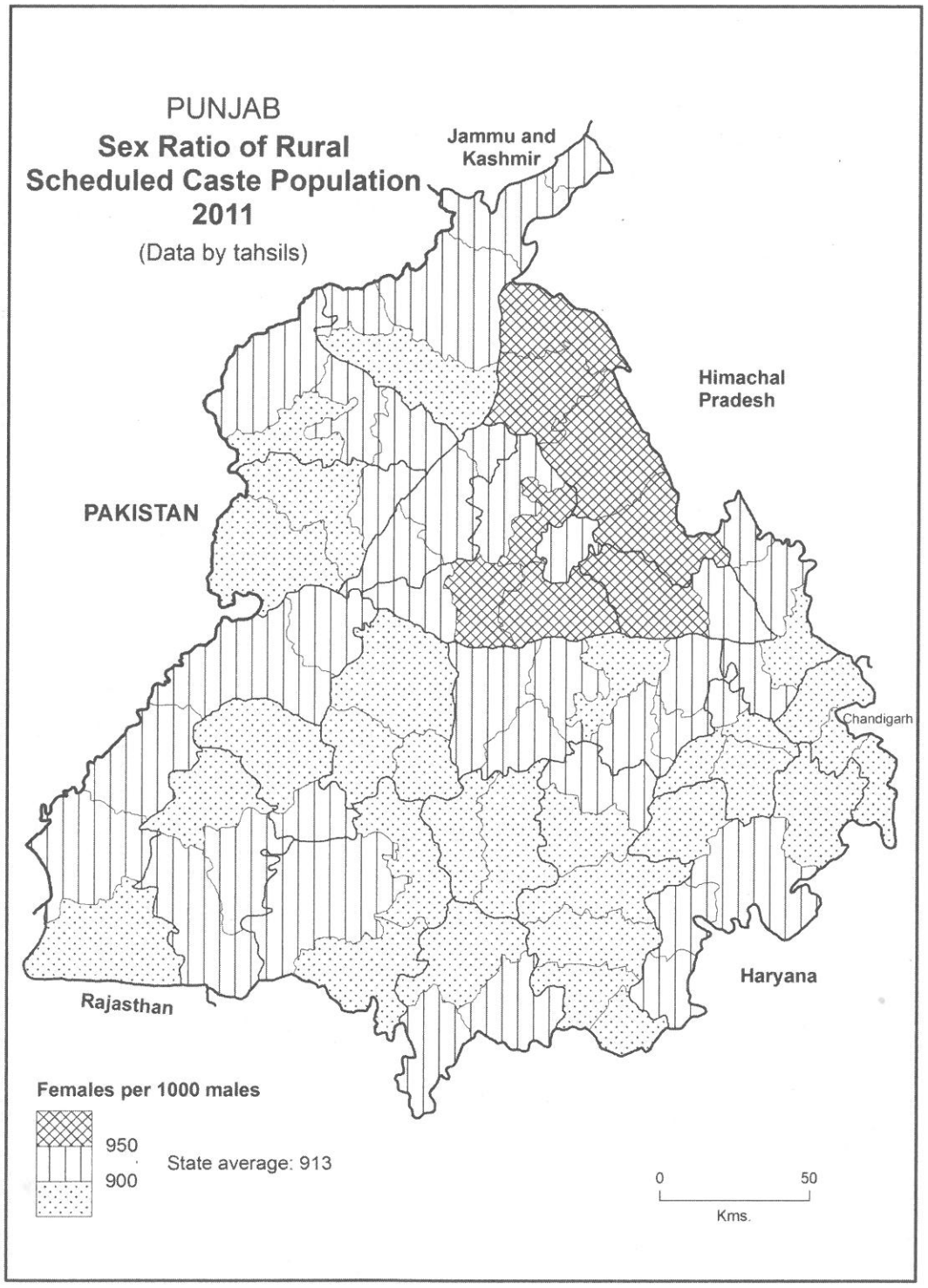
Map 1


PUNJAB
General Sex Ratio
2011
(Data by tahsils)
Jammu and Kashmir
Himachal Pradesh
PAKISTAN
Chandigarh
Haryana
Rajasthan
Females per 1000 males
950
900
State average: 895
0
50
Kms.

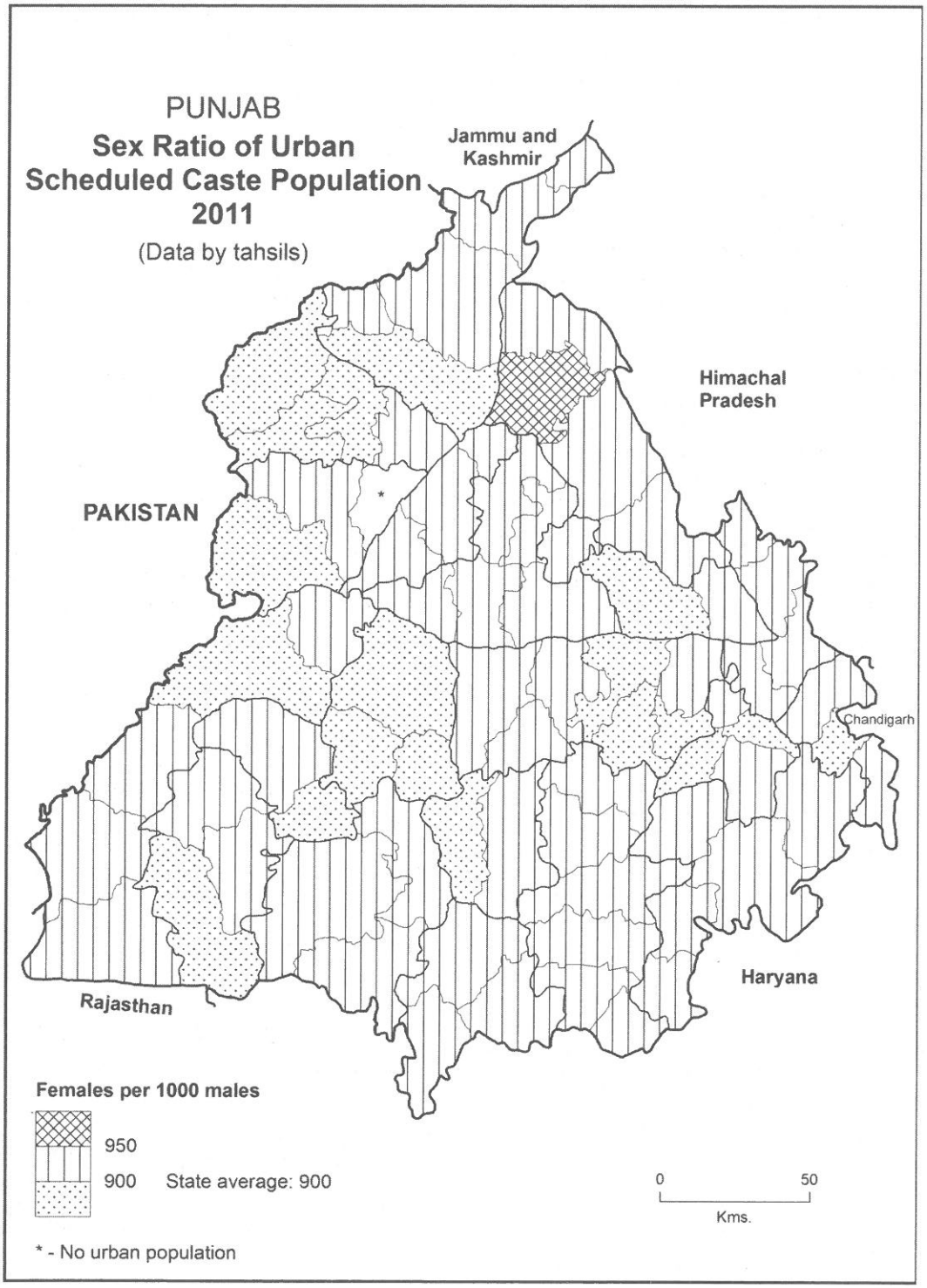
Map 2


PUNJAB
Sex Ratio of
Scheduled Caste Population
2011
(Data by tahsils)
Jammu and
Kashmir
Himachal
Pradesh
PAKISTAN
Chandigarh
Haryana
Rajasthan
Females per 1000 males
950
900
State average: 910
0
50
Kms.

Map 3


PUNJAB
Sex Ratio of Rural Scheduled Caste Population 2011
(Data by tahsils)
Jammu and Kashmir
Himachal Pradesh
PAKISTAN
Chandigarh
Haryana
Rajasthan
Females per 1000 males
950
900
State average: 913
0
50
Kms.

Map 4


PUNJAB
Sex Ratio of Urban Scheduled Caste Population 2011
(Data by tahsils)
Jammu and Kashmir
Himachal Pradesh
PAKISTAN
Chandigarh
Haryana
Rajasthan
Females per 1000 males
950
900
State average: 900
0
50
Kms.
* - No urban population

Map 5

Spatial Patterns

On the basis of sex ratio of scheduled caste population, various *tehsils* in the state have been classified into the following three categories (Map 3):

(a) Areas with relatively high sex ratio (more than 950 females/1000 males);

(b) Areas with moderate sex ratio (between 900 to 950 females/1000 males);

(c) Areas with relatively low sex ratio (less than 900 females/1000 males).

