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Professor K. D. Sharma (1948-2019)



With deep reverence and abiding gratitude, this issue of Population Geography is dedicated to Professor (Late) K.D. Sharma. He was Editor of the Journal from 2014 to 2018.

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KERALA'S HUMAN DEVELOPMENT MODEL (A Geographical Post-Mortem)

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Abstract: Kerala's achievements in social and human development, often referred to as 'Kerala Model' are widely acclaimed. There are, however, wide intra-state differentials in accomplishment. This paper attempts to capture this inconsistency making district as a study unit with the help of 25 indicators belonging to demography, primary education, health, income and poverty.

The analysis reveals that there are wide inter-district differentials in population growth, incidence of poverty and distribution of marginalized group population in the state. Performance of different districts can broadly be linked to three factors: sub-regional location, distance from the coast, and the share of SCs and STs in total population. Growing privatization in post-liberalization phase seems to have accelerated the process of widening spatial gaps, particularly in health care services, impinging on human development. The paper concludes that it is important to address all such inequalities for further consolidation of Kerala model and to move ahead. Spatial planning, both as a strategy and tool, may help to address this problem.

Keywords: *Kerala Model, Human Development Index, Gender Gap, Inclusive Growth, Post-Liberalization, Privatization of and health and education services*

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Introduction

'Kerala Model' captured the attention of academicians all over the world for Kerala's spectacular achievements in human development since the late 1970s. By 2016, when the state completed six decades of its existence in the present form, it overshadowed all other states in crucial human development indicators, like sex-ratio, literacy, infant mortality rate (IMR), life expectancy, and other associated parameters (Table 1). Even in per capita income, Kerala is listed among the top five major states. The Country report of India on Millennium Development Goals (MDG) has noted that Kerala has achieved all MDG 2015 targets well in advance (Government of India, 2017). It is a front runner among Indian states to transit to Sustainable Development, a professed goal under the UN charter.

Kerala, located in the SW corner of Indian peninsula, houses about 3.0 per cent of India's total population on 1.2 per cent of its area. Evidently, it densely populated state, having 860 persons/km² in 2011 against the national average of 382. Kerala, which came into existence under linguistic reorganisation of states in 1956 by amalgamating princely states of Travancore and Cochin, and Malabar part of Madras Presidency, contains areas staying under different systems of governance for long. Therefore, development initiatives were not same at the time of reorganisation. In 1957, Kerala created history when the Communist Party of India (CPI) formed the government after the assembly elections. The short lived government

under the CPI during 1957-1959 could initiate several path breaking measures. Their subsequent implementation brought about such an improvement in social and human development that by the early 1980s, the term 'Kerala Model' or 'Kerala Mode of Development' entered in the development discourse.

Table 1: Select human development indicators: A comparison of Kerala with India

Sl. No	Indicators	Kerala	Rank of Kerala in India	India
1	Population growth rate (annual) (2001-2011)*	0.48	1	1.63
2	Life expectancy at birth (2011-2015)*	75.2	1	68.3
3	Life expectancy-Female (2011-2015)*	78.2	1	70.0
4	Infant Mortality Rate (IMR) per 1000 live births (2016)*	10	1	34.0
5	Maternal Mortality Ratio (MMR) per lakh live births (2011-13)*	61	1	167
6	Literacy (2011)**	93.91	1	74.0
7	Female literacy (2011)**	91.98	1	64.6
9	Sex ratio (2011)**	1084	1	943
10	Incidence of poverty (2013)\$	7.05	2	21.92
11	Human Development Index (HDI) (2017)#	0.784	1	0.639
12	Per capita income (PPP INT\$)	9,200	12	6,375

Source: *Health and Family welfare statistics in India, 2017 ** Census of India; \$Reserve Bank of India, 2013; # Sub-national data base, Global Data Lab, hdi.globaldatalab.org; PPPINT\$- Purchasing Power Parity in International dollar following conversion rate of IMF

A question that invokes wide spread interest is: How a society, badly ridden with caste system, and the practice of un-touchability, could overcome these problems to turn into a top ranking state of the country in terms of literacy level and human health. It is argued that Kerala's achievement in demography, health and education sectors warrants an in-depth examination (Parayil, 1996, Chattopadhyay and Franke, 2006). Sustainable development, as an alternative development paradigm, is socially and spatially inclusive (Schleicher-Tappeser, 1997). Regional dimension is being recognized critical for effective and coordinated response to address developmental problems. Since early 1980s it has been asserted that the region might be a fundamental basis of economic and social life —after mass production (Storper, 1997). An overarching challenge is to examine spatial dimension of development and to identify spatial inequality within a given territory, to reorient the future development initiatives. These observations constitute the conceptual foundation of the present paper.

An attempt has been made to examine study the select aspects of human development in Kerala with a focus on demographic characteristics, education, health, human development, and poverty from a spatial perspective. In fact, the aggregate picture of 'Kerala Model' hides the structural and sub-regional inequalities in socio-economic development. Structurally, there are outlier communities lagging far behind, bypassed by the development process (Kurien, 1995; Kabir, 2010, Chakraborty *et al.*, 2010).

In 1971, Kerala recorded a literacy rate of 60.4 per cent and sex-ratio of 1016 (females/1000 males), against the national average of 34.4 per cent and 930, respectively. Decadal increase in population during 1961-71 was 1.9 per cent for Kerala, and 3.2 per cent

for country as a whole. In fact, demographic, educational and health indices displayed Kerala's edge over the national averages. The Centre for Development Study-United Nations (CDS-UN) study on Kerala in 1975 underscored the importance attention to educational and health services which help to build up human capital and make qualitative differences to the whole process of development' (CDS, 1975). Kerala's development experience, referred as 'Kerala Model', signifies that social development is possible through effective public action without the simultaneous rise in per capita income, urbanisation and industrialisation unlike developed countries (Dreze and Sen, 1989; Pillai, 2008). The model has been widely studied, debated and examined (see Tornquist and Tharakan, 1995; Parayil, 1996; George, 1998; Parayil (ed), 2000; Franke and Chasin, 2000; Isaac and Franke, 2000; Veron, 2001; Ravi Raman (ed), 2010).

Origin of 'Kerala Model' can be traced back to historical factors, locational aspects (influencing the availability and decentralised nature of natural resource base), affirmative public action and proactive civil society. Since formation of Kerala, irrespective of the political ideology (left or right) of government, the social welfare approach continued. In addition, space was provided for vibrant forward looking civil society, empowering even the common men to articulate their ideas and thoughts through discussion and discourse on various aspects of societal concern. Notably, Kerala *Sasthra Sahitya Parishad* (KSSP), a people science movement, launched its own literacy mission in 1977, more than a decade before the setting up of the National Literacy Mission in 1988 (Chattopadhyay, in press). In 2018, the seamless teamwork to contain Nipah virus, and the relief and rescue operations undertaken by the common masses in face of the devastating flood of August, 2018, again manifested strength and resolve of public action in Kerala. Also, budget allocation for social sector including health and education was substantially increased since 1957; growth rate of health expenditures exceeded total government expenditure in initial decades (Ramankutty, 2000). It is well realised that education or human capacity building forms the edifice of this internationally acclaimed achievement in a short span.

Since its formation, Kerala undertook a series of unique initiatives to overcome politico-geographic impediments and setting the footprints in land reforms, infrastructure development, improvement in health and education, population control, demographic transition, spread of literacy, civil society movement, earning foreign remittance, state income, and decentralised planning and governance. All these sectors are mutually reinforcing, contributing to human development and quality of life.

(i) Demographic characteristics

Of 334 million persons in 2011, 9.1 per cent belonged to scheduled castes (SCs), 1.5 per cent to scheduled tribes (STs) and about 3.0 per cent to fishermen in Kerala. Wide differentials in population growth during 1981-2011 have resulted in significant changes in population shares of different districts (Fig.1A). The range difference between population shares of the largest and the smallest district increased to about 10.0 per cent in 2011 from 8.0 per cent in 1981. At sub-regional level, all districts in south Kerala, Thrissur to Thiruvananthapuram, experienced a decline in their shares, against the Malabar districts registering the gain during this period, resulting in shift of the mean centre of population distribution from south to north Kerala; Malappuram district of Malabar region gaining the maximum.

Kerala, as a whole, registered the lowest decadal increase (4.5 per cent) in its population during 2001-2011, but growth varied widely across districts. Malappuram district recorded the highest decadal growth (13.4 per cent), and Pathanamthitta and Idukki districts, in south Kerala, experienced the negative (-3.0 per cent and -1.8 per cent, respectively) see Table 2. Similarly, population density ranged from 255 in Idukki to 1508 persons/km² in Thiruvananthapuram, population density and growth in the state finding a strong spatial correspondence (Fig. 1A and 1B). Land condition (land area <15.0 per cent slope) plays an important role in population density, correlation coefficient (r) value being 0.67 (Table 3) Rapid growth in number of households in comparison to population growth in the state during 2001-11 indicates to a fast break in joint family system: population grew by 4.9 per cent and the number of household by 16.8 per cent. Further, population in the age group of less than 35 years registered a decline, while the reverse was of true for higher age groups during this period (Zachariah and Rajan, 2018). All these changes are full of long-term socio-political implications.

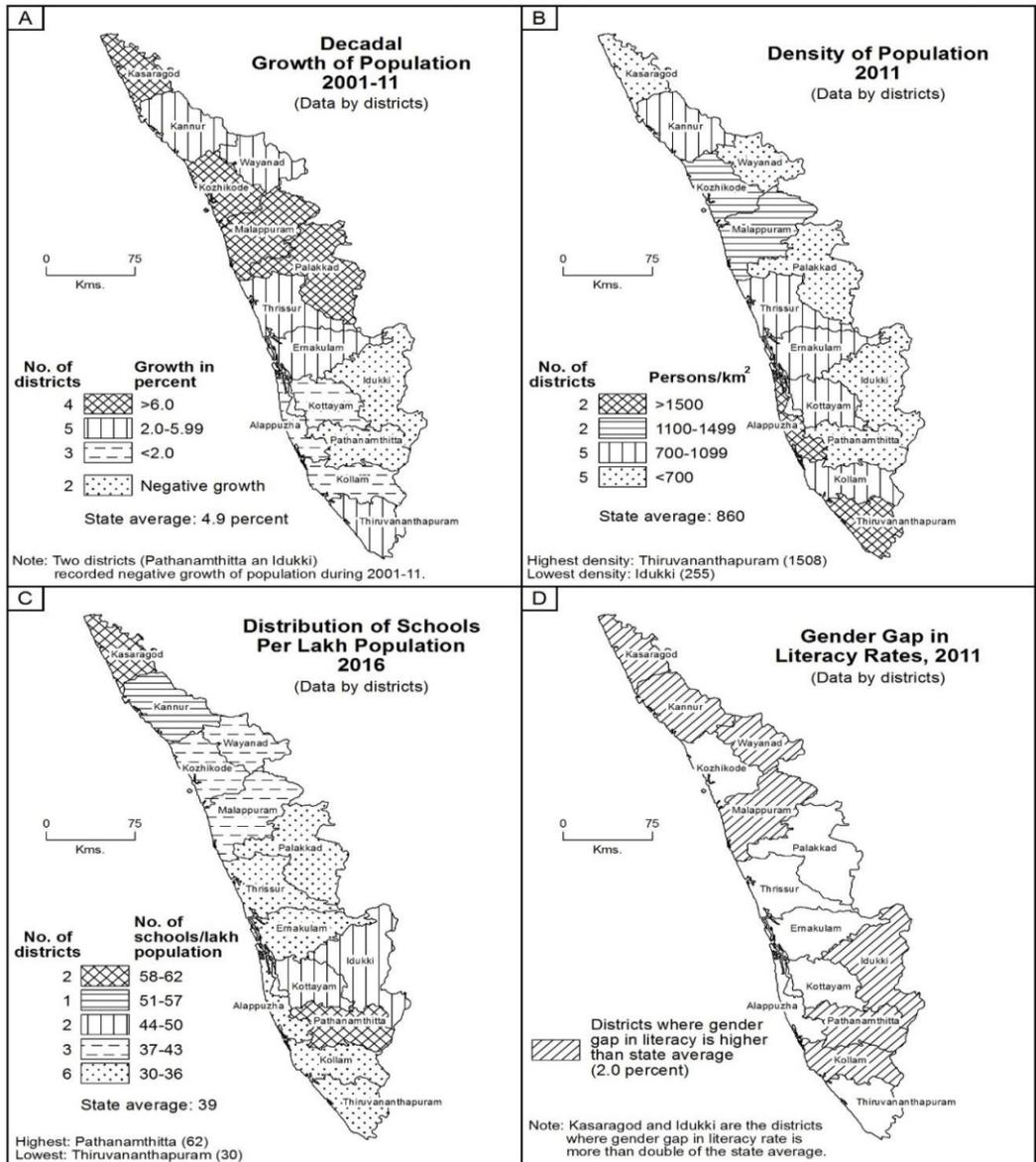
Average sex-ratio in 2011 was 1084, against the national average of 943, all the districts in the state faring above the national average. Notably, the sex-ratio among SC, ST and fishing population was lower than the state average but higher than the national average. While, district-wise shares of SC and ST population in the state find a negative correlation (r= -0.46) with their sex-ratios, the opposite is true (r=0.32) of fishing population (see Table 3). Three districts of Wayanad, Palakkad and Idukki, having the high concentration of SC-ST population, show a low sex-ratio. However, Ernakulam, a high urban-industrial district housing only 8.0 per cent SC-ST population, also has low sex-ratio of 1027, the second lowest after Idukki (Table 2). This signifies that improvement in sex-ratio warrants a multi-prong strategy rather than a linear approach.

Table 3: Correlation equations and correlation coefficients (r)

SN	Variables in regression analysis	Correlation equation	'r' value
1	Population density & type of land (<15% slope)	$Y = 12.84X + 470.4$	0.67
2	Population density and population growth	$Y = 0.002X + 1.899$	0.23
2	Sex ratio and SC ST population (% share)	$Y = -3.806X + 1124$	-0.46
3	Sex ratio and Fishing population (% share)	$Y = 5.515X + 1065$	0.32
4	Neonatal mortality rate (NMR) and Institutional delivery	$Y = -0.286X + 46.38$	-0.47
5	Infant mortality rate (IMR) and Institutional delivery	$Y = -0.528X + 74.05$	-0.57
6.	Female literate and IMR	$Y = -0.257 + 30.39$	-0.51
7	Population density and density of Govt. Allopathic medical Institutions (GAMI)	$Y = 0.000X + 0.085$	0.92
8	Population density and GAMI/lakh population	$Y = -0.001X + 5.786$	-0.81
9	Density of private allopathic medical institutions and density of GAMI	$Y = 4.923X - 0.371$	0.83
10	Index of Per capita income and density of Private medical allopathic institution	$Y = 1.762X - 0.753$	0.75
11	Index of Per capita income and density of GAMI	$Y = 0.32X + 0.032$	0.18
12	Human Development Index and SC ST population	$Y = 0.001X + 0.795$	-0.41
13	Incidence of poverty and SC ST population	$Y = 1.224X - 5.378$	0.70
14	Incidence of poverty and Human development index	$Y = -0.001X + 0.791$	0.75

KERALA

FIG. 1



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

(ii) Literacy, enrolment and distribution of school

Kerala's performance in education sector is impressive, to be acclamation as the 'Kerala Model'¹. Kerala is the first state to achieve cent per cent literacy rate in 1991. While many states are still struggling to achieve the goals of universal elementary education, dropout rates, gender gap in literacy rate, student-teacher ratio and the training of teachers and para-

¹ Even some scholars recommended it as the 'Keralization' of the whole education system in India (see Lewis, 1997; Tilak, 2001)

teachers under the *Sarva Shiksha Abhivan*. Kerala has successfully tackled the first generation problems of illiteracy and enrolment. Education in Kerala is inclusive and accessible to all-an accomplishment having a long history and lessons to learn. In the following, an attempt has been made to highlight some of the points in the context.

(a) Spread of modern education

Notwithstanding the limited accessibility- mainly confined to the upper castes with direct links to land ownership (Logan,1931), educational facilities were widespread even in pre-British era (Nair, 1989). Brahmins and Nairs, the upper castes in Kerala, had well developed educational institutions for their children. The scenario started changing gradually and by the beginning of 19th century educational institutions were functioning even in the countryside. However, most of these institutions were riddled with financial problems. The Travancore State issued a Royal decree stating, —the state should defray the entire cost of the education of its people in order that there might be no backwardness in the spread of enlightenment among them, that by diffusing education, they might become better subjects and public servants and the reputation of the state might be advanced thereby (Travancore Administrative Report, 1937-38:185-186). Soon free and compulsory education started in Travancore under state control (Census of India, 1951), paving the way for state initiatives for education; and Grant-in-aid system was introduced in vernacular schools in 1869. The village school scheme, introduced in 1871, envisaged one school in every village with local participation in providing school building and Government grant for teaching facilities commensurate with the number of pupils. However, it was extremely difficult for the children from backward communities to attend schools. Travancore Government took further initiatives to open schools exclusively for backward communities in 1895/96, and instituted scholarships for students and recruitment of teachers from such communities.

In 1806, the Prussian missionary started the first English school in Travancore, Christian missionaries playing the pioneering role, and the Government also encouraged them to establish schools by providing grants to such educational institutions (Tharakan, 1984). Over the years, several socio-religious groups and private agencies came forward to establish educational institutions. Government intervention through educational reforms and programmes coincided with these initiatives. As indicated above, several socio-political organisations and political agencies during pre-and post-independence periods have contributed to the spread of literacy and education. School education received a high priority in government policy. There were several innovative policies since formation of the state, helping the expansion of school education. Compulsory and free education, basic education, direct payment of salaries to private school teachers, reduction of regional and social disparities in school education, promotion of female education, school-feeding programme, promotion policy and travel concessions to students' are among the recent significant policy interventions (Govt. of India, 2008).

(b) Spatio-temporal growth and gender gap in literacy rates

Kerala's literacy was only 47.0 per cent in 1961 rose to 94.0 per cent in 2011, the corresponding figures for India, as a whole, were 28.3 per cent and 74.0 per cent, respectively. During 1981-91, literacy rate increased by 20.0 per cent, the highest ever increase, to be declared as the first state in India to have total literacy. Kottayam district, which ranked top

among districts in the literacy rate till 2001, was relegated to second position by Pathanamthitta in 2011. The literacy rates of Kasaragod, Wayanad, Malappuram, Palakkad, Idukki and Thiruvananthapuram districts have remained below the state average since 1991. Within this group of districts, Malapuram moved up to overtake Palakkad district. The range difference, between the lowest and the highest ranking districts is narrowing down with time, only 8.5 percent points in 2011 (Table 2). Districts falling under Malabar region had low literacy rates, the momentum picking up slowly. For higher concentration of SC and ST population in Kasaragod, Wayanad and Palakkad districts, literacy rate is below 90.0 per cent. In the state, literacy rates of SC and ST population are 88.7 and 75.8, respectively, against the state average of 94.0 percent. However, SC and ST population literacy rates were much higher than the national averages for such populations (66.1 and 59.0 percent, respectively).

Gender gap in literacy rates is quite low in Kerala as compared with country as a whole. In 2011, it was only 4.0 percent in Kerala, against 16.3 percent for India. The male literacy rate in the state was 96.0 percent and that of females 92.0 percent. Within the last two decades (1991-2011), the gender gap in literacy declined from 7.5 percent to 4.0 percent. The gender gap in literacy rates among SCs and STs of Kerala was 7.6 percent and 9.7 percent, respectively, these gaps being 19.7 percent and 19.1 percent, in order, at the national level. At district level, the gender gap ranges from a low of 1.4 per cent in Pathanamthitta district to a high of 7.3 percent in Palakkad district (Table 2). Inter-district differentials in male literacy rates are lower than that of females (Fig.1D).

(c) Distribution of schools

After Independence, Kerala witnessed a steady increase in number of schools. In 1947, there were only 3708 schools: 62.0 percent government managed and 38.0 percent government aided. By 2016-17, this number rose to 14,417: 12,981 offering State syllabus and 1436 CBSE and ICSE. Of 12,981 State syllabus schools, 6874 belonged to lower primary, 2988 to upper primary and 3119 to high category. 56.0 percent are Government aided private, 36.0 per cent Government and the remaining 8.0 percent private unaided schools. The number of aided schools has increased over the years, but there has been mushrooming of unaided private schools in the state.

The state average being 3.34, density of schools (schools per 10 km²) varies from a low of 1.14 in Idukki to a high of 5.47 in Kozhikode. The number of schools per one lakh population varies from 30 in Thiruvananthapuram to 62 in Pathanamthitta district, the state average being 39 (Fig.1C). Government schools are more in districts dominated by rural population.

The schools in the state are available within a short distance. On an average, one school is available within a radius of less than a kilometre. This average will come down further if uninhabited areas are excluded. More than nine-tenths of rural population in the state is served by primary schools/sections within a distance of one km (Govt. of Kerala, 2002; 2006). Making a provision for school facilities for rural and urban students is perhaps the first step in the direction of universalising school education. In this context, the success of Kerala is evidently clear. School facilities and associated infrastructure are more evenly and

adequately distributed across geographical regions and social groups in the state, not evident in many other Indian states(Gasper, 2003).

(d) Enrolment

Student enrolments in schools (I to X standard) of Kerala showed a declining trend since 1991-92. It was 32.7 lakh in 1961-62, rose to 59.07 lakh in 1991-92 and thereafter started declining to come down to 36.8 lakh in 2017-18. Present enrolment is around 12.3 per cent of total population in the age-group of 6 years plus. School enrolment per one lakh population (>6 years age) varies from 7,838 students in Pathanamthitta to 20,280 in Malappuram district, the state average being 12,296. School enrolment in districts of Malabar region is above the state average. In 1960-61, Malabar region accounted for 29.0 per cent of total enrolment in Kerala, rose to 46.5 per cent in 1990-91 (Salim, 2002), and then to 55.2 per cent by 2017-18. Enrolment growth in schools of Malabar region owes to the various steps initiated by the governments of different hues, since its formation. The current growth in enrolment is in tune with the population growth rate in different districts. Low enrolment in schools is directly related with low birth rate.

Since 1991-92, the absolute enrolment in Government and Aided schools came down by 51.0 per cent and 38.0 per cent, respectively. Against this, enrolment increased by 189.0 per cent in privately managed schools during the same period. The contrasting trend observed in case of Govt. and Govt. aided schools, on one side, and the privately managed schools, on the other side, is a challenging task-needing a serious thought. There are several schools managed by the government and voluntary organizations that have been rendered economically unviable, since there are only a few or no students in such schools. By 2017-18, number of such schools rose to 5,723, 55.0 per cent being aided and the remaining 45.0 per cent govt. run. Among economically unviable schools more than three-fourths are lower primary schools. Population control and economic prosperity are the major causes behind such a phenomenon. A larger number of families are opting for the single child and can afford to educate their children in the private/convent schools. The education has been greatly commercialised, making it a lucrative business. The post-liberalization era has witnessed the fastest growth of private sector in education system in the country. There are efforts to improve the condition of government schools in Kerala so that the students get attracted to such schools. This has yielded some results, as evident from the higher enrolment in Government schools during 2018-19.

In Kerala, girls made 49.0 per cent of total school enrolment in 2017. The ratio between girls and boys stood at 98:100 in lower primary school stage against the national average of 93:100. Average gender gap in Kerala is 2.0 per cent point, varying from a low of 1.0 per cent point in Ernakulam and Trissur districts to a high of 4.6 per cent point in Idukki. Kasaragod, Malappuram and Pathanamthitta are other districts with relatively high gap in boys and girls primary school enrolment.

Enrolment of SC-ST students in Kerala is also high. SC and ST student enrolment shares in primary schools stand at 10.6 per cent and 2.1 per cent, respectively. The dominant majority of the students from SC and ST population study in Government schools. In fact, there is a higher concentration of government run schools in the districts having relatively higher percentage of SC and ST population. For example, in Wayanad district, having more

than 22.0 per cent share of SC and ST population, in combine, 57.0 per cent of total schools are government managed.

NCAER data analysis revealed that enrolment of children in 6-11 age-group is almost the same between the highest and the lowest income groups in Kerala and Himachal Pradesh. However, in all other states enrolment share increases with increase in income slab (Tilak, 2002; Govt. of Kerala, 2005). Notwithstanding the spatial inequalities, Kerala has achieved educational equality among social groups and genders. Kerala had the lowest dropout rate (0.22 per cent) among Indian states during 2017-18. Among the different communities, the dropout rate is the highest (2.3 per cent) among ST students. SC students witnessed a dropout rate of only 0.3 per cent. At the district level, dropout rates vary from a low of 0.1 in Pathanamthitta to 0.6 in Idukki (Table 2). It is found that the highest dropout rates prevailed among the high school students, followed by lower primary students. Dropout rates are low among the upper primary students.

