

**LINKAGES BETWEEN URBANIZATION,
HIGHER EDUCATION AND PROFESSIONAL OCCUPATIONS:
A CASE STUDY OF THE SCHEDULED CASTE AND NON-SCHEDULED
CASTE URBAN POPULATIONS IN
UTTAR PRADESH: 2001**

*Dissertation submitted to Jawaharlal Nehru University
In partial fulfilment of the requirements for the award of the degree of*

MASTER OF PHILOSOPHY

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CERTIFICATE

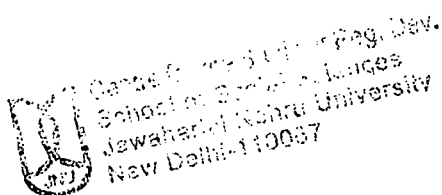
This is to certify that dissertation entitled “**LINKAGES BETWEEN URBANIZATION, HIGHER EDUCATION AND PROFESSIONAL OCCUPATIONS: A CASE STUDY OF THE SCHEDULED CASTE AND NON-SCHEDULED CASTE URBAN POPULATIONS IN UTTAR PRADESH: 2001**”, is my bona fide work for the degree of **MASTER OF PHILOSOPHY**, and may be placed before the examiners for evaluation.

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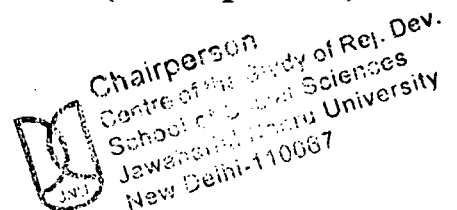
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DEDICATED
TO
MY PARENTS
FOR BEING A SOURCE OF
AN INTELLECTUAL VIGOUR AND IMMENSE HUMANENESS

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ABBREVIATIONS USED

SC	Scheduled Caste
ST	Scheduled Tribe
U.P.	Uttar Pradesh
Std.	Standard
OBC	Other Backward Class
UCH	Upper Caste Hindu
NCO	National Classification of Occupations
HDR	Highly Developed Region
MDR	Medium Developed Region
LDR	Low Developed Region
VHDR	Very Highly Developed Region
Non SC/ST	Non Scheduled caste and Scheduled Tribe

CHAPTER I

INTRODUCTION

1.1: Statement of the Problem

Urbanization in developing countries is not a direct 'growth stimulus' *per se* (Henderson, 2003)¹, however, its linkages with various social phenomena such as education and occupation set the trajectory for a multi-dimensional development. Urbanization, education, and occupation influence one another to such an extent that sometimes it becomes pretty difficult to ascertain which is being influenced by which. Urbanization creates opportunities for various occupations but at the same time many occupations have direct bearing on urbanization. Many families migrate to urban areas to provide better education to their wards. On the other hand, educated people move to urban areas in search of better employment opportunities. So, these three are closely knitted with one another. But there is no doubt that as far as higher education is concerned, it is highly correlated with urbanization. In rural India there are few colleges to cater to the needs of higher education. Students move out from their villages and head towards urban areas as these areas provide many opportunities to pursue higher education in various streams because one can find many colleges, universities in these areas, offering the whole spectrum of education. So urbanization gets inextricably linked with higher education.

A highly educated person aspires to get an occupation which is compatible with his/her degree. Highly educated people do not want to opt for agriculture and migrate from villages as they do not see any prospect there. They want white collar jobs or blue collar jobs available in urban areas. So urbanization gets linked with professional occupations in one way or the other.

When people achieve higher levels of education, say up to graduation, they do not want to work as ordinary peons but wish to become doctors, engineers, professors, administrative officers etc. But reality belies their wishes. There are many graduates and even postgraduates who are working as street vendors, newspaper hawkers,

¹ Vernon Henderson, 2003. 'The Urbanization Process and Economic Growth: The So-What Question'. *Journal of Economic Growth*, 8(1), pp. 47-71. Pdf available at: qed.econ.queensu.ca.-/pub/faculty/Lloyd-ellis/econ835/.../Henderson.pdf [Accessed on 21 Sep. 2010].

vegetable vendors, cobblers, scavengers etc. The list never ends. All this indicates that there is no compatibility between the level of higher education and the level of occupation. There lies a serious mismatch between higher education and occupation.

The incompatibility becomes much more pronounced when various social strata are taken into consideration. In the traditional caste-based and segmented structure of the Indian society, placing the Brahmins at the top and the Sudras at the bottom, there exists a caste, known as 'Scheduled Caste'. Ghurye (1969)² describes them as "depressed class" and they are regarded as the "fifth order" of the Hindu caste system. So in the social context, the Scheduled Castes belong to the lowest rung of the society. For hundreds of years the Scheduled Caste persons in India have been living in serious economic, social and educational backwardness (Mandelbaum, 1972)³. Article 15(4) of the Indian constitution specifically mentions about advancement of these socially and educationally backward classes of citizens. The historical social reality confirms that these groups deserve justice in a holistic perspective of educational development and social economic empowerment as these down-trodden groups do not have access to higher education or upper crust occupations. The Scheduled caste and Scheduled tribe population constitute a large chunk of society who have always been the worst sufferers be it participation in the higher education or having an occupation compatible with their levels of education. So it becomes imperative to assess the participation and attainment of Scheduled caste population in higher education as well as in higher occupations in comparison to non-Scheduled caste population, and to address the anomaly between level of education and level of occupation for both the populations.

1.2: Literature Review

1.2.1: Urbanization and Its Linkages with Higher Education and Professional Occupations

Urbanization is defined as the process by which a country's population changes from a predominantly rural to an urban way of life. Urbanization is measured by an increase in the proportion of a nation's population living in towns and cities.

² G.S. Ghurye, 1969. *Caste and Race in India*. Bombay: Popular Publication.

³ David G. Mandelbaum, 1970. *Society in India, volume 2: Change and continuity*. Berkeley, California: University of California Press.

Urbanization thus differs from urban growth which is simply the rate of increase in size of an urban population (Davis, 1972)⁴.

The view of the development professionals of urbanization has changed significantly over the years. Until the mid-1960s, urbanization was tied to modernization, a process that was assumed to include the elimination of a society's "traditional" or "backward" elements (Gusfield, 1967)⁵. Later ideas about modernization tended to depict migration and urbanization as undesirable. By the late 1960s and early 1970s, developmentalist task group pronouncements (Pearson, 1969)⁶ distinctly downplayed the role of urbanization in national development. The result was that urban centres were characterized not as a focus of development but as a place where rural surplus labour ends up, unemployment occurs, and social tensions abound. The new urban poor were seen as a drain on developing nations and as belonging primarily on the farm (Goldstein, 1983 cited in Mason, 1989)⁷. Poor urban migrants were also depicted as a drain on the city because, with their involvement in unskilled, unproductive work, they ultimately ended up in "slums of despair" or "cultures of poverty. And thus emerged the stereotype of the urban poor as a people ensnared in a tradition of poverty, incapable of contributing to urban life and therefore marginal to the modernization process (Mason, 1989)⁸.

The anti-urban bias that arose in academic and international assistance agency circles in the 1960s and 1970s is still with us (Lipton 1977⁹; Cohen 1979¹⁰; Booth et al.

⁴ Kingsley Davis, 1972. *The Role of Urbanization in the Development Process*. Reprint No. 408. Berkeley, California: International Population and Urban Research, University of California.

⁵ Joseph R. Gusfield, 1967. 'Tradition and Modernity: Misplaced Polarities in the Study of Social Change'. *American Journal of Sociology*, 72 (4), pp. 351-362. Pdf available at: www.jstor.org/stable/2775860 [Accessed on 25 Sep. 2010].

⁶ Lester B. Pearson, 1969. *Partners in Development: Report of the Commission on International Development*. New York: Praeger.

⁷ P. John Mason, 1989. 'The role of urbanization in national development: Bridging the rural-urban divide'. *A.I.D. program evaluation discussion paper no. 27*. U.S. Agency for International Development. Pdf available at: pdf.usaid.gov/pdf_docs/PNAAX221.pdf [Accessed on 21 Sep. 2010].

⁸ *Ibid.*

⁹ Michael Lipton, 1977. *Why Poor People Stay Poor: Urban Bias and World Development*. London: Temple Smith.

1984¹¹). But as far as higher education is concerned, Urbanization always plays the role of the determining factor as in India institutions for higher studies are found in towns, cities or in Metros and are almost non-existent in village areas. So Urbanization creates opportunities and infrastructure for higher education. Quigley (2008)¹² examines the role of Urbanization, particularly role of cities in growth and he argues that Urbanization is not as bad as it is pictured by many because urbanization brings many externalities with it. And one of them, which is very important is education. With spatial concentration of industries, education gets a boost as all industries need specific kinds of skills and to fulfil these requirements sometimes industry in itself organizes opportunities for better education and sometimes an individual himself takes an initiative to add to his own skills which provides him a better footing in the urban labour market or in the concerned occupation. He further argues that externalities arising from transaction costs and complementarities in production can result because a larger urban scale can facilitate better matches between workers' skills and job requirements. It means Urbanization positively influences various occupations.

Allan (1971)¹³ examines the modernization impact of urbanization. He formulated one socio-economic model to investigate this modernization impact and found that there was a very strong relationship between woman's socioeconomic attainments, particularly her education and her levels of modernism and concludes that cities offer access to educational achievement and subsequent occupational roles that afford some degree of economic security. David (1977)¹⁴ while tracing out the urban element in

¹⁰ Michael A. Cohen, 1979. 'Urban Growth and Economic Development in the Sahel'. World Bank Staff *Working Paper* No. 315. Washington, D.C.: World Bank.

¹¹ David Booth, John Harriss, and Mick Moore, 1984. 'Development and the Rural-Urban Divide.' *The Journal of Development Studies*, 20 (3), pp.1-166.

¹² Quigley M. John. 2008. 'Urbanization, Agglomeration and Economic Development'. *Working paper* no. 19. Commission on Growth and Development. Pdf available at: www.growthcommission.org-/storage/cgdev/.../Paper%20Quigley.pdf [Accessed on 21 Sep. 2010].

¹³ A. Schnaiberg, 1971. 'The Modernizing Impact of Urbanization: A Causal Analysis Economic'. *Development and Cultural Change*, 20(1), pp. 80-104.

¹⁴ D.A. Reedere, ed., 1978. *Urban Education in the 19th Century*. London: Taylor & Francis.

education in Britain found that the city can be treated as a reference point or context for studying intellectual, social and cultural change. He mentions several studies on the same issue in various countries and concludes that cities are centres of great change.

While analysing the linkages between higher education and labour markets in India in the context of recent developments, Agarwal (2006)¹⁵ finds that the student strength in higher education is only 10 percent, yet percentage of people having marketable skills is woefully low. As per National Sample Survey on employment and unemployment (1993-94), only 10.1 percent of male workers and 6.3 percent of female workers possessed specific marketable skills. The percentages were marginally higher in urban areas, indicating that urban areas provide better opportunities for higher education.

1.2.2: Higher Education and its Linkages to Urbanization and Professional Occupations

Education has got a tremendous development potential. It rejuvenates the various faculties of a person which would be dormant in absence of proper education. Education has economic, social and political value and higher education in fact moulds one's future. To Durkheim (1956)¹⁶ "*education is to arouse and develop physical, intellectual and moral states*". More narrowly, education is the inculcation in each generation of certain knowledge, skills and attitudes by means of institutions, such as schools, deliberately created for this end (Kneller, 1965)¹⁷. Sen (1999)¹⁸ also views education as a power which can expand one's real freedom, shower many positive achievements and pave a way to social justice.

¹⁵ Pawan Agarwal, 2006. 'Higher Education and labour market in India: The Need for a Change'. *ICRIER Working Paper* No. 180, June. Pdf available at: siteresources.worldbank.org/INTAB-CDE2007BEI/Resources/PAgrawal.pdf [Accessed on 15 Nov. 2010].

¹⁶ E. Durkheim, 1956. *Education and Sociology*. Translation from French by Fox, S.D. New York: The Free Press.

¹⁷ G. F. Kneller, 1965. *Educational Anthropology: An Introduction*. New York: John Wiley and Sons Inc.

¹⁸ A. Sen, 1999. *Development as freedom*. New York: Random House.

In India education after senior secondary classes (XI & XII Std.) is known as higher education or tertiary education. The British pioneered the modern higher education in India in the mid-19th century by establishing first three universities at Bombay (now Mumbai), Calcutta (now Kolkata) and Madras (now Chennai) in 1857 (Jayaram, 2006)¹⁹. Higher education was meant to be a means to serve their economic, political and administrative interests (Agarwal, 2007)²⁰.

Higher education has witnessed two major paradigm shifts. Before the 1970s, higher education used to be regarded as a formative power to uplift an individual or a society morally, socially and politically (Cowen, 1996)²¹. Higher education was largely confined to courses in languages and the humanities apart from a few institutions set up for professional education e.g. IITs (Indian Institute of Technology). It was not regarded as a 'commodity'. It was regarded as 'public good' (Tilak, 2008)²². But later on the whole world including India shifted to the 'commodification of higher education' (Altbach, 2001²³, Neave, 2002²⁴). Higher education now caters to the needs of modern industries. Hence a University is no longer a place where students apply to study (Kaul, 2006)²⁵. Universities have become the locus of knowledge production in the modern 'knowledge economy'. Higher education is now seen as a 'central underpinning for the knowledge economy of the 21st century' (Altbach 2007,

¹⁹ N. Jayaram, 2006. National Perspectives: India. In James J. F. Forest and Philip G. Altbach eds. 2006. *International Handbook of Higher Education*. Dodrecht, The Netherlands: Springer, pp. 747–767.