(a) Areas with relatively high sex ratio (more than 950 females/1000 males): Only nine percent of the total *tehsils* of the state recorded relatively high sex ratio among the Scheduled Caste population. All these *tehsils* belong to Doaba region. Out of these seven tehsils Dasua tehsil of Hoshiarpur district recorded the highest number of females per thousand males i.e. 967 closely followed by Mukerian (966), Garhshanker (964), Nawanshahr (962), Nakodar (952) and Phillaur (951). On the other hand the overall sex ratio of Mukerian was twelve points higher than that of scheduled castes. The *tehsils* of Dasua (976), Bholath (973), Garhshanker (966) and Nawanshahr (966) also recorded relatively high sex ratio for total population as compared to that of the scheduled castes (Tables 1 and 2).

Eight *tehsils* recorded a relatively high sex ratio of scheduled castes as whereas the sex ratio of eleven *tehsils* in the case of general population were high (Maps 2 and 3). Mukerian *tehsil* of Hoshiarpur district recorded the highest value (977) for scheduled castes whereas the value for overall rural sex ratio for this *tehsil* was thirteen points higher (990 females/1000 males) than the scheduled castes. The average value for the state in case of rural sex ratio of scheduled castes was relatively higher (913) than the general sex ratio (907).

Only one *tehsil* of the study area recorded a relatively high sex ratio i.e. Dasua with 955 females per thousand males among the urban scheduled castes. The average value for the state in this regard was 900 (Map 5). Interestingly the general sex ratio of total urban population was 25 points less than that of the urban scheduled castes in the state. Tables 1 and 2 show that in all the cases i.e. total, rural and urban the sex ratio of the scheduled castes has been higher than that of general population. It is a well-established fact that higher castes historically have been more prone to sex selection (Larsen and Kaur, 2013, p.45). Son preference among the upper castes in Indian society was a common practice (Chakraborty and Sukku, 2010, p.998). Higher castes were known for female infanticide even before the technology became available (Panigrahi, 1972, p.18). If the son-preference mindset continues and it becomes easier to pursue this goal with the help of modern advancement in pre-natal sex determination technologies such as ultrasound, sonography etc., then child sex ratio would continue to decline. The fact that the country's well to do class of people, irrespective of its region, religion or ethnicity is ahead in female foeticide weakens the argument often forwarded that female foeticide would stop with the spread of education and higher incomes (Gill, 2013, p.291). The hope of expected higher sex ratio with the rising levels of general awareness, literacy and education and income was commonly cherished by academicians and researchers. Surprisingly it did not happen as was expected, rather it is clear now that the above mentioned factors showed negative correlation in this regard.

It is quite obvious that propagation of modernity has had only a little ability to impact the social status of women (Wishwanath, 2007, p.285) at least in the countries of the developing world, particularly in the Indian context. Much of scholarly research on this issue suggests that women empowerment through education and paid work participation is important for shifting the balance of parental preference toward daughters. However, anticipated outcomes not- withstanding, recent census data continues to show women's survival disadvantage, even with higher educational achievements, much to the frustration of scholars and policy makers alike (Sen, 2001, p.6). According to the Hindu customs sons provide the continuation of family names and only sons can perform the funeral rites of their parents. In most patriarchal families, only sons can inherit property and women have no property rights. North India is characterized by a rigid patriarchal society in which a man who does not have a son would rather adopt one than to allow the daughters to inherit his

property (Gupta, 2003, p.176). Additionally the upper castes among the Hindus are more likely to engage in son preference while the lower castes who are poor and do not own land value women and girls for the labour they provide in rural areas (Liddle and Joshi, 1986, p.12). Among the scheduled castes the landless may be correlated with relatively less son preference and lesser gender inequality (Kishor, 1993, p.254). Punjab is not an exception in this regard. The age old mindset for 'son preference' has started changing gradually even if the change is not up to the desirable extent. However, gender-equality is an issue which has now become quite prominent in the minds of people in Punjab. The indication of equality by saying '*ladke ladki vich hun ki farak hai ?*' (What is the difference between son and daughter now?) is a welcome state of mind which promises better results in future.

Much of scheduled caste population in Punjab, as elsewhere in India, does not possess landed property which helps to change its mindset easily because the schedule castes were never bound with the notion of patriarchy. One of the grass root realities that has been observed in this region is that even among the people with landed property mindsets are changing due to the problems faced by old aged parents whose sons migrated to other countries and permanently settled over there. In most of the cases parents are not welcome in their families or those parents whose sons go abroad to earn their livelihood the daughters-in-law generally do not look after their in-laws properly in their old age. Then this duty is performed by daughter(s) of the family. It is gradually being realized that daughters are more caring as compared to the sons and daughters-in-law. Most of such cases were reported (Hindustan Times, July 12, 2014) in Doaba region known for considerable emigration of males. It strengthens the thinking of male-female equality that has led to relatively high sex ratio particularly in Doaba region. It is quite obvious among the scheduled castes. Additionally relatively more and early start of exposure of people in the defense services impacted the mindset of the people towards son-daughter equality. Relatively early start in education, particularly among the females in this region has made its own contribution in this regard.

(b) Areas with Moderate Sex Ratio (between 900 and 950 females/1000 males): Out of the 77 *tehsils* of Punjab, 41 *tehsils* had a moderate sex ratio of the scheduled caste population. In this category Shahkot *tehsil* of Jalandhar district reported the highest sex ratio (942), whereas only 22 *tehsils* displayed moderate sex ratio for the general population (Tables 1 and 2). Out of all the *tehsils* that fall in this category, in 13 t*ehsils* scheduled caste population was relatively ahead with more than 920 females/thousand males, whereas this number was eight in case of total population (Map 2). In both the cases, i.e. scheduled castes and general population, Doaba region displayed relatively high sex ratio. Out of eleven *tehsils* along the international border with Pakistan seven *tehsils* showed a moderate sex ratio of scheduled castes (Map 3) whereas only four *tehsils* were in this category in case of total population (Map 2).

Rural scheduled caste population in Punjab has shown a moderate sex ratio (900-950) in more than fifty percent of the *tehsils* of the state. A relatively high sex ratio within this category (more than 925 females per thousand males) were recorded in eleven *tehsils*. Table 2 reveals that the top three positions in this regard have been occupied by Nangal (945), Shahkot (943) and Balachaur (942). If we look at this phenomenon region wise, 67 percent *tehsils* of Majha region displayed a moderate sex ratio followed by Malwa and Doaba with 50 percent and 47 percent *tehsils* respectively. About 47 percent *tehsils* of Malwa region located along the interstate borders with Rajasthan and Haryana and about 56 percent *tehsils* located along the border with Himachal Pradesh and Jammu and Kashmir displayed a moderate rural sex ratio (Map 4). An obvious impact of socio-cultural interactions between different states can be observed on sex ratio of these areas.

As for as the sex ratio of urban scheduled caste population is concerned among the total 77 study units 56 witnessed a moderate sex ratio (900-950). Within this category ten *tehsils* showed relatively high values (between 925-948) in this regard. Moonak *tehsil* of Sangrur district recorded the highest sex ratio (948) in this category followed by Jalandhar-II, Nakodar, Nangal, Sardulgarh, Khamanon, Phagwara, Rajpura, Gidderbaha and Shahkot (Table 2 and Map 5).

Surprisingly the urban sex ratio for total population was moderate only in 22 *tehsils*. The region wise division for this attribute was twelve, eleven and two *tehsils* for Doaba, Malwa and Majha regions respectively. Only one tehsil, Tarn Taran, witnessed a moderate value in this respect (Table 1). Along the international border fifty percent *tehsils* recorded a moderate sex ratio of urban scheduled castes whereas the *tehsils* located along the inter-state boundaries with Rajasthan, Haryana and Himachal Pradesh showed a moderate sex ratio (895) except in Malout *tehsil* of Muktsar district (Map 5).

(c) Areas with Relatively Low Sex Ratio (less than 900 females /1000 males): Thirty eight percent *tehsils*, numbering 29, of the study area recorded a relatively low sex ratio of scheduled caste population (Table 2). Out of these twenty nine *tehsils*, twenty five were in Malwa and four belonged to Majha region. Interestingly not even a single *tehsil* of Doaba region recorded relatively low sex ratio among the scheduled caste population (Map 3). On the other hand, eighty four percent of the total *tehsils* of Malwa region recorded relatively low sex ratio for the total population (Table1 and Map 2). Late start in the field of education and emigration towards the advanced world and a greater incidence of dowry system in the Malwa region reflect their overall impact on sex ratio. In addition, relatively low literacy rates and low levels of education among the scheduled castes in the region contribute towards relatively low socio-economic development. Generally speaking a majority of these people borrow information from their surroundings which helps them for sex selective abortions. Ultimately it leads to a low sex ratio prevailing in the study area. Relatively less exposure, weak economic conditions and God fearing approach of majority of the illiterate scheduled castes may be mentioned as factors responsible for relatively high sex ratio. Additionally the economic value of women may be higher in low income families where women are compelled to engage in paid work (Mukherjee, 2013, p.8), which ultimately affects the sex ratio of the area.

Sex ratio of urban scheduled caste population for the study area was 900 (Table 2). Nineteen *tehsils* of the study area showed relatively low urban scheduled caste sex ratio of less than 900. Twenty six percent *tehsils* of Malwa region fall in low sex ratio of urban scheduled caste, whereas the percentage of *tehsils* in this regard was higher (50 percent) in the Majha region. Nawanshahr *tehsil* of S.B.S Nagar district of Doaba region recorded the lowest value (865 females /1000 males) for urban scheduled castes (Table 2 and Map 5). As far as urban sex ratio of total population is concerned fifty two *tehsils* of the study area recorded a low sex ratio i.e. less than 900 (Table 1). Personal observations suggest that dowry is not the only reason for sex selective abortions and son preference. It is the age old mindset of the people which compels them for this unfortunate decision. People do not feel satisfied and socially secure in the absence of a son. The parents in their old age do not prefer to live with their daughters because they feel out of place after shifting from their own home. The reasons of their hesitation for living with daughters are much deeper than their physical comfort at their own place. They feel emotionally distracted after getting uprooted from the place to which they were emotionally attached. They are convinced that it is the son who can provide social security to his sisters and parents.