(e) Challenges in primary education

Notwithstanding Kerala's commendable achievements in education sector, there are several challenges. Improvement in quality of schools, particularly in government and aided schools, related to teaching, class room, libraries, laboratories, play-ground etc is a big challenge, needing necessary provisions (Chandrasekhar and others, 2001). Kerala has entered into the 3rd stage of demographic transition. Many of the schools are uneconomic due to low birth rate, besides there is a strong pull from private institutions. Inclusiveness, socio-economically non-discriminatory and gender equality, strong points of Kerala's education system, are now facing serious challenges. The gap between poor and rich is increasing. Its impact on the education system is potent to seriously impair the very foundation of Kerala mode of development. Schools in private sector are increasing fast. The problems include increasing cost of education borne by students, growth of self (student) financed institutions, strengthening of non-financial entry barriers and inadequate attention to the problems of the disadvantaged groups (Ajitkumar and George, 2009). Growth of disposable income, increase in single child family, aspirations of parents to provide best education to their wards, decline in quality of education in Government schools are the reasons underlying the growth of private sector. Commercialisation, social segregation and class differentiation in education may lead to increasing spatial disparity as quality education may be more costly and inaccessible to the economically weaker sections. This will undermine the Kerala Model of development. An inclusive society is now turning into segregated one, affecting, in the long run, peoples' participation in public action/civil society movement, one of the unique features of this modal.

II. Status of health and health care

Kerala's performance on human health, as reflected in life expectancy at birth, infant mortality rate (IMR), maternal mortality rate (MMR), birth rate, immunisation, institutional delivery and the similar parameters is not only high among Indian states but also comparable with that of the developed countries. How Kerala has achieved this has been deliberated by different scholars (see Krishnan, 1985; Jeffrey 1992; Kannan and others, 1991; Ramankutty and Panikar, 1995). Apart from historical roots of traditional health care system in Kerala going back to pre-British period in India, awareness among the masses to avail health care

services, and their availability and proper utilisation are the key components of the improved health conditions in Kerala. Approaching the medical health care services during the sickness rather than to resort to self-medication has become a part of the habit among the people in state (Ramankutty, 2000).

(a) Infant mortality rate (IMR)

Even in the 1950s, Kerala had one of the lowest IMR in India (Govt. of India, 2008). In 2015-16, IMR in Kerala was 6 against all-India average of 41, and the rural Kerala recorded 5, against 46 for the rural India (Govt. of India, 2017). There are three distinct phases of fall in IMR: 1956-1966; 1967-1976, and 1976 onward (Govt. of India, 2008). Perhaps, the first phase is related to vaccination programme against small pox and other infectious diseases, along with expansion in health care facilities (Krishnan, 1985). Immunisation programme, launched in the late 1970s in state, played an important role in bringing down infant mortality rate. Availability of medical care during pregnancy and child birth has contributed significantly, as evident from intensification of institutional deliveries in rural areas. The share of such deliveries has gone to 99.0 per cent in 2013-14 from 26.0 per cent in 1973. Kerala and Goa are the two states in India that have the lowest IMR and cent per cent institutional delivery. Medical attention during pregnancy, overall health condition of expecting mother and immunisation have contributed significantly in bringing down IMR. Moreover, the negative correlation coefficient ($r = -0.51$) between proportion of literate female and IMR in case of Kerala indicates the contribution of female literacy in declining IMR (Fig.3 A, Table 3).

(b) Life expectancy and morbidity

The average longevity in Kerala is 75.2 years against the national average of 68.3. Urban life expectancy in Kerala (75.4 years) is slightly higher than the rural (75.1 years); the national averages are 67.1 and 71.9 years, respectively. Rural female life expectancy (78.4 years) in Kerala is the highest, around 10 years more than the national average (68.7 years). Among districts, life expectancy varies from 72.4 years in Idukki to 77.1 in Alappuzha and Kollam districts. Even the lowest life expectancy district of state has this average about four years higher than the national average. Inter-district differentials in life expectancy are the lowest of the demographic parameters examined here. It is evident in the lowest value (1.24) of the Coefficient of variability index.

According to NSSO 60th round data morbidity rate was 25.5 and 24.0 per cent in rural and urban Kerala, respectively. These two averages were 8.8 per cent and 9.9 per cent for the country as a whole. According to 71st round of the NSSO survey, the morbidity in Kerala has increased to 31.0 per cent in rural and 30.6 per cent in urban areas (Govt. of India, 2017), the national average being 8.9 per cent and 11.8 per cent, respectively. A comparison between national and Kerala averages on this count vindicates very low urban-rural differentials in Kerala than the country as a whole. Similarly, hospitalisation record for one year prior to the survey date reveals hospitalisation ratios in Kerala were 117 and 99 per thousand persons against the national average of 44 and 49 for rural and urban areas, respectively.

High morbidity in Kerala drew considerable interest among researchers since 1980s (Panikar and Soman, 1984; Kannan and others, 1991). Co-existence of low IMR and high morbidity has been widely discussed. There are several contributory factors. Nature of

diseases underpinning morbidity vary with socio-economic groups, environmental hygiene, level of literacy, and residential location (rural/urban/urban slums) (Gangadharan, 2003). Income is not the only factor contributing to the morbidity. Chronic illness is reported more among the upper economic strata. However, some chronic illnesses like asthma, with higher frequency among the poor sections, and the hypertension, more among the affluent class, contribute to morbidity. Interestingly, however, there is a relatively higher share of the rich in total morbidity at the national level in comparison to Kerala (Suryanarayan, 2008). Deprivation related morbidity is declining in Kerala, however, life style diseases or diseases of affluence like heart disease, diabetes and hypertension are reported across socio-economic groups in rural and urban areas both. It seems that the diseases of affluence and deprivation are getting converged in Kerala. Health consciousness, general awareness, total literacy, easy availability of health care facilities and urge to avail medical care, in unison, have also contributed to increasing rate of morbidity in Kerala.

(c) Modern health care system

The rulers of Travancore and Cochin princely states introduced several measures to spread education and western health care system in the 19th century (Ramankutty, 2000). In 1879, there was a royal proclamation for compulsory vaccination for public servants, prisoners and students (Panikar and Soman, 1984). Travancore state undertook various measures for health infrastructure, safe drinking water and even to train the medical professional in key positions. Appointment of Dr Mary Punnen Lukose, a lady doctor trained in England, as the Surgeon-General of Travancore in the early years of the 20th century, was a big step at a time when women doctors were still a rarity in Europe and America (Ramankutty, 2000). In addition, the establishment of hospitals by Christian missionaries in remote areas and encouraging young Christian girls to take up nursing as career had profound impact on Kerala society. Over the years a wide network of health infrastructures-hospitals, and dispensaries was developed both in urban and rural areas. By 1914, medical facilities were available for all people irrespective of caste and community. By 1938, separate maternity care centres were established in hospitals and dispensaries. In 1947, there were 140 government medical institutions, 32 hospitals, 108 dispensaries and 20 private medical institutions, receiving grant-in-aids from the government.

(d) Development of health sector since formation of the state

In 1956, when Kerala emerged as a linguistic state, there had been a well-developed health infrastructure. Health facilities grew rapidly in public sector, as a part of Government policy, in two distinct phases. The first three decades experienced high growth. Allopathic medical institutions grew from 490 in 1966 to 1014 in 1985. On an average, 28 new institutes were added per annum during this phase. The number of beds also increased: 18,526 to 33,329, registering an average annual increase of 779 beds. Availability of beds per lakh population increased from 98 in 1966 to 124 in 1985. Thereafter, the growth rate slide down considerably, only 266 institutes and 4675 beds added since 1985. In 2017, there were 1280 Allopathic health institutions with 38,004 beds. However, private sector continues to grow.

(e) Private health care facilities

There has been a steady increase of people seeking health care from private institutions (Dileep, 2009). The NSSO 71st round survey reveals that nearly 66.0 per cent households in

Kerala depend on private sector for medical care. In 1986, there were 9663 health care institutions with 49,000 beds in private sector, the number rose to 12,918 and of beds to 64,491 in 2004 (Govt. of Kerala, 2006). In the private sector, doctor-bed ratio was about 1:3, against about 1:7 in government. Around 45 lakh patients received treatment in private, about 2.4 times higher than in government medical institutions, indicating to not only the increased importance but also the growing faith of people in the private sector. Fiscal crisis, huge burden of non-plan expenditure, fall in quality of services, and the manner patients treated by the medical staff in government hospitals are some of the underlying factors behind people's preference for private sector (CPPR, 2017). Private hospitals have far outpaced government facilities in provisioning of hi-tech methods of diagnosis and therapy, such as computerized tomography (CT) scans, endoscopy units, magnetic resonance imaging (MRI), neonatal care units, coronary units, etc (Ramankutty, 2000). A survey conducted in 1987 indicated that only 23.0 per cent of 10,000 surveyed households used government institutions and this share varied from 8.0 per cent for the most affluent households to 33.0 per cent for the poorest stratum. Dependency on private sector for health services is not limited to the affluent class alone. Even the lower middle class households prefer the private institutions.

Nevertheless, Kerala stands way ahead of national average in public health care facilities. All India data of 2015 indicated that average number of people served per government (public) allopathic hospital (health institution) was 27,588 in Kerala against all-India average of 61,011 persons (Govt. of India, 2017). Kerala enjoys strong medical services under Ayurveda, homeopathy and other traditional medical systems.

(f) Spatial trend in health care facilities

There is a conscious effort at the policy makers' level to bridge urban-rural gap in health care infrastructure. The NSSO 70th round survey reveals that 94.9 per cent villages of Kerala have a PHC within 10.0 km and 99.8 per cent sub-centres within 3.0 km, whereas the national averages are 71.2 per cent and 71.4 per cent for same distances. Rural area in Kerala accounts for 89.0 per cent of institutions and 47.0 per cent of beds, against 83.0 per cent and 27.0 per cent at the national level. Considering these figures in the light of rural-urban distribution of population in India (in 69:31 ratio) and in Kerala (in 52:48 ratio), it may be noted that availability of health services in Kerala is more equitable and rural oriented than rest of the country. Distribution of institutions per lakh population is also positively related with rural population distribution (Fig 3B, Table 3). However, there are wide inter-district variations in this regard.

(g) Distribution of allopathic medical institutions by districts

The 1280 government allopathic medical institutions in Kerala are composed of 18 General Hospitals, 18 District Hospitals, 81 Taluk Hospitals, 680 Primary Health Centres (PHC), 168 24x7 PHC, 232 Community Health Centres (CHC), 18 Speciality Hospitals, 18 TB Clinics/Centres and 47 Others (Govt. of Kerala, 2018), distributed throughout the state. Six districts have more than 100 medical institutes each. One medical institution serves an average area of 30 km², varying from 16 km² in Alappuzha to 67 km² in Idukki district. Density of institutes (number of institutes/10km² area) varies from 0.15 in Idukki district to 0.64 in Allappuzha district, state average being 0.33 (Fig 8). The scenario is different in case of institutions per lakh population. Idukki district tops the list with 5.86 institutions/lakh persons

and in terms of availability of beds, and Wayanad district ranks first with ratio of 1:599. Both these districts are located within the Western Ghats, dominated by rural population. Distribution of medical institutions is closely related to population density as evident in high positive correlation coefficient ($r= 0.91$) between population and allopathic medical institutions densities and high negative correlation coefficient (-0.81) between population density and number of institutions per one lakh population (Table 3).

Private health care facilities have developed parallel to government facilities and boosted the overall availability of medical services in the districts. Distribution of private medical institutions is closely related to distribution of government medical facilities ($r= 0.83$) and income ($r=0.75$). Apart from income, literacy also shows a high correlation with private medical facilities (Table 3). This signifies that income and education determine individual's preference for private health facilities. Being high urbanized Allappuzha, Kottayam, Ernakulam, Kozhikode and Thiruvananthapuram districts enjoy high concentration of private medical institutions. Such a situation provides a congenial environment for proliferation of private medical centres, developed in and around market places.

(h) Challenges in health sector

For affordable and quality health care services, Kerala is visited by people both from India and abroad. Nevertheless, fiscal constraints, maintaining of high quality of services, aging infrastructure, underutilisation of available services in Government institutions, and apathy of service providers are some of serious challenges. High morbidity, prevalence of new diseases and ageing are other issues. Notwithstanding the government focus on social and spatial justice, the private sector has made big in-roads in state's health care services.

Household health expenditure is rising, making 'health a commodity purchased by ability to pay' (Nababe, 2003). Increase in demand for private health care is a combined effect of government policy, spread of literacy, health awareness, sensitisation and felt need for timely intervention in health matters (Ramankutty, 2000). Privatization has widened the spatial inequalities in health care services sector. Higher coefficient of variability index (CV index) value on three parameters, namely (i) medical institutions density, (ii) medical institutions/lakh population and (iii) beds/lakh population in case of private sector than the public sector make it evidently clear. The three CV index values for public sector are 37.0 per cent, 22.0 per cent, and 29.0 per cent, respectively, and 54.0 per cent, 32.0 per cent, and 52.0 per cent for private sector, in order. Growing privatisation is bound to accelerate this gap further.

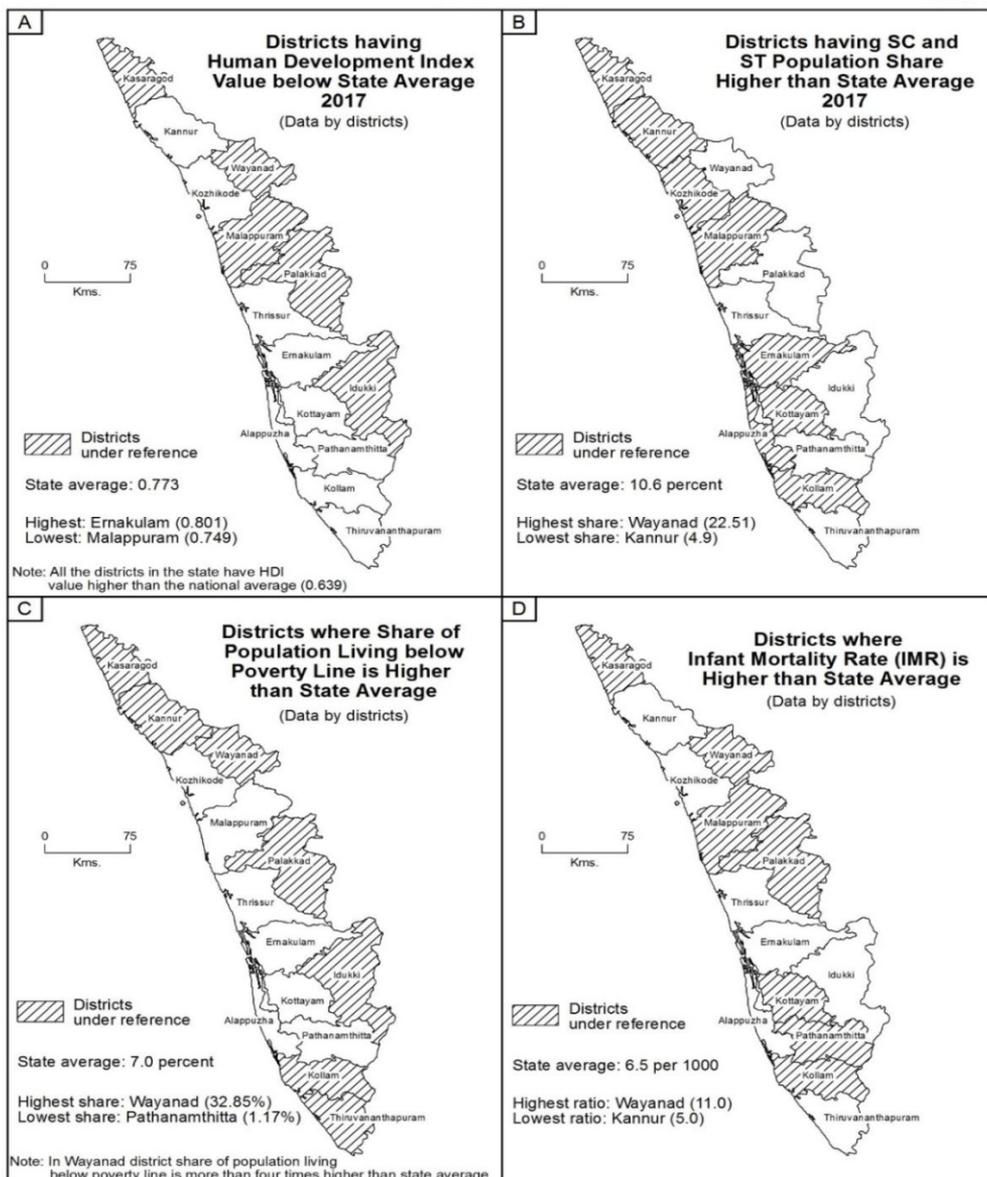
What should be the government strategy to deal with such a situation? One strategy can be that the public sector health institutions compete with those in the private sector by way of raising the quality of services at the affordable prices. Another can be to renovate the public health care system to reverse trend (Lekshmi and others, 2014). The National Health Policy of 2017 recommended an increase in allocation under health sector both at the Central and State level, also advised the state governments to earmark 8.0 per cent of their budget for health sector. Kerala now attempting to achieve 5.0 per cent target. Linking family health expenses with insurance is a widely debated issue among the policy makers. This will ease out disease related expenditure burden.

III. Human Development Index (HDI) and Poverty

Kerala consistently ranks first among all the states in India on HDI. Kerala's HDI value, which was 0.562 in 1995, rose to 0.773 in 2017, against 0.460 to 0.639 increase in national HDI average during this period. While Kerala, with 69 rank in the UNDP list, falls in high human development group, India, as a whole, with 131 rank in medium category of countries (UNDP, 2016). Kerala tops not only in HDI level but also in its growth. During 1995-2017, HDI increased by 0.211 points against the national average progress of 0.179 points, manifesting Kerala's strong commitment to move forward continuously.

KERALA

FIG. 2



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

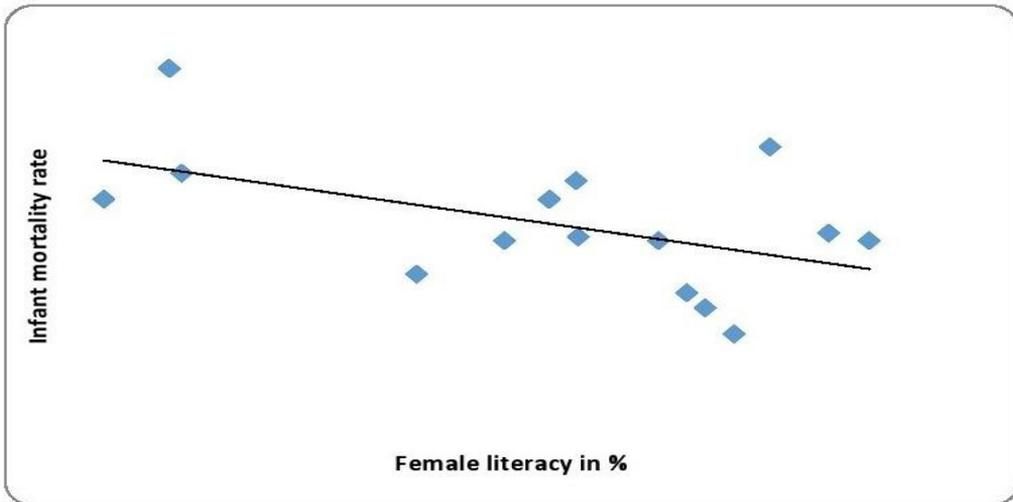


Fig.3 A: Kerala: Association between Infant mortality rate and female literacy

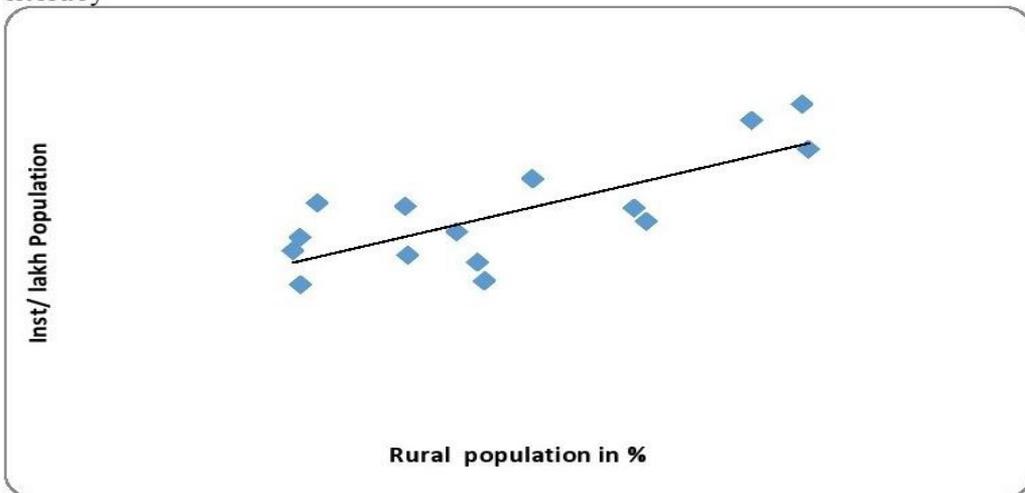


Fig.3B: Kerala: Association between rural population and government allopathic institutions/lakh population, 2017

Centre for Development Studies, Thiruvananthapuram computed district level HDI for Kerala using the four parameters: (i) life expectancy at birth, (ii) literacy rate, (iii) gross school enrolment, and (iv) real per capita income (see Govt. of Kerala, 2005). HDI value varying from a low of 0.753 for Wayanad to a high of 0.801 for Ernakulam district (Fig 2A, Table 2). Five districts (four of Malabar and one district of Southern Kerala) fall below the state average of 0.773 (Table 2). HDI and SC-ST shares find a negative association at the district level (Table 3). In other words, the districts having higher concentration of SC-ST population have lower HDI (Figs.2A and 2B). However, the reverse is true of association between HDI and fishing population in districts. Evidently, fishing population has performed better on parameters used to compute HDI. Locationally, the fishing population is mainly concentrated along the coastal tract of nine coastal districts, having higher urban-industrial

development than midland and highland tracts. Locational advantage has helped the population living there, including the fishing communities.

(i) Poverty

Only 7.0 per cent population of Kerala lives below the poverty line (Bhandari and Chakraborty, 2014). In ten of total 14 districts, this share was below 10.0 per cent (Table 2). However, there were wide inter-district disparity on this count. The share of such population varied from a low of 1.2 per cent in Pathanamthitta to a high of 32.9 per cent in Wayanad district, differing by more than 30.0 per cent. Four districts (Wayanad, Idukki, Kasaragod and Palakkad) have high share of population below poverty line. Interestingly, inter-district disparity in incidence of poverty is much wider than that of their per capita income (see Fig. 2C and Table 3). Incidence of poverty finds a strong association ($r = 0.70$) with distribution of SC-ST population in districts. However, the correlation between fishing population and poverty is not so clear. Poverty and HDI have strong negative association ($r = -0.75$). Spatial association of SC-ST population, poverty and HDI is well evident (Figs. 2 A, 2B and 2C).

The above analysis reveals that even though Kerala's overall achievements in socio-economic development are far better than many other Indian states, there are pockets of deprivation within the state (Chakraborty and others, 2010). Here lies the importance of adopting a spatially disaggregated target oriented approach and capability enhancement initiatives to wipe out deprivation.

Summary and Major Findings

Kerala's achievements in social and human development during the late 1970s early 1980s were so impressive that a term 'Kerala Model' or 'Kerala Mode of Development', was coined to provide a message that it was not necessary to cross urban-industrial hump, as commonly believed, for attaining high human development level. The state has achieved all the targets set under MDGs. However, aggregate picture, forming the basis of most of the deliberations, hides sub-regional inequalities in health, education, human development and income. By picking up twenty-five indicators related to health, education, income and poverty, the study highlights inter-district disparities and explains factors working behind such inequalities.

As evident from very low coefficient of variability, life expectancy and male literacy are spatially most equitable, the reverse is true of population growth. Condition of land (percentage of land <15% slope) and distribution of SC and ST population also record wide variations. The six district of northern Kerala (Palakkad, Malappuram, Kozhikode, Wayanad, Kannur and Kasaragod) are lagging behind their southern counterparts. Wayanad and Kasaragod fared at the bottom, and Kozhikode and Kannur above the average. However, Idukki district of south Kerala lags far behind on certain parameters, making it comparable with Wayanad district of Malabar region. Thrissur, Ernakulam, Kottayam, Alappuzha and Pathanamthitta districts, in combine, form a block of high human development level.

Role of historical factors is still important in explaining the sub-regional inequalities in social and human development. There is a sharp north (Malabar) and south (Travancore) divide in the state. Opposite to national level thesis, which states that British ruled territories are still more developed in health and education than those falling under the princely ruled areas, the Malabar region of Kerala, which remained a part of Madras Presidency during the colonial rule in India, is still lagging behind the southern Kerala, mostly remaining under princely

state of Travancore. This could happen in spite of several positive measures undertaken by the successive governments in Kerala during post-1956 phase.