²⁰ Pawan Agarwal, 2007. 'Higher Education in India: Growth, Concerns and Change Agenda'. *Higher Education Quarterly*, 61(2), pp.197–207.

²¹ R. Cowen, 1996. 'Last Past the Post: Comparative Education, Modernity, and perhaps Post Modernity'. *Comparative Education*, 32(2), pp.151-70. Pdf available at: <http://www.jstor.org/pss/3099720> [Accessed on 30 Jun. 2011]

²² J.B.G. Tilak, 2008. 'Transition from higher education as a public good to higher education as a private good: The saga of Indian experience'. *Journal of Asian Public Policy*, 1(2), pp.220-234.

²³ P.G. Altbach, 2001. 'Higher Education and the WTO: Globalization Run Amok'. *International Higher Education*, 23, pp.2-4. Available online at: <http://firgoa.usc.es/drupal/node/31830> [Accessed on 30 Jun. 2011].

²⁴ G. Neave, 2002. 'Globalization: Threat, Opportunity or Both?' *Newsletter* (International Association of Universities), 8(1), p.3. Pdf available at: <http://www.unesco.org/iau/newsletters-iaunew81.pdf> [Accessed on 30 Jun. 2011].

²⁵ S. Kaul, 2006. 'Higher education in India: seizing the opportunity'. *Working paper no. 179*, May, New Delhi: Indian council for research on international economic relations. Pdf available at: www.icrier.org/pdf/WP_179.pdf [Accessed on 30 Jun. 2011].

p.11)²⁶. This approach to higher education is a part and parcel of 'Human Capital Approach' of education which lays stress on maximization of utility function.

The commodification of higher education has posed serious questions of equity and access. Access and equity outcomes vary significantly across social groups and genders in India. *Tertiary education, especially the university sector, generally remains elitist* (Dassin, 2009)²⁷. Altbach (2007) also seconds this notion. The gates of the "Temples of Learning" are, on the whole, opened wider to the rich than to the poor, to the males more than to the females, to the forward castes more than to the backward castes. This reality reverberates in Tilak's (1979)²⁸ work who contends that one of the important features of Indian education is its inherent inequalitarian nature. He identifies four stages of inequalities in Indian education: a) Inequality in Educational Opportunity (IEO); b) Inequality in Educational Attainments (IEA); c) Inequality in Occupational Attainments (IOA); d) Inequality in Returns to Education (IRE). Most of the research work done in India concentrates on IEO only, and policy measures are directed towards reducing the IEO. No significant work has been done with regard to the other three stages.

There is something seriously wrong with Indian Higher education. According to National Commission of knowledge (2006)²⁹:

"The proportion of our population, in the age group 18-24, that enters the world of higher education is around 7 per cent, which is only one half the average for Asia. The opportunities for higher education, in terms of the number of places in universities, are simply not enough in relation to our needs".

²⁶ P.G. Altbach, 2007. Introduction: The underlying realities of higher education in the 21st century. In Altbach, P. and Peterson, P.M., eds. 2007. *Higher education in the new century: Global challenges and innovative ideas*, Chestnut Hill, Massachusetts: Centre for International Higher Education, Lynch School of Education, Boston College.

²⁷ J. Dassin, 2009. Higher Education as a Vehicle for Social Justice: Possibilities and Constraints. In Volkman, T.A., Dassin, J., and Zurbuchen, M., 2009. *Origins, Journeys and Returns: social justice in higher education*. New York: Social Science Research Council.

²⁸ J. B. G. Tilak, 1979. 'Inequality in Education in India'. *Indian Journal of Industrial Relations*, 14 (3), pp. 417-436.

²⁹ National Knowledge Commission, 2006. *Note on higher education*. New Delhi: National Knowledge Commission, Government of India.

Inequalities in education also stem from the social class one comes from. In India SCs and STs are the worst sufferers from inequalities in higher education. Chitnis (1972)³⁰ concludes that despite a series of welfare programmes for the betterment of SCs' education, there is no significant improvement in their educational status. In fact these programmes have led to the perpetuation of the old inequalities and even creation of some new ones. Kirpal (1978)³¹ builds up on his work and finds that though the scheduled castes/tribes form a large community and educational facilities and incentives offered to them are substantial, the community remains educationally backward.

Sushila (1981)³² contends that differences in social class are linked both directly and indirectly, via school, to achievements in some Third World countries, especially in the urban sector. In all the Indian states students hailing from the lower rung of the society i.e. SCs/STs are characterized by low achievements in their academic performance in comparison to their counterparts who hail from the upper strata of society (Rao, 2002)³³.

Mohanty (2006)³⁴ presents a clearer picture of the caste based inequalities in higher education. He states, "...in urban India, an upper caste Hindu aged 20+ is more than twice as likely as a ST and almost three times as likely as a Hindu-OBC to be a graduate, more than four times as likely as a Muslim and **five times as likely as an SC person**". Desai and Kulkarni (2008)³⁵ bring some hope in their work and state that

³⁰ S. Chitnis, 1972. 'Education for equality: case of Scheduled caste in higher education'. *Economic and Political Weekly*, 7(31/33), pp.1675-1681.

³¹ V. Kirpal, 1978. 'Higher education for the scheduled castes and scheduled tribes'. *Economic and Political Weekly*, 13(4/5), pp.165+167-169.

³² N. Sushila, 1981. 'Social Class and Academic Achievement: A Third World Reinterpretation'. *Comparative Education Review*, 25(3), pp. 419-430.

³³ S. Srinivasa Rao, 2002. 'Dalits in Education and Workforce'. *Economic and Political Weekly*, 37(29), pp.2998-3000.

³⁴ Mritunjoy Mohanty, 2006. 'Social Inequality, Labour Market Dynamics and Reservation'. *Economic and Political Weekly*, 41(35), pp.3777-3789.

³⁵ S. Desai and V. Kulkarni, 2008. 'Changing Educational Inequalities in India in the Context of Affirmative Action'. *Demography*, 45(2), pp.245-270.

over the years (1983-2000), inequalities at college level education have gone down. But more or less situation remains the same.

Dunn (1993)³⁶ explores the gender inequalities in higher education among SCs and STs and finds that women in these underprivileged groups are doubly disadvantaged. Chanana (2000)³⁷ also tries to look into the issue of gender inequality in higher education in respect of general population and she concludes that women are still facing the substandard attitude of Indian patriarchal society. Dreze and Sen (2002)³⁸ follow 'Human Capability Approach' to education which considers resources and opportunities as ends in themselves. They illustrate how region, gender and caste combine to depress educational attainment in some of the Indian states.

Now, when education is much more market oriented, every occupation is defined by certain levels of educational skills and thus they are closely linked to each other. Lin. et.al. (1981)³⁹ examine Blau- Duncan status achievement model in respect of social resources and strength of social ties and concludes that even though social ties play an important role in the attainment of a good status, direct relationship of education and occupation holds the dominant place.

Nikolaou and Theodossiou (2006)⁴⁰, in their study focus on the returns to education by the type of occupation in which the individual is employed and assess whether workers' level of education is rewarded equally across occupations or whether the evidence is consistent with the view that only a particular level of required education for the given occupation is directly rewarded. They arrive at the conclusion that educational qualifications are important for the higher ranks of occupational status,

³⁶ D. Dunn, 1993. 'Gender inequality in education and employment in the scheduled castes and tribes of India'. *Population Research and Policy Review*, 12, pp.53-70.

³⁷ K. Chanana, 2000. 'Treading the Hallowed Halls: Women in Higher Education in India'. *Economic and Political Weekly*, 35(12), pp.1012-1022.

³⁸ J. Dreze and A. Sen. 2002. *India: Development and Participation*. New Delhi: Oxford.

³⁹ N. Lin, W. M. Ensel, and J.C. Vaughn, 1981. 'Social Resources and Strength of Ties: Structural Factors in Occupational Status Attainment'. *American Sociological Review*, 46(4), pp. 393-405. Pdf available at: www.jstor.org/stable/2095260 [Accessed on 17 Nov. 2010].

⁴⁰ A. Nikolaou, and I. Theodossiou, 2006. 'Returns to qualifications and occupation for males and females: evidence from the British Workplace Employee Relations Survey (WERS) 1998'. *Applied Economics Letters*, 13(10), pp. 665 — 673.

and their effect progressively disappears as one examines these effects at lower ranks of occupational status.

Glaeser and Mare (2001)⁴¹, argue that an urban worker who is well educated and skilled has higher opportunities to achieve a better occupation in comparison to the worker who is less educated and semi-skilled.

Higher education is also closely linked to urbanization. Chitnis (1969)⁴² finds urban concentration of higher education a fact. He sums up that almost all colleges and universities in India are located in urban areas. Greenwood (1971)⁴³ comes to a conclusion that an urban dweller is likely to have a higher level of education than a rural inhabitant. Henderson (1999)⁴⁴ holds the same view. Deshpande (2006)⁴⁵ also finds that higher education in India is concentrated in urban areas.

1.2.3: Professional Occupations and their Linkages with Higher Education and Urbanization

First of all it must be clarified that both job and occupation are not the same thing. A job is a specific and sometimes unique bundle of activities carried out by a person in the expectation of economic remuneration while an Occupation is an abstract category used to group and classify similar jobs (Hauser and Warren, 1997)⁴⁶. National Classification of Occupation (NCO-2004) divides various occupations into nine broad divisions and the second division is called 'Professionals'. Persons who increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach

⁴¹ E. Glaeser, and D. Mare, 2001. 'Cities and skills'. *Journal of Labor Economics*, 19, pp.316–342.

⁴² S. Chitnis, 1969. 'Urban concentration of higher education'. *Economic and Political Weekly*, 4(28/30), pp.1235-1238.

⁴³ M. J. Greenwood, 1971. 'A Regression Analysis of Migration to Urban Areas of a Less Developed Country: The Case of India'. *Journal of Regional Science*, 11(2), pp.253–262.

⁴⁴ V. Henderson, 1999. 'How urban concentration affects economic growth'. *Policy research working paper 2326*. Washington D.C.: Infrastructure and environment, Development research group. Pdf available at: [http://scholar.google.co.in/scholar?hl=en&q=how urban concentration affect economic growth](http://scholar.google.co.in/scholar?hl=en&q=how+urban+concentration+affect+economic+growth) &gs [Accessed on 21 Sep. 2010].

⁴⁵ Satish Deshpande, 2006. 'Exclusive Inequalities: Merit, Caste and Discrimination in Indian Higher Education Today'. *Economic and Political Weekly*, 41(24), pp.2438-2444.

⁴⁶ R.M. Hauser and J.R. Warren, 1997. 'Socio-economic indexes for occupations: A review, update and critique'. *Sociological methodology*, 27(1), pp. 177-298. Pdf available at: <http://onlinelibrary.wiley-.com/doi/10.1111/1467-9531.271028> [Accessed on 17 Nov. 2010].

about the foregoing in a systematic manner, or engage in any combination of these three activities are called professionals⁴⁷

Driver (1962)⁴⁸ finds a close relationship between occupational attainment and level of education in central India. In most modern countries there is a high direct relationship between educational attainments and occupational attainments (Clignet, 1977)⁴⁹. But one should not forget that occupational attainment does not depend on merely education. Many other factors decide one's occupational entry e.g. social class, income, prestige, and power, opportunities for advancement, congenial fellow workers, emotional gratifications, and indeed, all employment conditions that are defined as desirable (Blau, et al., 1956)⁵⁰. College education plays a greater role in the attainment of a good occupation (Pascarella and Terenzini, 2005)⁵¹. They come up with two important conclusions. One, a degree provides a net occupational status advantage over secondary and higher secondary diplomas, and, two, as the tertiary education grows, unemployment rate goes down.

Higher education in India is characterised by an 'occupational focus' (Yash pal, 2009)⁵². Despite this new orientation, unemployment rates are high particularly, among the youths of the disadvantaged sections (SCs & STs) of the Indian society. Social and economic benefits of higher education are unequally distributed among the social groups. There has always been a minimal presence of SC population in higher level of occupations as Srinivas (1966)⁵³ also confirms, "*.....members of the higher castes dominated the professions; the higher level posts in the government, in fact all*

⁴⁷ National Classification of Occupation-2004.

⁴⁸ Edwin D. Driver, 1962. 'Caste and Occupational Structure in Central India'. *Social Forces*, 41(1), pp. 26-31. Pdf available at: <http://www.jstor.org/stable/2572916> [Accessed on 22 Jan. 2011].

⁴⁹ R. Clignet, 1977. 'Educational and Occupational Differentiation in a New Country: The Case of the Cameroun'. *Economic Development and Cultural Change*, 25(4), pp.731-745.

⁵⁰ P.M. Blau, J. W. Gustad, R. Jesson, H. S. Parnes and R. C. Wilcox, 1956. 'Occupational choices: a conceptual framework'. *Industrial and Labor Relations Review* 9, pp.531-543. Pdf available at : www.jstor.org/stable/2519672 [Accessed on 22 Jan. 2011].