Even though sex related abortions are illegal in India, their number has increased. Among the educated and wealthy people, sex selective abortions have increased significantly especially when the first born is a daughter (Jha, et al., 2011, p.1925). India's patrilineal traditions indicate that the son cares for his parents in old age and inherits property, while the dowries paid to marry off daughters can be expensive. The result is sex-selective abortion and an under investment in girls which badly affects the sex ratio and ultimately ends with gender imbalance. In this way son preference is the result of combined effect of several factors such as economic and socio-cultural utilities of sons, support in old age and their need in continuation of linage, inheritance and religious rituals (Gill, 2013, p.295). In other words sons are preferred because they act as boundary protectors and boundary expanders (Miller, 2001, p.1092). Despite the fact that Punjab is an economically advanced state, the status of women is not satisfactory. Consequently infanticide and neglect of girls are accepted social

norms. Son preference, infanticide, foeticide and sex selective abortions may be rational choices made by women who perceive their unborn daughter's lives to be mirror images of their own lives (Mitra, 2014, p.1033). It is an obvious fact that among those families where husbands are alcoholic or drug addicts, wives do avoid giving birth to a girl child fearing a terrible future for them. Such circumstances (undesirable social environment with domestic violence) force them for sex selection. Moreover, poor economic conditions prevailing in such families work in two ways; first, imaginary fear of economic affordability of girl child, and second, a ray of socio-economic security from a male child.

Summing up

The scheduled caste population of the state has relatively high sex ratio in all segments i.e. total, rural and urban as compared to that of general population. It has been observed that geographical regions with relatively small landholdings witnessed relatively high sex ratio among the scheduled castes as well as the general population. In comparison, areas with relatively large landholdings have relatively low sex ratio. *Tehsils* adjoining the state capital Chandigarh witnessed relatively low sex ratio for scheduled caste population along with total population. Gender imbalance among the rural masses of Malwa region is an alarming indication for a grim future. It may give birth to several social problems. It may impact the relatively poor states of our country in an adverse manner as it is quite well known that poor parents often sell their daughters to rich people from other states. This practice may show an upward trend in the times to come given a quite low sex ratio in rich states like Punjab. It has been reported that Haryana is observing such a practice. Villages under the jurisdiction of 'Satrol Khap' has many youths who have married girls from Bihar, Jharkhand, Kerala, Madhya Pradesh, Uttar Pradesh and Assam (Hindustan Times, July 15, 2014). In this regard three things are quite obvious: (i) girls from far off places have to struggle hand for adjustment in an alien culture which is predominantly patriarchal; (ii) very poor parents have to sell off their daughters not only because they cannot afford dowry but also because the money they earn by selling their daughters is a source of some financial security for them also; and (iii) such matrimonial alliances lead to uprootings, rerootings and cultural melting-pot situations. The age old mindset of male domination along with the desire for son among the masses, particularly in areas with dense population and limited resources, pressurize the people to limit their family size norms. Generally 'smaller family size norms' and desire of a son do not go together comfortably, particularly when the first child is a girl child. In such situations, to ensure their assumed economic and social security, the malpractice of female foeticide is quite common among the masses. It ultimately ends in gender imbalance among all the social groups. In future years, better education and a higher standard of living would imply better maternal care and health, ensuring the survival of more male fetuses. Increasing prosperity and resource availability would also facilitate the affordability of sex selection technology. Both factors could work to lower sex ratio at birth and child sex ratios. Manifestation of a shortage of women could result in rising number of incidents of trading girls and women and a further commodification and devaluation of women (Dreze and Khera, 2000, p.342).

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THE CITY ALIVE: HUMANISING URBAN GEOGRAPHIC RESEARCH IN INDIA

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Abstract

Urban research is without doubt one of the most fecund major themes within Geography and it stands to reason since the city is in essence a material space. Urban research the world over has seen a sea change in terms of perspective, approach and methodology of studying the city. The city now is seen as a dynamic entity which has a distinct spatiality constructed through and manifest in both its social and spatial dimensions. This has brought the city as it is 'lived' and 'experienced' by its inhabitants into focus. The present paper through a comparison of research trends in Indian and Western Urban Geography builds a case for humanising research in urban geography through the acceptance of current, socially relevant perspectives on the city and the use of qualitative methodologies to study the city.

Keywords: Urban, City, Research trends, Spatial, Cultural, Dialectics

Introduction

Geography with its focus on space has a special bond with the study of cities. Cities are essentially spatial entities where people converge and cultures come alive, cultures are built, represented and eroded. Cities are the locales where humans play out their perceptions, emotions and reactions. Cities are in essence the spatial personification of a variety of human interactions not just with the environment but among humans themselves as well. The manner in which humans inhabit, live, experience and negotiate a city lends a specific spatiality to the city. The city is a built environment that has the power to influence human behaviour and direct social dynamics. The "social" and the "spatial" play out a dialectical relationship manifest in the person of the city.

The above perspective on cities developed as a result of the 'spatial' and 'cultural' turns (Philo, 2000; Valentine, 2001; Warf and Arias, 2009; Banerjee-Guha, 2011) that took place across the entire spectrum of social sciences during the late 1980s and early 1990s. Faced with the twin challenges of defending and retaining its spatial preserve and adding a cultural flavour to its body geographic research at the global level saw a tilt towards showcasing the human element in cities (Jacobs, 1993). The reigning paradigm of postmodernism which advocates pluralism, heterogeneity, uniqueness and particularity (Dear, 1988) has further buttressed research of this nature. Cities today are no longer viewed as anonymous neutral spaces. Rather they are seen to have a spatiality that influences the social dynamic and is in turn influenced by it.

It is from this vantage point that the present paper views urban research in India. The main objective is to understand how well Indian geographers have responded to this changed perspective on and understanding of cities. This has been done by first tracing recent trends in urban research at the global level, reviewing work by Indian geographers particularly in the last

quarter of a century and finally building a case for paying greater attention to the human element in urban geographic research in India. The last in particular is targeted at population geographers whose research foci find not a small intersection with urban research.

A Century of Theoretical and Methodological Developments in Urban Research

The last century has been a dynamic one in terms of historical events. It saw the rise and demise of imperialism and colonialism, the rise and probable demise of socialism, the establishment of the modernization project and then the move towards postmodernism. The ideologies of Capitalism and Marxism have survived the demise of both Imperialism and Socialism and Postmodernism has brought its own set of implications. All of these have in one way or the other been reflected in research in urban geography. A brief description of the past trends in the study of cities is given in this section.

Following Pattison (1964), Kaplan *et al.*, (2009) have traced four traditions of studying cities that remained in vogue from 1900 to 1970: (i) human-environment tradition that dominated till early 1920s, (ii) regional tradition that held sway till 1950s, (iii) physical geography tradition that became popular in the 1970s, and (iv) the spatial tradition that dominated geographic research from the 1950s onwards and is going strong even today aided by methodological tools such as GIS.

Criticised for its treatment of cities as inanimate objects and humans as economic rational beings and for over-emphasizing distance as the major constraint to spatial behaviour, the spatial tradition during the sixties gave way to the traditions of Behaviouralism (White and Gould, 1974) and Humanism (Tuan, 1976).

The end of the seventies saw the rise of Marxism and Structuralism in geography. These promoted a historico-materialist approach and mainly focussed on the political-economy of cities, class struggles and resultant inequalities in the cities. This was manifest in the work of Castells (1977) and Harvey (1973, 1985). This was also a time when social theory gained importance within urban geography. Social theorists viewed cities "as social and cultural in origin and political in intent" (Peet, 1998, p. 6) and argued that urban space is socially constructed.

The close of the last century and the beginning of the new century added a variety of flavours to urban research. These included: a feminist interpretation of cities; cities in the age of globalisation; cultural processes as manifest in the cityscape; and the use of postmodern and poststructuralist methodologies and perspectives for the study of city. All these approaches focus on the everyday human experiences in the city.

Feminist geographers argue that space reinforces and reflects gender norms of a society and assert that women perceive and experience spaces differently from men. Effects of globalization on cities are increasingly being studied especially by Marxists with 'global cities' (Sassen, 1991, 2002) and 'world cities' (Knox, 2002) becoming the focus of research. Urban cultural geographers focus on how meanings are enshrined in the landscapes, issues of power relations, spatial politics and processes by which representations are produced (Leitner, 1992). Semiotics was used to study urban landscapes and focus was placed on "the discourses, symbols, metaphors and fantasies through which we ascribe meaning to the modern experience of urban living" (Donald, 1992, p. 427). Research with a bottom-up approach which focussed on everyday life, locality and local perceptions (Holt-Jensen, 1999) and micro-scale studies became more visible.

With the advent of postmodernism qualitative research such as ethnography and discursive and representational analyses became fashionable in studying cities with a special focus on everyday life (Jacobs, 1993; Holt-Jensen, 1999; Dear, 2000).

Poststructuralists focussed on power

relations and argued that power resides in codes, simulations and the media (Peet, 1998). It was recognised that cities create, represent and express meanings and these meanings may be contested. Urban spaces are often expressions of dominant groups but the subordinate groups often express themselves in cities through resistance, contestation, confrontation or symbolic take-over of urban spaces.