In addition, relief and settlement system have also played an important role in this. Longitudinal topographic grain of the state coupled with the ribbon like settlements in continuous chain, from one end to the other end of the state along coastal plain and midlands, has shaped the development contours in the state in such a way that the degree of development diminishes from the coast to inland, location with respect to the coast and altitudinal position playing important role. Wayanad and Idukki districts, located in the heart of the Western Ghats, and Palakkad district, with its interior location, are lagging behind other districts of the state. It is for locational reasons that the fishing community, living mostly along the coast and backwaters, are better off on account of health and education parameters in comparison to SC and ST population, concentrated in the interior districts of Wayanad and Palakkad in Malabar area. Privatisation of education and health sectors, in post globalisation/economic liberalisation phase, has accelerated the process of widening spatial inequalities in social and human development in the state.

Financial constraints coupled with shrinking role of the state government in health and education sectors and the consequent increased intrusion of private sector in these sectors is posing now a serious threat to Kerala Model. Strategically, it is important that the state develop decentralised infrastructure and introduces spatial planning for further consolidation of Kerala Model, to minimise spatial inequalities and move towards a sustainable society.

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Table 2: Kerala: Selected indicators by districts

District/ State	Land area (<15% slope)#	Pop. Growth-2001-11 (%)*	CBR (no/1000)&	Pop. Density (km ²)* 2011	Sex ratio Female/1000 male)*	SC ST pop. (%)*	Literacy (%)*	Gender gap in literacy (%)**	Drop-out rate (%)**	Total Allo.Med. Inst./lakh pop.***	IMR (-no/1000) &	Life Expect. (years) &	HDI (Index) 2017	Poverty (%)^
Kasaragod	36.6	8.6	15.1	657	1080	7.8	89.85	4.0	0.38	36.46	8.2	75.7	0.760	14.78
Kannur	22.9	4.7	16.9	852	1136	4.9	95.41	2.1	0.15	39.93	5.0	75.6	0.783	7.17
Wayanad	27	4.7	17.5	384	1035	22.5	89.32	2.2	0.19	43.66	11.0	73.5	0.753	32.85
Kozhikode	27	7.2	17.5	1316	1098	7.0	95.24	0.1	0.26	42.90	6.4	75.4	0.781	5.67
Malappuram	22.4	13.4	20.8	1157	1098	8.1	93.55	2.2	0.13	26.04	7.5	75.6	0.749	6.91
Palakkad	27.5	7.4	12.8	627	1067	16.1	88.49	1.8	0.29	30.41	7.5	76.1	0.761	13.07
Thrissur	28.4	4.9	14.5	1031	1108	10.7	95.32	1.0	0.08	32.99	4.6	76.4	0.794	3.22
Ernakulam	32.7	5.7	12.9	1072	1027	8.7	95.68	1.0	0.21	59.79	3.9	75.9	0.801	2.55
Idukki	3.9	-1.8	11.0	255	1006	18.1	92.20	4.6	0.55	43.93	5.5	72.4	0.754	16.59
Kotayam	51.4	1.1	11.9	895	1039	8.9	96.40	2.0	0.29	68.63	6.6	75.6	0.796	1.26
Alappuzha	91.5	0.9	8.1	1504	1100	9.8	96.26	1.4	0.09	47.65	8.9	77.1	0.794	3.2
Pahnamhitta	18.8	-3	13.5	452	1132	14.4	96.93	3.4	0.07	48.46	6.4	76.7	0.795	1.17
Kollam	38.7	1.9	10.6	1061	1113	12.9	93.77	2.4	0.10	33.26	8.0	77.1	0.787	7.28
Thiruvananthapuram	18.8	2.9	13.4	1508	1087	12.1	92.66	1.4	0.22	32.87	6.4	75.2	0.773	7.87
Kerala	29.5	4.9	14.5	860	1084	10.6	93.91	2.0	0.20	40.57	6.5	75.6	0.773	7.0

Data source: # Chattopadhyay and Chattopadhyay, 1995; * Census of India, Kerala, 2011; **Economic Review, 2018; & Government of Kerala, 2006; ^Bhandari and Chakraborty, 2014

DIASPORA COMMUNITIES AND DIASPORA POLICIES – THE HUNGARIAN CASE¹

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Abstract: The paper examines the category of diaspora and the different approaches to diaspora policies with the main objective of identifying the elements of diaspora group cohesion, which allows the distinction of Diaspora from other types of macro-community. Therefore, the analysis covers the migratory origin, the social integration, the cultural assimilation, the institutionalization of ethnic boundaries, the homeland orientation and the diaspora policies provided by the kin-state. Summarizing the most relevant typologies within this field of study, the authors underline that the different ideal types of diaspora communities, organizations and policies do not appear in the form of "pure" in reality. To illustrate this, the Hungarian diaspora and the kin-state policies targeted toward them have been taken as a case study.

Keywords: *Diaspora, minority, migration, Hungarian diaspora, identity preservation, diaspora politics*

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Diaspora studies: The importance and actuality

Szilágyi (2018) argues that in the era of post-national globalisation, post-national and foreign politics, the territorial basis of authority are replaced by the system of networks, processes and trends. It is the utmost source of social knowledge. The diaspora studies are closely linked to exploring this source. Investigating the institutionalization of communities of migratory origin and their relations with their homeland provides a good opportunity to define the contemporary relations of global, national and local formations (Gazsó, 2015). Furthermore diaspora studies link branches of science as it is an interdisciplinary field of study. To study the diaspora communities dispersed in the world, theories and methods of different branches of science should be fused to get a holistic picture with different viewpoints of socio-political processes to elaborate general definitions of the analysed communities. The focus of diaspora studies is on the socio-political processes—such as the migration movement, the social integration, the cultural assimilation, the institutionalization

¹The paper is dedicated to the 650th anniversary of the foundation of the University of Pécs, Hungary.

of ethnic boundaries, the homeland orientation and the kin-state activism—rather than the static phenomena, the cultural content or the numeric definition of the explored macro-communities (Bokor et al. 2018, Wilhelm, 2009). This paper discusses the basic elements of diaspora group cohesion, which all together allows distinguishing diaspora from other ethnic, national or religious minorities.

We begin with Safran's (1991: 83–84) well known diaspora definition, which states that the diaspora concept is used for minority communities whose members share several of the following characteristics:

- 1) they or their ancestors, have been dispersed from a specific original »centre« to two or more »peripheral,« or foreign, regions;
- 2) they retain a collective memory, vision, or myth about their original homeland—its physical location, history, and achievements;
- 3) they believe that they are not—and perhaps cannot be—fully accepted by their host society and therefore feel partly alienated and insulated from it;
- 4) they regard their ancestral homeland as their true, ideal home and as the place to which they or their descendants would (or should) eventually return—when conditions are appropriate;
- 5) they believe that they should, collectively, be committed to the maintenance or restoration of their original homeland and to its safety and prosperity; and
- 6) they continue to relate, personally or vicariously to that homeland in one way or another, and their ethno-communal consciousness and solidarity are importantly defined by the existence of such a relation.

Migratory origin as power of group cohesion

One of the most commonly accepted criteria of the 'diaspora' concept is the migratory origin. It does not primarily refer to actual migration personally experienced, but the manifestation of the event of migration in the collective conscience and its symbolic community shaping force. Partly, this is what provides the grounds for the internal self-identification and the external assessment of diaspora communities as such. In this sense, the significance of migratory origin surpasses even that of otherness, i.e. of cultural, ethnic, linguistic or religious distinctive features, for what makes a diaspora community so—differentl from the social and cultural environment surrounding it is that it derives its origin from elsewhere, even when the members of the given community did not personally experience the process of migration.

It is the migratory origin that sets diaspora communities apart from ethnic and national minorities regarded as autochthonous. This last term refers to those communities whose ethnic or national frameworks have been consolidated within the frameworks of other nation-states (such as the Basque or Catalan communities that have territorial autonomy in Spain), or those communities which due to the modification of the borders, have found themselves outside the borders of the kin-state and continued to evolve there (such as Hungarian ethnic minorities residing in the areas detached from historic Hungary). While in the case of a diaspora, it is the cohesive force of the migration from the place of origin

present in the collective conscience that matters the most, for the latter ethnic and national communities, it is the naturalness of staying in the same location, preserving their contact with the native land and the historic past linked to one's habitat, in other words, the group-forming force of indigenes and autochthonous existence that is crucial.

Kymlicka (1995) drew attention to this distinction as it follows: "I believe [...] that it is important to distinguish national minorities (distinct and potentially self-governing societies incorporated into a larger state) from ethnic groups (immigrants who have left their national community to enter another society)".

The distinctions between diasporas and autochthonous national minorities are the most striking in the objectives of their institutions, and their claims toward the majority states they are incorporated in. While diaspora organizations fight mostly for the conditions enabling integration or against negative discrimination, the objectives of autochthonous minorities go beyond it. They often claim self-determination or cultural, political and territorial autonomy (e.g. Bretons and Alsacians in France, Frisians in the Netherlands, Bosniaks of Sandzak in Serbia and the trans-border Hungarians in the neighbouring countries), or they word separatist demands and claims for entire independence (e.g. Catalans in Spain or Scots in the United Kingdom).

Diaspora vs. scattered communities—clarifying a confusion of Hungarian terminology

Related to the distinction between diaspora of migratory origin and autochthonous national minority it is worth speaking about the meaning of the Hungarian expressions 'scattered' (szórvány). This term is used to denominate national communities, which have become minorities in their native place by the modification of state borders losing their 'block' (tömb) existence gradually because of the cultural assimilation and the emigration. By contrast, the term 'diaszpóra' in Hungarian is used to denote communities, which have been formed as a result of migration processes. As Balogh et al. (2007: 8) argued: "In Hungarian public discourse as well as in scholarly literature in history and folklore, the term 'szórvány' is primarily applied to Hungarians living not in a uniform bloc as a majority, but mixed with other ethnic groups and in minority in the areas of historical Hungary annexed by successor and neighbouring states following the Peace Treaty of Trianon. While the concept of 'diaszpóra' conventionally implies a strong emphasis on dispersion and migration, the notion of 'szórvány' for domestic (Hungarian) use highlights the semantic component of the 'residual status', regression and the threat of disappearance". However, Keményfi (2006: 85–86) argues that there are overlaps and exceptions between the autochthonous minority and the diaspora of migratory origin: "Although the distinction autochthonous (szórvány) vs. allochthon ('diaszpóra') seems to be helpful, this principle of differentiation can be contested in many cases. Consider to what extent a Hungarian Protestant community in Mezőség (Câmpia Transilvaniei) is different as a 'szórvány' from a Hungarian Roman Catholic community that settled down there in the 19th century. But we could also mention the example of the ongoing migration of ethnic Hungarians from the neighbouring countries, be it to the old kin-state or to other countries of Europe". Clifford (1994: 309) also drew attention to the dangers of using migratory origin as a criterion of defining minority groups: -Lines too strictly drawn between 'original' inhabitants (who often themselves replaced prior populations) and subsequent immigrants risk ahistoricism. With all these qualifications, however, it is clear that the claims to political legitimacy made by peoples who have

inhabited a territory since before recorded history and those who arrived by steamboat or airplane will be founded on very different principles.‡

The forms of social integration

In addition to the migratory origin, the social integration is also a decisive criterion for the diaspora as well. The typologies which classify diasporas based on their integration into the majority society of their host state can be considered as ‘classic’. Regarding this issue Armstrong’s typology (1979) is a milestone, which divided diaspora communities into two major types. On the one hand ‘proletarian diaspora’ refers to the communities of migratory origin that live in a marginal, peripheral and disadvantaged situation in their new home. On the other hand ‘mobilized diaspora’ is related to those diaspora communities which have achieved a distinguished social status for themselves and thus they are able to affect the economic and political life and even the foreign relations of their host state. In the past decades, several diaspora typologies of this kind have been suggested. A few diaspora types are: Cohen’s (1997) five-component typology—victim, labour, imperial, trade and de-territorialized, Esman’s (2009) three-component typology—the settler, labour and entrepreneurial, and Bruneau’s (2010) four-component typology—the religious, political, cultural and entrepreneurial.

The institutionalization of ethnic boundaries

For a community of migratory origin to become a diaspora community, it needs to resist cultural assimilation while integrating socially; that is, it needs to preserve its “otherness” with respect to the majority of the host state. This does not mean that the internal cultural characteristics of the diaspora communities will be preserved irrespective of space and time, but that the ethnic boundaries constituting the foundation of cultural otherness become long-lasting between a given diaspora community and its social environment. The theoretical framework of the concept of ethnic boundaries in this sense was elaborated by the cultural anthropologist Fredrik Barth. Barth’s (1969) basic thesis affirmed that ethnicity is determined by the way individuals belonging to different ethnic groups interact with each other and express certain cultural aspects in harmony with the context. By that, Barth called into question the view generally accepted until then, namely that ethnicity is the sum of unaltered cultural characteristics (mother tongue, belief system, customs, traditions, moral and aesthetic norms, attachment to a certain location, etc.) on the basis of which any person’s ethnic affiliation can be automatically and objectively identified. Barth’s theory directed attention from cultural specificities to ethnic boundaries, which represented a paradigm shift in the scientific approach of ethnicity.

The ethnic boundaries in spite of their interoperability, proved to be more durable than the cultural characteristics, which are changing continuously because of the dynamism of social interactions and the influence of the environment. The maintenance of ethnic boundaries is carried out communally rather than individually, through the process of institutionalization. The different nature of diaspora institutions offers another criterion for inventing typologies. There are a number of ways to classify diaspora institutions, such as the date of their creation, their goals or the areas of their activity. Furthermore, there are typologies that combine different principles for creating a more complex form of categorization. One of the most striking cases of this is the typology developed by Attila Papp

Z. and his collaborators (2008) with the aim to classify the functions and characteristics of Hungarian-American institutions. Their typology—based on the empirical research and classification of the Hungarian institutions in the United States of America—combines the principle of ethnically open vs. ethnically closed organizations with the principle of local vs. national organizations. The result of this combination is a matrix that encompasses four types of diaspora organizations.

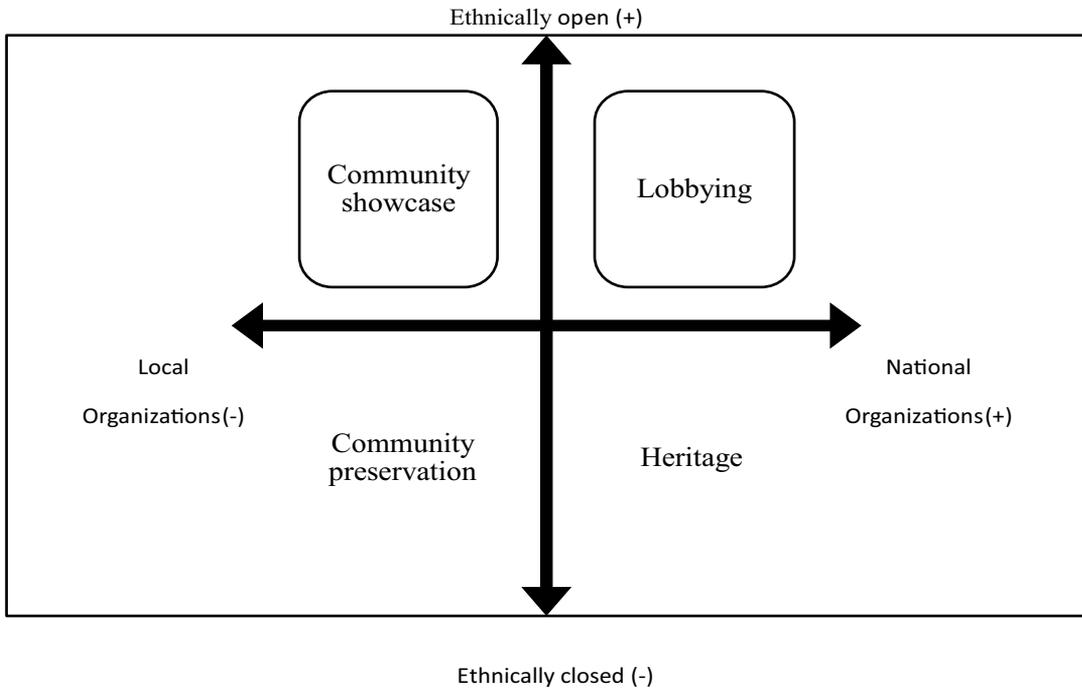


Fig.1. Classification of diaspora institutions. Source: Papp Z., *et al.*, 2008: 430.

Even if this complex typology reaches a structural understanding of the fundamental features of diaspora organizations, its ideal types seldom if ever exist in their pure form in everyday life. As Papp Z. himself recognized it: “In reality, actual organizations share characteristics of different types, although usually its most salient characteristic allows us to characterize it as a single type” (Papp Z. *et al.* 2008: 430).

Social integration and ethnic boundaries maintenance do not happen overnight. More time needs to elapse before it turns out whether a community of migratory origin is capable of fitting into the society surrounding it while maintaining its ethnic boundaries and transmitting the desire to exist as a distinguished ethnicity from one generation to another. Existing as a diaspora is basically a long-term phenomenon, characterized by the permanence of “living among strangers”. Consequently, one of the crucial criteria of diasporas is the time factor.

Diasporic network and homeland orientation

Migratory processes and ethnic boundaries existed as early as in the Middle Ages. In fact, at the time of the migration of peoples, a greater proportion of the population must have lived in emigration than nowadays. However, in those days, seldom (and only in the case of religious

communities) was there a possibility for related communities dispersed all over the world to establish transnational contacts with each other reaching across borders. This network of relations is also one of the decisive criteria of the category of diaspora in a narrow sense, the formation of which has been facilitated the most by the conditions of the present age. The appearance of means of transportation opening up new horizons for human mobility, the increasingly fast development of communication and information technologies and their widespread use, the international flow of capital, the global currents of various ideologies and concepts, all in all, the processes of globalization have induced such conditions that make it possible for macro communities organized on ethnic, national or religious basis and dispersed in the world to create a diasporic existence.

The concept of global network connections of diaspora communities was the end of the age of modern nation states and the beginning of a new age of globalisation for many scholars (Appadurai, 1996.; Beck, 1999.; Castells, 1996.; 1997.; 1998.). However, it is questionable whether the sum of these processes will create a homogeneous and transnational world in which the national efforts of the state authorities and governments become insignificant. Experience seems to indicate that national identity constitutes the basis of self-identification and world order up to this day. This does not mean that national efforts are present in the same form as they were in the early period of the birth of modern nation-states. Nationalisms—just like other ideologies, public cultures and political religions—are constantly changing: they continuously adapt to the new social, political, economic and cultural circumstances. So the question is not whether we are witnessing the end of the age of nation-states, but how the processes of globalization shape the generic goals of nationalism.

Besides migratory origin, the ethnic boundaries' maintenance and the relations with kin communities believed to be of identical origin, another fundamental criterion for macro communities categorized as diasporas is their attachment to a certain place of origin, or, in more specific words, the homeland orientation. This does not refer to the feeling of homesickness or nostalgia for the home, but rather to the special orientation of a given community towards a real or imagined place of origin, which appears in the collective consciousness as the authentic source of the cultural values, ethnic, national or religious identity and loyalty of this community. This relationship is quite special if this place of origin appears not only in the collective memory, but also in the shape of a specific state. Moreover, this state may have such economic and legal support policies that affect certain diaspora communities directly. In this case, we are not only dealing with an imagined ancestral homeland, but a concrete kin-state, which has not only a symbolic relationship with the diaspora community, but a pragmatic one. The homeland orientation of diaspora communities and the diaspora policies of kin-states are the evidence of the continuity of the role of the nation-states under globalism (Gazsó, 2015).

Scholars on this topic tend to make typologies by identifying similarities and differences among these state policies designed to forge the relationship between diaspora communities and their homeland. The following are a few of the most relevant.

Levitt and Dehesa (2003) comparing the diaspora policies of South American states categorized state policies supporting diasporas belonging to five types:

- 1) bureaucratic reforms that states implement in response to emigrants' and their descendants' heightened importance to policymakers;
- 2) investment policies which seek to attract or channel migrant remittances;
- 3) extension of political rights to non-resident populations in the form of dual citizenship, the right to vote or the right to run for public office;
- 4) introduction of state services or protections for diaspora communities;
- 5) implementation of symbolic politics designed to maintain and reinforce the national identity, the sense of belonging and long-term membership of co-nationals living in diaspora.

Gamlen (2006), based on a comparative study of diaspora policies of approximately seventy states, identified three higher-level types of diaspora engagement policy:

- 1) capacity building policies, which have two pillars: the symbolic nation-building policies and the institution building policies;
- 2) extension of rights, which means, on the one hand, the political incorporation of the diaspora and, on the other hand, the extension of social and civil rights to the diaspora;
- 3) extracting obligations from the diaspora, which aims at utilising economic and political sources of it.

Ragazzi (2014) on the basis of an original dataset characterized thirty-five states in terms of their symbolic policies, social and economic policies, religious and cultural policies, citizenship policies and government and bureaucratic control, coded by nineteen categorical variables. From the quantitative comparative analysis of this dataset Ragazzi derives five ideal-types of states:

- 1) expatriate state, which is formed around the focus on cultural and educational policies as the most distinguishing factor;
- 2) closed state, which refers to those states that strongly regulate or seek to restrict the mobility of their population and police it abroad and do not allow for external voting;
- 3) global-nation state regroups states that represent the widest range of diaspora policy features and provide populations abroad with the broadest number of civil, political and social rights;
- 4) managed labor state is characterized by the provision of investment schemes for returnees;
- 5) indifferent state is characterized by a generalized lack of interest in its population abroad.

In case of all models aiming to classify diasporas it is important to underline that they are not categories excluding one another but they are parts of descriptive theories even if the above cited authors give examples to represent them. In reality mostly mixed situations and institutions can be perceived instead of ideal types. Furthermore the kin-state responsibility and the diaspora engagement practices are changing from time to time. As the diaspora communities should not be seen as bounded entities, or a static ethno-demographic condition, but rather as a dynamic and multi-dimensional phenomenon, the kin-state should be conceived not as a given, analytically irreducible, fixed entity, but rather in terms of

differentiated and competitive positions adopted by different actors, organizations, parties or individual political entrepreneurs competing for power (Gazsó, 2017.).

The Hungarian Case

The Hungarian nation is divided by state borders. Hungarian communities abroad came into being, small and large in number, all over the world as a consequence of the vicissitudes of Hungary’s modern history. The border changes of the 20th century (particularly following the peace treaty of Trianon signed in 1920, which ceded two-thirds of the territory of Hungary to other countries), the wars that have devastated the Carpathian Basin, as well as drastic political regime changes and economic crises have pushed millions of Hungarians beyond Hungary’s borders either as national minorities in newly created states or as immigrants. They and their descendants collectively have preserved their national identity to a lesser or greater extent by maintaining their ethnic boundaries across generations within the societies of which they became a part. These trans-border communities have sustained to the present a widespread institutional network and certain relations with Hungary.

Table 1. Typologies within diaspora studies

Typology of	Criteria	Type	Author
Co-national Communities Abroad	Origin	Autochthonous National minorities Diaspora communities of migratory origin	Will Kymlicka (1995)
Diaspora Communities	Migration feature Social integration Community shaping force	Proletarian, Mobilized	John A. Armstrong (1976)
		Victim, Labour, Imperial, Trade, De-territorialized	Robin Cohen (1997)
		Settler, Labour, Entrepreneurial	Milton J. Esman (2009)
		Religious, Political Cultural, Entrepreneurial	Michael Bruneau (2010)
Diaspora Organizations	Open vs. closed Local vs. national	Community showcase Lobbying, Heritage, Community,preservation	Attila Papp Z. (2008)
Diaspora Policies	Feature of measures	Bureaucratic Investment policies Extension of rights Providing state services Symbolic politics	Peggy Levitt – Rafael de la Dehesa (2003)
	Level of engagement	Capacity building Extending rights Extracting obligations	Alan Gamlen (2006)
Kin-States	Level of transnational inclusion	Expatriate, Closed Global-nation Managed labour Indifferent	Francesco Ragazzi (2014)

Source: Gazsó, 2017: 72.

On the one hand, the so-called autochthonous Hungarian national minorities living in the neighbouring countries are concentrated in Transylvania (Romania), southern Slovakia, Vojvodina (Serbia) and Trans-Carpathia (Ukraine), however, there are some less numerous communities of this type also in Burgenland (Austria), northern Croatia and Prekmurje (Slovenia) (Bárdi et al., 2008). According to the last census, they all together consist of 2.2 million people (Kapitány, 2015). One of the criteria for grouping these minorities is their situation relation to the majorities, i.e. the above mentioned distinction between the ‘scattered’ (szórvány) and living in the ‘block’ (tömb) (Agárdi 2005). ‘Tömb’ means a larger area inhabited by the minority, such as the centre of Transylvania (Sik, 2012). “Szórvány” refers to those Hungarians beyond the border who constitute less than 30 per cent of the local population. Thus, they are isolated from the nation with an interrupted institutional system, and are, therefore, subject to continuous eradication (Ördögh, 2017). On the other hand, there are millions of Hungarian people living in diaspora communities which came into existence through the migration waves from the end of the 19th century until nowadays (Gaszó, 2019).