⁵¹ E.T. Pascarella and P.T. Trenzini, 2005. *How college affects students (vol. 2)*. San Francisco: Jossey-bass, a wiley imprint.

⁵² *Committee on Renovation and Rejuvenation of Higher Education*, 2009. (Yashpal Committee – Report), New Delhi: MHRD.

⁵³ M.N. Srinivas, 1966. *Social Change in Modern India*. Berkeley: University of California Press.

white-collar jobs, While the lower castes provided certain essential services and goods". Dunn (1993)⁵⁴ and Driver (1962)⁵⁵ also confirm this notion.

Tilak(1979), looks into the inequalities in occupational achievements and states that the:

“Explanation to inequalities in occupational attainments can be found in either or both of the following factors: (a) the inferior quality of education backward castes received, and, (b) deliberate discrimination in the labour market against backward castes We find in India a direct relationship between caste and educational attainments on the one hand, and caste and occupational attainments on the other, resulting in no direct relationship between education and occupation”.

Mohanty (2006)⁵⁶ argues that in urban India inequalities in occupational attainment are starker for SCs than that in rural India. He finds that ‘An SC is nine times more likely to be a casual labourer than an upper caste Hindu in urban India’. He further finds that upper caste Hindus (UCHs) are most likely to be concentrated in high end service sector urban jobs and SCs, STs and OBCs are most likely to be in low-paying casual labour jobs across agriculture, industry and services in both rural and urban India. Thorat and Newman (2009)⁵⁷ also establish the caste based discrimination in the job market. They establish that dalits i.e. SCs, STs and Muslim applicants face significant discrimination in the white-collar job market.

Tilak (1980)⁵⁸ finds a close relationship between urbanization and occupations corresponding to higher education. He concludes that unemployment rate among the higher educated people is higher in rural areas than in urban areas. At the same time,

⁵⁴ D.Dunn, *op. cit.*

⁵⁵ Edwin D. Driver, *op. cit.*

⁵⁶ Mohanty, *op. cit.*

⁵⁷ Sukhdeo Thorat and Katherine Newman, eds., 2009. *Blocked by Caste: Economic Discrimination in Modern India*. New Delhi: Oxford University Press.

⁵⁸ J.B.G. Tilak, 1980. ‘Education and Labour Market Discrimination’. *Indian Journal of Industrial Relations*, 16(1), pp. 95-114. Pdf available at: www.jstor.org/stable/27768597 [Accessed on 27 Jun. 2011].

unemployment among the less educated people is at a higher level in urban areas than in rural areas.

So, it can be concluded that available literature supports the relationship between urbanization, higher education, and occupational structure. For Scheduled caste population, there exists an indirect relationship between higher education and occupational attainments. There is meagre research about inequalities in attainment of higher education. Massive inequalities persist between Scheduled caste and non SC/ST populations in respect of attainment in Higher Education as well as in professional occupations.

1.3: Objectives

Following are the objectives of the present study:

- a) To assess the linkage between the regional pattern in the levels of urbanization and the levels of attainment in higher education for the scheduled caste and non SC/ST urban populations in Uttar Pradesh.
- b) To explore the compatibility/incompatibility between the levels of higher education and employment in professional occupations for the scheduled caste and non SC/ST urban populations in the State.
- c) To indicate the disparities between the Scheduled caste and non SC/ST populations in terms of levels of educational attainment in higher education and professional occupations.

1.4: Research Questions

Based on the stated objectives of the study four research questions are posed:

- a) What are the levels of urbanization and incidence of Scheduled caste populations in the urban areas in Uttar Pradesh and what is the regional pattern of these variables and the disparities therein?
- b) What are the levels of attainment of higher education in the scheduled caste and non SC/ST urban populations in the State and what is the extent of disparity between them?

- c) What are the levels of regional disparities in the professional occupations in respect of SC and non SC/ST urban populations of the State?
- d) What are the linkages and anomalies between attainment of higher education and employment in professional occupations among the Scheduled caste and non SC/ST populations in the State?

1.5: Study Area

Area of study for the present research work is the state of Uttar Pradesh. There are seventy districts in this state in the year 2001. According to Census of India 2001, the Scheduled caste (SC) population of the state is 35,148,377 (35 Millions Approximately), which is equal to 21.1 Percent of its total population (166,197,921). Uttar Pradesh holds the first rank in terms of absolute number of SC population and its share in the state's total population among all the states and union territories of India. This explains the need to select this state as an area of the present study.

1.6: Data Base

- a) Primary Census Abstract (PCA) of Uttar Pradesh: Census of India 2001.
- b) Census of India 2001: B-Series (Economic Tables).
- c) Census of India 2001: C-Series (Socio Cultural Tables).
- d) National Classification of Occupation (NCO) 2004.
- e) District wise development indicators, Uttar Pradesh 2009.
- f) BPL Survey Uttar Pradesh 2002.

1.7: Methodology

This study is carried out at district level. All the seventy districts of Uttar Pradesh have been taken into consideration. In order to facilitate the analysis of the study, the state has been divided into four regions on the basis of their levels of development, based on the following indicators:

1. Percentage of urban population to total population.
2. Total literacy rate.

3. Percentage of rural people below poverty line.
4. Percentage of people engaged in manufacturing.
5. Percentage of electrified villages to total inhabited villages.
6. Length of total pucca roads per thousand Sq. Km.
7. Percentage of net irrigated area to net area sown.

After dividing all the indicators by their means, a composite index is worked out. Values of composite index are plotted on a GIS based maps using 'equal interval' class method. The following Table 1.1 presents the four regions of Uttar Pradesh and the districts falling under each region:

Table 1.1: Socio-economic Regions of Uttar Pradesh

REGIONS	DISTRICTS
Very Highly Developed Region (VHDR)	Ghaziabad, Lucknow, Kanpur Nagar, Varanasi.
Highly Developed Region (HDR)	Meerut, Agra, Firozabad, Sant Ravidas Nagar Bhadohi.
Medium Developed Region (MDR)	Saharanpur, Muzaffarnagar, Bijnor, Rampur Moradabad, Jyotiba Phule Nagar, Baghpat, Gautam Buddha Nagar, Bulandshahar, Jhansi, Aligarh, Hathras, Mathura, Mainpuri, Bareilly Shahjahanpur, Hardoi, Unnao, Rae Bareli, Kannauj, Etawah, Kanpur Dehat, Jalaun, Mau Kaushambi, Farrukhabad, Allahabad, Ballia Jaunpur, Ghazipur, Mirzapur, Sultanpur Faizabad, Ambedkar Nagar, Chandauli,
Low Developed Region (LDR)	Etah, Budaun, Pilibhit, Mahrajganj, Bahraich, Mahoba, Banda, Pratapgarh, Siddharthnagar, Shrawasti, Balrampur, Sitapur, Kushinagar, Deoria, Basti, Hamirpur, Chitrakoot, Kheri, Gorakhpur, Auraiya, Azamgarh, Sonbhadra, Fatehpur, Gonda, Sant Kabir Nagar, Lalitpur, Barabanki

Map I, showing the above mentioned regional division is given before the beginning of the second chapter. While discussing the level of education, this study takes into consideration only higher education i.e. it considers the SC and non SC/ST graduates

and above who are of age fifteen and above. It also covers the components of higher education i.e. Graduates and above in Arts field, Medical field, Engineering field and Teaching field.

In order to get a much clearer picture of participation in various occupations, this study analyzes occupations at **Four Digit Level of NCO- 2004** classification i.e. Division, Sub Division, Group and Family because we do not get a clear picture of participation of any society in various occupations by studying occupations just at one or two digit level.

Occupational data has been presented at four digit level of NCO classification but it is not cross-classified by educational levels. So the concept of 'Skill Level' defined by NCO-2004 has been incorporated to compensate this lacuna. This concept lays down the guidelines for the right relationship between level of education and the corresponding level of occupation. This concept is dealt extensively in the concerned chapter.

To capture the disparities between Scheduled caste males/females and non SC/ST males/females in terms of higher education and higher level of occupations, modified David Sopher's Index has been applied. This index is calculated in the following way:

$$\text{Modified Sopher's Index} = \log (X_2/X_1) + \log \{(200-X_1) / (200-X_2)\}^{59}.$$

Where,

X_1 = Value of the phenomena of the deprived class

X_2 =Value of the phenomena of the dominating or non-deprived class

To show the relationship between urbanization, higher education, and professional occupations through maps 'Overlay Analysis' method of GIS has been used. Correlation has been calculated to determine the strength of their relationship and regression has been run to find a best fit model to describe their relationship. Tables, Figures and Maps have been used wherever necessary.

⁵⁹ Modified Sopher's index has been introduced by Kundu and Rao (1985). They have used 200 in place of 100 to satisfy the additive monotonicity axiom which states that when any constant is added to the given series, inequality must go down.

1.8: Chapter Scheme of the Study

This study is set out in six chapters.

The first chapter deals with a general introduction, objectives, research questions, methodology, study area, data sources, and limitations of the study and also attempts to review the available literature and related studies in the area.

Chapter II addresses the first research question i.e. the levels of urbanization in the state and incidence of SC and non SC/ST populations in the urban areas of the state and the inequality between the urban incidences of these two populations.

Chapter III presents an in-depth analysis of the magnitude and spatial pattern of SCs' and non SCs' participation in higher education and brings out the disparities between the two.

Chapter IV discusses the magnitude and spatial pattern of SCs' and non SCs' participation in some important occupations and brings out the disparities between the two.

Chapter V unravels the relationship between urbanization, higher education, and professional occupations and captures the anomaly between higher levels of education and corresponding levels of occupation.

Chapter VI is the concluding chapter of the study. It draws on the major findings of the study and spells out the policy implications. It also offers a way forward and scope for further research.

CHAPTER II

LEVELS OF URBANIZATION AND INCIDENCE OF SCHEDULED CASTE AND NON SC/ST POPULATIONS IN THE URBAN AREAS OF UTTAR PRADESH

2.1: Introduction

Urbanization and development are closely linked to each other. While urbanization in itself does not cause development, sustained development does not occur without urbanization (Henderson, 2010)¹. So, it becomes imperative to study the urban phenomenon in the area of the study. Urbanization refers both to urban population growth and to the expansion of the urban areas as well (Sivaramakrishnan, et al., 2005, p.8)². It is progressive concentration of population in urban units (Davis, 1965 cited in Dutta, 2006, p.2)³. Davis (1954)⁴ defines level of Urbanization as the proportion of people who live in urban areas. Some scholars e.g. Arriaga (1970)⁵ and Kasarda & Crenshaw (1991)⁶ found this definition insufficient to capture the level of urbanization and pleaded for the incorporation of a standard and universal size of the urban settlements. Many scholars now use the United Nations definition of urban localities (20,000+) and cities (100,000+) to standardize comparisons of urban development across nations (Kasarda, 1991)⁷. Measures of the degree of urbanization,

¹ J.V. Henderson, 2010. 'Cities and development'. *Journal of regional science*, 50 (1), pp. 515–540.

² K. C. Sivaramakrishnan, A. Kundu and B.N. Singh, 2005. *Handbook of Urbanization in India: An analysis of trends and processes*. New Delhi: Oxford University Press.

³ Kingsley Davis, 1965. 'The urbanization of the human population'. *Scientific American*, 213(3), pp. 41-53.

⁴ Kingsley Davis and Hilda Hertz Golden, 1954. 'Urbanization and the Development of Pre-Industrial Areas'. *Economic Development and Cultural Change*, 3(1), pp.6-26. Pdf available at: <http://www.jstor.org/stable/1151656>, [Accessed on 10 Jun. 2011].

⁵ Eduardo E. Arriaga, 1970. 'A New Approach to the Measurements of Urbanization'. *Economic Development and Cultural Change*, 18(2), pp. 206-218. Pdf available at: <http://www.jstor.org/stable/1152610>, [Accessed on 10 June, 2011].

⁶ John D. Kasarda and Edward M. Crenshaw, 1991. 'Third World Urbanization: Dimensions, Theories, and Determinants'. *Annual Review of Sociology*, 17, pp. 467-501. Pdf available at: <http://www.jstor.org/stable/2083351>, [Accessed on 14 Mar. 2010].

⁷ *Ibid.*

generally used are, per cent urban $[(\text{urban population}/\text{total population}) * 100]$, per cent rural $[(\text{rural population}/\text{total population}) * 100]$, and urban-rural ratio $[(\text{urban population}/\text{rural population}) * 100]$ (Dutta, 2006)⁸.

Urbanization occurs through certain mechanisms which include natural increase by urban dwellers, international immigration to cities, internal rural-to-urban migration, reclassification, and metropolitanization. In Indian case, though all the mechanisms are having impact in their own way, urbanization is mainly attributed to two mechanisms namely, rural to urban migration and metropolitanization (Kundu, 1983)⁹. There is a large population which unceasingly treads towards the cities. Some cities manage to accommodate the influx of this predominantly rural crowd. But for most of them, it turns out to be a strenuous job. This results into constant addition to the numbers of 'shelters of despair' or slums and into a very high spike in unemployment rate (Sivaramakrisnan, 2005)¹⁰. Struggle for the better sharing of the precious natural resources slowly and gradually dismantles the social fabric of an urban society.

Urbanization is increasing everywhere but the rate and levels of urbanization differs significantly across the Indian states. While big cities are on the way to develop into metropolitan cities, small and medium towns are witnessing very slow rates of growth.