All of the above trends, focussed on not just cities as experienced, viewed and negotiated by their populations but also looked at and acknowledged the multiplicity of perspectives and interpretations that existed with regard to the city. The city as experienced by the 'subaltern' gained representation through these trends in urban research. All four perspectives whether feminist, Marxist, postmodern or poststructuralist critiqued and sought to unravel the power structure and dominant discourses on cities to replace them with the voice of the hitherto unrepresented subaltern. In essence urban research in the new millennium at the global level has moved from the general to the particular and from the positivistic to the humanistic. How well urban research in India has responded to this challenge remains to be seen.

Urban Geography in India: An Overview

The present section provides a brief overview of the trajectory of research followed by urban geography within India. The effort will be to understand the manner in which the sub-discipline has evolved, the issues and themes that have been focussed upon and the research paradigms in terms of research style and perspective that have governed these changes. Based on a review of review exercises this section views urban research during the last century. Several geographers have conducted reviews of research in the field of urban geography in India. These include scholars who have independently carried out reviews (Misra 1989, 1990a; Thakur and Parai, 1993) or have been commissioned by academic organisations such as ICSSR (Gosal, 1972; Krishan, 1979) and IGU (Misra, 2004, 2008; Markandey, 2012). Indian urban geography has also been the focus of study by foreign geographers (Hoselitz, 1962).

The main themes that Indian urban geographers focussed on till 1990s (Gosal, 1972; Alam, 1984; Misra, 1990a) include: (i) patterns and trends of urbanization, (ii) land use, morphology and evolution of towns, (iii) city region, hinterland and hierarchy of urban settlements, (iv) functional classification of towns, (v) urban planning, policies and administration and (vi) social and economic structure of towns. Table 1.1 shows the major research trends that dominated Indian urban geography during the last century.

It would appear that the four traditional approaches to studying geography as identified by Pattison (1964) have left their mark on Indian urban geography as well. It is a different matter that their appearance on the horizon of urban geographic research occurred after a time lag of almost two decades when compared to the Western world. It was therefore only as late as the 1980s that Indian geographers started moving beyond spatial analysis towards studies in behavioural geography.

Urban research in behavioural and humanist tradition focussed on analysing spatial decisions and studying perceptions of urban environment (Sundaram, 1984; Desai, 1980, 1982, 1985; Pannerselvam, 1989). Urban cultural geography also received an impetus with geographers focussing on the evolution of cultural landscapes of individual cities (Singh, 1985, 1987; Dhussa and Bhardwaj, 1988). The influence of endogenous forces such as physiography and climate and exogenous forces like administrative decisions and transportation networks on the spread of urbanisation were also studied (Sharma, 1981) Social and environmental issues such as urban crimes (Dutt and Venugopal, 1983) and pollution (Desai, 1982; Noble, *et al.*, 1985) were also studied. Traditional themes that continued to remain in fashion even in this decade were urban historical geography (Ramachandran, 1989; Kosambi and Brush, 1988), model building to

Table - 1
Indian Urban Geography: Research Trends

Tradition/Paradigm	Decade	Themes
Man-land Relationship	Till early 1950s	Physical environment especially site, situation, origin and historical evolution of towns.
Regional Studies/ Areal Differentiation	1950s and 1960s	Trends and patterns of urbanisation in different regions, case studies of individual cities, functional typology, morphology.
Spatial Analysis	1970s	Statistical analysis of urban spatial patterns, development of deterministic models, rural-urban relationships, testing of western theories such as primate city, rank-size rule.
Behaviouralism, Humanism	1980s and 1990s	Analysis of human behaviour, spatial preferences and perception of urban landscapes, social and environmental issues such as urban housing, slums, poverty, crimes, pollution, drainage problems, evolution of cultural landscapes.

Source: Compiled from review of literature.

study the spatial structure of cities (Dutt, 1983) and studies on individual cities with researchers focussing on the change in population density with respect to city's morphology (Dutt, *et al.*, 1984).

The nineties saw the implementation of the New Economic Policy, and the passing of the 74th Constitutional Amendment. Both these factors added a new perspective to cities and urban research. Recognised as an "engine of growth" urbanisation was seen as a phenomenon to be promoted and urban management became the new "catchword". Thus one encounters research on urban development policy (Kant, 1993), urban-rural relations (Krishan, 1991) and urban management with researchers studying pricing of water supply (Krishan, 1990; Krishan, *et al.*, 1998), drainage problems (Singh and Rahman, 1998a), residential mobility (Kahlon, 1998), housing (Misra, 1990b; Sharma, 1995; Rana and Thakur, 1996; Singh and Rahman, 1998b), urban poverty (Nath, 1994; Banerjee-Guha, 1994), slums (Dutt, *et al.*, 1994) and relationship between health and household environment (Singh, *et al.*, 1996). Most of these studies were carried out using quantitative analysis of primary and census data. A few studies in the tradition of urban cultural geography were also conducted. The cultural landscapes of cities were studied (Singh, 1994a, 1994b; Singh and Malville, 1995), social areas within cities which had resulted from the inter-play of social and cultural forces were studied (Sharma, 1992b) and imperial urban landscapes in India were subjected to discourse analysis (Kenny, 1995, 1997; Blunt, 1999). Most such studies however were done by western geographers.

Throughout the eighties and the nineties the intersection of population studies with urban research within geography remained strong. Geographers focussed on the relationship between population dynamics such as migration and urban growth (Rana and Krishan, 1981; Bala, 1987) during the eighties and continued to focus on processes, trends and patterns of macro-level urbanization (Shukla and Berry, 1991; Sharma, 1992a; Diwakar, 1993; Kant, 1995) in the nineties. In fact, a research theme that seems special and specific to Indian urban geography is the growth dynamics of the Indian urban population. Whether this is because of the vast availability of census data or the fast pace of urban growth which comes with its own issues is a moot points. The looming numbers and the distortions within the urban system also promoted research on urban management related themes.

Beyond the four traditions, geographers in India responded only partially to the behavioural approach in geography. Other than that one finds hardly any evidence of research from the Marxist,

humanistic, structuralist, poststructuralist or postmodern perspective. It would appear that these research waves, current in the West during second half of the last century, failed to wash the shores of Indian urban geography.

Indian Urban Geography in the New Millennium

A comprehensive review was carried out with the objective of identifying issues that urban geographers are currently addressing and the tools they are employing. Research papers published during the last fifteen years have been reviewed. Only such papers have been listed which have focussed on Indian towns/cities and which were published either in geographic journals and edited books or by geographers in other journals. The recurrent research themes have been classified under four major heads.

I. Urban Growth Dynamics

Urbanisation occurs through change in population structure and through physical expansion of urban centres. Several geographers have focussed on the trends and patterns of urbanisation at various geographic scales. Studies have been conducted at district level (Tripathi, 2008), at state level (Singh, *et al.*, 2008; Sharma, 2008; Gill, 2013), at national level (Khan, 2008, 2009; Basak, 2009; Singh, 2013; Islam and Khan, 2014), at international level (Yeung, 2011) and at global level (Aggarwal, 2014). Most of these are urban population based studies and have analysed census data from the spatio-temporal perspective. They have also focussed on regional imbalances that exist in India with respect to urbanisation.

The demographic character of Urban India has endured as a focus of research. Indian geographers have studied spatial pattern and composition of urban population (Singh and Chaturvedi, 2009; Gill and Bhardwaj, 2010), urban-ward migration (Khairkar, 2001; Kaur, 2004; Shivalingappa, 2007; Kaur, 2009; Khan, *et al.*, 2009, 2011; Longchar, 2014), socio-economic characteristics of floating labour (Rayaz, 2010), urban literacy (Lonavath and Kumar, 2015) and impact of the city on rural population growth in the urban periphery (Sharma, 2007; Sharma, *et al.*, 2011), and the population growth in cantonment towns (Bali, 2010). Most of the studies are solely based on secondary sources particularly census data with only a few studies corroborating it with primary data.

Researchers have also dealt with the morphological evolution of individual cities using a historico-geographic perspective (Sharma, 2004; Maurya, 2009; Gangawata and Khan, 2009; Kumar and Jaglan, 2009; Tiwari, 2013). Such studies are descriptive and aimed at studying the transformation of city's morphology using gazetteers and city development plans. Sharma (2004) has emphasised the importance of socio-economic and cultural environments as well as social context in the analysis of urban morphogenesis and has argued that the built environment is a symbolic representation of the social order. His call, however, was something of a cry in the wilderness which not many geographers responded to.

There has been a spurt of research done on urban growth and the related urban land use and land cover change. Most researchers have focussed on the relationship between population growth and land use change within the city (Singh and Kaur, 2008a; Khandelwal, 2009; Kumar, 2011; Saini and Kaushik, 2013), causes and impact of urban expansion (Saini, 2008; Singh and Kumar, 2012; Kuchay and Bhat, 2014), transformation of rural landscape at the urban fringe (Singh and Siddiqui, 2008; Ramesh, 2011, Sharma, *et al.*, 2011) and economic benefits of land use change (Bali, 2014). Researchers have also attempted to quantify urban sprawl using remote sensing data (Bhatta, *et al.*, 2010a; Bhatta *et al.*, 2010b). Such studies have made use of secondary statistical data and have used GIS to predict the direction of future growth of the city. Most of these studies conclude that urban growth has led to encroachment on agricultural land which now show signs of urban land uses. Sharma (2011) while dwelling on emerging issues in urbanisation in India has stressed the need to look at the process

of urbanisation in terms of its constitutive facets.