Finding the Hungarian diaspora

In the assessment of the Hungarian diaspora a number of difficulties exist. On the one hand, in many of the receiving countries ethnic or nationality origin was not recorded in the census data. In this regard they took into account only the place of birth or citizenship. These records do not indicate the descendants of a Hungarian immigrant even when many among them have preserved their Hungarian identity. On the other hand, we do not have precise data on the number of Hungarians, leaving the Carpathian Basin with the emigration waves of the 20th century. This too is a consequence of numerous causes. In the years preceding First World War the mass migration, which left entire regions of historic Hungary depopulated, were ethnically mixed (because of the fact that the population of the Kingdom of Hungary was ethnically highly heterogeneous as well). Then during the inter-war years the vast majority of emigrating Hungarians came from those areas of the former Austro-Hungarian Monarchy which had been ceded to the neighbouring successor states. Thus, they were recorded as citizens of Austria, Czechoslovakia, Romania and the Kingdom of Serbs, Croats and Slovenes (later called Yugoslavia). Thus all data we have about the numerical size of the Hungarian diaspora are based on estimations.

The Hungarian diaspora engagement policies of the present age

In the end of 1980s, after the 40 years of socialist regime, through the process of democratic transition Hungary was reconsidered as a kin-state under the new social, political and economic conditions. The Government responsibility for the fate of Hungarians living outside its borders was stated in the new 1989 Constitution. The designation of a kin-state stance in this way was not an exception, but a general tendency in East-Central Europe. The Romanian, Slovenian, Croatian, Ukrainian and Polish Constitutions contain similar references to their ethno-national kin-communities living beyond their borders.

Initially the Hungarian kin-state policies were mainly concerned with supporting the autochthonous kin-minority populations living in neighbouring states. After 2010 this changed significantly. Presently, Hungary’s kin-state policies have shifted toward the diaspora communities in numerous ways. Table 2 presents the main Hungarian diaspora

engagement policies of the present age at three different levels: (i) legislation; (ii) decisions-making bodies and consultative forums; and (iii) aid policy and programs.

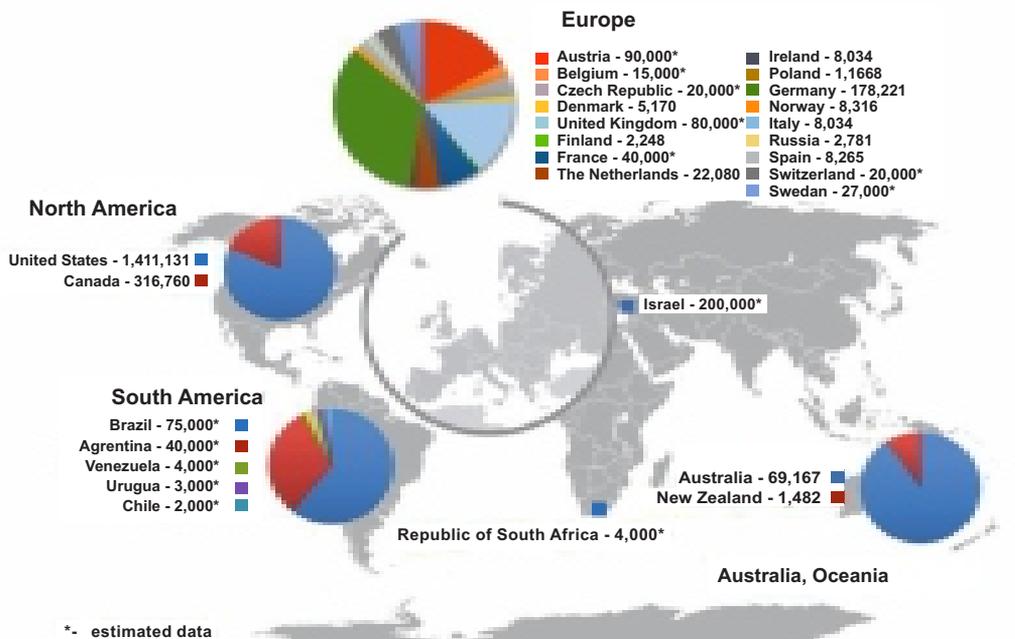


Fig. 2. Estimation of the number of Hungarians living in Diaspora.

Source: Prime Minister's Office, *State Secretariat for Hungarian Communities Abroad* (2016): Hungarian Diaspora Policy. Strategic Directions. p. 18.

Table 2. Hungarian Diaspora policies in practice.

Legislation	Decision Making bodies and Consultative Forums	Programs
Ethnic preferential citizenship laws (Act XLIV of 2010)	State Secretariat for Hungarian Communities Abroad	Julianus Program (cadastre of the Hungarian heritage)
Extension of suffrage (Act CCIII of 2011)	Bethlen Gábor Fund Bethlen Gábor Fund Management Ltd.	Mikes Kelemen Program (preservation of the diaspora's material heritage)
Testimony for National Cohesion (Act XLV 2010)	Hungarian Register	Kőrösi Csoma Sándor Program (preservation of Hungarian identity, language and culture)
Reinforcing the kin-state responsibility (Fundamental Law of Hungary of 2011/D)	Hungarian Diaspora Council	Diaspora Program (birth right program)
	Committee on National Cohesion	Study Grant Programs
	Hungarian Science Abroad Presidential Committee	Momentum Program (brain drain tax)

Source: Authors

The Hungarian case shows the diversity of diaspora policies in practice. Table 2 contains almost every type of diaspora engagement policy exposed on the table 1. Moreover, it also should be underlined that the orientation of the kin-state to co-nationals living abroad is not a static phenomenon, but dynamic process. Consequently, the Hungarian diaspora engagement policies of the present time is changing with time (Jarjabka – Gazsó, 2019).

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Migration Pattern in India: A Comparative Analysis - Total versus Scheduled Caste Migrants, 2001

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Abstract: Census of India 2001 for the first time published migration data related to Scheduled (castes and tribes) migrants with that of all migrants, making it possible to compare the migration process between the two segments of Indian population. The present paper compare the all migrants with that of scheduled castes. The study of migration patterns of the two groups, using the data on their socio-economic and geographical selectivity of migration, reveals that both the groups suffer from the absence of strong economic incentives for migration. However, Indian economy has provided relatively stronger educational and economic opportunities to migrants belonging to general population than those belonging to scheduled castes. Despite their poor background in education, the share of scheduled caste migrants among those migrating for educational opportunities is found to be higher than for economic opportunities.

Keywords: Migration process, Geographical selectivity of migration, Multicollinearity, Eigen vector, Principal component, Orthogonal dimensions

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Introduction

According to Census of India 2011, more than 30.0 percent of Indian population resides in places other than their place of last residence. Such persons, known as ‘_migrants’, are found to be having different combinations of gender, residence, education and many other social characteristics. These patterns of migration have close links with socio-economic and political realities of the society. Census of India, National Sample Survey Organisation (NSSO) and other research agencies in India, have been carrying out considerable research on various aspects of migration patterns in India since long back. In view of the selectivity of migration, the data is tabulated by different characteristics like, residence, gender, age, education etc. Since social networking also plays an important role in migration, attempts have been made, though at a limited scale, to tabulate migration data for different social groups also, like scheduled castes and tribes etc. NSSO in its 64th round (2007-8) has tried to collect the migration data on scheduled caste, tribes and others groups also, but on a limited scale¹.

Census of India, which has a long history of collecting and tabulating the data on migration, has been covering important aspects of migrants except for major social groups like; caste and religion up to 1991. The coverage, however, has continuously been evolving and improving since its inception in 1871, the 2001 Census of India resolved, for the first time, to tabulate a series of special tables for two major deprived sections of Indian society viz. scheduled castes and tribes also for selected aspects of migrants. These tables, however, were prepared at the state level and only for interstate migrants. The information provided

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in these tables are valuable as never before in independent India such data for migrants was available. These tables covered important aspects of migration such as: duration, distance, residence, gender, reasons and age etc. The migration data of scheduled castes (SCs) and tribes (STs), however, could become available for analysis only recently, due to the delay in publication. However, such an important data are quite useful to understand the process of assimilation of the migrants of the weaker section of the society in the labour market as compared to all migrants. Taking a cue from all this, the present study attempts a state level comparative analysis of the intra-state migration patterns of all migrants and with that SC migrants- the largest deprived section. Notably, such a comparative analysis is not possible at interstate level, since data for the same are not available for SC and ST population. Despite this, such an exercise will be worthwhile, since share of interstate migration is not very high.

The patterns of migration of any section of the society, reflected in their selectivity of gender, residence, distance, education, nature of work and reasons of migration etc. will indicate the opportunities available to them. A comparative analysis will help in understanding inter-group differentiation in availability of these opportunities.

Dominant Patterns of Migration

On the basis of migration selectivity, the patterns of migration of any group can be determined with the help of related variables of distance, residence, gender, education, age, nature of work and reasons of migration etc. However, characteristics of all migrants and SC migrants given by the Census are not identical. The comparative study between all migrants and SC migrants, therefore, is carried out by taking only the common variables listed below in Table 1. Duration of migration has been excluded due to the fact that their number is affected by their mortality.

Table 1: List of variables

S. No.	Variable Name	Variable Name (abbreviated)
1	% of intra-district migration.	MIGRATION RATE I
2	% of inter district migration.	MIGRATION RATE II
3	% urban of intra district migration.	% URBAN IN I
4	% urban of inter district migration.	% URBAN IN II
5	% of female in total intra district migration.	% FEMALE IN I
6	% of female in total inter district migration.	% FEMALE IN II
7	% of urban male reporting work/employment as the reason of migration.	U M WORK/ EMPLOYMENT
8	% of urban female reporting work/employment as the reason of migration.	U F WORK/ EMPLOYMENT
9	% of urban male reporting education as the reason of migration.	U M EDUCATION
10	% of urban female reporting education as the reason of migration.	U F EDUCATION
11	% of rural male reporting work/employment as the reason of migration.	R M WORK/ EMPLOYMENT
12	% of rural female reporting work/employment as the reason of migration.	R F WORK/ EMPLOYMENT
13	% of rural male reporting education as the reason of migration.	R M EDUCATION
14	% of rural female reporting education as the reason of migration.	R F EDUCATION

In 2001, there were 28 states and 7 Union territories in India for which the above data were generated from the *General Tables and Special Tables for Scheduled Castes of the D-Series of Migration Tables of Census of India 2001*².

Data set of the above 14 different variables related to major characteristics of migrants such as distance, residence, gender, major reasons of migration etc. was prepared for all migrants and SC migrants, separately.

The scores of these 14 variables showed considerable inter-correlation among themselves, suggesting that they can be summarised through smaller number of dimensions by clubbing together the strongly correlated variables. To summarise in this way, each set of data were subjected to the principal component analysis separately-for all and SC migrants. Each correlation matrix yielded a set of 14 eigen values, equal to the number of variables. These eigen values can be arranged in descending order. If high multicollinearity is found in the correlation matrix, first few eigen values will be very large, suggesting that entire set of variables can be summarised by these few “principal components”. Thus the eigen values greater than unity are given in Table 2. These eigen values relate to their corresponding principal components. Each principal component (PC) is a unique weighted combination of the 14 constituent variables transforming them into smaller number of different orthogonal patterns of migration. The required weights are derived from different eigen vectors corresponding to each eigen value. The eigen value of each PC also gives the variation explained by it as proportion to total variations of the data matrix³. Thus we will find a few of them explaining a very larger proportion of the total variance of the 14 variables. Table 2 also provides the proportion of variation explained by each component to the total variation (n=14) and the cumulative percentage explained by them.

Table 2: Extraction of Principal Components and their Cumulative percentage Variance

P.C.	All Migrants			SC Migrants		
	Total	% of Variance	Cum. % of Variance	Total	% of Variance	Cum. % of Variance
1	5.047	36.050	36.050	4.466	31.898	31.898
2	2.433	17.379	53.429	2.900	20.711	52.609
3	2.014	14.386	67.815	1.662	11.872	64.481
4	1.227	8.763	76.577	1.348	9.629	74.110

There are four eigen value greater than 1 in each case, however, only first three principal components were retained to avoid complexity arising due to higher number of dimensions.

The first PC, giving the most dominant pattern of migration, in the case of all migrants explained 36.1 percent of the total variations. Second PC, giving second most dominant pattern, explained about a half as much as the first one. Both together explained about 53.5 percent of the total variance. Third PC, explaining the third most dominant pattern, explained about 14.40 percentage variations. Thus first three most dominant patterns of total migrants

together explained about 67.80 percent of the total variance of the 14 variables. Such a good percentage variations is sufficient to justify the choice of the first three PCs.

The first PC in the case of SC migrants explained about 31.9 percent of the total variance. Second PC explained about two-thirds as much as the first one. Both together explained about 52.6 percent or more than one-half of the total variance. Third PC component explained nearly 14.4 percentage variation. Like all migrants, in the case of SC migrants also first three dominant patterns together explained 64.5 percent of the total variations of the 14 variables. Such a good percentage variations in the case of SC migrants is also sufficient to justify the choice of their first three PCs.

Factor coefficients and scores of dominant patterns

To identify the patterns reflected by each PC and also to work out the factor score, the factor coefficient matrix is also generated using SPSS package and are given below in Table 3.

Table 3: Factor Coefficients for All Migrants and SC Migrants

S.N.	Variables	Factor Coefficients					
		All Migrants			S.C. Migrants		
		1 st PC	2 nd PC	3 rd PC	1 st PC	2 nd PC	3 rd PC
1	Migration Rate I	-.402	.587	.317	.731	-.223	-.179
2	Migration Rate II	-.566	.348	.127	.591	-.180	.428
3	% Urban In I	.611	-.530	.113	-.040	.367	.452
4	% Urban In II	.390	-.445	.208	.349	-.081	.044
5	% Female In I	-.857	.253	-.290	.772	-.264	-.428
6	% Female In II	-.850	.146	-.190	.782	-.454	-.250
7	UMWork/Employment	.362	.202	-.756	.822	-.070	-.049
8	UF Work/Employment	.758	.402	.204	.389	.701	.303
9	UM Education	.251	.333	.437	.238	.776	-.437
10	UF Education	.688	-.249	.616	.361	.423	-.150
11	RMWork/Employment	.618	-.086	-.710	.786	-.026	.328
12	R F Work/Employment	.848	.302	-.076	.559	.189	.685
13	R M Education	.129	.784	-.035	.546	.588	-.308
14	R F Education	.647	.562	.161	-.101	.860	-.122

First PC of allmigrants

The first PC of the all migrants explains 36.1 percent of the total variance of 14 variables. It has significant negative coefficients with both the percentages of intra-district and intra-state migration and also with the percentage of female in both. However, percentage of migrants stating work/employment as reason of migration for both male and female in urban and rural areas also showed significant positive coefficients. Urban and rural female giving education as reason of migration also showed significant positive coefficients. Thus, coefficients of most of the variables related to main reasons of migration are on expected line. Hence we can call the most dominant intra-state migration pattern of all migrants as: **“low migration of male”**. The scores of first PC of all migrants have been plotted (see Fig.1A).

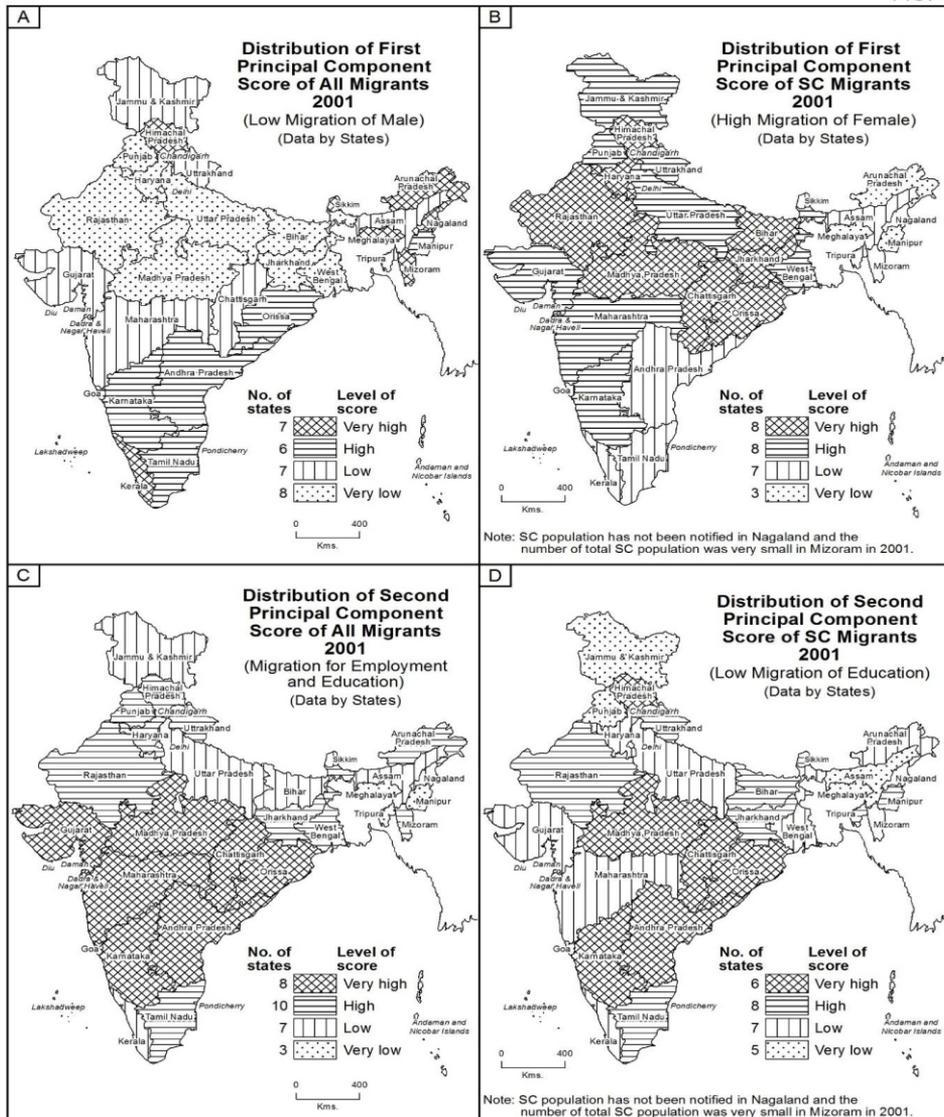
Thus the most dominant pattern among intra-state all migrants shows a tendency of migration rooted in work/employment and education but with a weak flow and male dominance. Weakness of migration stream has been is a serious concern raised by many⁴.

First PC of SC migrants

The first PC of the intra-state migration of SCs explains 31.9 percent variations of the total of the 14 variables and the pattern of the factor coefficients of the variables show almost convers of the all migrants. It shows significant positive coefficients of percentage of both intra-district and intra-state migrants and percentage of female in both (as oppose to total migrants). Importantly, the coefficients of all the other variables remain almost on the expected lines as in the case of all migrants. There are marginal differences between the two and hence we may call as, **High migration of female**. Scores of first PC have also been plotted on a map (Fig. 1B). Thus the most dominant pattern among the intra-state SC migrants shows a tendency of high migration of female rooted in work/employment and education.

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FIG. 1



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

Geographical distribution of most dominant pattern of migration: All and SC migrants

It is important to note that among all migrants the dominant pattern is not very strong for males but low following the general pattern of employment and education as the reason of migration. On the other hand, the dominant pattern of SC migrants is found to be quite strong for females due to the similar reasons.

The geographical distribution of the factor scores of first principal component of the all migrants and SC migrants is highly revealing (Figs. 1A and 1B). In the case of all migrants the concentration of the scores is found to be very high or high mainly in the south Indian states of Karnataka, Andhra Pradesh, Kerala, and Tamil Nadu, and major parts of the north and north-eastern states including Odisha.

The states where the scores of the first principal components of the all migrants were low or very low, the score of the first principal components of SC migrants are found to be high or very high in states of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Uttarakhand, Uttar Pradesh, Rajasthan, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, West Bengal, Karnataka, Gujarat, Odisha, Gujarat and Maharashtra. The scores of the first principal components of the SC migrants are low and very low in remaining states.

Thus, there seems to be complementarity between all migrants and the SC migrants so far as the dominant pattern of the intra-state migration is concerned. The all migrants of India show high concentration of dominant pattern characterised as “Low migration of male” in southern and north-eastern states. The SC migrants show the concentration of the dominant pattern characterised as “High migration of female” in remaining north and central Indian states.

Second principal component of all migrants

Second principal component of all migrants explains only 17.4 percent of the total variance of the 14 variables. As stated earlier, consistently low positive coefficients are found with the percentage of migrants both at intra-district and intra-state levels, and high negative coefficients of percentage urban at both the distance level of migration. With percentage of female migrants in both the distance, the level of coefficient are insignificant. Out of the four coefficients of work/employment as reasons of migration for male, female in urban and rural areas, coefficient of urban female is found to be positive and significant. Coefficient of rural female is also positive but small. Coefficients for education as reason of migration for male, female in urban and rural areas, the coefficients of urban male, rural male and rural female are all found to be positive and significant. Thus, the second principal component of all migrants may be termed as, **Migration for employment and education**. Thus, in case of all migrants, the second most dominant pattern of migration should have been normally the first i.e. strong stream of migration backed by employment and education.

Second principal component of SC migrants

In the case of SC migrants, second principal component of intra-state explained 20.7 percent of the total variance. Out of the six variables related to the distance, gender and residence, only percentage of intra-district urban migrants has a significant positive coefficient and percentage of female in intra-state migration has a negative. For reasons of migration, the coefficients are found to be positive for all the variables of education for male, female of

urban and rural areas. For work/employment as reason of migration, only the coefficient of urban female is found to be positive and significant. Thus, unlike the all migrants, second principal component of SC migrants do not show positive coefficients for rate of either intra-district or intra-state migration. Additionally, the coefficients of percentage of SC migrants reporting work/employment are also weak thus we may call the second principal component of the SC migrants as, **Low migration for education**. Thus, the second most dominant pattern of migration among the SCs is driven by education both for male and female in rural as well as in urban areas alike.

Geographical distribution of second most dominant migration pattern: All and SC migrants

Scores of second principal component for all migrants and SC migrants have also worked out and are plotted on the choropleth maps (see Figs 1C and 1D).

Figure 1C showing the scores of the second principal component for all migrants reveals that score is very high or high major states for Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, Gujarat, Rajasthan, Haryana, Punjab, Himachal Pradesh and Uttarakhand in case of migration for work/employment and education. The scores are also very high or high in some of the bordering states in the northeast India including Arunachal Pradesh and Mizoram.

Score of the second principal component are found to be low or very low in most of the out-migrating states like Jammu and Kashmir, Uttar Pradesh and Bihar from the north and Kerala from south. Other states falling in this group include Assam, Nagaland, Sikkim, Tripura, Manipur and Meghalaya, all from the northeast.

Conforming to the spatial pattern for all migrants, Figure 1D shows very high or high values on the scores of the second principal component for the SC migrants in states of Himachal Pradesh, Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu and Chhattisgarh. However, SC intra-state migrants in the major state of Gujarat, Maharashtra, Punjab and Haryana could not show high scores unlike the all migrants. The pattern of all the other major states is almost same as for all migrants.

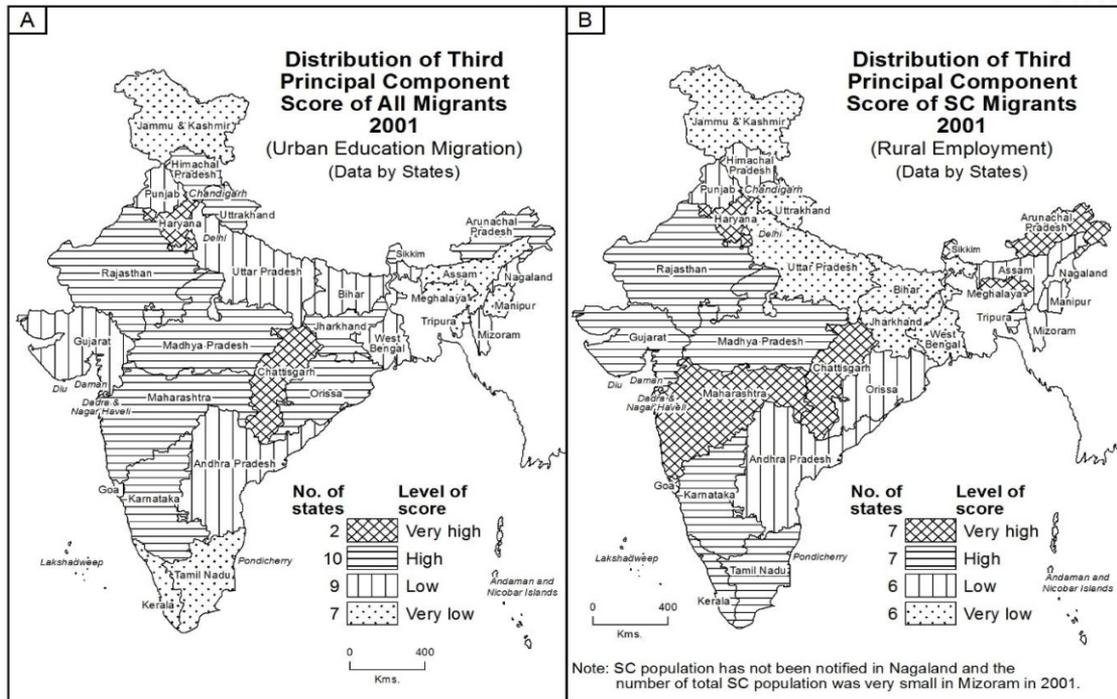
Thus, the second most dominant pattern of intra-state migration of all migrants and SC migrants show partial similarity so long as education is concerned. It shows SC migrants in disadvantageous position in work/employment as the reason of migration. The states which have high work/employment opportunities like Maharashtra, Gujarat, West Bengal, and Arunachal Pradesh SC migrants show low scores. The fact once again remain the continuation of the role of education in case of SC migrants.