2.2: Nature of Urbanization in Uttar Pradesh (U.P.)

The state of Uttar Pradesh is characterized by '*Dysfunctional Urbanization*' (Parveen 2005, p.200)¹¹. As in the rest of the country, urbanization in Uttar Pradesh is '*top-heavy*' or '*lopsided*' i.e., a few large cities and metropolises comprise a large

⁸ Pranati Datta, 2006. 'Urbanisation in India'. *Paper Presented at European Population Conference* (Session 62: Population process in Urban areas), 21-24 June: Liverpool (U.K.). Available online at: <http://epc2006.princeton.edu/download.aspx?submissionId=60134>, [Accessed on 14 Mar. 2010].

⁹ Abanti Kundu, 1983. 'Urbanisation in India: A Contrast with Western Experience'. *Social Scientist*, 11(4), pp. 37-49.

¹⁰ Sivaramakrisnan, *op. cit.*, p.57.

¹¹ Shahnaz Parveen, 2005. *Changing face and challenges of urbanization: a case study of Uttar Pradesh*. New Delhi: Concept Publishing Company.

proportion of the urban population (Parveen, 2005 p.49¹² and UHRC Report 2006, p: 11¹³). According to the census of India, almost 34.5 million (20.8 per cent of the total population) people live in urban areas of Uttar Pradesh spread over 704 towns and cities. There are six million-plus cities in the state i.e. Kanpur, Lucknow, Agra, Varanasi, Meerut and Allahabad which comprise over one-fourth (28 per cent) of the urban population of the state. The other 47 cities which have a population of over a lakh, account for a third (35 per cent) of the urban population. The remaining 652 towns are inhabited by the remaining 40 per cent of the state's urban population (UHRC Report 2006, p.11)¹⁴.

Map 2.1 shows the level of urbanization in the districts of Uttar Pradesh. There are many districts which show high percentages of urbanization and most of them fall in western part of the state implying that the western part of the state is the most urbanized followed by the central and eastern parts of the state (*Ibid.*)¹⁵. Most districts of eastern Uttar Pradesh have urban population less than 10 per cent of the total population implying that the traditional rural culture still dominate in this part of the state.

2.3: Incidence of Scheduled Caste Population in the Urban Areas of U.P.

Rampant poverty and unemployment with dismal agricultural production compels the SC population of the society to migrate to urban areas in order to get rid of the cruel brunt of social stigmatization, exclusion and mental and physical torture levied on them by the so called higher castes (Berreman, 1979, ch.10)¹⁶. This influx of rural population into various urban areas varies in intensity and spatial distribution. Different social strata also manifest different rates, magnitudes and spatial distribution in urban areas.

¹²*Ibid.*, p. 49.

¹³ S. Agarwal, S. Kausik, and A. Srivastav, 2006. *State of urban health in Uttar Pradesh*. New Delhi: Urban Health Resource Centre (UHRC).

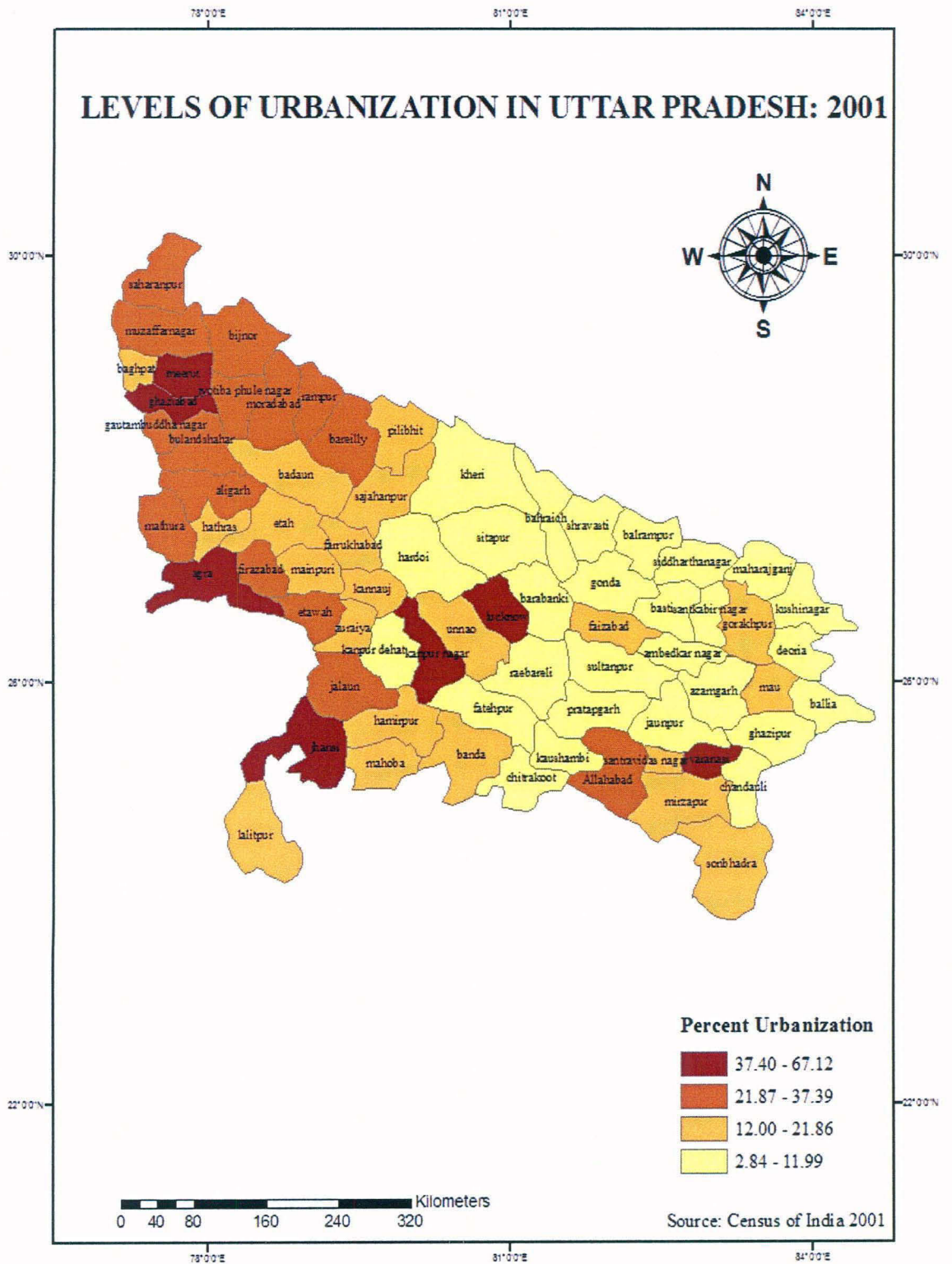
¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ Gerald D. Berreman, 1979. *Caste and other Inequities: Essays on Inequality*. Meerut: Manohar Book Service.



Map 2.1: Percentage of Population Residing in the Urban Areas of Uttar Pradesh



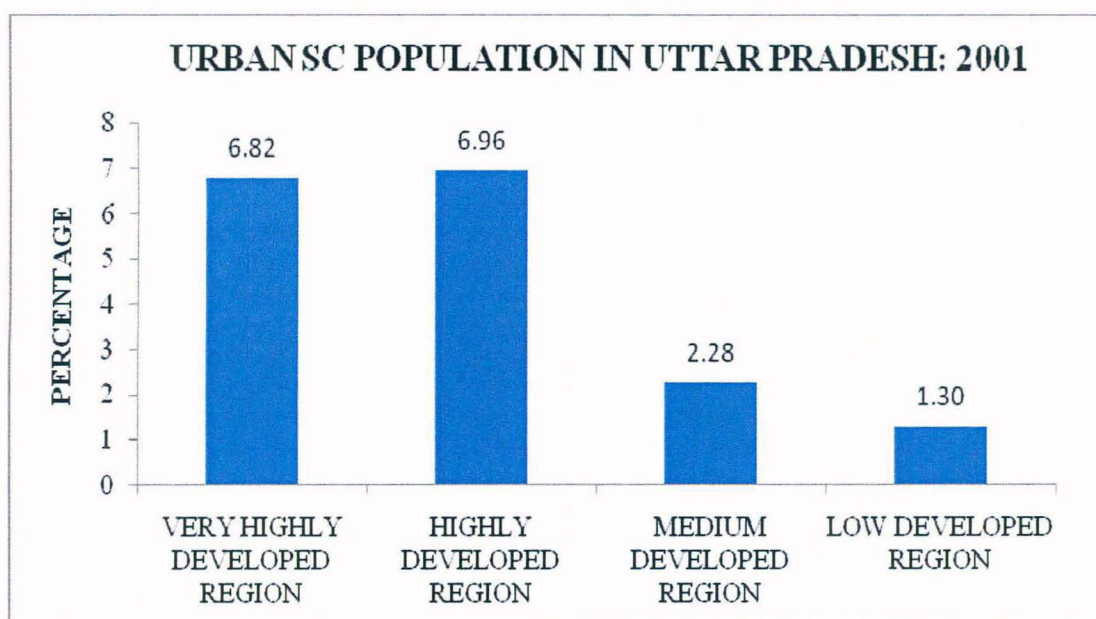
According to Census of India 2001, total urban SC population is only 2.60 per cent of the total population of the state. If total SC population is taken into consideration,

only 10.69 per cent of the total SC population is residing in the urban areas of Uttar Pradesh. When this proportion is calculated for total urban population of the state, it is found that only 8.99 per cent of the total urban population belongs to SC population. This shows that the state of Uttar Pradesh still has to go a long way to attain the impressive levels of urbanization for SC population.

2.3.1: Region wise Incidence of Scheduled Caste Population in the Urban Areas of U.P.

Uttar Pradesh has been divided into four regions for the present study in order to facilitate the explanation of the phenomenon in question. These regions are Very Highly Developed Region (**VHDR**), Highly Developed Region (**HDR**), Medium Developed Region (**MDR**), and Low Developed Region (**LDR**). All the regions differ significantly in terms of incidence of SC population in the urban areas of Uttar Pradesh. Figure 2.1 reflects the percentage of SC population residing in the four urban regions of Uttar Pradesh.

Figure 2.1: Regional Distribution of Urban SC Population out of Total Population in U.P.



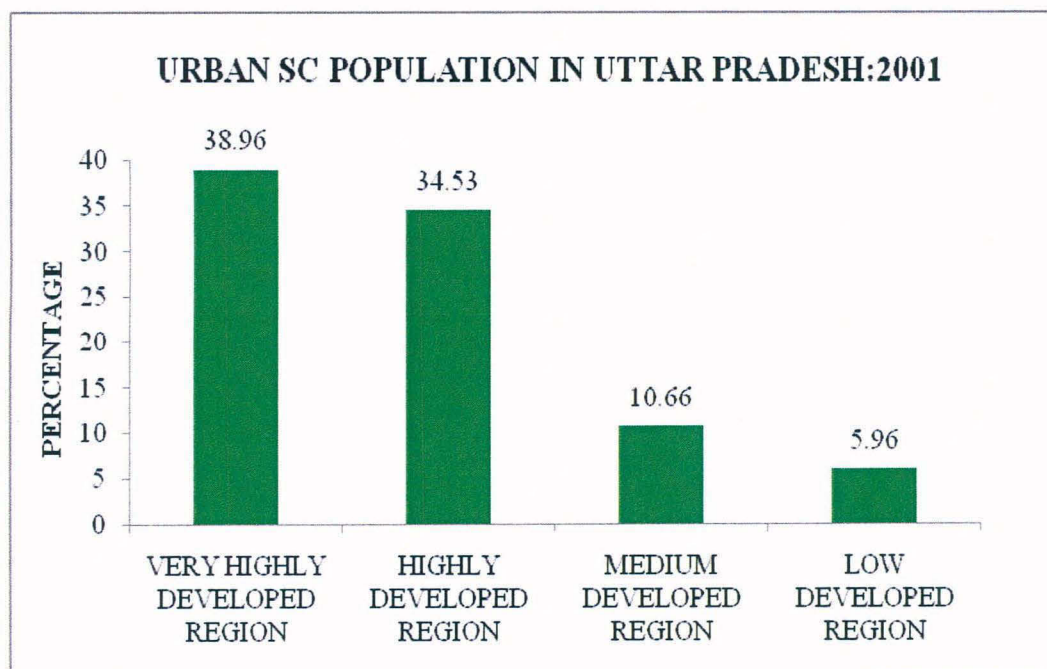
Source: Census of India 2001- Primary Census Abstract (PCA) of Uttar Pradesh

The above graph reveals the position of urban SC population in terms of total population of urban Uttar Pradesh. It is found that every region presents a very gloomy picture of incidence of urban SC population. No region records even 10

percent urban SC population out of total population. Only Very Highly Developed Region and Highly Developed Region record more than 5 per cent urban SC population. Districts falling under these regions are hubs of administrative and manufacturing activities. So, these regions provide diverse opportunities to the existing as well as to the in-migrant population. As a consequence all the districts under them record considerable percentage of urban SC population. Medium Developed and Low Developed Regions show low percentage of urban SC population as districts falling under these regions are historically backward areas accommodating a substantial number of UP's poor and socially marginalized who are unable to migrate to urban areas (Kozel and parker, 2003)¹⁷. Towns in these districts are still evolving in terms of their economic base.