II. Urban Environment

There has been a lot of literature generated on the physical environment of the city and its transformation. Most studies are focussed on impact of urbanization on the environment (Tyagi, 2005; Banerjee, 2006; Singh and Kaur, 2008b; Kahlon, 2014a), urban disasters (Kewalramani, 2006; Malini, *et al.*, 2009), urban green spaces (Sharma and Jalan, 2013), air quality and pollution (Kahlon and Brar, 2006; Singh, *et al.*, 2008; Sharma and Chauhan, 2009; Sahay and Ranjana, 2009; Singh and Jamal, 2013; Kaneez-e-Ibrahim, 2014) and urban heat island effect (Singh and Nath, 2012; Mahesh, *et al.*, 2012; Pandey, 2013). Most of these studies have made use of satellite imageries and GIS and are again based solely on secondary data.

III. Urban Management

Considerable amount of research has been done on urban infrastructure management such as housing, transportation, sanitation, waste disposal and the problems related to these. Urban housing with particular reference to inclusivity (Markandey and Srinagesh, 2013; Markandey, *et al.*, 2016), urban transportation problems (Ryngnga and Kharsyntiew, 2008; Fakhruddin and Alam, 2009; Jasrotia, 2011; Raj and Singh, 2011; Bhattacharjee, et al., 2012; Srinagesh, *et al.*, 2014), inter-urban accessibility (Pan and Chakraborty, 2009), water issues (Rayaz and Singh, 2009; Srinagesh, *et al.*, 2015) and waste management (Singh and Mohammad, 2009; Grace, 2010; Mohammad, 2011; Yadav, *et al.*, 2014; Srivastava, *et al.*, 2014; Mohammad, 2014) have received a lot of attention. Singh (2009) has critically analysed the impact of 74th Constitutional Amendment Act on urban governance through a case study of Madhya Pradesh. He collected primary data through structured interview schedules and has focussed on the initiatives taken to decentralize urban governance and the difficulties faced by the officials. Researchers have also focussed on the causes behind the emergence of slums (Datta, 2010), the socio-economic conditions and quality of life of slum dwellers (Sahay, 2006; Kaushik and Sharma, 2010; Jha and Tripathi, 2014; Deshmukh and Khadke, 2015), child labourers from slums (Sajjad, *et al.*, 2011; Sumitra and Chandra, 2014), social structure of slums and rehabilitation sites (Ayyar and Khandare, 2013), slum ontology (Shekhar, 2014), slum tourism (Meschkank, 2011) and slum typology (Shekhar, 2012). Most of the aforementioned researchers have also tried to understand the causes behind migration of slum dwellers. A lot of these studies are based on statistical analysis of primary data which has been supplemented with secondary data. Shekhar (2012) has attempted to generate a typology to gain a better understanding of slums in Delhi. He has based this typology on their location and access to amenities.

The application of remote sensing and GIS to enhance decision-making for solving urban problems has received considerable attention. Such studies have shown the importance of satellite imageries and GIS in development of city sanitation plans (Phansalkar, 2013), traffic management (Raj and Singh, 2011), site suitability analysis (Lallianthanga and Sailo, 2013), land use/land cover analysis (Jalan, 2010; Kumar, 2011; Jaybhaye and Mundhe, 2013; Srinagesh and Baktula, 2014), urban growth analysis (Kumar et al., 2015; Narayanan, 2015) and slum monitoring (Shekhar, 2014).

IV. Globalisation, Development and Urbanisation

Scholars have also focussed on the relationship that exists between globalisation, urbanisation and development. Studies have been conducted on the impact of urban influence on the development of the neighbouring rural settlements (Ali and Varshaney, 2012; Sharma and Sen, 2015), gender disparity in terms of development (Bano and Mishra, 2014), development-induced displacement which leads to forceful eviction of the poor (Banerjee-Guha, 2012), neoliberal urbanism and associated development which leads to exclusion of the poor and environmental degradation (Banerjee-Guha, 2009; Aggarwal, 2014) and how success stories of globalization

focus merely on economic aspects while leaving out social and environmental aspects (Homm and Bohle, 2012). Such studies have mostly used empirical data and have focussed on the marginalised sections of the urban population. Several scholars have tested the applicability of western theoretical models such as rank size rule and law of primacy (Patra, 2009; Marh and Sharma, 2009; Khinduka, *et al.*, 2009). They have also carried out functional classification of cities (Mishra and Sharma, 2007; Guchhait and Dasgupta, 2009). Most of these studies are based on statistical analysis of Census data.

New Directions in Urban Research

During the new millennium urban geographers also took some tentative steps towards adopting current research trends within the discipline. In this context work on Urban Cultural Geography deserves special mention. Sharma (2004b) has carried out some interesting work on the colonial urban landscape in India through a critical analysis of the names of colonial bungalows in the hill stations. His analyses of the influence of cultural norms, historical experience and administrative/feudal privilege on the socio-spatial dynamics in erstwhile princely and colonial urban centres in the Himalayas are noteworthy for their distinctiveness of approach as well as methodology (Sharma, 2000 and 2013). Information obtained through a careful study of secondary sources such as old guide maps was supplemented with primary data, to identify the major themes in bungalow names and has shown how individuals try to recreate familiar landscapes in an alien environment. Working in the tradition of Humanism within Geography, Dhussa and Erski (2004) have presented the landscape of Calcutta as it existed in the early 19th century through a critical analysis of Rudyard Kipling's work. Rayaz and Singh (2008) have analysed the impact of modernisation on the Muslim society in Jammu city. Leaning towards Social Geography, they used primary data to study the impact of education and employment on the caste and kinship network among the Muslims there. Lee's (2011) study is particularly noteworthy for critically analysing the opposing narratives that exist with reference to urbanisation in India. Through the case study of transformation of urban landscape in Bengaluru, he has brought out the "glaring inequalities" that exist in urban society in terms of slums at one extreme and enclaves of exclusivity at the other extreme.

The engagement of gender with urban spaces has also emerged as a research focus. Researchers have focussed on the difference in experiences of spatial control faced by women (Datta, 2007), marginalisation of women workers in the urban informal economy (Gandhi and Banerjee-Guha, 2008), the effect of globalisation on the changing identities of working middle-class women (Sil, 2011), the difference between men and women working from home (Mohan, 2011), spatiality of women's fear of violence (Paul, 2011a), gendered construction of public spaces (Paul, 2011b) and crimes against women (Kahlon, 2014b). Some of these studies are based on primary data and have an element of qualitative analysis but by and large the positivistic view dominates. No doubt, the above work has been situated in the urban context, however how urban space and its construction emerges as a decisive factor has seldom been the focus of research. Indeed the last is more visible in some recent work carried out on slums.

Meschkank (2011) uses a qualitative approach to study the manner in which slums are perceived and understood by various actors involved in slum-tourism in Dharavi in Mumbai. She has used primary data and observational-theoretical approach to understand how different images of slums are socially constructed. Datta (2012a) has highlighted the cosmopolitan neighbourliness that exists in slums and its inherent gendered nature through a case study of squatter settlement in Delhi. She has used primary data collected through informal conversations, interviews and daily journals and has focussed on showing how the construct of neighbourliness and openness towards the acceptance of others in

slums helps the subaltern to survive in an exclusionary city. Datta (2012b) has critically analysed the relationship between space and law through a gendered intersectional lens. Through extensive fieldwork she has presented an interesting ethnographic study of an illegal squatter colony in Delhi where the threat of demolition looms large over the inhabitants. She has brought out the ways in which the subaltern negotiates illegality in her everyday life and how this reflects on gendered power relationships.

Urban Research Trends in India: An Evaluation

A review paper is by nature an evaluative exercise. The question is: against what parameters may one evaluate research trends? The issue of relevance is most crucial to research. Relevance may be seen in terms of prevailing research paradigms within the broader discipline as well as within social sciences in general. Another measure of relevance may be the research's ability to respond to current issues and problems. The ability to make use of the state-of-the-art in terms of methodology too is a crucial indicator of relevance of research.

Urban research in India has responded to issues of concern on the Indian Urban scene. These include the fast paced urbanisation process, its patterns, direction, extent and implications; the ensuing problems and issues ranging from urban environment and urban infrastructure to urban slums and urban crime. The methodology applied to urban research has mainly remained in the realm of spatial analysis using quantitative techniques and more recently G.I.S and Remote Sensing. The availability of data from the Census of India on various parameters of cities and towns has greatly aided urban research in general and research on urbanisation in particular. Urban geographic research in India stands well-poised to be of value to planners, administrators and industry alike. In addition it has to a degree manifested an Indian flavour in its themes.

Nevertheless, Indian research on urban geography has failed to make the mark along more parameters than one. Even allowing for the time lag of two decades that exists between urban research at the global level and urban research in India there have been various research impulses that have simply failed to elicit a response from Indian Geographers. These include the engagement of urban geography with social theory, Marxism and structuralism. This despite the fact that a number of scholars have highlighted the need for geography to become more socially relevant (Dikshit, 2006; Banerjee-Guha, 2011). Urban geographic research in India has marginalised human practices while focussing too much on spatial tradition. The studies that do focus on the human aspects have reduced humans to mere numbers. Even though the cultural turn took place more than two decades ago very few studies have taken culture into context while researching cities. The post-modern perspective in urban research is also yet to make a significant impact in India. This may also be the reason why urban geography depends primarily on quantitative data and produces generalised observations as against adopting qualitative research methodologies and coming up with research that recognises the particular as well as the marginalised. Although quantitative methods are helpful in strengthening one's argument yet one cannot rely solely on them for providing explanations for urban problems or to generate a theory (Ramachandran, 1989). The "spatial turn" all over the social sciences has made most disciplines sit up and take notice of the 'spatial' as an explanatory variable. Urban Geographers in India however still appear innocent of and oblivious to this development. The result is that Indian Geographers researching the urban have failed to carve a niche for themselves within the larger field of urban studies. This owes to their failure to respond to changing research perspectives and associated methodologies.