Third principal component of all migrants

Third principal component explains about 14.4 percent of the total variation of the 14 variables of all migrants. Most of the variables have shown insignificant coefficients except for both percentage of urban male and rural male giving work/employment as reason of migration have a significantly high negative coefficients. Only urban male and female migrants both have positive significant coefficients for education as the reason of migration and hence we name it as, **Urban educational migration**. It may cover only those smaller proportion of well to do migrants who move for higher education to renowned educational centres in the state and UTs of NCT, Delhi, Chandigarh, Maharashtra, and Karnataka.

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FIG. 2



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

Third principal component of SC migrants

The third principal component explains only 11.9 percent of the total variance of the 14 variables related to migration pattern of the SC migrants. Only the coefficients of rural migrants both male and female giving work/employment as reason of migration have shown positive and significant values. Variables related to education as reason of migration have shown negative coefficient and intra-state Migration rate and percent urban migrants in intra-district rate of migration have shown positive significant coefficients. Since only rural employment variables have shown significant positive coefficients for male and female both and so, we may call this as, **Rural employment**. Its intensity is not very strong. The very high value of its scores is found in Maharashtra, Haryana and Chhattisgarh, among the major states.

Geographical distribution of third most Dominant pattern of Migration: All and SC migrants

The scores of the third principal components of all migrants and SC migrants have also been worked out and plotted on maps (see Figs. 2A and 2B). Figure 2A, giving the scores of third principal component of all migrants show very high or high values in the state of Chhattisgarh, Haryana, Himachal Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Maharashtra and Karnataka. It is also very high in Sikkim and Arunachal Pradesh and UTs of NCT, Delhi, Chandigarh, Lakshadweep, Daman and Diu, Dadra and Nagar Haveli and Andaman and Nicobar.

The scores of the third principal component of SC migrants are found to be high or very high in the states of Chhattisgarh, Goa, Haryana, Meghalaya, Arunachal Pradesh, Sikkim Maharashtra, Tripura, Gujarat, Tamil Nadu, Kerala, Karnataka, Rajasthan and Madhya Pradesh, Dadra and Nagar Haveli.

The geographical pattern of the scores of third principal component, the weakest of the three dominant pattern of migration does not shows any similarity between the all and SC migrants with the note that the all migrants show pattern of education migrants which in the case of SC migrants coincide with migration for rural employment (Fig. 2B).

Summary and Findings

The dominant pattern of intra-state migration of all and SC migrants as reflected by variables related to distance level, gender, residence (urban or rural) and the two main reasons of migration (work/employment and education) can be sufficiently summarised by first three patterns in each case.

The intensity of these aspects (intensity of migration, and employment and education) over different patterns varies among two groups, as shown below.

Dominant Patterns of migration	Group	
	Total migrants	SC migrants
First	Low migration of male	High migration of female
Second	Migration for employment and education	Low migration for education
Third	Urban educational migration	Rural employment migration

First, the most dominant pattern among all migrants indicates the predominantly male migration with low intensity. The same, for SC migrants, is dominated by female with high intensity. The most dominant pattern of the all migrants may be characterised as **low migration of male**, and for SC as **high migration of female**

The most dominant pattern among two groups of migrants could be a result of the fact that, when upward trends in migration after the economic liberalisation policies in 1991 emerged, it initiated limited employment opportunities mainly for males in most of the economically developed states, mainly enjoyed by all migrants. On the contrary, SC migrants had their sufficient share of opportunities in other states, mainly enjoyed by the female migrants.

Second, the most dominant pattern of all migrants covers the migration associated with work/employment and education. For SCs, the same is associated with education only with no work/employment and with lower intensity of migration. In the case of all migrants it is characterised as **Migration for employment and education**. The same for SC migrants is, however, characterised only as **Low migration for education**. Thus the two patterns appears to be similar with some marginal difference. Both the groups of migrants have education as a common factor but all migrants have additional factor of work/employment also.

Geographically, the high and very high intensity with which the second dominant pattern is associated is almost the same for all migrants and SC migrants, except the major state of Gujarat, Maharashtra, Punjab and certain parts of north-eastern states where all migrants have very high and high intensity but SC migrants low or very low.

It is important to note that education as reasons of migration, though is not appearing in the first dominant pattern but struggle to come up and has found a place in the second dominant pattern. In the case of SC, specially, where work/employment goes to third dominant pattern but education remains first.

Third, the least dominant pattern of all migrants relates to the additional urban educational component of total migrants not associated with work/employment. Thus apart from the education associated with work/employment, covered in second pattern, there is further migration only for education highlighting enhanced opportunities of education to the total migrants. The same for SC migrants is related to the work/employment aspect not covered in second pattern and in a way it complements the second pattern to match with the second pattern of all migrants.

Geographically also, the scores of second principal component and the third principal component appear to be similar as education is included in both except for the state of Gujarat, Kerala, Tamil Nadu and some of the northeast India which do not show higher intensity of educational migration. Third dominant pattern of SC migrants give the higher scores in most of the states where the scores of second principal component are lower.

Notes and References

1. Besides collecting the data of general migrants, 64th round of NSS (2007-8) has classified the data for some special category of people also; like Scheduled castes, scheduled tribes and other backward classes. The survey also divided migrants into different category of economic status by calculating their monthly per-capita consumption expenditures (MPCE).
2. Census of India (2001). *Migration Table D 2*: Migrants classified by place of last residence, sex and duration of residence in place of enumeration.
Census of India (2001). *Migration Table D 5*: Migrants by place of last residence, age, sex, reason for migration and duration of residence.
Census of India (2001). *Migration Table D-2 SC*: migrants by place of last residence, duration of residence and reason of migration for scheduled caste within the State/U.T. classified by place of last residence, sex and duration of residence in place of enumeration for scheduled caste.
Census of India (2001). *Migration Table D-3 SC*: migrants within the State/UT.
3. For a detailed discussion on Principal Component see Mahmood, Aslam (2017). *Statistical Methods in Geographical Studies*, Rajesh Publications New Delhi pp.158-169.
4. Although there is no denial of the role of migrants in the economic development of the country and the role it plays in reducing the level of poverty, the "Report of the Working Group on Migration" has shown its concern on the economic, social and political marginalization of these migrant workers. See for details Government of India (2017 b) *Report of the Working Group on Migration*, Ministry of Housing and Urban Poverty Alleviation, Government of India, January 2017, p.3

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URBANISATION AND URBAN ZONES IN HARYANA

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Abstract: Following its emergence as newly carved out state in 1966, Haryana experienced a rapid growth of urbanisation. Urban growth in the state, however, has been highly uneven. Distance from the NCT of Delhi and transport linkages, through national and state highways, with Delhi have been found responsible for shaping the pattern and process of urbanisation in the state. As one moves away from the national capital and the national highways, the degree of urbanisation as well as the size and spacing of urban centers display a remarkable difference. The lopsided urban development in the state has created a number of problems.

The present paper examines the trends and pattern of urbanisation along with identification of urban zones in Haryana since Independence by using data/information available from different decadal publications of Census of India.

In 2011, more than a half of the total urban population in Haryana resided in nineteen top ranking cities, making only a fraction of a per cent of total 154 urban centers in the state. On the other side of the scale, 44 towns making roughly one-third in total urban centers had only less than 4.0 per cent of the total urban population. Fourteen urban zones, identified in the state, subsume nearly nine-tenths of the total urban population.

Keywords: *Urbanisation, Acceleration and terminal stages of urbanisation, Urban zones, Distributional pattern*

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Introduction

Urbanisation transforms an economy and a society by making these more diversified, specialized, and complex along with changing the value system. In fact, an urban area is differentiated from a rural area on the basis of certain characteristics such as population size, amenities and facilities, transport and information networks, and the size and character of economy. However, in the case of developing countries, urban areas several times look as if they are an extension of rural settings. A large number of small towns in India differ marginally from their surrounding rural hinterlands.

In conventional terms, urbanisation amounts to the transformation of a society in terms of living, working, and enjoying. In the process, the rural setting change to urban, and from primary to non-primary economic activities. Primary activities are increasingly replaced by secondary, tertiary and quaternary activities. Urbanisation symbolises more independence, relative economic stability, decent living, orderly and flexible social

structure. Both, the natural increase and rural-urban migration contribute to urban growth. It is generally assumed that large urban centers have larger potentiality to generate employment in comparison to small sized urban settlements. Resultantly, more and more job seekers get attracted to large urban centers making these larger and larger, at the cost of a large number of small urban centers, which either stagnate or grow slowly due to their low employability. Urban to urban movement of people contribute to this.

Haryana, which emerged as a new state on political map of India following the linguistic reorganization of Punjab in 1966, experienced rapid urbanisation during the last four decades. The intense demand for Punjabi speaking *suba* (province) in mid-1960s resulted in reorganization of Punjab on lingual basis, its southern Hindi Speaking areas emerging out into a new state of Haryana. After its emergence as a new state, Haryana made tremendous progress especially in the field of agricultural development. This resulted in a huge demand for extension services in agriculture sector, agricultural inputs, and market *mandis* for the sale of agricultural surpluses. This resulted in emergence of several rural service centers gradually acquiring urban character (Sangwan, 1992). This provided not only the impetus for rapid urbanisation but also as many as 36 new urban centers emerged within a span of two decades during 1971-1991. Gradually, the government of Haryana shifted its focus to manufacturing and tertiary sectors keeping in view the benefits of spill-over effects of National Capital of Delhi. Gurgaon and Faridabad became the new centers of economic activities. There has been large scale conversion of agricultural land to commercial and manufacturing activities. Large population from Delhi and other parts of the country shifted to Faridabad and Gurgaon towns to get employment in IT sector or for finding affordable houses to reside. This resulting in a huge spurt in urban population growth in the region around Delhi during the latest census decade (2001-2011). Another area of rapid urban growth has been along the GT Road in the districts of Sonapat, Panipat, Karnal, Kurukshetra, and Ambala districts. In the north, Panchkula district benefited from its proximity of Chandigarh, the state capital and modern city of Independent India. However, this wave of urban-industrialisation bye-passed several pockets in the state. For example, spill-over effect from the National Capital almost completely bye-passed the Mewat district, falling in the close proximity to Delhi. Similarly, a number of districts in south-western Haryana such as Kaithal, Sirsa, Fatehabad, and Jind were also bye-passed by this wave of urbanisation. This created, on one hand, the areas of high urban concentration and huge dispersal in the state, on the other hand. There emerged wide sub-regional level disparity in urban development in the state. On one hand, in Faridabad district nearly 80.0 per cent of population was living in urban areas, on the other side of the scale, in Mewat district only 11.4 per cent of its population was living in urban areas at 2011 Census. Twenty top ranking towns, making only a fraction of a per cent in total 154

towns in the state in 2011, subsumed more than one-half of the total urban population in the state.

Taking a cue from the above statements, the present paper attempts to study the process of urbanisation in Haryana in the light of following objectives:

1. To study the trends and patterns of urbanisation since Independence,
2. To examine sub-regional disparity in level of urbanisation, and
3. To study urban population and change therein according to population size category of urban centers, and
4. To demarcate urban regions/zones and discuss pattern of distribution and spacing of urban centers

Haryana, which covers an area 44,212 km² and extends between 27°39' to 30°55' North latitude and 74°27' to 77°40' East longitudes, was divided into 21 districts at the time of 2011 Census. Currently, there are 22 districts in the state. A new district of Charkhi Dadri has been added in 2016, after the conduct of 2011 Census. In 2011, the state had a total population of 25.4 million persons. Out of this 8.8 million persons or 34.8 per cent were living in urban areas. In all, there were 154 urban centers in the state in 2011, distributed according to the following status: 74 census towns, 51 municipal towns and 29 municipal corporation and outgrowth towns. With 34.8 per cent urban population, Haryana ranked sixteenth at the national level. Its urban share of 34.8 per cent was higher than the national average of 31.2 per cent but lower than the average for its nearest neighbor (Punjab, 37.5 per cent). During 2001-11, the state recorded decadal increase of 19.9 percent in its total population, against this urban population increase by 44.6 per cent during the same period.

For accomplishing the study, data have been pick up from the Census of India publications for different census decades. The study covers a period of seven census decades from 1951 to 2011 with focus on recent census decades. Urban population data have been calculated and mapped at district level as well as at the level of individual towns. The linear spacing of urban centers has been examined on the basis of formula $\Sigma r/N$ i.e. known as observed spacing of urban zones/regions in the state.

Trends in urbanisation

In the first few decades after Independence, pace of urbanisation has been quite slow in Haryana. Only less than one million population making 17.07 per cent in total population of 5.67 million in Haryana was living in urban areas of all sizes. This grew at a slow pace till 1971. In 1966, when Haryana acquired statehood under the linguistic reorganization of Punjab, urbanisation process in the state entered into a fast track. This period coincided with the Green Revolution and expansion of administrative services in the newly organised state. The existing towns started growing fast

and new towns emerged in the new areas. Consequently, there has been radical departure from the previous trend in urbanisation. During 1971-81 decade, there has been an absolute increase of 1.05 million persons in total urban population of the state, which was higher than the total urban population in the state in 1951. In proportional terms, urban population share went to 21.9 per cent in 1981 from 17.7 per cent in 1971, registering an increase of more than 4.0 per cent points (Table 1). As many as 13 new town emerged during this decade. This decade, experienced highest ever decadal increase of about 60.0 per cent in urban population of the state. The next decade (1981-91) also experienced rapid increase in urban population from 2.83 million to 4.05 million, the share of urban population in total population growing to 24.6 per cent in 1991 from 21.9 per cent in 1981. This was a decade of physical expansion in urbanisation, as 21 new towns emerged in the state during this period. The next census decade was oriented to intensification of urbanisation in the state, against its physical expansion during 1981-91. During 1991-01, when urban population registered an absolute increase of 2.06 million persons, reaching to 6.12 million persons from 4.05 million persons in 1991 and urban share went up to 28.9 per cent from 24.6 per cent, the number of new town was only nine during this decade. This indicated to an intensification rather than physical expansion in urbanisation process in the state. It was for the first time in 2001 that urban population share in total population of Haryana (28.9 per cent) crossed over the national average of 27.8 per cent (Joshi, 2018).

Table 1: Haryana: Trends in urbanisation, 1951-2011

Census Year	Total Population (million)	Urban Population (million)	Urban Population (%)	Decadal increase in nos.	Decadal increase (%)	Urban Population India	
						% in Total	Growth (%)
1951	5.67	0.97	17.07	-	-	17.34	-
1961	7.59	1.31	17.23	339186	35.02	18.00	35.9
1971	10.04	1.77	17.67	464279	35.50	19.91	37.8
1981	12.92	2.83	21.88	1054428	59.47	23.34	48.1
1991	16.46	4.05	24.63	1227357	43.41	25.72	36.2
2001	21.14	6.12	28.92	2060560	50.82	27.78	31.7
2011	25.35	8.84	34.88	2726799	44.59	31.20	31.8
1951-11	+19.68	+7.87				-	-
Growth in%	+346.83	+812.97	-	-	-	-	-

Source: Census of India (2011). *General Population Tables, 2011: Haryana*, Directorate of Census Operations, Haryana, Chandigarh.

The latest census decade (2001-11), which registered an absolute increase of 2.73 million in urban population of state taking it to 8.84 million

from 6.12 million, making more than one-third or 34.9 per cent in total population of the state, registered physical expansion as well as further intensification of urbanisation process in the state. Not only, 49 new towns emerged in the state taking the total number of urban centers to 154 from 105 in 2001, but also as many as 20 towns became cities (having population of one lakh plus). This indicates to top heavy urban structure in the state.

During 1951-2011, the share of urban population in total population increased to 34.9 per cent in 2011 from 17.1 percent in 1951. The urban population in the state increased by more than eight times, and the number of towns increased almost thrice from 56 in 1951 to 154 in 2011. There has been physical expansion as well as intensification of urbanisation in the state. The period 1971 onward was a period of accelerated growth in urbanisation in the state. The latest decade (2001-11) displaying further consolidation of urbanisation in few area, resulting in widening of sub-regional disparity in urban development in the state.

This was evidently clear from the share of urban population among districts in the state. Top ranking six of 21 districts in the state had, in combine, nearly three-fifths (or 59.0 per cent) of the total urban population in the state. In three districts of Faridabad, Gurgaon, and Panchkula majority of population was living in urban areas. In Faridabad district the share of urban population was as high as 79.51 percent. On the other side of the scale, the four bottom level districts of Bhiwani, Fatehabad, Mahendragarh, and Mewat had, in combine, only less than one sixth or 16.5 per cent of total urban population in the state. In all the four districts, the share of urban population in their total population in 2011 was below 20.0 per cent. In general, the degree of urbanisation is higher in the eastern and south-eastern parts of the state and lower in western and southwestern parts.

The same tendency can also be observed if urban centers are arranged according to the size category. More than two-thirds (68.0 per cent) of the total urban population was residing in the twenty Class I towns of the state.

It is apparently clear that the state has registered higher growth of urban population as compared to country, as a whole. It is evident that the state is moving towards the faster growth in urbanisation. The state average was 34.9 percent, against the national average of 31.2 percent in 2011. Further, the urban growth rate in the state was higher than that that of rural areas for the first time during 2001-11.

Decadal growth of urban population in the state is highly revealing. During 1951-1991, the share of urban population in the state remained lower than the national average. But coming to 2001-11 decade, urban population in the state grew faster than the national average. In 1991, the share of urban population in Haryana was 24.6 against the national average of 25.7 per cent. During the entire period of four census decades (1951-1991), urban

population increased by only four times, from 9.68 lakh in 1951 to 40.55 lakh in 1991, registering an addition of 30.87 lakh persons in urban areas.

Haryana: Distribution of Towns by their Population Size, 2011

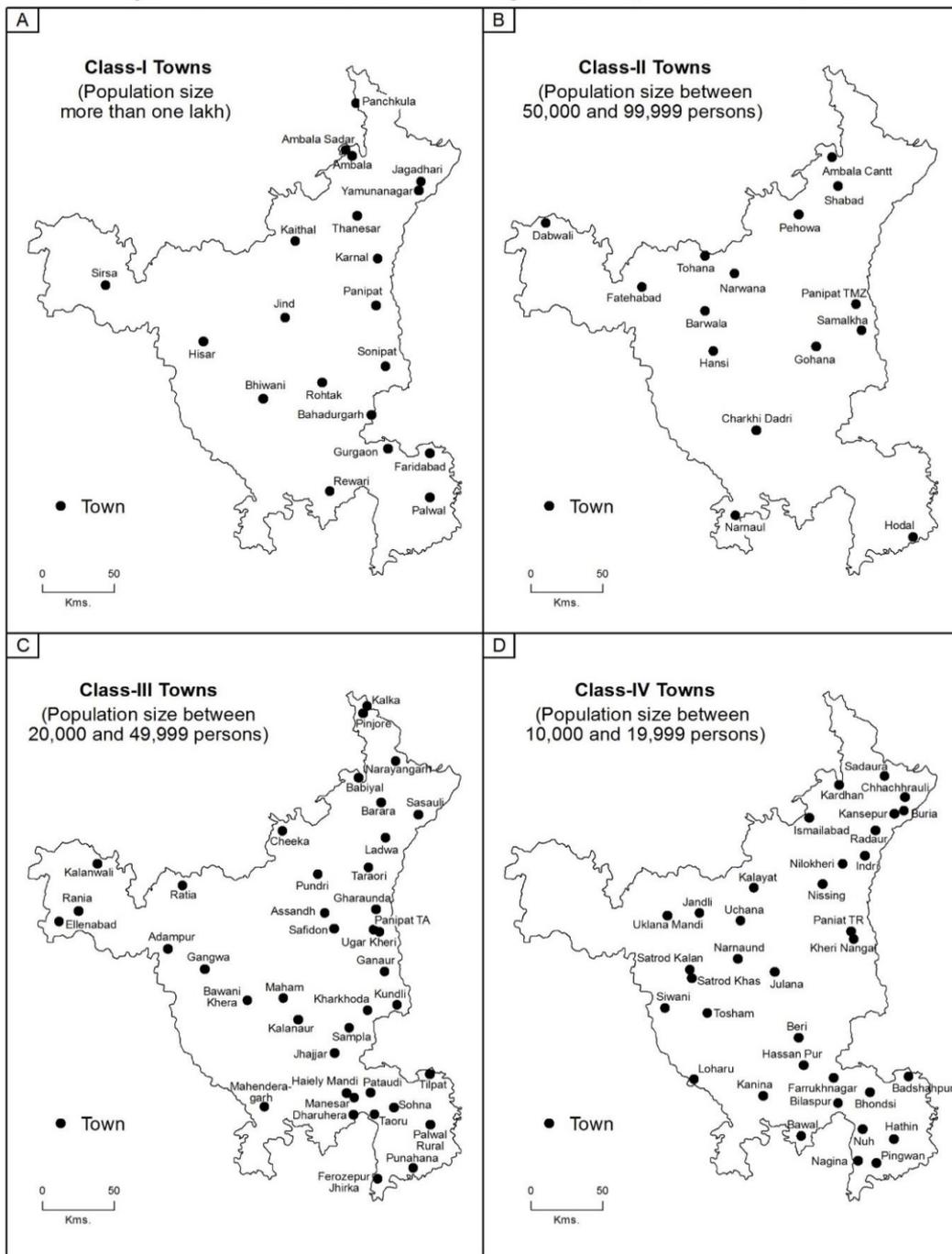


FIG. 1

However, during the next decade (1991-2001) the urban population grew fast to reach 28.9 per cent in 2001 from 24.6 per cent in 1991. In the next decade, urban population grew much faster to reach 34.9 per cent in 2011 from 28.9 in 2001. The national averages were 27.8 per cent and 31.2 per cent, respectively. During 1991-2011, there has been an absolute increase of 4.79 million persons in urban population of the state. This number was higher than the total urban population in the state in 1991 (4.05 million persons).

Urban population distribution by size category of towns

Census of India classifies urban centers into six categories of towns: (i) towns having population one lakh or more (Class I towns), (ii) towns having population between 50,000 persons and 99,999 persons (Class II), (iii) towns having population between 20,000 persons and 49,999 persons (Class III), (iv) towns having population between 10,000 persons and 19,999 persons (Class IV), (v) towns having population between 5,000 persons and 9,999 persons (Class V), and (vi) towns having population less than 5,000 persons (Class VI). Towns having population less than 20,000 persons are generally classified as the “small towns”, and between 20,000 to 50,000 persons as “medium towns”, and those more than 50,000 persons as “large towns”.

Of 154 towns of different size category in the state in 2011, as many as 74 or nearly one-half (48.0 per cent) of towns, having 10.3 per cent of total urban population in the state were “Census Towns”. For all practical purposes, “census towns” are considered as villages by the state government. No urban body is established by the state government for their management. If the number and population of “Census Towns” in state is deducted out of the total urban population in the state, the total number of towns in the state will come down to 80 towns and the share of urban population in total population to 31.0 per cent from about 35.0 per cent in 2011. In some of the districts of the state, the number of “Census Towns” was quite large. In six districts, namely Ambala, Yamunanagar, Panipat, Hisar, Rewari, and Panchkula, each having five “Census Towns”, 49 or two-thirds of total 74 “Census Towns” were located. Evidently, “Census Towns” have made a significant contribution to degree as well as physical expansion of urbanisation in the state of Haryana.

Distribution of towns in the state according to their population size category makes another interesting story. While, only 20 of total 154 towns the state fall under the Class I category (having population of one lakh or more), their share in total urban population of the state is more than two-thirds or 68.0 per cent. On the other side of the scale, 44 towns falling under V and VI size category of towns and making nearly one-third (28.5 per cent) in total towns of the state, has only less than four per cent (3.3 per cent) of total urban population in the state. High concentration of population in top

twenty towns falling under the Class I category of towns and very low population share of total urban population in a large number of towns falling under class IV, V and VI category of towns speaks of distorted urban hierarchy in the state, which does not fit well in rank-size rule theory propounded by G.K.Zipf in 1949.