The preceding discussion evaluated the SC urban population in terms of total population. In order to capture the incidence of urban SC population holistically, their standing in terms of total SC population must also be taken into consideration. Figure 2.2 brings this idea home.

Fig. 2.2: Regional Distribution of Urban SC Population out of Total SC Population in U.P.



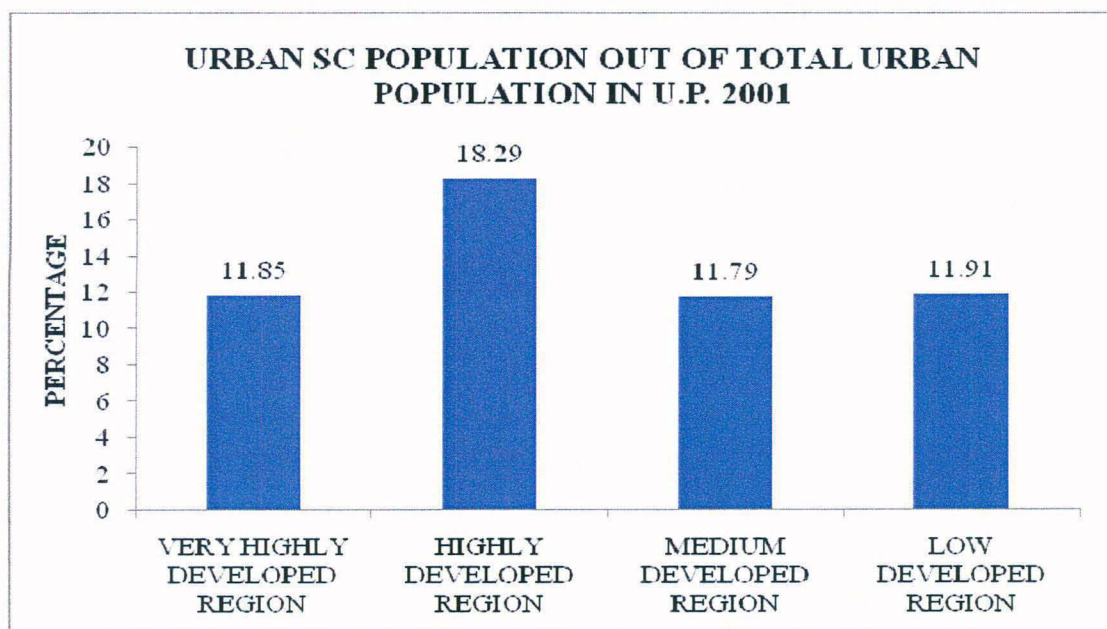
Source: Census of India 2001, PCA U.P.

¹⁷ Valerie Kozel and Barbara Parker, 2003. 'A profile and diagnostic of poverty in Uttar Pradesh'. *Economic and Political Weekly*, 38(4), pp. 385-403.

According to the above figure, it is clear that the Very Highly Developed Region (VHDR) is leading in terms of distribution of urban SC population. As mentioned earlier, all the four districts of VHDR i.e. Ghaziabad, Kanpur Nagar, Lucknow, and Varanasi, are hubs of administrative and manufacturing activities. So, these districts provide diverse opportunities to the existing as well as to the in-migrant population. This results into high percentages of urban SC population. VHDR is followed by HDR. Districts falling under HDR i.e. Agra, Firozabad, Meerut, and Sant Ravidas Nagar, also witness high percentages of urban SC population as these districts are primarily manufacturing centres. Medium Developed and Low Developed Regions show low percentages of urban SC population as districts falling under these regions are lagging behind in terms of industrialization, the catalyst behind employment generation (Subas, 1984)¹⁸.

The foregoing discussion considered urban SC population out of total SC population. But in order to make the picture clearer, position of SC population must be analysed keeping in view the total urban population. Figure 2.3 presents this scenario for urban SC population in Uttar Pradesh.

Figure 2.3: Regional Distribution of Urban SC Population out of Total Urban Population in U.P.



Source: Census of India 2001, PCA U.P.

¹⁸ Ram subas, 1984. 'Dynamics of Agrarian Relations in Sultanpur East Uttar Pradesh'. *Social Scientist*, 12(7), pp. 57-63. Pdf available at: <http://www.jstor.org/stable/3517059> [Accessed on 10 apr. 2011].

Figure 2.3 indicates that the, urban SC population in each of the regions registers more than 10 per cent urban SC population out of total urban population. Interestingly, Very Highly Developed Region records a lower urban SC population in comparison to Low Developed Region. This might be due to the number of districts falling under each region. Very High Developed region consists of only four districts while Low Developed Region encompasses twenty seven districts. So, the number of cities in low developed region exceeds the number of cities in Very Highly Developed region. This gets reflected in the higher percentage of urban SC population in the Low developed region.

The Highly Developed region exhibits the highest percentage of urban SC population as districts in this region are mainly manufacturing centres (Parveen, 2005 p.210)¹⁹ . So, there is a substantial influx of in-migrants and this influences the percentages of urban SC population (*Ibid.* p.89)²⁰. Medium Developed Region shows the lowest percentages of urban SC population because these are upcoming areas on the scene of economy.

2.4: Spatial Pattern of Urban SC Population in U.P.

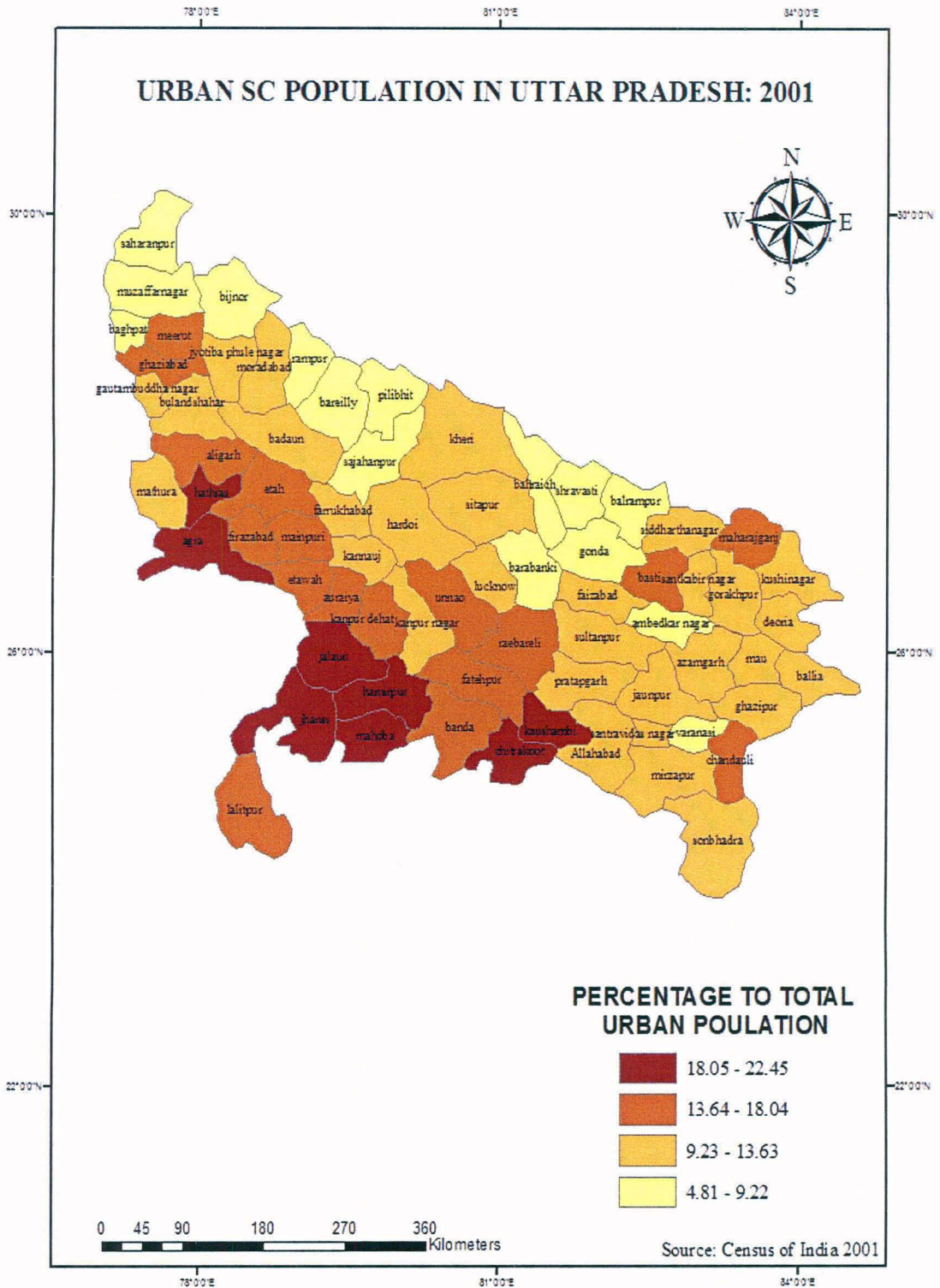
Region wise analysis sometimes over-shadows the true picture of the phenomenon in question. So, in order to get a true picture, a lower level analysis is needed. In this study the district represents the lowest unit level. Map 2.2 is an effort to capture this true picture.

This map shows that the urban SC population in the state is concentrated into two belts i.e. northern and southern belts. The Northern belt which runs from the north-western part of the state to south-eastern part of the state, exhibits very thin concentration of urban SC population while the southern belt records a high concentration of urban SC population. Hathras (25 per cent), Agra (22 per cent) Jalaun (27 per cent), Jhansi (28 per cent), Hamirpur (23 per cent), Mahoba (26 per cent), Chitrakoot (26 per cent), and Kausambi (36 per cent) already have a high incidence of SC population. That is why all of them show high concentration of urban SC population.

¹⁹ S. Parveen, *op. cit.*, p.210.

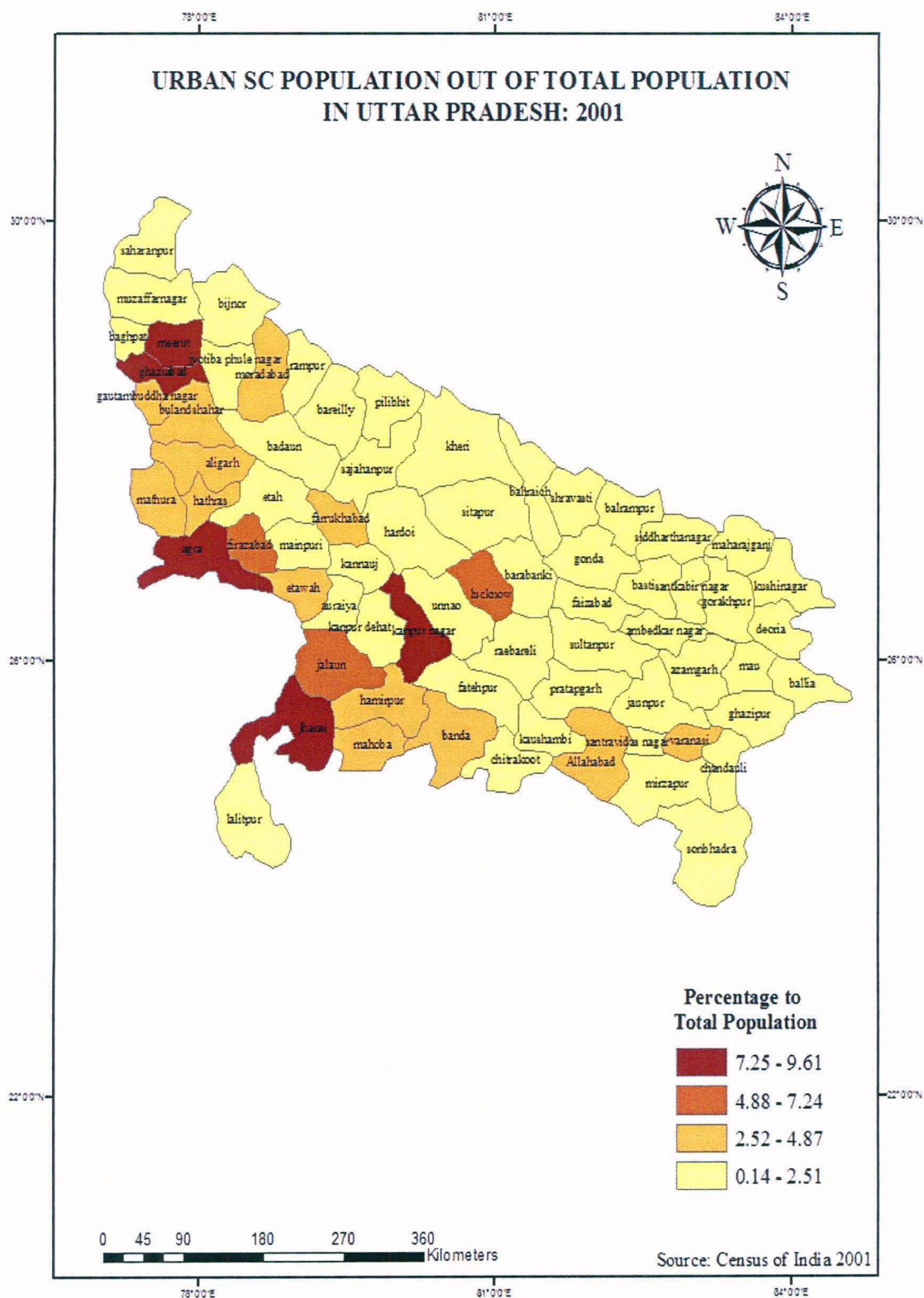
²⁰ *Ibid.*, p.89.