Humanising Urban Geography

Cities are now seen as dynamic entities in terms of their social contexts and the processes

through which their spaces are constituted (Pinder, 2014). No doubt cities due to their inherent spatial dimension form a natural focus for geographical enquiry. Nevertheless shifts in social theory and a burgeoning of academic interest in the city have expanded the range of perspectives and disciplines scrutinising the urban setting (Jacobs, 1993). That being the case geography as a discipline stands in grave danger of losing its dominance over the urban as a territory of research. Such an eventuality at a time when 'space' and 'spatiality' are being used as key theoretical constructs to articulate the link between social theory and everyday life by an increasing number of researchers in social science (Banerjee-Guha, 2011) would be a pity indeed.

The present review exercise has made it obvious that urban geographic research in India has failed to encash on the spatial as an explanatory variable in the understanding of the social. Urban locales or cities are treated as neutral, geometric spaces innocent of the social dynamic. This is particularly surprising when one looks at the quantum of urban flavoured research that population and social geographers have conducted. Bradnock (1986, p. 278) while commenting on research done on social geography in South Asia states that *"some of the work on urban social patterns carried out in India during the last fifteen years appears to owe more to the availability of the hardware and software to process statistical information than to the rigorous testing of soundly based hypotheses or to a sensitive appraisal of factors not amenable to statistical analysis, however sophisticated"* (emphasis added).

This then is one of the major weaknesses of urban research in India: its dependence on secondary quantitative data and its refusal to protest the "positivist hegemony" under which it continues to languish. The issue is both of philosophy and methodology. In fact the two go together.

The current global recognition of cities as sites of socially produced spaces and spatially enacted social dynamics, seeks the application of qualitative methodologies ranging from ethnography to semiotics to discursive analysis. The engagement with social theory that explains the relationship between ideology, power and the built form becomes a necessity in this context. This would mean a need to focus on human aspects, culture in the cities and the transformation that these have undergone.

The city is a built environment constructed, populated, negotiated and interpreted by humans. Human action in turn is overlain by power structures that dictate discourse as well as ideology. Whereas the powerful apparently dominate the urbanscape and legitimise their discourse, the marginalised or the suppressed tend to contest and resist this domination of the powerful. All these power dynamics are enacted on and through space. An understanding of the cityscape thus would be incomplete if it refuses to take cognizance of this dimension of the city.

Such an understanding runs through the feminist, post-structuralist and cultural approaches to studying the city and hence make their research more relevant. Population geographers who concern themselves with human behaviour as manifest over space enjoy a special felicity in dealing with research in this genre. What they lack is a sound philosophical base that may be developed through an understanding of social theory and its engagement with the "spatial". The need therefore is to broaden the vistas of urban research beyond the purely positivistic, to arm oneself with the requisite methodologies and be eclectic in terms of approaches. All of the above lie within the domain of the human geographer and it is not without reason that Dikshit (2006) places the onus of making geography socially relevant, upon the human geographer. It is only through humanising urban research that we can hope to breathe new life into it and see the 'city come alive' in Indian urban geographic research.

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NEW MAP SERIES: 5
PLACES OF WORSHIP IN INDIA: 2011

GOPAL KRISHAN
Chandigarh, India

The first step in carrying out the Census of India is the preparation of a complete and unduplicated list of geographical entities, such as state, district, tehsil / taluk / community development block and village/town. This frame of administrative areas is frozen about a year in advance of the census. For the 2011 Census, this was done with reference to 31 December 2009.

Census operations in India are conducted in two phases: (i) house listing and housing census, (ii) population enumeration. The former is meant to systematically list all the structures, houses, and households for providing a sound base for the latter. The house listing and housing census as a prelim to the 2011 Census was carried out during April-September 2010 in various states and union territories.

One of the objectives of the housing census is to record the use or vacant status of any census house. A census house is a building or a part of it which is used or recognized as a separate unit because it has its own main entrance from the road, or a common courtyard or common staircase. Nine kinds of uses, such as residence, shop/office and school/college, are taken note of. Place of worship, listed at serial number 8, covers temple or gurudwara or mosque or church or any other place of worship.

As per 2011 Census of India, there are 3.01 million places of worship of all variety and faith in the country. By comparison, the number of educational institutions is 2.11 million and that of health outlets 0.68 million. Evidently the number of places of worship in India is more than that of educational and health centres put together (Table 1). This is in consonance with the diversity of religions and intensity of religiosity of its people (Table 2).

In terms of frequency, one percent of the census houses in India are places of worship. These are marked by a relatively greater concentration in the hill states located in the north-west region, western states of Rajasthan and Gujarat, and southern states of Kerala and Karnataka. The states in the north-east and West Bengal and Odisha are also noted for a comparatively high frequency of places of worship (Map 1).

A somewhat different picture is obtained when the number of places of worship is referred to the area of different states and union territories. There is one place of worship for every one sq. km. of area in India. The entire Ganga-Brahmputra plain, most of the southern states and Punjab stand out as areas of high density of places of worship. On the other hand, the hill states in the north-west and most of them in the north-east region, states in central India and Haryana display a low density of places of worship (Map 2).

Three types of areas can be identified where the additive figure for educational and health institutions exceeds that of places of worship (Map 3). First, parts of the north-east region, where church is in main religious command; the central tribal belt, where institutionalized places of worship are not that frequent; and third, large urban places, where high population densities do not require widespread places of worship. About 80 per cent of places of worship are located in India's rural areas which share about 69 per cent of the total population of the country. One would have

Table -1
India: Occupied Census Houses Used as Place of Worship, School/College and Dispensary/Hospital, 2011

States/ Union Territories	Number of census houses used as		
	Place of worship	School/college	Hospital/dispensary
States			
Andhra Pradesh	191,418	138,574	49,556
Arunachal Pradesh	3,427	5,405	787
Assam	159,818	93,616	21,304
Bihar	166,560	105,439	29,587
Chhattisgarh	62,015	82,634	10,508
Goa	5,964	2,913	1,649
Gujarat	181,854	93,087	39,801
Haryana	33,315	24,364	13,665
Himachal Pradesh	38,199	27,560	7,376
Jammu & Kashmir	49,135	31,843	6,278
Jharkhand	64,336	68,290	12,014
Karnataka	219,915	139,176	42,781
Kerala	105,562	75,480	31,589
Madhya Pradesh	170,240	198,641	27,126
Maharashtra	278,768	213,833	100,885
Manipur	5,724	4,388	724
Meghalaya	7,005	11,584	1,111
Mizoram	3,875	4,879	658
Nagaland	3,168	3,887	941
Odisha	133,789	98,437	17,873
Punjab	63,244	31,228	14,494
Rajasthan	224,269	131,434	36,649
Sikkim	1,407	2,434	324
Tamil Nadu	170,553	86,294	49,977
Tripura	10,366	10,692	2,214
Uttar Pradesh	354,421	256,746	80,727
Uttarakhand	33,503	29,949	7,676
West Bengal	257,125	119,465	64,983
Union Territories			
Andaman & Nicobar Isles	1,494	1,058	291
Chandigarh	450	695	366
Dadra & Nagar Haveli	425	711	209
Daman & Diu	555	221	146
Delhi	8,668	9,709	7,853
Lakshadweep	466	328	43
Puducherry	2,282	1,715	1,063
INDIA	**3,013,315**	**2,106,709**	**683,228**

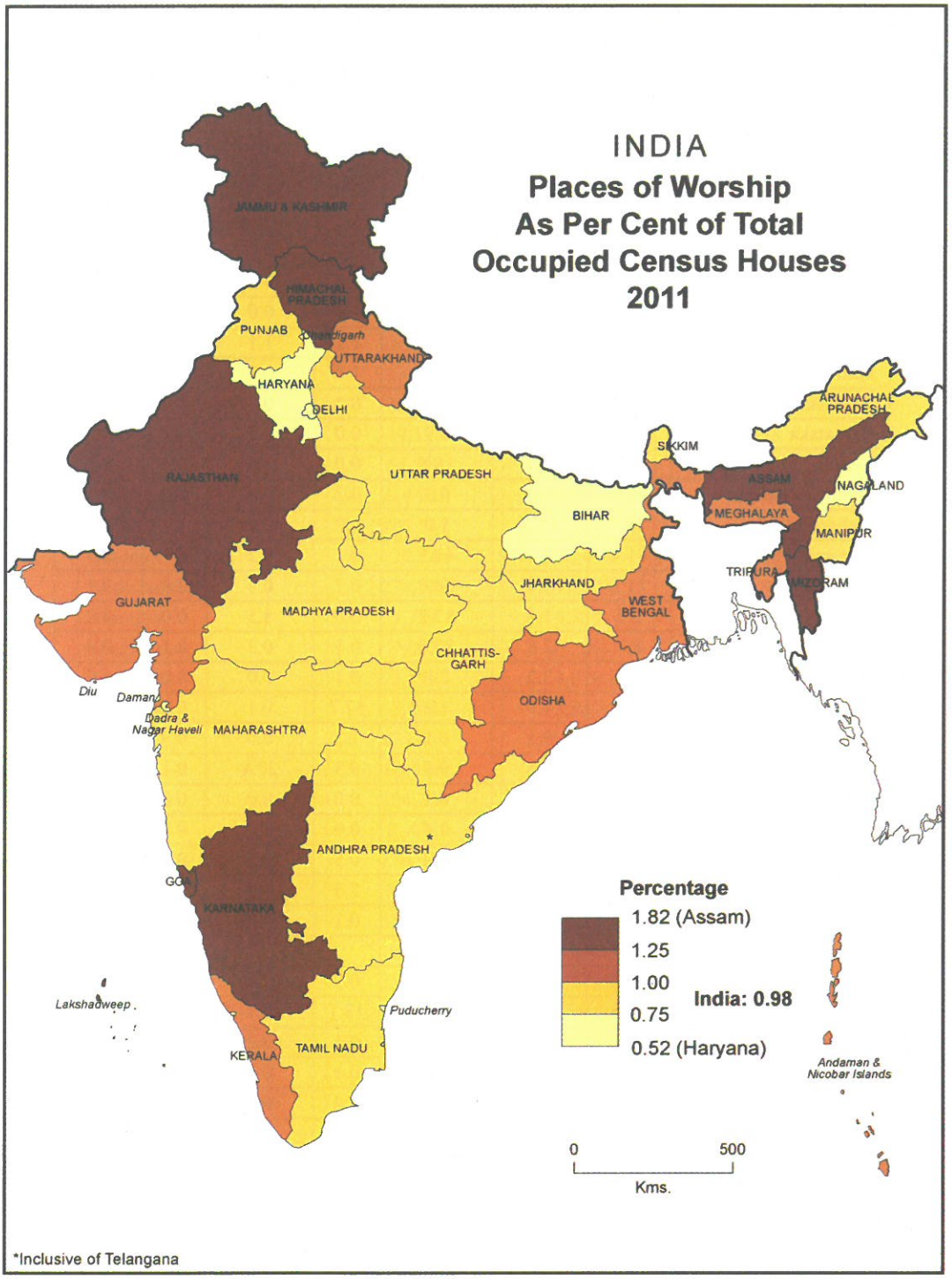
Source: Census of India, 2011.