The top ranking town (Faridabad in the same district), falling under Class I town category, and only „million plus“ city in the state, had nearly one-sixth or 16.0 per cent of total urban population in 2011. In their distribution, 20 Class I towns were distributed in 18 of 21 districts in the state at the time of 2011 Census. In the three districts of Mewat, Mahendragarh and Fatehabad any Class I town was yet to emerge, whereas there were the two each in Yamunanagar and Ambala districts. As many as 16 of 20 Class I town in the state were administratively acting as district headquarters. It was only in case of Jhajjar and Kurukshetra districts, where Class I towns were not the districts headquarters. In the former case, Class I town was Bahadurgarh and in the latter case it was Thanesar (Fig. 1A).

Size Category	No. of towns	% in total towns	Population	% in total urban pop.	Cumulative %
Class I (One Lakh or more)	20	13.00	6,014,739	68.02	68.02
Class II (50,000-99,999)	11	07.14	706,518	08.00	76.02
Class III (20,000-49,999)	45	29.22	1,315,126	14.87	90.89
Class IV (10,000-19,999)	34	22.08	513,117	05.80	96.69
Class V (5,000-9,999)	36	23.37	261,431	02.96	99.65
Class VI (<5,000)	08	05.19	31,172	00.35	100.00
Total	154	100.00	8,842,103	100.00	

Source: Census of India (2011), Calculated from *General Population Tables, Haryana*, Directorate of Census Operations, Haryana, Chandigarh.

Class II towns (population between 50,000 and 99,999 persons) were only 11 in number and their combined population made only 8.0 per cent in total urban population of the state (Table 2, Fig. 1B). These were distributed in ten districts, Fatehabad district having the two such towns (Fatehabad and Tohana). Evidently, Class II towns were confined to less than one-half of the districts. Class III towns, numbering 45 or making nearly one-third in total towns, had another about 15.0 per cent of total urban population in the state. These three category of towns, from the top, subsumed, in combine, more than nine-tenths of total urban population in the state. Locationally, 23 or majority of such towns were in NCR part of Haryana state, another six were located in close proximity to Chandigarh in northeastern part of the state. Only ten were located in western part of the state in Sirsa, Kaithal, Jind, Hisar, and Fatehabad districts (Fig. 1C). Class IV towns numbering 34 were distributed 15 of 21 districts in the state. The maximum number of six towns

fall in Yamunanagar district following by Hisar with four, and Bhiwani, Gurgaon, Karnal, and Mewat with three each (Fig.1D). More than a-half or 18 such towns were “Census Towns”. In other words, overgrown villages for the state government. Another 36 or about one-fourth towns in the state fall under Class V category. Distributed in 16 districts of the state, all but Ateli in Mahendragarh district were the “Census Towns”. In other words, no municipal body was constituted by the state government to manage their affairs. Rewari district alone had six of them and majority of such towns was confined to four districts of Rewari, Ambala, Panipat, and Yamunanagar. Finally, 8 towns were classified as Class VI category of towns, distributed in five districts. Panchkula district had the maximum number of five followed by Ambala with two and Faridabad, Sonipat, and Jhajjar, one each. All of them were designed as the “Census Towns”. Briefly, the overwhelming majority of Class I towns in the state were administratively functioning as district headquarters, and Class IV, V and VI towns were predominantly the “Census Towns”.

Number of towns in the state grew slowly in the beginning. However, the process accelerated in the latest census decade. This number was only 62 in 1971. 1971 was the first census held in Haryana after it was formed into a new state. The number of towns has gone to 154 in 2011, registering a growth of about 150.0 per cent during 1971-2011. However, most of the increase in number of towns took place during the latest census decade (2001-2011). During this decade, as many as 49 new towns, making more than one-half or 53.3 per cent of the total towns, were added in the state. The remaining less than one-half or 43 towns were added earlier during three decades (1971-2001). Obviously, urban growth in the state accelerated during the 21st century.

The average population size of urban centers has also increase during this period. In 1971, average population size of a town in the state was 28,798 persons-rose to 57,416 persons in 2011, growing by two times (Table 3).

Table-3: Haryana: Number and size of urban centers, 1971-2011

Census Year	No. of urban centers	Increase in No. of towns	Average population size of a town	Change in size
1971	62	-	28,798	-
1981	75	+13	33,913	+5115
1991	96	+21	42,237	+8324
2001	105	+9	58,241	+16004
2011	154	+49	57,416	-826
1971-2011	-	92	-	28,618

There has been a continuous increase in average size of a town during 1971-2001, the biggest increase taking place during 1991-2001 decade. For example, the average size of a town was 42,237 in 1991, which rose to 58,241 persons in 2001, registering a change of nearly double in population size

(Table 3). However, there has been a decline in average size after 2001, mainly because of big jump in number of new towns during 2001-11 decade.

Distribution of towns by districts

There is a highly uneven distribution of urban population among the districts in the state. Six top ranking districts in urban population steal more than a half (51.6 per cent) of the total urban population in Haryana. These districts included Faridabad and Gurgaon in the southeastern, Panipat in the eastern, Hisar in northwestern and Ambala and Yamunanagar in the northeastern parts of the state. Their combined share in total urban centers in the state make only two-fifths (Table 4). Faridabad district, located in the close proximity of National Capital of Delhi, along steals one-sixth or 16.3 per cent of total urban population in the state, while sharing only less than 2.0 per cent of total urban centers in the state. On the other side of the scale, five bottom ranking districts of Kaithal, Rewari, Mahendragarh, Fatehabad, and Mewat, in combine, have less than one-tenth of total urban population in the state. Whereas, they share, in combine, about 20.0 per cent in total urban centers of the state. In other words, their share in total urban population of the state was one half of their share in total urban centers in the state.

District	Urban Population	% to total urban population	Cumulative %	No. of Towns	% to total towns	Cumulative %
Faridabad	14,38,855(79.5)	16.27	16.27	3	1.95	1.95
Gurgaon	10,42,253(68.8)	11.79	28.06	9	5.84	7.79
Panipat	5,55,085(46.1)	6.28	34.34	12	7.79	15.58
Hisar	5,53,488(31.7)	6.26	40.60	11	7.14	22.72
Ambala	5,00,774(46.4)	5.66	46.26	15	9.74	32.46
Yamunanagar	4,72,829(38.9)	5.35	51.61	12	7.79	40.25
Karnal	4,54,810(30.2)	5.14	56.75	8	5.19	45.44
Sonipat	4,53,364(31.3)	5.13	61.88	8	5.19	50.63
Rohtak	4,46,164(42.0)	5.05	66.93	5	3.25	53.88
Bhiwani	3,21,322(19.7)	3.63	70.56	6	3.90	57.78
Sirsa	3,19,248(24.7)	3.61	74.17	5	3.25	61.03
Panchkula	3,13,230(55.8)	3.54	77.71	8	5.19	66.22
Jind	3,05,583(22.9)	3.46	81.17	6	3.90	70.12
Kurukshetra	2,79,225(22.0)	3.16	84.33	5	3.25	73.37
Jhajjar	2,43,339(25.4)	2.75	87.08	5	3.25	76.62
Palwal	2,36,544(22.7)	2.68	89.76	6	3.90	80.52
Kaithal	2,36,011(22.0)	2.67	92.43	4	2.60	83.12
Rewari	2,33,430(25.9)	2.64	95.07	9	5.84	88.96
Fatehabad	1,79,588(19.1)	2.03	97.10	4	2.60	91.56
Mahendragarh	1,32,855(14.4)	1.50	98.60	5	3.25	94.81
Mewat	1,24,106(11.4)	1.40	100.00	8	5.19	100.00
Total	88,43,103(34.9)	100.00		154	100.00	

Note: Figures in parentheses indicate to urban population share (%) of total population of respective districts.

The three top ranking districts of Faridabad, Gurgaon and Panipat, in combine, subsumed more than one-third of total urban population against their share of one-sixth or 15.6 per cent in total urban centers in the state. On the whole, nine districts, each having 5.0 or more share in total urban population in the state, had in combine more than two-thirds or 66.9 per cent of total urban population against their share of only 54.0 per cent in total urban centers in the state. These districts included Faridabad, Gurgaon, Panipat, Hisar, Ambala, Yamunanagar, Karnal, Sonipat, and Rohtak. With the exception of Hisar, all these districts are located either in the close proximity of National Capital of Delhi in NCR region or along the G.T.Road in the eastern plains. Against this, the majority of districts located in the southwestern and western parts of the state have low shares of urban population. Hisar district has been identified as a counter magnet center to National Capital to arrest the migrants likely to migrant to the national capital. Saharanpur in Uttar Pradesh, Alwar in Rajasthan and Patiala in Punjab are other cities. These cities are provided funds under the National Capital Region planning to boost socio-economic infrastructure and manufacturing activities to general employment opportunities. In the northeastern part, Panchkula, Ambala, and Yamunanagar districts have benefitted from the presence of Chandigarh, the state capital city and a dynamic growth pole center. Definitely, it is the spillover effect from national capital of Delhi in the southeastern part and that of Chandigarh in the northeastern part which have helped the urban-industrialisation process in the state, but at the same time has created sub-regional disparities in urban development.

Faridabad and Gurgaon districts have largely benefitted from their nearness to Delhi. There has been a huge conversion of agricultural land to commercial and manufacturing activities. A large population from Delhi and other parts of the country shifted to Faridabad and Gurgaon towns to get employment in IT sector or for affordable residential houses (see also Yadav, 2012). This resulting in a huge spurt in urban population growth in the region around Delhi during the latest census decade (2001-2011). However, this wave of urban-industrialisation bye-passed almost completely Mewat district, in spite of its close proximity to Delhi. This least urbanized district in the state has only a small share (1.40 per cent) in total urban population of the state. There are eight urban centers in the district, but one-half of these are "census towns".

The share of urban population in total population of individual districts also differ widely, indicating to huge inter-districts disparities. On one hand, in Faridabad district nearly 80.0 per cent of population was living in urban areas, on the other side of the scale, in Mewat district only 11.4 per cent of its population was living in urban areas at 2011.

URBAN ZONES

Urban zones have been delimited on the basis of spacing and distribution pattern of urban centers, defined in terms of the presence of a number of urban centers in close proximity to each other. Identical to the dominance of non-primary activities, these are urban islands on rural landscape with high accessibility. They are dynamic in nature, since undergo spatial and temporal changes similar to the economic regions. The emergence of new towns introduce relative changes in spacing and pattern of urban centers distribution. The technique evolved by Clark and Evans (1954) is based on observed and expected spacing. The Rn scale defines the distribution of urban centers in the zones so delimited, clustered, random and uniform, based on different values. The demarcation of urban zones is based on the following yardsticks:- (i) presence of urban centers in a linear or cluster form, (ii) inter-spacing observed between 6-15 km., (iii) urban centers, located in isolated positions or in scattered form, are excluded from urban zones, because of their location, (iv) assumed that an urban zone, thus delimited, must be dominated by a very large or large size urban center, and (v) must form a continuous belt.

On the basis of all these parameters, the following 14 urban zones have been identified in the state (Table 5 and Fig. 2).

1. Panchkula Zone—developed on the northwestern margin of the state, this zone benefitted from the presence of Chandigarh, the state capital and modern city of Independent India. All the towns of this zone are situated in the close proximity to Chandigarh. With 211,355 persons in 2011, Panchkula is the largest urban center in this zone. The other centers included Kalka (34,134 persons), Pinjore (35,912 persons) and Raipur Rani (9,028 persons). The total population of this zone is 2.90 Lakh persons, making only 3.3 per cent in total urban population of the state. All these centers are the satellite towns of Chandigarh, falling under its daily commuter's zone.

2. Ambala-Yamunanagar Zone—distributed in elongated shape along Ambala-Yamunanagar Highway, this zone is well linked through rail and road routes with Delhi, Jammu, and Kolkata. Ambala (MC) with its three suburbs is the largest city. In all, there are 12 urban centers in this zone including Ambala (MC), Ambala Sadar, Ambala Cantt., Babiyal, Barara, Radaur, Saha, Nanhera, Farukhpur, Mustfabad, Kardhan and Boh Towns. It has a total urban population is 8.01 Lakh persons, making 9.0 percent of total urban population in the state. Recently, it has developed direct road connectivity with Panchkula via Saha town.

Table-5: Urban Zones: Number of centers and their population, 2011

Sl. No.	Name of zone	No. of centers	Popula-tion	% to total	Rn Value	Nature of Dispersion	Observed Spacing in km.
1	Panchkula-Kalka	4	290429	3.28	1.80	Moderate uniform	11.25

2	Ambala-Yamunanagar	12	801649	9.01	1.16	Least uniform	05.83
3	Panipat-Karnal	7	992397	11.22	1.88	Moderate uniform	12.86
4	Sonipat-Ganaur	4	389346	4.40	0.58	Semi-clustered	03.44
5	Rohtak-Jind-Gohana	7	687397	7.77	2.05	Uniform	16.25
6	Hisar-Bhiwani	5	666477	7.54	2.69	Uniform	21.87
7	Bahadurgarh-Jhajjar	4	242030	2.74	2.75	Uniform	20.00
8	Faridabad-Palwal	6	1665695	18.84	1.88	Moderate uniform	09.58
9	Rewari-Farrukhnagar	6	244978	2.77	1.61	Low uniform	09.17
10	Narnaul-Ateli	3	95189	1.08	1.46	Low uniform	08.33
11	Kaithal-Narwana	3	270876	3.06	3.85	Uniform	25.42
12	Sirsa-Fatehabad	4	327086	3.70	2.73	Uniform	21.88
13	Gurgaon-Nuh-Dundahera	7	1031324	11.66	2.29	Uniform	10.71
14	Naraingarh-Bilaspur	4	59086	0.67	1.77	Moderate uniform	09.37
	Total	76	7764049	87.81	2.00	Moderate uniform	12.57

3. Panipat-Karnal Zone- located along the G.T. road, Panipat along with its two satellite towns and Karnal town is the most important urban node. It has seven urban centers with a total population of 9.92 Lakh persons, making 11.2 percent in total urban population of the state. It has inter-spacing of towns between 8 and 15 km. The other towns of the zones are Taraori, Nilokheri, Uncha Siwana, Indri, Gharaunda and Thaneswar. It is well connected via road and rail routes with Delhi, also connected with Ambala, Ludhiana, Jalandhar and Jammu Tawi.

4. Sonipat-Ganaur Zone- extended on the northern border of Delhi along Delhi-Ambala road and rail routes, it has close links with National Capital of Delhi. Sonipat town with 2.89 Lakh persons is the hub of the zone. Samalkha, Kharkoda, and Ganaur are the other towns. It is the part of NCR, Delhi.

5. Rohtak-Jind-Gohana Zone- comprising of seven urban centers, it has 7.8 per cent of total urban population in the state. Rohtak (374,292 persons), and Jind (167,592 persons) are the main centers of the zone. It has a rectangular shape. Rohtak, the main junction of road and rail routes and having the educational and commercial centers, is closely linked to Delhi. Gohana, Julana, Maham, and Kalanaur are the other towns of the zone, spaced at an average distance of 8 km. (Fig. 2)

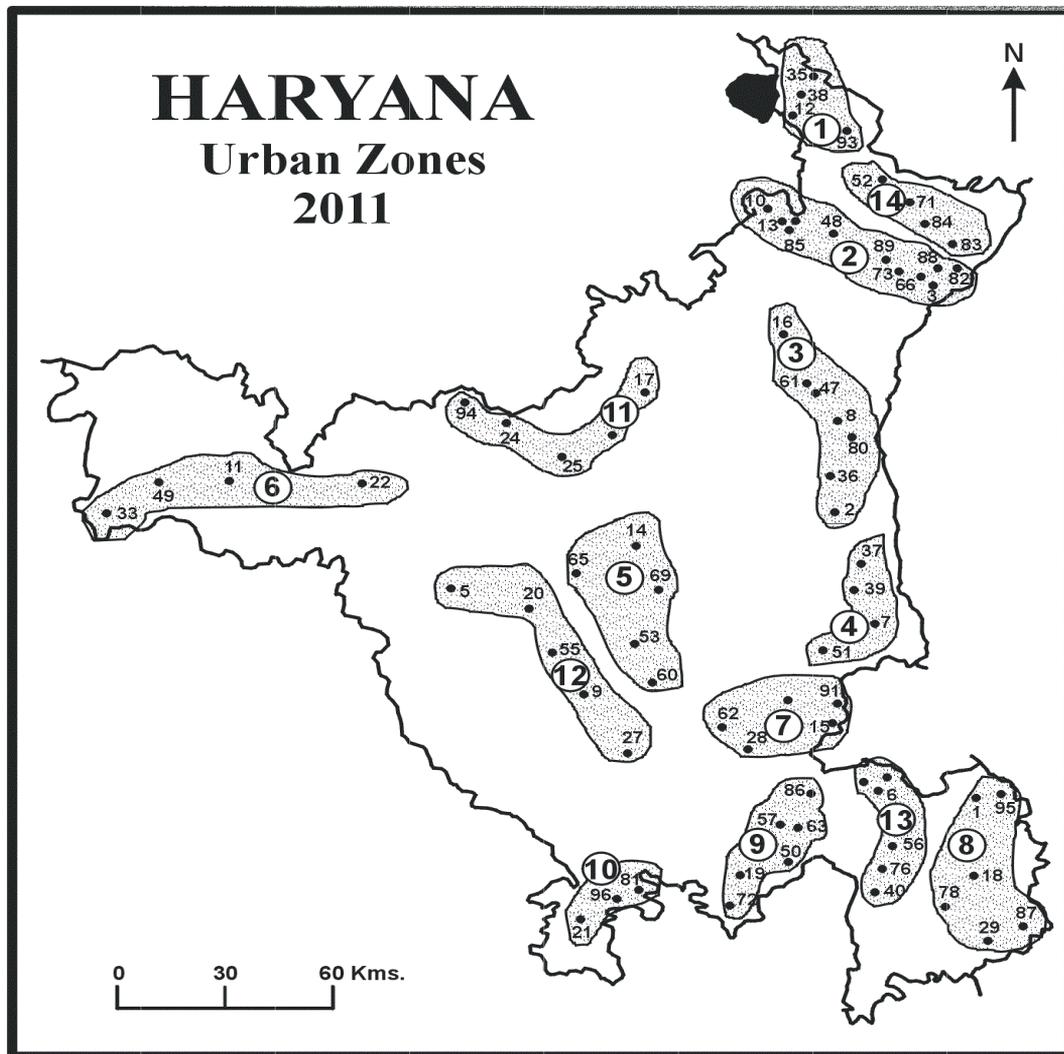


Fig. 2

6. Hisar-Bhiwani Zone-Hisar (307,024 persons) and Bhiwani (196,057) are the two main cities of this zone. Hansi (86,770) is also an important town. It has a linear shape. Bhiwani is located at a junction of roads linking Hisar, Rohtak, Rewari and Mahendragarh towns. Hisar, located on Sirsa-Rohtak route, is an important industrial city. Charki Dadri (56,337) and Bawani Khera (20,289) are other towns. All the urban centers are spaced at a distance of 8-10 km.

7. Bahadurgarh-Jhajjar Zone- extending along Bahadurgarh-Delhi road, it covers the western part of the NCR. Bahadurgarh road connects it with Rohtak and further to Jind, on one side and with Hisar, on the other. Bahadurgarh (170,767 persons), Jhajjar (48,424 persons), Beri and Ladrawan

are the other towns. As a whole, this zone has 2.74 percent of total urban population of the state.

8. Faridabad-Palwal-Hodal Zone-the largest urban zone, it has million city of Faridabad as its core. Having elongated shape, Palwal (131,926), Hodal (50,143), Tilpat, Hassan Pur and Hathin are other towns of this zone. This zone has 18.8 per cent urban population of the state.

9. Rewari-Farrukhnagar Zone- Rewari, having road connectivity with Gurgaon, Dadri, Mahendragarh, and Narnaul, is the main center of this zone. Other towns in the zone are Dharuhera, Hailey Mandi, Pataudi, Farrukhnagar and Bawal. The zone has 2.8 per cent of total urban population in the state. Pataudi and Farrukhnagar happen to be princely states during the British rule.

10. Narnaul-Ateli Zone-extended on south-west corner of the state, it is relatively less developed area. Narnaul is the largest town, other being Kanina and Ateli. It shelters only 1.1 per cent of total urban population of the state.

11. Kaithal-Narwana Zone- arc shaped, Kaithal is important town of the zone. It is linked via road with Karnal, Kurukshetra, Pehowa, Narwana and Tohana.

12. Sirsa-Fatehabad Zone- Sirsa being the largest center with 182,534 persons, the zone has four urban centers and accommodates 3.1 per cent of the total urban population. Fatehabad, Ratia and Ellenabad are the other important towns, spaced at an average distance of 20.25 km.

13. Gurgaon-Nuh-Dundahera Zone- recording rapid development during the last one decade, Gurgaon is the hub of this zone. Gurgaon is the second largest town after Faridabad. Gurgaon is an important center of software development in the north India along with light industries, medical and educational centers. Manesar is also a town of this zone known for car manufacturing. Badshahpur, Nuh, and Sohna are the other important towns of the zone. It has 11.7 percent of total urban population in the state.

14. Naraingarh-Bilaspur zone- a smallest recently developed zone is located bordering to Himachal Pradesh and Uttar Pradesh. Naraingarh has come up as an industrial town, and lies on the bus route to Dehradun-Nahan-Chandigarh. Sadaura, Chhachhrauli and Bilaspur are the other towns. It has well developed road connectivity with Yamunanagar also.

Conclusions

Moving at a very slow pace, urbanisation picked up in Haryana after it emerged into a newly formed state in 1966. Immediately after its formation, the state experienced the impact of Green Revolution followed by industrailisation in areas falling in the close proximity to the National Capital of Delhi. The spillover effect of Delhi in southeastern and of Chandigarh on the northeastern parts of the state coupled with the impact of G.T. road passing through its eastern plains helped greatly in boosting the

urban-industrialisation in the state. This was clear from the rapid increase in number of urban centers from 62 in 1971 to 154 in 2011 and the share of urban population from 17.7 per cent to 34.9 per cent during the same period. While, the decade of 1981-1991 was marked with physical expansion of urbanisation process, the next decade saw the consolidation of urbanisation in already urbanized areas. The latest decade (2001-2011) is marked with both physical expansion and further consolidation. Forty-nine new towns emerged during the decade and twenty towns entered into Class I category of towns-subsuming more than two-thirds of total urban population in the state. Distortion in urban hierarchy and wide sub-regional disparities in urban development are the hallmarks of the latest urbanisation picture in the state. The new wave of urbanisation bypassed several areas even in the close proximity to National Capital of Delhi. Mewat, the least urbanised district in the state, located in close proximity to National Capital is the classical example of this. Almost entire southwestern and western part of the state are also examples of low and dispersed urbanisation.

Seventy-four of total 154 towns in the state are "Census Towns", particularly not towns in the rule books of state administration. Administratively, they are treated as villages by the state government. Their exclusion from the list of urban centers will not only bring down drastically the number of urban centers in the state, but also the degree of urbanisation in the state. Fourteen urban zones of different size and shape have been identified in the state. There is a clear cut impact of locational factors on spatial patterning of urban zones in the state. Urban zones are closely spaced near the national capital in southeastern part, along the G.T. Road in the eastern part and in the close proximity to Chandigarh, in the northeastern parts of the state.

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Regional Variations in Occupational Structure of the Chamars in India

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Abstract: The paper attempts to study inter-state differentials in occupational/industrial classification of the Chamar caste workers in India using the latest 2011 Census data. The Chamar, the numerically the largest and the most widely distributed SC caste in India, is still dominantly agricultural by occupation and rural by residence. Only a slightly higher than two-fifths of their workers were engaged in non-farm activities, against this the share of such workers was nearly three-fourths for Balmiki workers.

There were, of course, wide inter-state differentials on this count. In some states like Himachal Pradesh the share of cultivators among the total Chamar workers was as high as two-fifths. In contrast, in Bihar seven of each ten Chamar workers were employed as agricultural/casual labourers. On the whole, in eight states, the majority of the Chamar workers was employed in farm sector, and in remaining 17 states and four union territories the reverse was true of the Chamar workers. However, in the former category of states, more than seven of each ten (73.0 per cent) of total Chamar population was residing. Evidently, the dominant majority the Chamar households in the country was employed in farm sector, where wages were generally low and working conditions poor.

Keywords: Numerical dominance, Work participation rates, Landless labourers, Non-farm employment, occupational diversification.

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Introduction

The Chamar caste is numerical the largest and geographically the most widely distributed of the castes listed in the VIII Schedule of the Indian Constitution under the Article 341 for taking special welfare measures for socio-economic upliftment of former untouchable castes and communities. Initially, stigma of untouchability in the traditional hierarchy of castes in India was the basic criterion to include or exclude castes in the scheduled list of castes, but today the list include castes that never faced untouchability. Presently, there are, in all, nearly 600 castes among the scheduled castes in India. However, 16 top ranking castes of them, each having at least three million persons, shared together 127.9 million or 63.5 per cent of 201.4 million SC population of India in 2011.