Map 2.2: Urban SC Population out of Total Urban Population in Uttar Pradesh



In Map 2.2 we considered the distribution of urban SC population out of total urban population. When this distribution is calculated in terms of total population, a little bit similar spatial pattern is registered as indicated in Map 2.3.

Map 2.3: Distribution of Urban SC Population in terms of Total Population in U.P.



Map 2.3 further supports the presence of a northern and a southern belt, running from the north-west to the south-east of the state in terms of distribution of urban SC population. All the districts falling under the upper northern belt register lowest

percentages of urban SC population, while only some districts from southern belt show the lowest percentages of urban SC population.

2.5: Inequalities in the Incidence of Urban SC and Urban Non SC/ST Populations in U.P.

It is assumed that in comparison to the SC population, large proportion of the non SC/ST population resides in urban areas. Census of India elucidates it through data. According to 2001 Census, 23.04 per cent non SC/ST population out of total population is living in urban areas of Uttar Pradesh. This percentage for SC population is only 2.60 per cent indicating a gap of more than 21 percentage points in terms of incidence of urban population. So, it is crystal clear that the urban SC population stands nowhere in comparison to the urban non SC/ST population.

Map 2.4 confirms that there are glaring inequalities in the proportion of urban SC and urban non SC/ST populations. In all the districts of the state the proportion of urban SC population is almost negligible in comparison to urban non SC/ST population. The pattern is evident in this map. The upper northern belt consists of districts which record low percentages of urban SC population while the lower southern belt, at least seems to be competing with the higher percentages of urban non SC/ST population. A large stretch of the northern belt lies in Low Developed Region, which is industrially backward (Subas, 1984²¹ and Parveen, 2005 p.226²²). Large urban centres such as Kanpur Nagar and Lucknow are missing from this region. Only small urban towns are found in this region and these towns are not able to attract people from agrarian economy to urban economy. Therefore this part of the belt registers lower percentages of SC urban population.

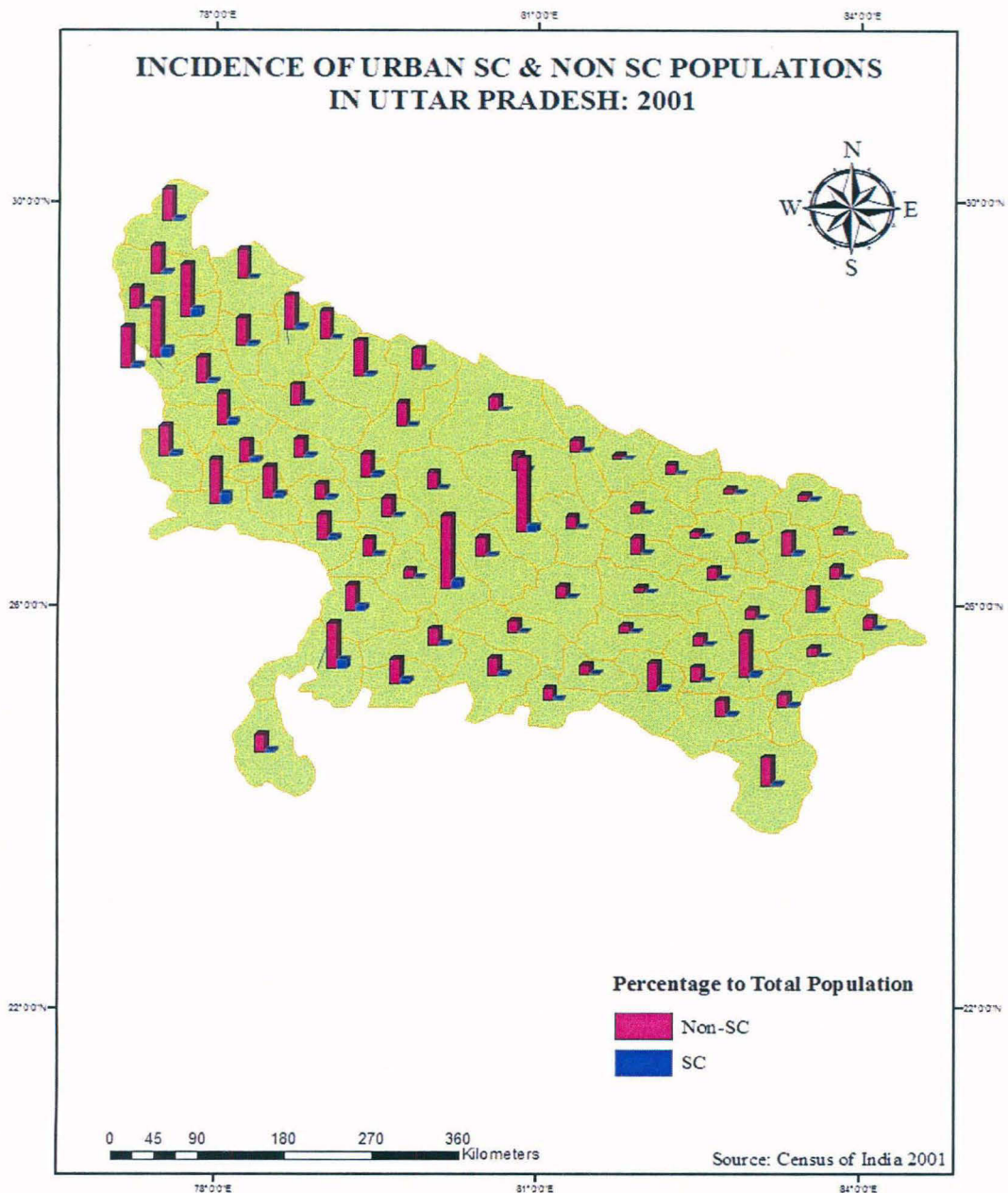
Overall lower incidence of SC urban population can be attributed to chronic poverty and low levels of educational attainment which in turn hampers their mobility from rural areas to urban centres (Dubey, Palmer-Jones and Sen 2004)²³.

²¹ *Ibid.*

²² *Ibid.*, p.226.

²³ Amaresh Dubey, Richard PalmerJones and Kunal Sen, 2004. 'Surplus Labour, Social Structure and Rural to Urban Migration: Evidence from Indian Data'. *Paper presented at the Conference on the 50 th*

Map 2.4: District Wise Urban SC and Non SC/ST Populations in Uttar Pradesh



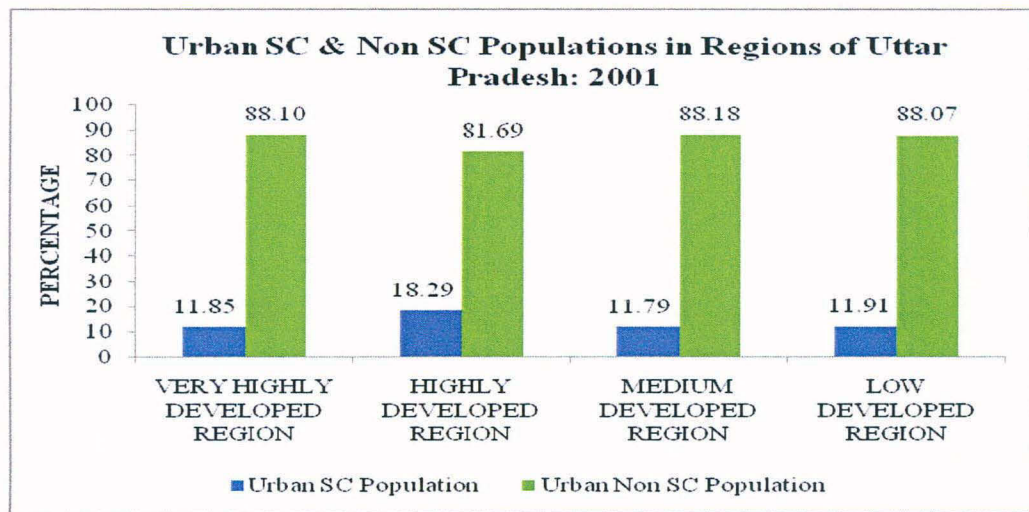
2.5.1: Region wise Inequalities in the Incidence of Urban SC and Urban Non SC/ST Populations in U.P.

To get the larger picture, Region wise analysis of inequalities in the incidence of urban SC and urban non SC/ST Populations is necessary. Figure 2.4 brings out these inequalities. It is found that urban non SC/ST population is dominating in every region as the percentage of urban non SC/ST population in each of the regions is

anniversary of the Lewis Model, July 6-7. Pdf available at: www.sed.manchester.ac.uk/research/events-conferences/.../Sen2.pdf, [Accessed on 30 Jun. 2011].

above 80 per cent. It confirms the gaps between the two populations in one of the important dimensions of development.

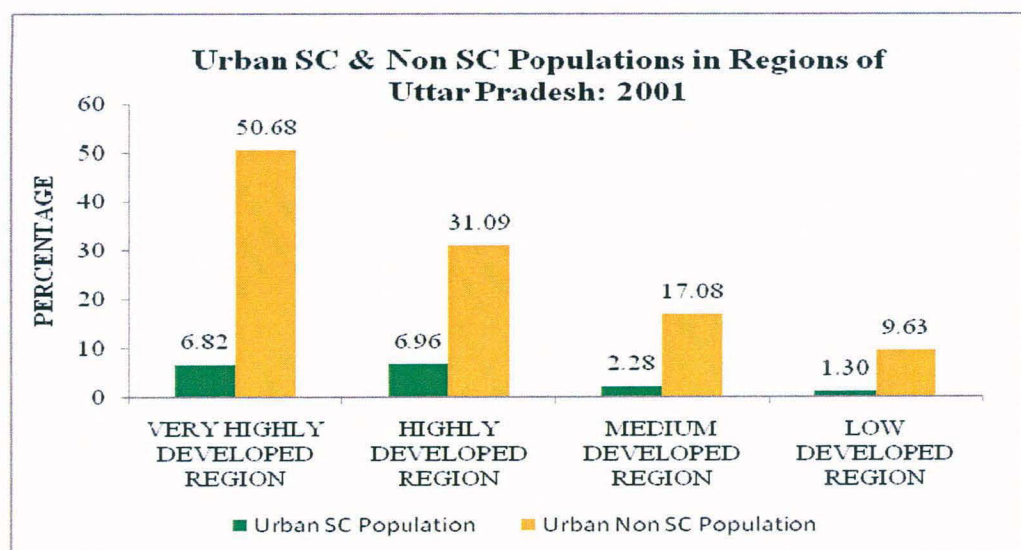
Fig. 2.4: Regional Inequalities in the Incidence of Urban SC & Non SC/ST Populations in U.P.



Source: Census of India 2001, PCA U.P.

Analysis of inequalities for both the SC and non SC/ST populations in terms of total population can reveal important findings. At the state level proportion of urban SC population in total population is only 2.60 per cent, while the proportion of urban non SC/ST population in total population is 23.04 per cent. So, inequalities become much more obvious when total population is taken into consideration. Figure 2.5 presents these inequalities between the two populations.

Figure 2.5: Unequal Incidence of Urban SC and Non SC/ST Populations in U.P.

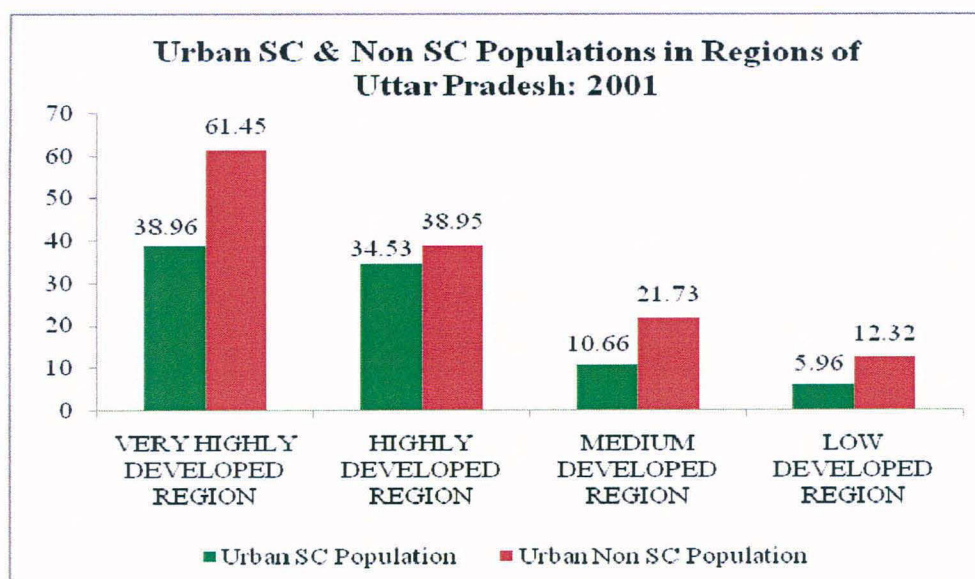


Source: Census of India 2001, PCA U.P.