Table- 2
India: Religious Composition of the States and Union Territories, 2011

State	Population share in percentage						
	Hindu	Muslim	Christian	Sikh	Buddhist	Jain	Others
Andhra Pradesh*	88.5	9.6	1.3	0.0	0.0	0.1	0.5
Arunachal Pradesh	29.0	2.0	30.3	0.2	11.8	0.1	26.6
Assam	61.5	34.2	3.7	0.1	0.2	0.1	0.2
Bihar	82.7	16.9	0.1	0.0	0.0	0.0	0.3
Chhattisgarh	93.2	2.0	1.9	0.3	0.3	0.2	2.1
Goa	66.1	8.3	25.1	0.1	0.1	0.1	0.2
Gujarat	88.6	9.7	0.5	0.1	0.1	1.0	0.0
Haryana	87.5	7.0	0.2	4.9	0.0	0.2	0.2
Himachal Pradesh	95.2	2.2	0.2	1.2	1.1	0.0	0.1
Jammu and Kashmir	28.4	68.3	0.3	1.9	0.9	0.0	0.2
Jharkhand	67.8	14.5	4.3	0.2	0.0	0.0	13.2
Karnataka	84.0	12.9	1.9	0.0	0.2	0.7	0.3
Kerala	54.7	26.6	18.4	0.0	0.0	0.0	0.3
Madhya Pradesh	90.9	6.6	0.3	0.2	0.3	0.8	0.9
Maharashtra	79.8	11.5	1.0	0.2	5.8	1.2	0.5
Manipur	41.4	8.4	41.3	0.1	0.2	0.1	8.5
Meghalaya	11.5	4.4	74.6	0.1	0.3	0.0	9.1
Mizoram	2.7	1.4	87.2	0.0	8.5	0.0	0.2
Nagaland	8.7	2.5	87.9	0.1	0.3	0.1	0.4
Odisha	93.6	2.2	2.8	0.1	0.0	0.0	1.3
Punjab	38.5	1.9	1.3	57.7	0.1	0.2	0.3
Rajasthan	88.5	9.1	0.1	1.3	0.0	0.9	0.1
Sikkim	57.8	1.6	9.9	0.3	27.4	0.1	2.9
Tamil Nadu	87.6	5.9	6.1	0.0	0.0	0.1	0.3
Tripura	83.4	8,6	4.4	0.0	3.4	0.0	0.0
Uttar Pradesh	79.7	19.3	0.2	0.3	0.1	0.1	0.3
Uttarakhand	83.0	13.9	0.4	2.3	0.1	0.1	0.2
West Bengal	70.5	27.0	0.7	0.1	0.3	0.1	1.3
Union Territories							
Andaman & Nicobar	69.4	8.5	21.3	0.3	0.1	0.0	0.4
Chandigarh	80.8	4.9	0.8	13.1	0.1	0.2	0.1
Dadra & Nagar Haveli	93.9	3.8	1.5	0.1	0.2	0.3	0.2
Daman & Diu	90.5	7.9	1.2	0.1	0.1	0.1	0.1
Delhi	81.7	12.9	0.9	3.4	0.1	1.0	0.0
Lakshadweep	2.8	96.6	0.5	0.0	0.0	0.0	0.1
Puducherry	87.3	6.1	6.3	0.0	0.0	0.1	0.2
All India	**79.8**	**14.2**	**2.3**	**1.7**	**0.7**	**0.4**	**0.9**

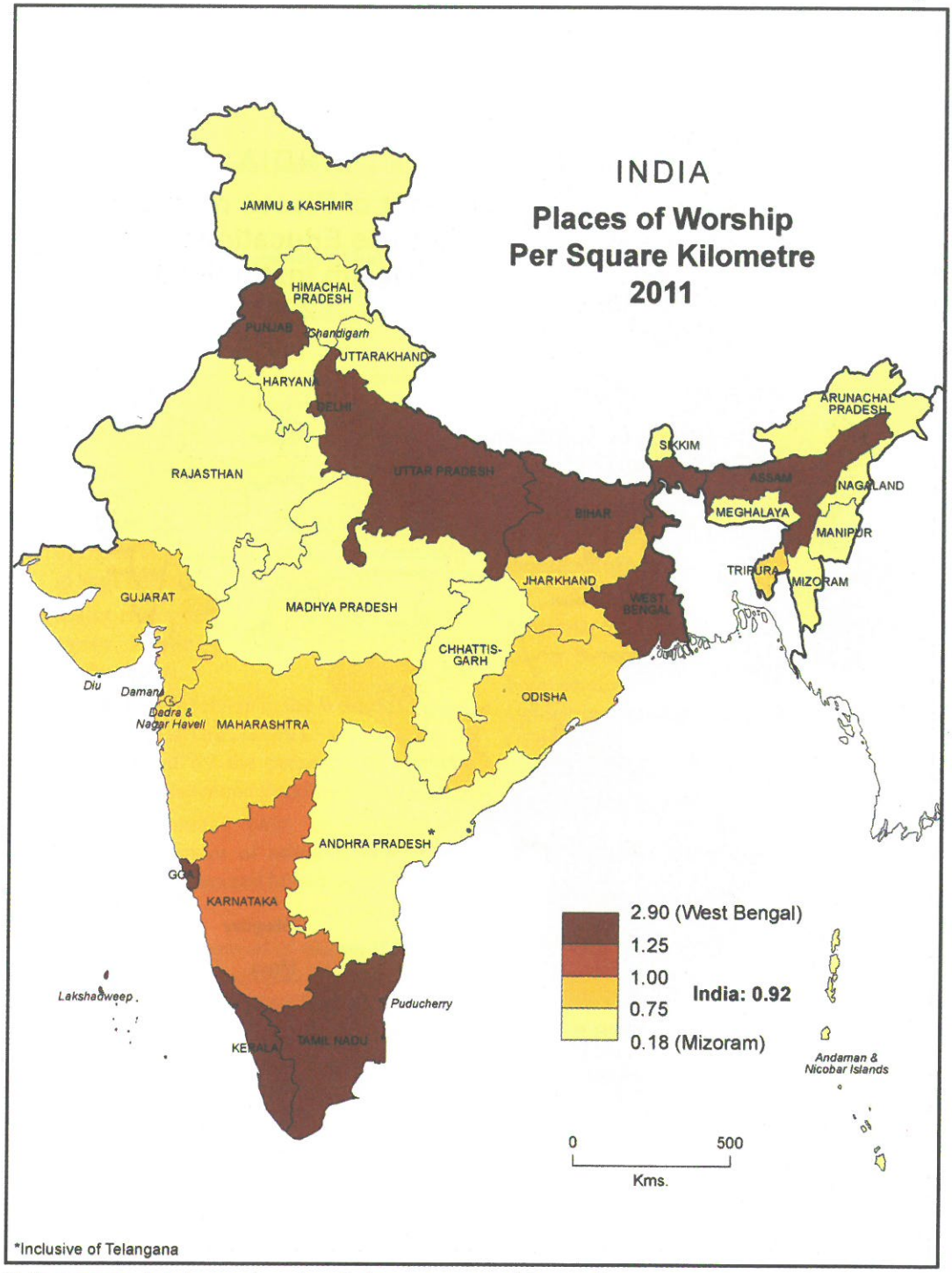
*Source: Census of India, 2011 . * Inclusive of Telangana*