The Chamar caste, the largest scheduled caste in India with a population of 46.72 million persons making more than one - fifth or 23.2 percent in total Scheduled Caste population of India in 2011 and distributed in 25 states and four union territories in 2011, is differently called in different areas and as such include many sub-groups. In Gujarat, Karnataka and Maharashtra, they are notified with Bhambi; and Jatva, Mochi/Muchi, Satnami, and Raidas would prefer an identity distinct from the Chamar (Singh, 1993:302). They make first ranking SC caste in 184 districts (excluding 11 districts, having a population of less than 1,000 persons) of ten states and one union territory. Their share in total SC population of respective

districts ranged from a high of 91.8 per cent in Kabeerdham (Chhattisgarh) to a low of 14.7 per cent in Godda (Jharkhand). Further, the Chamars made majority SC caste (more than 50.0 per cent) in 109 districts of India in 2011. Seventy-eight of such districts were distributed in three states of Uttar Pradesh (48 districts), Madhya Pradesh (21 districts) and Chhattisgarh (10 districts). The rest were distributed in Haryana, Bihar, Punjab, Rajasthan, Himachal Pradesh and NCT of Delhi. The Chamars were though predominantly rural by residence (more than 80.0 per cent living in rural areas), had low female literacy (45.0 per cent against 48.0 per cent for all SCs) and agricultural (only 42.0 per cent workers engaged in non-farm factor against 43.0 per cent for all SCs), but more organized and assertive in political and social terms. The Dalit Panthers Movement started in the early 1970s in Maharashtra has made their youth radical and highly assertive. Over the period, they have mastered in identity politics using leaders such as B.R. Ambedkar and Jyotiba Phule as their icons. Their widespread geographical distribution and numerical dominance over the other SC castes in several states and their sub-regions helped them in this context. The electoral successes of Bahujan Samaj Party (BSP) under Mayawati, who hails from the Chamar caste, exemplify this well. BSP made early inroads in power politics in some states and finally succeeded in gaining political power Uttar Pradesh. In 21 districts of the country, the Chamar make more than three-fourths in total SC population there. Definitely, this goes in their favour so far as the electoral politics is concerned. Being traditionally landless, they were engaged in skin and hide and in agriculture as labourers. Presently, they are employed as daily-wage worker, cultivators, household industry workers, leather workers and shoe-makers. In Himachal Pradesh, they are now engaged in masonry, carpentry, basketry and rope-making. Kurils of Madhya Pradesh have adopted modern occupations. Education has improved and they are now shifting to urban areas. The teachers, administrators, engineers, doctors, defence personnel and white-collar workers from amongst them are the harbingers of modern inter-community linkages, cutting across community barriers. Some of them have emerged as political leaders both at the national and state levels. Given different historical background, some of the states and union territories have done relatively better than others for their welfare.

In the light of above statements, it would be interesting to examine inter-state differentials in occupation structure of the Chamars in India by using data/information available from the 2011 Census, the latest in the series. The latest picture is a cumulative effect of the effects made by different individuals and individual households, on the one hand, and the different state/union territory governments, on the other hand, for their socio-economic upliftment since Independence. In which of the states/union territories, the occupational structure of the Chamars is more diversified than the others and why, makes an important question? Answering such a question will help in reassessing as well as re-defining the programmes and policies framed by different state and union territory governments for their socio-economic upliftment.

For the purpose, the data have been picked up from the Census of India, *Special Tables on Scheduled Castes, 2011* by taking the state as a unit of data analysis and mapping. In 2011, there were 28 states and seven union territories in India, and the Chamar caste was distributed in 25 states and four union territories. In the states of Sikkim, Nagaland, and Arunachal Pradesh and the union territories of Puducherry, Lakshadweep, Andaman and Nicobar Islands, the Chamar caste was not notified. In fact, in Nagaland, Arunachal Pradesh,

Lakshadweep, and Andaman and Nicobar Islands, scheduled castes were not at all notified in 2011.

Since, the Census of India stopped publishing individual SC caste-wise data on the occupational structure of SC population in India at the district level after 1981 Census, we are handicapped in extending this study to the district level. Further, the Census of India divides workers into two categories: *main* and *marginal* workers. Those working for major part of the reference period of six months or more are termed as “main” workers, those, who had not worked for the major part of reference period (worked less than six months), termed as “marginal” workers and a person who had not at all worked during the entire reference period as a “non-worker”. Accordingly, 58.2 million or about 71.0 per cent of 82.3 million SC workers were classified as the “main” workers, and remaining 24.1 million or 29.0 per cent as “marginal” workers. The present study will focus only on the occupational/industrial classification of the “main” workers.

Before moving further to analyse the data on occupational structure of the Chamars at the state level, we shall compare occupation structure of the Chamars with other nine major SC castes in India to see where the Chamar caste stands among the major SC castes in India in terms of their occupational diversification.

The Chamars in comparison to other major SC castes

Adi Dravida, Balmiki, Chamar, Dhobi, Madiga, Mahar, Mala, Dusadh and Pasi were the top ranking nine SC castes in India at the time of 2011 Census. Each having more than 5.0 million persons and their combined population made 105.7 million, their share made 52.5 per cent in total SC population of India. Geographically speaking, Adi Dravida, Mala, and Madiga castes were mainly concentrated in south Indian states, Mahar caste mainly in Maharashtra and Chhattisgarh, Balmiki, Chamar, and Dhobi in north Indian states, and Dusadh and Pasi in Uttar Pradesh and Bihar states.

SC Caste Name	Main Workers	Farm sector workers	Per cent	Non-farm sector workers	Per cent
Adi Dravida	3,043,414	1,475,393	48.48	1,568,021	51.52
Balmiki	1,702,927	438,748	25.76	1,264,179	74.24
Chamars	11,911,351	6,882,462	57.78	5,028,889	42.22
Dhobi	1,165,121	578,237	49.63	586,884	50.37
Madiga	3,253,435	2,426,846	74.60	826,589	25.40
Mahar	3,461,749	1,999,117	57.75	1,462,632	42.25
Mala	2,345,637	1,648,280	70.27	697,357	29.73
Dusadh	1,077,138	792,806	73.60	284,332	26.40
Pasi	1,627,892	1,176,604	72.28	451,288	27.72
Sub-Total	29,588,664	17,418,493	58.87	12,170,171	41.13
Remaining SC Castes	28,594,817	15,538,552	54.34	13,056,265	45.66
Total	58,183,481	32,957,045	56.65	25,226,436	43.35

In 2011, nearly one-half or 49.8 per cent of total “main” workers in India were engaged in non-farm activities. The national averages for SC main workers was 43.4 per cent, for non-SCs 54.4 per cent, and for nine top ranking SC castes 41.1 per cent. It means, the top ranking SC castes in India have the least diversified occupational structure in comparison to both the non-SC and rest of the SC castes. The combined share of non-farm employment was 45.7 per cent for remaining more than five hundred SC castes in India (Table 1). One can safely infer that dominant majority of SC workers are still engaged in agricultural operations mostly as agricultural labourers and thus rural by residence.

There were, of course, wide inter-caste differentials in structural composition of workers among nine top ranking castes. The share of non-farm employment ranged from a high of 74.2 per cent for the Balmikis to a low of only 25.4 per cent for the Madigas, differing nearly by three times. Traditionally, Balmikis are engaged in sweeping and scavenging. Against this, Madigas, mainly concentrated in Andhra Pradesh and Karnataka, are traditionally agricultural labourers. In 2011, dominate majority of their workers (65.5 per cent) were engaged as agricultural labourers. This proportion was only 22.1 per cent for Balmikis.

Of the nine major SC castes, the Balmikis, the Adi Dravidas and the Dhobis/Dhobas are three SC communities, in whose case the majority of workers were engaged in non-farm economic activities. Balmikis are traditionally engaged in sweeping and scavenging, which are low paid tertiary activities. During the British rule in India, they were recruited in defence services to perform these traditional services. After independence, with urban-industrial development there has been rapid in urbanization in India, creating a huge demand for their traditional services as sweepers and scavengers. This played an important role in residential shift from rural to urban areas and change of their occupation structure. Reservation of jobs in public sector units for scheduled caste workers in post-Independence period also played an additional role in their shift of resident and occupations. That is why, Balmikis are more urbanized and employed in non-farm activities than other major SC castes. Whereas, socio-cultural movements in south India especially in Tamil Nadu, where are the Ad Dravidas highly concentrated happened the downtrodden castes including the Adi Dravidas in their socio-economic transformation (see Kshirsagar, 1994:380-390). While the reverse was true of Madigas, Malas, Dusadhs and Pasis. However, one- third or 33.1 per cent of Pasis workers were cultivators and only about two-fifths working as landless agricultural labourers. Within this group, the Dhobis and the Chamars are the two other castes among whom about one-fifth or more workers are engaged as cultivators. It means sizable share of Pasis, Dhobis and Chamars households own land or cultivate land on rent, providing them prestige and power animating from landownership in rural communities.

Briefly, the majority of SCs workers are still engaged in farm sector activities, mainly as low paid agricultural workers. Of course, there are wide inter - caste differentials in this context. Of the nine top ranking castes, the three castes namely Adi Dravidas, Balmikis and Dhobis/Dhobas have the majority of their workers employed in non-farm activities; while the reverse is true for remaining six castes namely, Madigas, Malas, Chamars, Mahars, Dusadhs and Pasis. However, Pasis and Chamars from the latter and Dhobis/Dhobas from the former group have a good share of workers engaged as cultivators. This adds not only to their income but also prestige and power in rural society.

In the following, occupational/industrial composition of workers belonging to the Chamar caste are discussed in details at the state level. It is to be noted here that earlier the Census of India was classifying and publishing industrial classification of individual SC castes up to the district level. However, the practice was discontinued after the 1981 Census. In absence of requisite data, we are forced to restrict our discussions to the state level.

Occupational/Industrial Structure of the Chamars

Chamars, in contrast to Balmikis/Bhangis, are predominantly rural by residence, have relatively low female literacy and high male-female literacy differentials and employed mostly as the agricultural labourers (Table 2).

Table 2: Comparative picture of urbanization, general literacy, female literacy and occupational diversity between all SCs and Chamars, 2011				
Caste	Urbanization	General Literacy	Female Literacy	Non-farm employment
Chamar	19.46	58.08	45.28	42.22
All SCs	23.60	56.50	48.30	43.35
Non-SCs	35.20	66.09	59.40	54.41
Note: All figures are in percentage. Literacy rate has been computed on the basis of total population in place of excluding 0-6 age-group population.				
Table 2A: Classification of states/union territories in accordance to work participation rates of Chamars, 2011				
Level/per cent	Name of State/Union Territory			
High (>40.0%)	Manipur (49.5), Kerala(46.9), Mizoram (46.8), Tamil Nadu (45.7), Daman & Diu* (40.5) Total=5			
Moderate (40.0-30.0%)	Karnataka(38.2),Maharashtra(37.9), Andhra Pradesh (35.6), Dadra & N.Haveli* (35.3), Goa (35.0),Chandigarh*(34.1),Gujarat (33.4), Tripura (32.9), Assam (30.4) Total= 9			
Low(< 30.0%)	NCT of Delhi*(29.4),Chhattisgarh (29.1), Madhya Pradesh (28.7), Punjab(28.6) Rajasthan(28.5),West Bengal(27.8), Himachal Pradesh(25.3),Uttarakhand (25.0),Odisha(24.9),Jammu &Kashmir (24.4), Haryana (23.9), Meghalaya (22.3), Uttar Pradesh (20.5), Bihar (18.6), Jharkhand (16.3) Total=15			

Average: 24.1

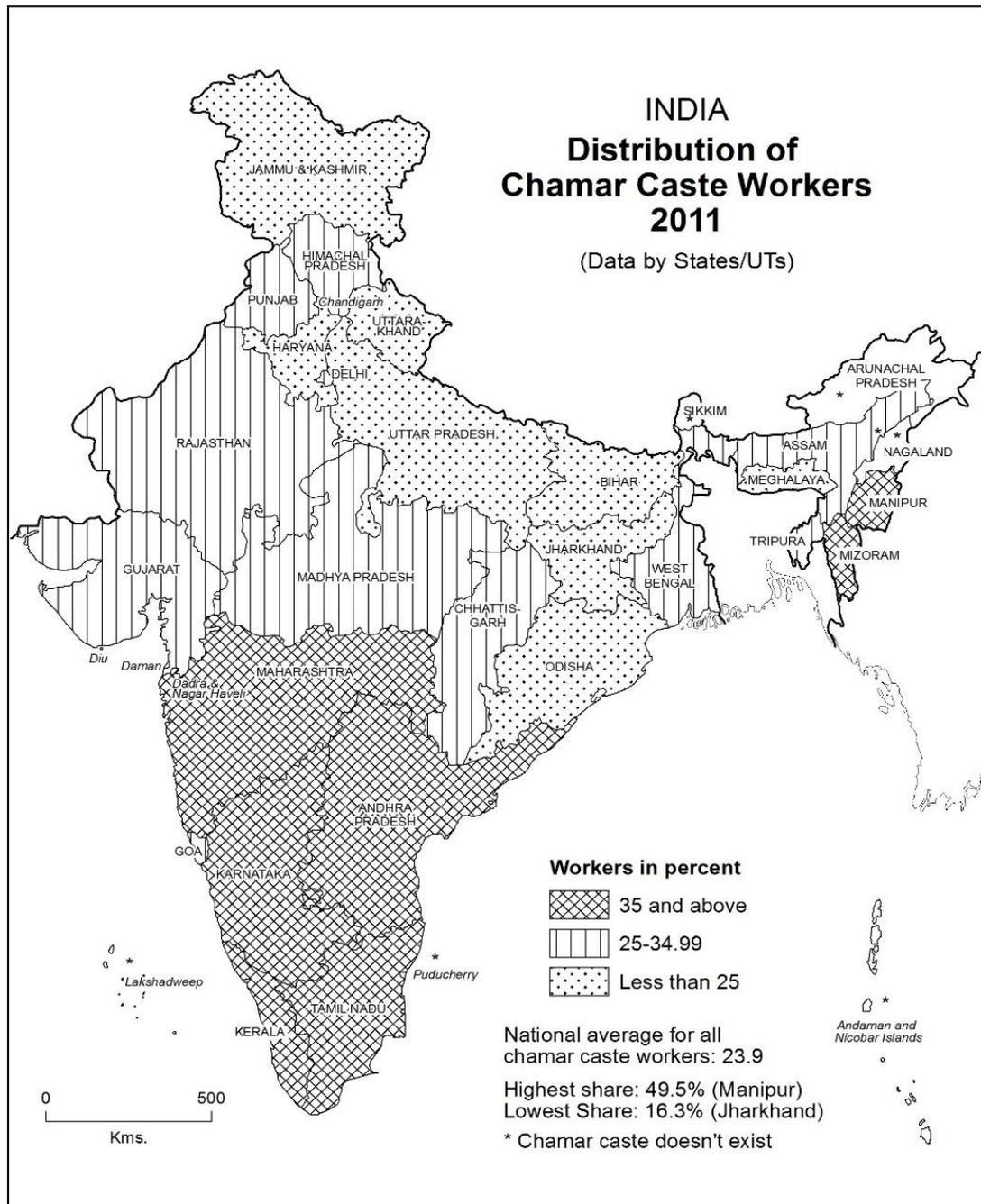
Notes: 1. *Union Territories, 2. Figures in parenthesis indicate to workers as percent to total population

The work participation rate of the Chamars (about 24.0 per cent) was quite low. This indicates to a high dependency ratio among the Chamars. In other words, there were three dependents on one Chamar worker. Against this, there were less than two persons dependent on one Madiga worker. The latter caste is mainly concentrated in south India and the former in north India.

What explains the low work participation rates among the Chamars? It seems that these is a marked outflow of economically the most active workforce from the backward states like Bihar, Uttar Pradesh, and Jharkhand, where Chamars are highly concentrated, to the developed states and their metropolitan cities to work leaving behind their families at the native place. This results in low work participation rates of Chamars in states, which are economically backward but having high concentration of the Chamars. Low work

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participation rates of Chamars in states like Uttar Pradesh, Bihar, West Bengal, and Rajasthan speaks of this. Another explanation, needing further investigation, may be that the Chamars being a relatively better-off caste of SCs in India can afford to keep their school/college going children off the labour force.



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

FIG. 1

Of course, there are wide inter-state differentials in work participation rates of the Chamars. It ranged from a high of 49.5 per cent in Manipur to a low of only 16.3 per cent in Jharkhand, the respective shares the two states differing by three times (Table 3). In four states & one union territory, where was work participation rate of Chamars higher than 40.0 percent, the total population of Chamars is very low. Total population of Chamars in these states ranged from a high of 525 persons in Tamil Nadu to 131 persons in union territory of Daman & Diu. In these states, most of the Chamars are either working as migrant labourers or central government employees including defense personnel like armed forces for the national security.

State/UT	Worker	Cultivators	Agri. Labourers	Household industry workers	Other workers
Jharkhand	16.31	14.25	29.14	3.35	53.26
Bihar	18.62	8.78	69.86	2.33	19.02
Uttar Pradesh	20.46	25.34	38.66	2.96	33.03
Meghalaya	22.34	5.81	3.10	1.94	89.15
Haryana	23.90	7.34	32.40	2.03	58.23
Jammu and Kashmir	24.45	25.09	5.07	1.49	68.23
Odisha	24.88	22.82	27.51	5.94	43.74
Uttarakhand	24.97	10.57	33.17	2.38	53.88
Himachal Pradesh	25.27	39.76	4.28	1.54	54.42
West Bengal	27.83	7.20	44.19	5.36	43.25
Rajasthan	28.55	31.22	18.63	3.28	46.88
Punjab	28.59	3.98	22.53	4.03	69.45
Madhya Pradesh	28.71	22.18	44.71	3.80	29.31
Chhattisgarh	29.14	30.64	42.72	0.70	25.94
Assam	30.39	15.01	12.79	3.68	68.52
Tripura	32.92	2.89	4.97	2.26	89.89
Gujarat	33.36	12.73	42.04	0.90	44.34
Goa	34.96	3.22	0.51	1.88	94.39
Andhra Pradesh	35.58	1.70	7.48	13.59	77.24
Maharashtra	37.91	12.69	26.60	4.83	55.88
Karnataka	38.23	13.25	59.49	1.58	25.68
Tamil Nadu	45.71	3.33	2.92	5.00	88.75
Mizoram	46.81	14.55	3.45	0.00	80.00
Kerala	46.86	1.03	2.06	0.00	96.91
Manipur	49.47	25.53	2.13	1.06	71.28
<i>Union Territories</i>					
NCT of Delhi	29.39	0.22	1.00	2.23	96.55
Chandigarh	34.11	0.20	0.30	0.89	98.61
Dadra & N. Haveli	35.29	5.95	2.46	0.00	91.58
Daman & Diu	40.46	0.00	0.00	0.00	100.00
All Chamars	23.90	19.81	37.97	2.95	39.27
All SCs	28.89	16.43	40.22	2.81	40.54
All Non-SCs	29.99	26.86	18.73	3.78	50.63

In another seven states and two union territories, where work participation rate of Chamars ranged between 30.0 and 40.0 per cent, Andhra Pradesh, Tripura, Goa and Dadra and Nagar Haveli belong to a category of states/union territories where total population of Chamars was relatively small. Whatever little number of persons was there, they were living and working in urban areas, mostly engaged in urban services relating to sanitation. In Karnataka, Maharashtra, Gujarat, Assam, and Chandigarh (UT), where Chamars have relatively higher concentration, present a contrasting picture. In Karnataka, Maharashtra and Gujarat, Chamars were dominantly rural and agricultural. Against this, in Chandigarh (UT) and Assam, they were highly urbanized and engaged in non-farm activities. In states of southern and western India, Chamars are enumerated with Bhambi/Bhambhi and Chambhar castes. However, in Andhra Pradesh the Chamars and Chambhars are notified separately.

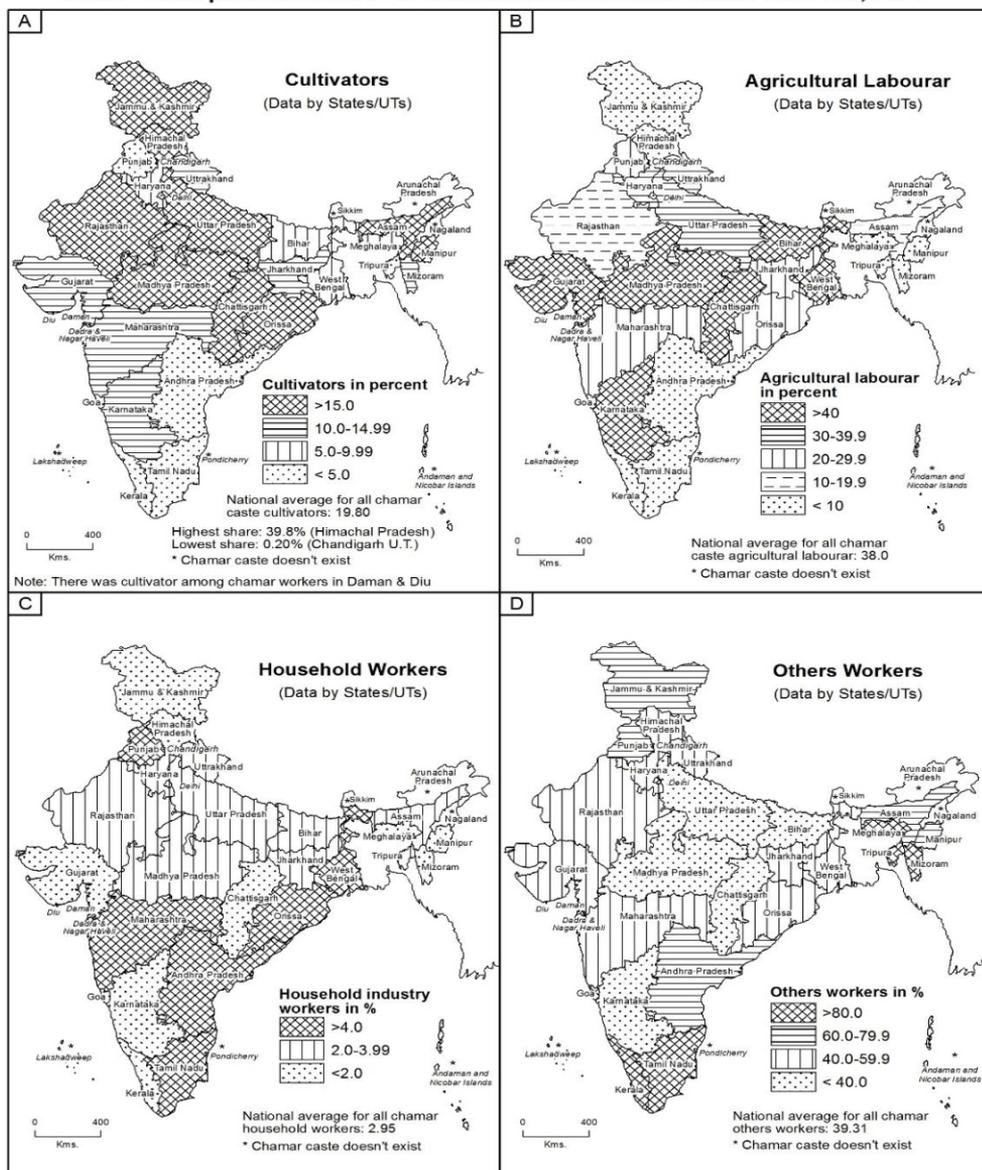
In remaining fourteen states and one union territory (i.e. NCT of Delhi), where the Chamars were highly concentrated, their participation rates are low. Their combined strength in these areas was about nine-tenth of total Chamars in India. In all these states except Meghalaya, population of Chamars was quite large but work participation rate low. States and UTs in this category were distributed in northern, central and eastern India.

On the whole, the dominant majority of Chamar workers (57.8 per cent) were engaged in farm activities, mainly as agricultural labourers. Nonetheless, about one-fifth or 19.8 per cent of their total (main) workers were cultivators in 2011. Only a tiny share of their worker (about 3.0 per cent) was engaged in household industries. In fact, in post-green revolution phase traditional household industries registered a sharp decline in rural India, forcing many SC rural artisan households, earlier engaged in traditional activities like skin tanning, shoe-making, rope-making, carpentry and so on, to join agriculture as labourers. Increase in agricultural wages and the decline in demand for traditional household industry products, in combine, contributed to this. In 2011, 57.8 per cent of the Chamar workers were employed in farm sector and remaining 42.2 per cent as non-farm workers. Of course, there were wide inter-state variations in this context.