This figure also shows that there is a huge gap in the incidence of urban SC and urban non SC/ST population. Even the Very Highly Developed Region, which is considered as the hub of administrative and manufacturing activities (Parveen, 2005, p.45)²⁴ exhibits a huge gap in the incidence of both the urban populations. It means that SC population is also missing from the administrative and manufacturing sectors of big cities. In all the regions the same story continues.

Urban SC population out of total SC population and urban non SC/ST population out of total non SC/ST population may reveal some deeper insights. Figure 2.6 is an effort in this direction. This figure differs a little bit in overall conclusion as when total SC and total non SC/ST population is taken into consideration, gaps are not so stark. When total population and total urban population had been taken into consideration to show the inequality between both the urban populations, it was found that gaps were always more than 20 percentage points. But their respective total population gives a different impression. Though all the regions show considerable gaps, urban SC population in Highly Developed Region is almost running parallel to urban non SC/ST population. The difference is only of 4.5 percentage points. Incidence of urban non SC/ST population in Medium and Low Developed Regions is low in comparison to other regions.

Figure 2.6: Region Wise Incidence of Urban SC and Non SC/ST Population in U.P.



Source: Census of India 2001, PCA U.P.

²⁴ Parveen, *op.cit.*, p.45.

2.6: Region wise Gender Inequalities in the incidence of Urban SC and Urban Non SC/ST Populations in U.P.

Proportion of urban female population in total urban population indicates the level of gender empowerment. Though women are in no way inferior to men, the percentage of urban female population has always been low. So, it is essential to examine the gender dimension in the incidence of urban SC as well as urban non SC/ST population. Table 2.1 tries to capture this gender dimension in terms of their total population in the different regions of the state.

Table 2.1: Gender Wise Incidence of Urban SC and Non SC/ST Populations in U.P.

Regions	Urban Non SC/ST Population (In Percent)		Urban SC Population (In Percent)	
	Males	Females	Males	Females
Very Highly Developed	32.89	28.56	20.88	18.09
Highly Developed	20.85	18.10	18.64	15.89
Medium Developed	11.56	10.17	5.70	4.96
Low Developed	6.52	5.80	3.17	2.79

Source: Census of India 2001, PCA U.P.

The table shows that as far as gender dimension is concerned gaps between urban male and female population in all the regions of the state are not so stark. Interestingly this holds true for both the SC as well as non SC/ST population. Gaps vary from less than one percentage point to four percentage points.

Table 2.1 analysed the gender dimension of the incidence of urban population in respect of their total population. But when the same analysis is carried out in respect of total population, results might be different. Table 2.2 brings this out.

Table 2.2: Gender Wise Incidence of Urban SC and Non SC/ST Populations in U.P.

Regions	Urban Non SC/ST Population (In Percent)		Urban SC Population (In Percent)	
	Males	Females	Males	Females
Very Highly Developed	27.13	23.55	3.65	3.16
Highly Developed	16.65	14.45	3.76	3.20
Medium Developed	9.09	7.99	1.21	1.06
Low Developed	5.09	4.53	0.69	0.61

Source: Census of India 2001, PCA U.P.

Table 2.2 clearly shows that in respect of total population gender gaps are reduced to naught. Urban non SC/ST population in VHDR and HDR exhibits some considerable gender gaps otherwise in all the other regions gaps are minimal. For urban SC Population gender gaps are almost negligible. But in comparison to the urban non SC/ST female population, urban SC female population stands nowhere. This shows that SC women still need to register their rightful presence in urban areas.

Table 2.3 presents the gender gaps in terms of total urban population of the various regions of the state.

Table 2.3: Incidence of Urban SC and Non SC/ST Populations in Uttar Pradesh

Regions	Urban Non SC/ST Population		Urban SC Population	
	(In Percent)		(In Percent)	
	Males	Females	Males	Females
Very Highly Developed	47.16	40.94	6.35	5.50
Highly Developed	43.73	37.96	9.87	8.42
Medium Developed	46.92	41.26	6.30	5.49
Low Developed	46.60	41.47	6.33	5.57

Source: Census of India 2001, PCA U.P.

Table 2.3 makes it clear that in respect of total urban population, there are substantial gender gaps. These gaps are larger for the urban non SC/ST population than that of urban SC population. For urban SC population this gap varies from less than one percentage point to around two percentage points but for urban non SC/ST population it ranges from five percentage points to eight percentage points. This scenario emerges out due to the male dominated migration towards urban areas (Parveen, 2005 p.139)²⁵.

2.7: Summary and Conclusions

This chapter clarifies the incidence of urban SC population in three respects i.e. Total SC Population, Total Population, and Total Urban Population. Magnitude as well as the spatial pattern of the incidence of urban SC population is presented through various cartographic techniques. It also examines the inequalities in the incidence of

²⁵ *Ibid.*, p.139.

SC and non SC/ST populations in the urban areas of Uttar Pradesh. These inequalities were also studied in terms of the gender dimension. The main findings in this chapter are:

- * Urbanization in Uttar Pradesh is '*top-heavy*' or '*lopsided*' i.e., a few large cities and metropolises contain a large proportion of the urban population and others are still upcoming areas on the scene of a strong economy.
- * According to Census of India 2001, total urban SC population stands only 2.60 per cent of the total population of the state.
- * If total SC population is taken into consideration, only 10.69 per cent of the total SC population is residing in the urban areas of Uttar Pradesh.
- * Only 8.99 per cent of the total urban population of the state belongs to SC population.
- * Medium Developed and Low Developed Regions show low percentage of urban SC population as districts falling under these regions are historically backward areas accounting for a substantial number of UP's poor and socially marginalized who are unable to migrate to urban centres. Moreover, urban centres in these regions are smaller in comparison to other prominent urban centres such as Kanpur, Lucknow and Ghaziabad etc. and also are not able to attract people because of their weak industrial base.
- * Urban SC population in the state is concentrated into two belts i.e. northern and southern belts, running from the north-west to the south-east of the state. Northern belt exhibits relatively lower concentration of urban SC population while southern belt records high concentration of urban SC population. This belt shows higher concentration of urban SC population because the districts falling under this belt already have high incidence of SC population.
- * Even the hubs of administrative and manufacturing activities i.e. Very Highly Developed Region and Highly Developed Region are not able to attract large proportion of urban SC population. The lower incidence of SC urban population can be attributed to chronic poverty and low levels of educational

attainment which in turn hampers their mobility from rural areas to urban centres.

- * According to 2001 Census, 23.04 per cent non SC/ST population out of total population is living in urban areas of Uttar Pradesh. This share for SC population is only 2.60 per cent indicating, a gap of more than 21 percentage points. So, it is clear that urban SC population stands nowhere in comparison to urban non SC/ST population.
- * As far as gender dimension is concerned, gaps between urban male and female population in all the regions of the state are not so stark. However in comparison to the urban non SC/ST female population, urban SC female population stands nowhere.

CHAPTER III

LEVELS OF ATTAINMENT AND DISPARITIES IN HIGHER EDUCATION FOR SC AND NON SC/ST POPULATIONS

3.1: Introduction

Education is the most constructive gadget in one's hand with unapprehended potential. It is a panacea to almost every problem if not to all. If served ubiquitously and extensively, it unlocks the destiny of any individual, society or nation. When it comes to higher education, no one denies the fact that it moulds one's culture, career and charisma. Even Aristotle realized that "The fate of empires depends on the education of youth". In fact, development and higher education are strongly correlated (Tilak, 2007)¹. Advancement in higher education is measured in terms of access, opportunity, quality and attainment. All these aspects of higher education hold their own importance but as far as this study is concerned, it concentrates on educational attainment as "educational attainment is the single most important determinant of a person's success in the labour market" (Bishop, 1995)² and closely related with other social and economic indicators of development (Trivedi, 2007)³.

Hailing from a particular social class affects one's educational attainment (Chitnis, 1972)⁴. This holds very true in Indian educational scenario. The gates of the schools, colleges, and universities are, on the whole, opened wider to the rich than to the poor, to the males more than to the females, to the forward castes more than to the backward castes (Tilak 1979)⁵. The present chapter tries to capture the regional pattern of educational attainments in higher education and brings out the disparities in

¹ J. B. G. Tilak, 2007. 'Higher education, poverty and development'. *Newsletter*, International Institute for Educational Planning. 25(1), p.5. Pdf available at: www.iiep.unesco.org/fileadmin/user.../upload/pdf/jane07.pdf, [Accessed on 27 Jun. 2011]

² John H. Bishop, 1995. 'Improving Education: How Large are the Benefits? How can it be Done Efficiently?' *Centre for Advanced Human Resource Studies, Working Paper Series*. Paper 211. Pdf available at: <http://digitalcommons.ilr.cornell.edu/cahrswp/211>, [Accessed on 24 Mar. 2011].

³ Prashant Kumar Trivedi, 2007. 'Disparity and development in Uttar Pradesh'. *Social Change*, 37 (1), pp. 162-178. Pdf available at: <http://sch.sagepub.com/content/37/1/162.full.pdf+html> [Accessed on 23 Mar. 2011].

⁴ Chitnis, 1972, *op. cit.* Ch. I, p.8.

⁵ Tilak, 1979. *op. cit.* Ch. I, p.7.

these attainments for Scheduled caste and non SC/ST populations. It also addresses the gender gaps in terms of educational attainments in higher education for the above mentioned populations.

3.2: Incidence of Higher Education in Uttar Pradesh

In India, education after senior secondary classes (XI and XII std.) is known as higher education. It encompasses all students who are a part of degree colleges and universities. Census of India provides data on higher education up to district level. Data is provided for the following components of higher education:

1. Graduate and above.
2. Graduate degree other than technical degree.
3. Post graduate degree other than technical degree.
4. Engineering & technical degree/diploma.
5. Degree/diploma in medicine.
6. Agriculture & dairying degree.
7. Veterinary degree.
8. Teaching degree.

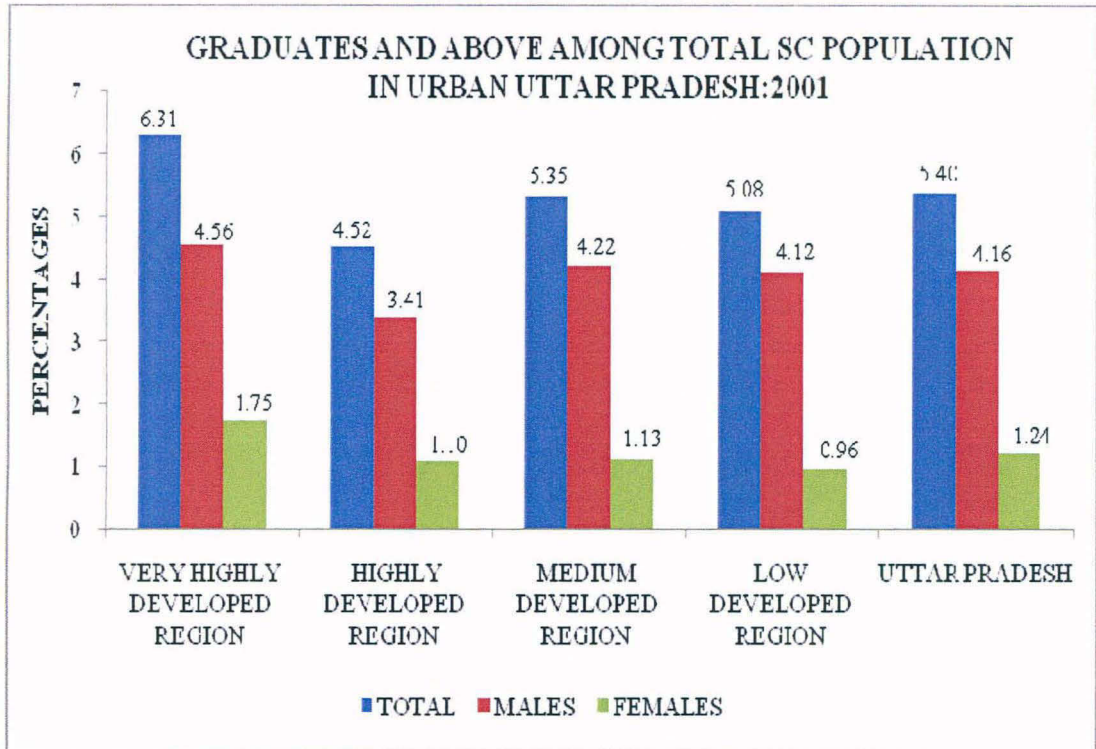
The present chapter considers only those persons who are graduates and above and are of age 15 and above. Although the main thrust of the study is on SCs, it also includes non SC/STs. All the components of the higher education have been dealt extensively except veterinary degree as the number of persons having veterinary degree is almost negligible. However, actual figures for persons having this degree are provided in the Appendix-I.