Map 1



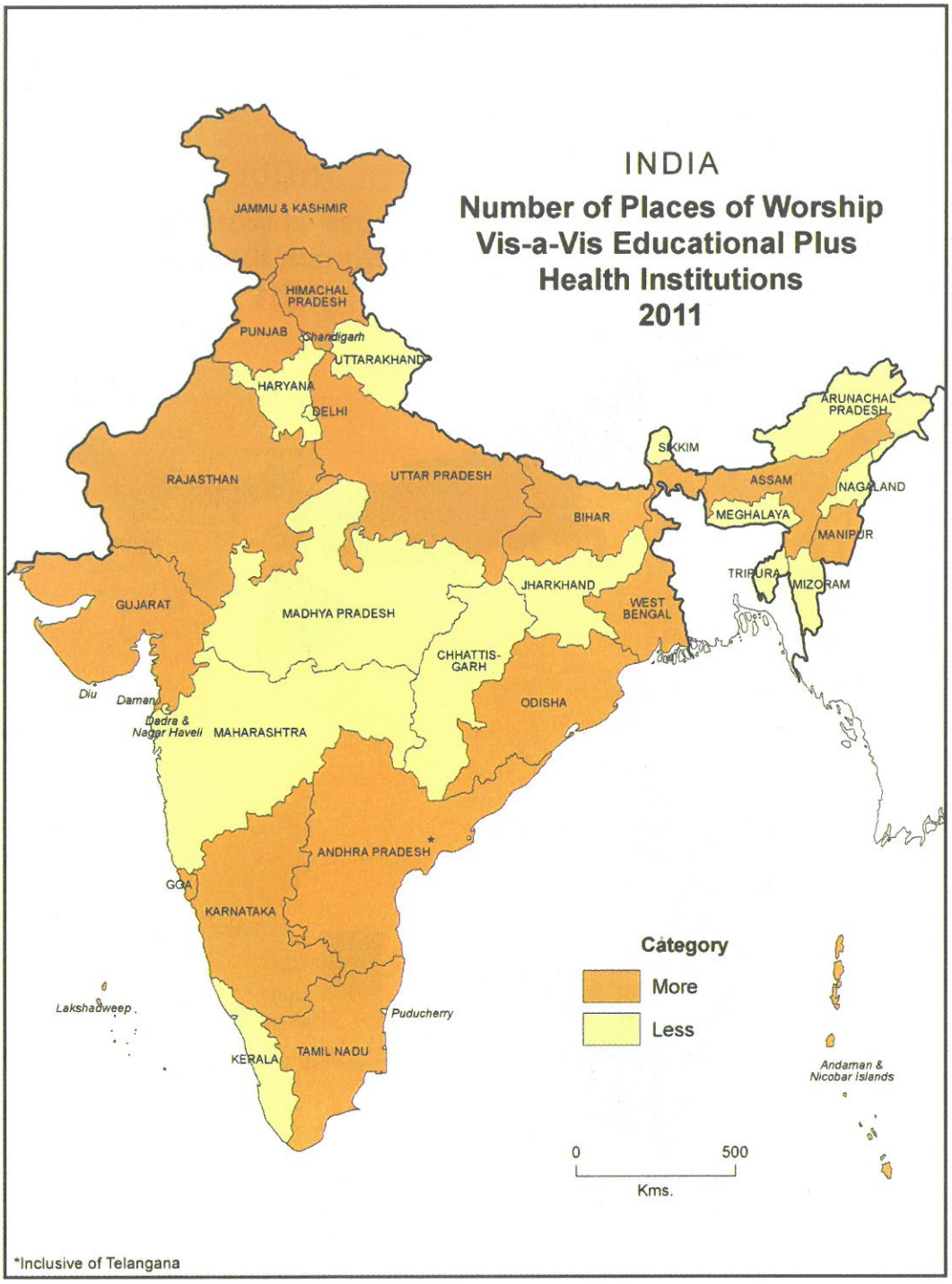
- One per cent of the occupied census houses are venues of worship in India.

Map 2



- On an average, India has one place of worship for every one square kilometer of area.

Map 3



- The number of places of worship in India exceeds that of educational and health institutions put together, indicating a greater faith in the divine than in education and health in their lives.

expected a relatively high ratio for places of worship in areas of diversified religious composition, such as Kerala. This is not the case. The factor of very high population density seems to have overpowered the factor of religious diversity.

A study of pilgrimage places reveals their heavy concentration in the following types of areas:

- All the deltaic tracts, namely of the Ganga, Mahanadi, Godavari-Krishna, and Kaveri, which are marked by predominance of Hindu temples;
- Historic capital cities such as Srinagar, Delhi, Agra, Hyderabad and Mysore, which in many cases have the Hindu and Muslim places of pilgrimage in close proximity to each other;
- Middle Ganga Plain, marked by presence of Hindu and Buddhist places of pilgrimage in large numbers;
- Major rivers and mountain ridges, where again Hindu places of pilgrimage predominate;
- Source areas of rivers in the Western Ghats and adjoining areas which are distinguished by the presence of Hindu pilgrimage places and Buddhist caves; and
- Konkan coastal belt, presenting a composite picture of religious places of Hindus, Christians and Muslims.

Pan-India is the spread of places of Hindu pilgrimage. These are scattered all over from Amarnath cave in Jammu and Kashmir in the north to Rameshvaram in Tamil Nadu in the south and from Dwarka and Somnath in Gujarat in the west to Guwahati and Imphal in the east. Badrinath, Puri, Rameshwaram and Dwarka, positioned on the four corners of the country, enjoy the prestigious status of *dhams* (abodes of the divine). Tirupati is the most venerated temple in South India. Haridwar, Allahabad and Varanasi are eminent places of pilgrimage located along the Ganga. Pushkar in proximity of Ajmer has the only temple dedicated to Brahma, the lord of genesis of the universe. One can observe the spatial spread and interconnectivity of all these places contributing to cultural unity of India. These find an association with different natural features, such as rivers, mountains and forests.

The life dream and devotional obligation of every Muslim is to go for *Hajj* or pilgrimage to Mecca in Saudi Arabia. This is outside India but venerable to every Muslim. Within India, the pilgrimage among Muslims was popularized by the Sufi saints. The *dargah* or shrine of Moinuddin Chishti of Ajmer (d.1235), of Qutubddin Bakhtiyar Kaki on the outskirts of Delhi (d.1235), and of Nizammudin Auliya in Delhi (d.1325) carry special fascination for the Muslims as places of pilgrimage. The *dargah* of Sayyid Salar Masud Ghazi in Bahraich, located between Lucknow and Faizabad, is another place which attracts thousands of Muslims.

While shrines of saints are special for the Muslims, for Sikhs it is a place dedicated to their *Gurus*. Several of these are located close to a water body or along a river. Amritsar is famous for its Golden temple, associated with the fourth *Guru*, Guru Ramdas. Sultanpur Lodhi as also Badrinath have their association with the first *Guru*, Guru Nanak, Sis Ganj in Old Delhi has its affiliation with the ninth *Guru*, Guru Tegh Bhadur, and Anadpur Sahib, Patna Sahib, Nanded with the tenth *Guru*, Guru Gobind Singh. Pilgrimage places of the Sikhs celebrate the life events and achievements of their *Gurus* and are meant to reinforce tenets of Sikhism.

Christians seek proximity to God at their places of pilgrimage. This may be for the purpose of penance or confession or for seeking physical or spiritual healing. Among them, Basilicas of Jesus, Church of St. Cajetan and Church of St. Francis of Assisi, all in Goa, deserve a special mention. Santa Cruz Basilica of Cochin and Cathedral Church of St. Thomas in Mumbai hold an equal importance. All these basilicas and churches were raised by the Portuguese. By comparison, the Christ Church of Shimla and Cathedral of the Sacred Heart in Delhi

are the creation of the British. The sacred places of the Christians in India find an association with the names of different Roman Catholic saints and apostles.

Virtually all the pilgrimage sites of the Buddhists are concentrated in the Middle Ganga Plain. Notable among these are Bodh Gaya, where Buddha attained enlightenment; Sarnath, where he delivered his first sermon; Sravasti, which played host to Buddha during his frequent visits, and Kushinagar, where he acquired *nirvana* (liberation). All these places are marked by the presence of stupas (domes), relics of monasteries and temples. The 29 Ajanta Caves, located inside the fold of Western Ghats, carry wall paintings and sculptures representing Buddha, who otherwise had not visited this area. Thus, all the Buddhist places of pilgrimage find an association only with Buddha.

Jain places of pilgrimage are also linked to the lives of their saints. The merit in visiting them is seen as a lesson in endurance and austerity. An additional consideration is to gain knowledge about Jainism. Above all, it is an act of paying reverence to noble souls. Such places display a bipolar concentration: one in the Middle Ganga Plain, where Jainism had its origin, and two in Western India of Rajasthan and Gujarat, where it experienced maximum spread. Mount Parsvanatha or Sametsikhara and Pavapuri, both in Bihar, fall in the first category, and Mount Abu, Ranakpur and Jaisalmer in Rajasthan and Girnar, Satrunjaya and Tarange in Gujarat belong to the second category. Besides, Shravana Belagola, about 100 km from Mysore in South India, is another place of Jain pilgrimage. All the Jain places of pilgrimage are noted for the presence of magnificent temples dedicated to Jain *Tirthankaras* or saints.

The story of religious places in India is imbued with sanctity and devotion in a variety of ways. Places of the Hindu pilgrimage find an association with natural features like sacred rivers, mountain ridges and deep forests; those of the Muslims are often *makbaras* or shrines, and the ones of the Sikhs find an association with the lives and philosophy of their *gurus*. The Christian places of pilgrimage are concentrated in those few areas where the Portuguese ruled. Roman Catholic saints are their main focus. Buddhist places of pilgrimage are heavily concentrated in the Middle Ganga Plain and all are linked to the life of Buddha. Likewise, the places of Jain pilgrimage find an association with the birth of Jainism in Middle Ganga Plain and its spread in Western India. Such is the geographic tapestry of sacred India.