The share of cultivators in total Chamar workers ranged from a high of about two-fifths (39.8 per cent) in Himachal Pradesh to a low of less than 2.0 per cent in Andhra Pradesh, and all union territories recording nil or a negligible share of such workers in total Chamar workers. In six states of Himachal Pradesh, Rajasthan, Chhattisgarh, Manipur, Uttar Pradesh and Jammu and Kashmir, the share of cultivators in total workers was one-fourth or higher. In another two states (Odisha and Madhya Pradesh), this share was more than one-fifth. In this way, about one-third of total 25 states having Chamar population in 2011 had the share of Cultivators among Chamar workers, which was higher than the average for all the Chamars in India. Except Manipur, all other such states were located in north and central India. In contrast, ten states of Bihar, West Bengal, Haryana, Punjab, Tripura, Meghalaya, Goa, Andhra Pradesh, Tamil Nadu and Kerala had this share of less than one-tenth. In south India, it is only Karnataka, where this share was higher than one-tenth but lower than the national average for the Chamars. Against this, Punjab had this share lowest of all the north India states, even less than one-half of Bihar, having the highest share of farm workers among Chamars in India. Briefly, the share of cultivators among the Chamar workers was higher in north Indian states and the lower in south Indian states. The share of cultivators among the Chamar workers finds a positive association with historical factors and success of land

distribution among SCs under land ceiling act, while showed a negative association with degree of urbanization in states and union territories of India.

INDIA: Occupational/Industrial Distribution of Chamar Caste Workers, 2011



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

FIG. 2

Inter-state variation in the share of the Chamar agricultural/casual labourers was much higher than that of Chamar cultivators. It ranged from a high of about 70.0 per cent in Bihar to less than one per cent in Goa. The union territories, in general, had a very low share of such workers. The two states, Bihar and Karnataka, had the dominate share of Chamar workers in agriculture as the labourers. In another four states (Madhya Pradesh, West Bengal, Chhattisgarh, and Gujarat), this share was more than two-fifths in total workers. Also, the

share of such workers was quite high in Uttar Pradesh. In all, seven states had this share higher than the average for the Chamar workers in India. Notably, however, the average share of agricultural labourers (38.0 per cent) among the Chamars was lower than the average for all SCs (40.0 per cent) in India. This is associated mainly with the higher share of cultivators among the Chamars in comparison to all SCs in India. The non-SC castes had this share less than one-fifth.

On the other side, all the union territories along with states in northeast and south India, except Karnataka, recorded low to very low share of such workers among the Chamars. In seven states of Meghalaya, Tripura, Mizoram, Manipur, Goa, Tamil Nadu, and Kerala, the share of agriculture labourers among Chamars was less than 5.0 per cent. Himachal Pradesh from northwest Indian states is also included in this category. In all these states, except Himachal Pradesh the total population of the Chamars is generally small. Briefly, states in the Indo-Gangetic plains, in general, had higher proportion of agriculture labourers among the Chamar workers, while the reverse was true for all the union territories and states located in northeast and south India. Further, in states having relatively higher share of cultivators among the Chamar workers, the share of agriculture labourers in total Chamar workers was relatively low to very low.

Only a small fraction (2.93 per cent) of the Chamar workers was engaged in household industries. However, the average share for Chamar workers was slightly higher than that for all SC castes (2.81 per cent). Notably, the share Non-SC castes was higher (3.78 per cent) than the Chamars and all SCs both. Among states, the share of such workers among the Chamars ranged from a high of about 14.0 per cent in Andhra Pradesh to nil in Mizoram and Kerala. Among union territories, Dadra and Nagar Haveli and Daman & Diu also recorded nil share of such workers. It was only in the four states of Andhra Pradesh, Odisha, West Bengal and Tamil Nadu, the share of such workers among Chamars was 5.0 per cent or more. Assam, Jharkhand, Maharashtra, Rajasthan, and Punjab are others states, where was the share of Chamar workers in household industries was between 3.0 and 5.0 per cent. In India, under the impact of rapid urbanization and modernization there has been a sharp decline in demand for goods produced in traditional household industries, wherein a large number of SC households were employed, at one point of time.

The share of “other workers”² among the Chamars varied widely among the states and union territories. 39.3 per cent being the all India average for all Chamars workers, the share ranged from a high of cent per cent in Daman and Diu to a low of only 19.0 per cent in Bihar. All the four union territories had this share of more than 90.0 per cent. Among states, there were as many as sixteen states, where the share of such workers was higher than one-half, and in another four states (Odisha, West Bengal, Rajasthan, and Gujarat) it was higher the average for all the Chamars in India. In remaining five states of Bihar, Uttar Pradesh, Madhya Pradesh, Chhattisgarh and Karnataka, this share was quite low. In these states, only three or less among each ten Chamar workers were employed in non-farm activities. This indicates to very poor economic conditions of the Chamars in these states. In 2011, these states, in combine, had nearly 70.0 per cent total Chamars in India.

² The category of “other workers” included those engaged in manufacturing industries, plantation, trade and commerce, transport, storage and communications, and other services.

Table 4: Classification of States/UTs in accordance to the majority of the Chamar workers employed in farm and non-farm activities, 2011

Having majority worker in the farm sector	Having majority workers in the non-farm sector
Bihar (78.7), Chhattisgarh (73.4), Karnataka (72.7), Madhya Pradesh (66.9), Uttar Pradesh (64.0), Gujarat (54.5), West Bengal (51.4), Odisha (50.3) Total=8	Daman&Diu(100.0),Chandigarh(99.5),NCT, Delhi(98.8),Kerala(96.9),Goa(96.3),Tamil Nadu (93.8),Tripura (92.2), Dadra & Nagar Haveli (91.6), Meghalaya(91.1), Andhra Pradesh (90.8), Mizoram (80.0), Punjab (73.5), Manipur (72.3), Assam (72.2), Jammu & Kashmir (69.8), Maharashtra(60.7), Haryana (60.3), Jharkhand (56.6), Uttarakhand(56.3), Himachal Pradesh (56.0), Rajasthan (50.2) Total=21

Note: Figures in parentheses indicate to percent in total main workers.

On the whole, in eight states the majority of the Chamar workers was employed in farm sector activities, and in remaining 17 states and four union territories the reverse was true of the Chamar workers (see Table 4). In the former category of states, 73 per cent of total Chamars were residing, while remaining 27 per cent were living in the latter category of states/UTs. Evidently, the dominant majority of the Chamar households in the country was employed in farm sector activities.

Conclusion

The majority of SCs workers are still engaged in farm sector activities, engaged mainly as low paid agricultural workers. Of course, there are wide inter-caste differentials in this context. Of the nine top ranking castes, the three castes namely Adi Dravidas, Balmikis and Dhobis/Dhobas have the majority of their workers employed in non-farm activities; while the reverse is true for remaining six castes namely, Madigas, Malas, Chamars, Mahars, Dusadhs and Pasis. However, Pasis and Chamars from the latter and Dhobis/Dhobas from the former group have a good share of workers engaged as cultivators. This adds not only to their income but also prestige and power in rural society.

The Chamar, the largest and most widely distributed SC community in India, had low work participation rates. Their work participation rate of 24.0 per cent indicates to a high degree of dependency ratio among them. Low work participation rate was more evident in the case of economically backward states like Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan, where the Chamar population has a very high concentration. The reverse was true of union territories and states having a low concentration of Chamars. States in northeast and south India represent this category. The majority of the Chamar workers was employed in farm sector especially as agricultural labourers. However, in some states like Himachal Pradesh the share of cultivators in total Chamar workers was as high as two-fifths. In contrast, in Bihar seven of each ten Chamar workers were employed as agricultural/casual labourers. On the whole, in eight states, the majority of the Chamar workers was employed in farm sector, and in remaining 17 states and four union territories the reverse was true of the Chamar workers. However, in the former category of states, more than seven of each ten (73.0 per cent) of total Chamar population was residing. Evidently, the dominant majority the Chamar households in the country was employed in farm sector.

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Dispersal of Kashmiri Speaking People in India, Outside their Home State of Jammu and Kashmir, 2011

GOPAL KRISHAN

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In the Indian context, spatial dispersal of a linguistic group outside their home state is an indicator of their involvement with the mainstream. Such outflows establish socio-economic and political networks of mutual interest over space. The process also helps in distinguishing inward-looking communities from those which are always in search of new pastures. Inward looking communities, by choice or compulsion are likely to develop a sense of alienation.

Among various linguistic groups, Kashmiri speaking people are most home bound, next only to Assamese. The 2011 Census of India recorded their total as 6.80 million out of whom 6.68 million resided in Jammu and Kashmir. Hardly 0.12 million or 1.72 per cent of the Kashmiri speaking people were living outside their home state. The comparative figure for Assamese speaking people was, of course, a bit lower at 1.41 per cent (Table 1).

Some outflow of the Kashmiri speaking people is on record at least since the colonial days. This was broadly in two channels. One comprised the Muslims, who moved out because of poverty to different towns and cities of pre-partition Punjab, particularly at the time of famines in 1833 and 1877-79. They found livelihood in wood cutting, load carrying and carpet weaving in general. The other channel carried educated Kashmiri Pandits who found vocation in professional, technical and office services in various cities of northern India. After independence such a tendency persisted for some time, with a gradual decline in out-migration of Kashmiri Muslims for labour. They started moving out as vendors, though in small numbers, of Kashmiri products. The land reforms, in terms of land redistribution, enacted by the state in 1950's caused some outflow of Kashmiri Pandits, who were on the losing end in such a situation. The most critical situation erupted in 1990's when Kashmiri Pandits were ousted from the Kashmir Valley *en masse* in the nature of ethnic cleansing. They were resettled or took shelter in different cities of India, especially the metropolitan ones. Meanwhile some outflow of the Kashmiri Muslims also continued for business, education and services.

The 2011 Census of India informs that of the total Kashmiri speaking people outside Jammu and Kashmir, 48.9 per cent or nearly a half were confined to the neighbouring state of Himachal Pradesh. The bordering areas of this state with Jammu and Kashmir were settled by Kashmiri speaking people centuries ago. During the colonial days, a considerable number of Kashmiris migrated to Shimla, the imperial capital. The recent decades are noted for an additional inflow of them directed to towns like Dharamsala, Kullu, Manali and others.

Table 1: India: Percentage of Various Linguistic Groups Living outside their Home State, 2011

Assamese	1.41	Odia	7.49
Kashmiri	1.72	Tamil	7.64
Dogri	3.20	Telugu	12.89
Maithali	3.87	Mainpuri	13.57
Bodo	4.50	Bengali	19.07
Gujarati	6.37	Punjabi	24.78
Marathi	6.70	Santali	55.62
Malayalam	6.97	Konkani	57.27
Kannada	6.99	Nepali	60.52

Source: Census of India, 2011 (State-wise Distribution of Population by Scheduled Languages in India, Part I).

*Hindi, Sindhi, Sanskrit and Urdu have not been taken into consideration since these were not specific to any single state in terms of their affiliation.

Table 2: Number of Kashmiri Speaking People outside Jammu and Kashmir, 2011

State/Union Territory	Number of Kashmiri speaking people	Percentage in total
Himachal Pradesh	57050	48.9
Delhi	18122	15.5
Maharashtra	8274	7.1
Haryana	6225	5.3
Uttar Pradesh	6123	5.2
Rajasthan	4164	3.6
Karnataka	3388	2.9
Punjab	2913	2.5
Uttarakhand	1770	1.5
Chandigarh	1330	1.1
Gujarat	1111	^
Madhya Pradesh	1050	^
Bihar	986	^
Kerala	651	^
West Bengal	624	^
Andhra Pradesh and Telangana	576	^
Tamil Nadu	453	^
Goa	372	^
Assam	357	^
Jharkhand	296	^
Chhattisgarh	171	^
Tripura	161	^
Odisha	140	^
Arunachal Pradesh	108	N
Meghalaya	79	N
Nagaland	77	N
Manipur	48	N
Andaman and Nicobar Islands	34	N
Puducherry	30	N
Sikkim	30	N
Mizoram	23	N
Dadra and Nagar Haveli	11	N
Daman and Diu	3	N
Lakshadweep	Zero	N
INDIA	116750	100.0

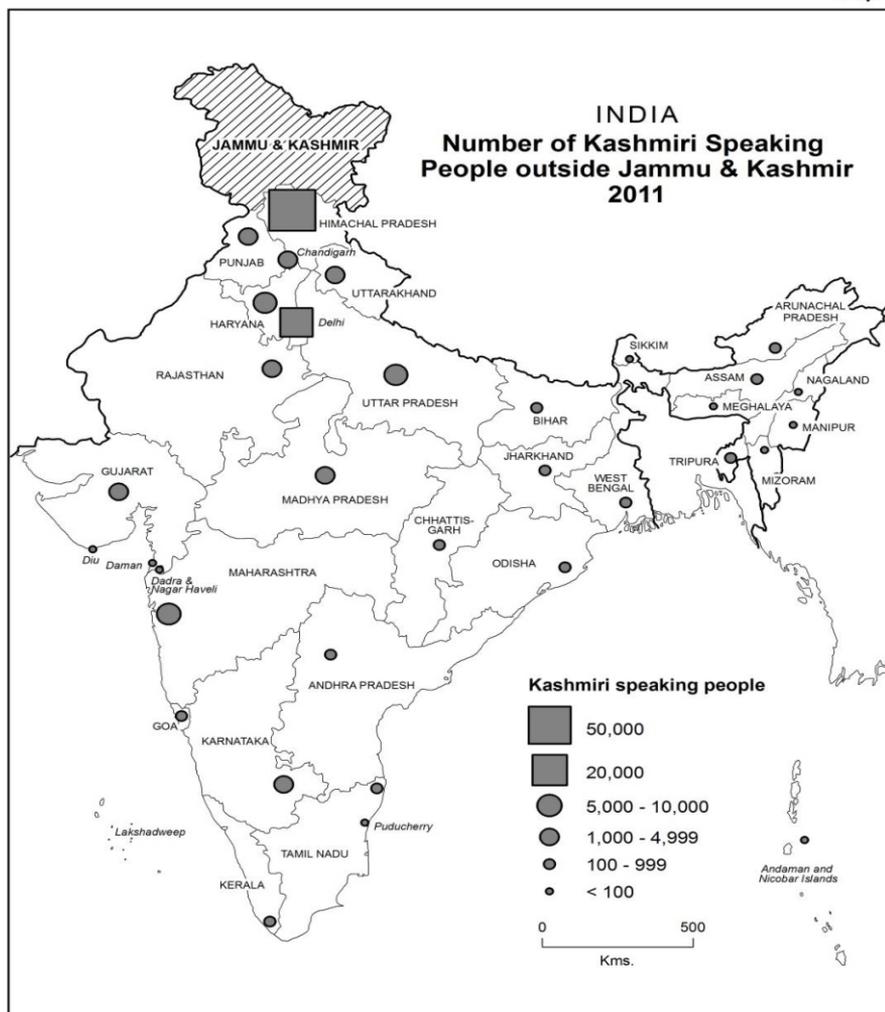
Source: Census of India 2011 (State-wise Distribution of Population by Scheduled Languages in India – Part II).

^ - Less than one per cent

N - Less than 0.1 per cent

The National Capital Territory of Delhi accounts for 15.5 per cent of Kashmiri speaking people outside their home state. The comparable figures for Maharashtra, Haryana and Uttar Pradesh are 7.1, 5.3 and 5.2 per cent respectively. In all of them, this population is city based, by and large.

Map 1



* Courtesy: Mr. Mohan Singh, Cartographer, for designing the map.

In other states and union territories, the number of Kashmiri speaking people is small. In 22 of them it is less than one thousand each; rather in ten among these it does not cross even two digits. Most of these are located in North-East India, Eastern India, and South India. Lakshadweep does not have even a single Kashmiri speaking person (Map 1).

The fact confirmed by the above description is obvious enough. The dispersal of Kashmiri speaking people outside their home state is not only meagre but also confined to a few states and some metropolitan cities. Meanwhile the state remains much in news on daily basis for political reasons. Certainly there is a need for creating opportunities and ambience for Kashmiri speaking people to ensure their greater participation in life of the nation.

Book Review

PunamTripathi: **The Vulnerable Andaman and Nicobar Islands: A Study of Disasters and Response**, Routledge (Taylor and Francis Group), London and New York, 2018, pages-334, price:Rs.1095/-

In the last line of **preface** of the book under review, the author writes, ‘research is a journey and this book is my first step in this direction’ (p. xix). After reading the book, any reader will say with confidence that Punam Tripathi has started her academic journey well with a sound foundation. It is not only for selecting the less researched area, which has the difficult social and physical terrain to access and conduct field work, that is Andaman and Nicobar Islands, but also for articulating her ideas and putting them convincing and logically, Punam Tripathi deserves our congratulations. However, one may disagree with the glasses, which she used to approach the disasters, as a phenomenon to study. But that can be true about anyone of us, moving through the academic terrain. She may be blamed for heavy reliance on vulnerability approach, considering disasters as a ‘social construction’, instead of adopting a holistic approach giving due importance to hazard, risk and vulnerability. But, she is candid enough to admit that it is part of her training (p.xv).

For accomplishing the study, she collected data/information not only from various secondary sources, including libraries, government offices, RTI Act and internet, but also conducted field work to collect information on different aspects of disaster response mechanism. With the help of a well-structured questionnaire, she covered 100 out of the 9797 households, resettled after the 2004 tsunami, which devastated the entire Andaman and Nicobar Islands.

The book organized into eleven chapters including the major findings of the study begins with identification of disasters in the Andaman and Nicobar Islands, followed by the history of disasters, divided into the four phases: occurring in the 19th century, during the World War II, after the Independence in 1947, and at the occurrence of tsunami in the 21st century, sequentially. The sixth, seventh, eighth, ninth and the tenth chapters examine the damage caused due to the Tsunami, vulnerability of different sections of Island society due to the Tsunami, response, compensation, and recovery phase of this disaster event. Finally, in the eleventh and the final chapter the finding arrived at in different chapters are recapitulated in a consolidated form. All the chapters are inter-connected and inter-dependent, speaking out of the organization skill of the author.

How the islands and people residing there were ill-treated not only by the colonial masters, but also by the mainland India after Independence has been aptly summarized by the author in the following words, ‘Not only the colonial masters exploited and ill-treated the islanders in the past but also mainland India treats islands as a ‘dump yard’. The utter disregard for developing and harnessing its natural resources or caring for tribal population created vulnerability to disaster against the backdrop of which can be seen the Tsunami of 2004’ (p.92). There are several other finding of the study, which are worth quoting.

The impressive part of the book is the lucidity of the literary style. Ideas have been communicated in simple, coherent and effect manner. This renders a smooth reading. Hardly any grammatical or spelling mistake can be noticed.

The spatial dimension of different issues is well illustrated by a variety of quality maps, which are well designed, and communicating the main messages of the research work effectively. The author has reviewed a large number of studies on the theme, making it not only exhaustive but also focused. Analytical part is strong and highly convincing indicating logical and scientific skill of the author. Things have been explained in a scientific and systematic manner.

The book is sufficiently strong from conceptual, methodological and analytical points of view. Nevertheless, the web of arguments and explanations thorough out the book roam around vulnerability paradigm, which is one of the paradigms in disaster studies. There have been, of course, paradigmatic shifts in disaster studies over the years. The hazard centric paradigm dominated the scene in the 1950s and 1960s. The focus moved to structural paradigm in the 1970s, bring vulnerability in the focus. This was followed by a shift to risk paradigm, bringing both hazard and vulnerability at the centre stage. Had the author taken all this into account, value of her work would have been further strengthened. All this is said not to distract in any manner from the high quality of the work already accomplished.

On the whole, the book makes an interesting reading of scientific and analytical work. The ideas are refreshing and thought-provoking; moreover presented in a lucid, direct, coherent, organized manner. The jacket of the book is well designed, and hard copy of the book is available on an affordable price of less than eleven hundred rupees, minus the discount. I strongly recommend the book for the general public as well as scholars interested in teaching and research related to the disasters.

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OBITUARY

Professor K. D. Sharma (1948-2019)

Professor (Dr.) Krishan Datt Sharma, popularly known to generations of his students as “K.D. Sir”, passed away during the early morning hours of March 11, 2019. He breathed his last at a private hospital in Chandigarh after a brief illness.

Born on October 23, 1948, he came from a family majorly of teachers. His father Late Professor I.D. Sharma served in the Department of Political Science, Panjab University, Chandigarh. Prof. K.D. Sharma attended DAV College, Chandigarh for his under-graduation, and then joined Panjab University and obtained two Masters, degrees: M.A. English (1969) and M.A. Geography (1971). He completed his doctoral research degree in Geography under the able guidance of renowned geographer Late Professor A.B. Mukerji. He joined the Department of Geography as Lecturer in 1974 and superannuated as Professor in 2008 and remained Professor re-employed till 2013.

Having obtained a rich experience of teaching and research, spanning over four decades, Professor K.D. Sharma published extensively in journals and books of repute. He guided as many as 39 students for their M.Phil./Ph.D. degrees. During service, several honours and awards came his way. Some of these included Editor, *Population Geography*, the Journal of the Association of Population Geographers, India (2014 till his demise); Joint-Editor of the same (2005-2009 and 2009-2013); Chairperson of the Department (1993 to 1996); Coordinator, Special Assistance Program (SAP) of the UGC (2004-2008); Reviewer, Journal of *Cultural Geography*, Oklahoma State University, USA (2010); UGC nominee on SAP Advisory Committee, Department of Geography and Regional Development, University of Kashmir, Srinagar (2010-2015); Secretary, IIG, Pune (1992-1998); Co-Chairman, Commission on Urban Ecology, NAGI (1995-1998); Editor, *Indian Cartographer*, The Journal of Indian National Cartographic Association (INCA), Hyderabad (1997-98); Member, Editorial Board, Panjab University, Social Science Research Journal (Arts), 2004-2005; and also of the Panjab University, Social Science Research Bulletin (Arts), 2008-09. Urban and Rural Population and Settlements, Social Geography, Urbanization and Urban Development were major areas of his research interest. Professor K.D. Sharma was life member of all major Professional Societies of Geography. Also, he was a member of many Committees of national level organizations, such as the Indian Council of Social Science Research (ICSSR), New Delhi; Indian Military Academy (IMA), Dehra Dun; University Grants Commission (UGC), New Delhi.

Professor K.D. Sharma worked tirelessly and was instrumental in clearing the backlog in publishing the journal volumes. He was very quick in providing complete feedback to authors for meeting the deadlines. He was critical but at the same time positive even if the

manuscripts were not up to the mark. Through his strong writing skills and command over English language, he brought more prestige to the journal during his tenure as editor. Professor K.D. Sharma's contributions, therefore, to the discipline of Geography in general and the Department of Geography at Panjab University in particular, would always be deeply acknowledged and remembered.

Professor K.D. Sharma was a fantastic human being. Endowed with a strong sense of humility, modesty, patience and passion, he was a teacher par excellence. He supported a soft-hearted persona. He had an eye for detail and was always available to students for discussions and for clearing their doubts. I am privileged to have shared a close personal bond with him since 1978, the year in which he accompanied a two weeks long field trip of our batch of M.A Geography to Jammu and Kashmir. During that trip a totally different and much more pleasant and caring KD Sir made a room in our hearts forever. He became a great friend and he actively participated in all our activities including the playing of *Antakshri*. The secret that he sings also, was revealed to us as a very pleasant surprise when he sang two full songs of old Bollywood movies. The lines of those songs... "*aye meri zohra jabeen,tujhe maloom nahin.....*" and "*chalat musafir moh liyo re pinjre wali muniya...*" still resonate in my ears. My association with Professor K.D. Sharma got strengthened further after I joined the Department as faculty in 1984. I had always looked to him for guidance for my own research. The scholarly discussions held with him and in the company of Late Professor G.S. Gosal during tea breaks while sipping home-made *tulsi chai* which he used to bring, are unforgettable. Before superannuating, he resided for many years in the house (#G-14) next to ours on the campus. The fond memories of our celebrating occasions such as birthdays and festivals together would always remain fresh not only in my mind but in the minds of my family members too. Both my sons admired him a lot as their "KD Uncle" would encourage them and appreciate their habit of reading good literature, about which he himself was so passionate.

It is still very hard for me to believe that our dear Professor K.D. Sharma is not amidst us. He will be missed not only by his wife, Mrs. Ruby Sharma, his family and friends but also by numerous students whom he taught over the years.

RIP Professor K.D. Sharma.....

With wet eyes....

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I, Surya Kant, hereby declare that the particulars given above are true to the best of my knowledge and belief.

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NOTE TO CONTRIBUTORS

Population Geography of the Association of Population Geographers of India is a refereed journal published bi-annually in June and December. The Journal welcomes original papers in the area of Population Geography and allied disciplines.

Manuscripts The maximum length of a paper is about 6000 words. The manuscripts must be submitted in soft/hard copy typed in MS-Word. Original Maps, if any, are to be included in the text as well as separately in .jpg format. Manuscripts should be carefully checked before submission and must be preceded by a covering page stating the title of the paper, full name(s) of the author(s) along with mailing address. An abstract of about 150-200 words outlining scope, methodology, and main findings of the work should be given in the beginning. Paper must not have been published previously in any periodical or book and should not be submitted elsewhere until a decision is received from this Journal.

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Crang, M. (2005). Qualitative methods: there is nothing outside the text? *Progress in Human Geography*, 29(2) 225-33.

For book (two authors): The name(s) of the author (s), Year of Publication, Title of Book, Place of Publication, and Publisher's Name. e.g., Krishan, G., and Singh, N. (2017). *Researching Geography: The Indian Context*. Routledge: London.

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