Educational attainment in higher education for SC population is meagre (Trivedi, 2007)⁶. In Urban Uttar Pradesh only 5.39 per cent of the total SC population of age 15

⁶ Prashant Kumar Trivedi, 2007. 'Disparity and development in Uttar Pradesh'. *Social Change*, 37 (1), pp.162-178. Pdf available at: <http://sch.sagepub.com/content/37/1/162/full.pdf+html> [Accessed on 23 Nov. 2010].

and above have attained the educational level of Graduate and above (*ibid.*)⁷. The following figure depicts the educational attainment of SCs in higher education:

Figure 3.1: Educational Attainment of SCs in Higher Education in Uttar Pradesh



Source: Census of India 2001- C Series

It is very clear from the above figure that the educational attainment of SCs in higher education is dismal. In any of the regions of Uttar Pradesh, percentages of SC graduates and above do not go above 6.5 per cent. Percentages of male SC graduates in every region are below 5 per cent. Percentages of female SC graduates presents a very discouraging picture as their percentage of educational attainment in higher education is very low (Chanana, 2000)⁸.

Regionwise description of educational attainment of SCs in higher education brings home a clearer picture. The following table presents the educational attainment of SCs in higher education in the Very Highly Developed Region (VHDR) of Uttar Pradesh:

⁷ *Ibid.*

⁸ K. Chanana, 2000. 'Treading the Hallowed Halls: Women in Higher Education in India'. *Economic and Political Weekly*, 35(12), pp.1012-1022.

Table 3.1: Educational Attainment of SCs in Higher Education in VHDR of Uttar Pradesh

Education Levels/Region	Very Highly Developed Region					
	Among SC Graduates & Above (In Percent)			Among Total Graduates & Above (In Percent)		
	Total	Males	Females	Total	Males	Females
Graduate & Above				3.97	2.87	1.10
Graduate With No Technical Degree	65.83	47.95	17.88	2.61	1.90	0.71
Post Graduate With No Technical Degree	25.57	17.73	7.84	1.02	0.70	0.31
Engineering & Technical Degree/Diploma	5.06	4.41	0.65	0.20	0.18	0.03
Degree/Diploma In Medicine	1.62	1.27	0.35	0.06	0.05	0.01
Agriculture & Dairying Degree	0.17	0.17	0.01	0.01	0.01	0.00
Teaching Degree	1.73	0.77	0.96	0.07	0.03	0.04

Source: Census of India 2001- C Series

The above Table also encompasses the components of higher education. This Table also clarifies the stand of SC graduates and above in various components of higher education among total SC graduates and above and also among total graduates and above.

A very large proportion of SC graduates and above (65.83 per cent) do not possess any Technical Degree. This automatically excludes them from lucrative jobs (Rao, 2002)⁹. Even persons who pursued post graduate degrees, also did not go for a technical degree. The percentages for SC graduates who pursued technical degree is very low (Chaudhry, 2007)¹⁰. SC population needs good doctors and teachers but there are very few (less than 2 per cent) who possess degrees in Medicine or Teaching (Rao, 2002)¹¹.

If one wants to know where the SC graduates and above stand in the crowd of total graduates and above, one gets a very disappointing picture as only 3.97 per cent of the total graduates and above belongs to SC population and the rest 96.03 per cent graduates come from the upper sections of the society. Percentages of SC graduates and above in various components of the higher education among total graduates and

⁹ S Srinivasa Rao, 2002. 'Dalits in Education and Workforce'. *Economic and Political Weekly*, 37(29), pp.2998-3000.

¹⁰ Sujit kumar chaudhry, 2007. 'The Scheduled Castes in Higher Education'. *Mainstream*, 45(24). Available online at: <http://www.mainstreamweekly.net/article143.html>, [Accessed on 20 Feb. 2011].

¹¹ S Srinivasa Rao, *op. cit.*

above make the picture much more gloomy as SC graduates stand no where among total graduates and above.

To capture the incidence of higher education, total SC population should also be taken into consideration as this provides a much clearer picture. The following Table brings out this incidence:

Table 3.2: Incidence of Higher Education among total SCs in VHDR of Uttar Pradesh

Education Levels/Region	Very Highly Developed Region		
	Among Total SCs (In Percent)		
	Total	Males	Females
Graduate & Above	6.31	4.56	1.75
Graduate With No Technical Degree	4.15	3.03	1.13
Post Graduate With No Technical Degree	1.61	3.03	0.49
Engineering & Technical Degree/Diploma	0.32	0.28	0.04
Degree/Diploma In Medicine	0.1	0.08	0.02
Agriculture & Dairying Degree	0.01	0.01	0.02
Teaching Degree	0.11	0.05	0.06

Source: Census of India 2001- C Series

Table 3.2 clearly shows that SC population has yet to transform themselves into a highly educated society. Only 6.31 per cent of the total SC population of age 15 and above have attained tertiary education with very low percentages of population having technical or job-oriented degrees. If such a situation prevails in the Very Highly Developed Region of Urban U.P. (Uttar Pradesh), what can be expected from the other regions.

The Highly Developed Region (HDR) is similar to the VHDR. More or less the same picture emerges also from this region. Table 3.3 shows that among total SC Graduates and above almost 65 per cent of Graduates and above do not possess any Technical degree. SC Graduates and above having degree or diploma in Engineering and Medicine are also very few again establishing the fact that their job prospectus in the labour market is very low. Because now a days professional jobs require a technical or vocational degree.

Table 3.3: Educational Attainment of SCs in Higher Education in HDR of Uttar Pradesh

Education Levels/Region	Highly Developed Region					
	Among SC Graduates & Above (In Percent)			Among Total Graduates & Above (In Percent)		
	Total	Males	Females	Total	Males	Females
Graduate & Above				6.47	4.89	1.58
Graduate With No Technical Degree	64.93	50.08	14.84	4.20	3.24	0.96
Post Graduate With No Technical Degree	27.45	19.65	7.80	1.78	1.27	0.50
Engineering & Technical Degree/Diploma	4.61	3.81	0.80	0.30	0.25	0.05
Degree/Diploma In Medicine	1.09	0.86	0.23	0.07	0.06	0.01
Agriculture & Dairying Degree	0.21	0.19	0.02	0.01	0.01	0.00
Teaching Degree	1.71	0.95	0.76	0.11	0.06	0.05

Source: Census of India 2001- C Series

The position of SC graduates and above among total graduates and above in HDR is better than that of VHDR. There are almost 7 per cent SC graduates and above among total graduates and above in HDR which is very encouraging. But as far as SC graduates and above with Engineering or Medical Degree is concerned the scenario is the same as in the case of VHDR.

When total SC population of age 15 and above is considered, a clearer picture of educational attainment in higher education emerges. The following Table presents this scenario:

Table 3.4: Graduates and above among total SC population of age 15 and above in HDR of U.P.

Education Levels/Region	Highly Developed Region		
	Among Total SCs (In Percent)		
	Total	Males	Females
Graduate & Above	4.52	3.41	1.10
Graduate With No Technical Degree	2.93	2.26	0.67
Post Graduate With No Technical Degree	1.24	0.89	0.35
Engineering & Technical Degree/Diploma	0.21	0.17	0.04
Degree/Diploma In Medicine	0.05	0.04	0.01
Agriculture & Dairying Degree	0.01	0.01	0.00
Teaching Degree	0.08	0.04	0.03

Source: Census of India 2001- C Series

This Table shows that only around 5 per cent graduates and above come from SC community and the rest 95 per cent population of SCs of age 15 and above are out of

the ambit of the much needed higher education. Again very few SC graduates attained their degrees and diploma in Engineering or Medicine.

The Medium developed region consists of 35 districts. So in terms of representation of educational attainment in higher education it is a very important region. Table 3.5 present the development of higher education in the Medium Developed Region (MDR):

Table 3.5: Educational attainment of SCs in Higher Education in MDR of Uttar Pradesh

Education Levels/Region	Medium Developed Region					
	Among SC Graduates & Above (In Percent)			Among Total Graduates & Above (In Percent)		
	Total	Males	Females	Total	Males	Females
Graduate & Above				4.99	3.94	1.05
Graduate With No Technical Degree	65.14	52.08	13.06	3.25	2.60	0.65
Post Graduate With No Technical Degree	27.55	20.90	6.65	1.37	1.04	0.33
Engineering & Technical Degree/Diploma	4.02	3.54	0.49	0.20	0.18	0.02
Degree/Diploma In Medicine	1.18	0.98	0.20	0.06	0.05	0.01
Agriculture & Dairying Degree	0.27	0.27	0.00	0.01	0.01	0.00
Teaching Degree	1.82	1.14	0.69	0.09	0.06	0.03

Source: Census of India 2001- C Series

The situation of SC graduates and above with no technical degree is almost the same as in the case of VHDR and HDR. Around 65 per cent of the total SC graduates and above do not have any technical degree. They have passed their graduation or post graduation with ordinary pass courses. The number of SC graduates having degree or diploma in Engineering, Medicine or Teaching is very low. Situation of SC female graduates is all the more pitiable. Position of SC graduates among total graduates is not healthy in any way. They account to only 5 per cent of the total graduates and above and SC female graduates do not cross the mark of even 2 per cent.

Table 3.6 shows the position of graduates and above among total SCs who are of age 15 and above. The table records that only around 5 per cent of the total SC population of age 15 and above have attained graduate or post graduate degrees/diplomas and most of them have attained their degrees/diplomas in non-technical subjects. The situation of SC female graduates is the same in this region also. Their inclusion in the

higher education is very low. Their percentage of attainment in higher education never exceeds 2 per cent.

Table 3.6: SC Graduates Among Total SC Population of Age 15 and Above in MDR of U.P.

Education Levels/Region	Medium Developed Region		
	Among Total SCs (In Percent)		
	Total	Males	Females
Graduate & Above	5.35	4.22	1.13
Graduate With No Technical Degree	3.48	2.78	0.70
Post Graduate With No Technical Degree	1.47	1.12	0.36
Engineering & Technical Degree/Diploma	0.22	0.19	0.03
Degree/Diploma In Medicine	0.06	0.05	0.01
Agriculture & Dairying Degree	0.01	0.01	0.00
Teaching Degree	0.10	0.06	0.04

Source: Census of India 2001- C Series

The Low Developed Region consists of 27 districts of Uttar Pradesh. So in terms of the state's representation, this region holds an important place. The following Table brings out the incidence of attainment of higher education in the Low Developed Region (LDR):

Table 3.7: Incidence of Educational Attainment of SCs in Higher Education in LDR of U.P.

Education Levels/Region	Low Developed Region					
	Among SC Graduates & Above (In Percent)			Among Total Graduates & Above (In Percent)		
	Total	Males	Females	Total	Males	Females
Graduate & Above				4.80	3.89	0.91
Graduate With No Technical Degree	66.13	54.14	11.98	3.17	2.60	0.58
Post Graduate With No Technical Degree	26.08	20.25	5.83	1.25	0.97	0.28
Engineering & Technical Degree/Diploma	4.09	3.75	0.34	0.20	0.18	0.02
Degree/Diploma In Medicine	1.42	1.24	0.18	0.07	0.06	0.01
Agriculture & Dairying Degree	0.29	0.28	0.00	0.01	0.01	0.00
Teaching Degree	1.98	1.43	0.56	0.10	0.07	0.03

Source: Census of India 2001- C Series

This region has got the highest percentage of SC graduates and above having no technical degrees/diplomas. This percentage amounts to 66.13 per cent which indicates the traditional and backward nature of the region. This region is characterized by chronic poverty and this is being reflected in its educational attainment scenario. This fact gets much more strengthened by Table 3.7 as this region has the lowest percentage of SC female graduates which again shows its 'traditional' nature with regards to higher education (Trivedi, 2007)¹². As far as the place of females among total graduates is concerned, it depicts the same picture as in the case of other regions. Their percentages never exceed 5 per cent. This picture becomes deplorable in case of SC female graduates.

The following Table gives the educational attainment of SC graduates and above in total SC population of age 15 and above. In this region also total number of graduates and above are not more than 5 per cent and the SC graduates with technical degrees and diplomas are very few in number. The number of such graduates and above among SCs never exceeds 2 per cent. When it comes to SC female graduates, the condition is not better than that of any other region. In fact the condition of female graduates is the worst in this region. They do not touch the mark of even a single percent.

Table 3.8: Graduates and Above Among SCs in LDR of Uttar Pradesh

Education Levels/Region	Low Developed Region		
	Among Total SCs		
	(In Percent)		
	Total	Males	Females
Graduate & Above	5.08	4.12	0.96
Graduate With No Technical Degree	3.36	2.75	0.61
Post Graduate With No Technical Degree	1.32	1.03	0.30
Engineering & Technical Degree/Diploma	0.21	0.19	0.02
Degree/Diploma In Medicine	0.07	0.06	0.01
Agriculture & Dairying Degree	0.01	0.01	0.00
Teaching Degree	0.10	0.07	0.03

Source: Census of India 2001-C Series

¹² Prasant Kumar Trivedi, *op. cit.*

It can hence be concluded that in each of the regions there is a majority of graduates and above who do not possess any technical degree or diploma and who have simply completed their graduation or post graduation merely with pass courses (Rao, 2002)¹³. When it comes to technical or professional degrees or diploma, very few have obtained these degrees or diplomas (*Ibid.*)¹⁴. The case of female graduates is much worse. They do not touch even the mark of a single percent. In fact they are doubly disadvantaged (Dunn, 1993)¹⁵. There are many reasons for this dismal performance of SCs in educational attainment in higher education e.g. SCs can not afford the technical degrees (Hasan and Mehta, 2006)¹⁶, they don't get proper career counselling (Ram, 1995)¹⁷, Unavailability of technical degree colleges and universities and sometimes the inability to cope up with the difficult syllabus of technical courses. All this becomes later a big handicap for SC graduates and above to get any job corresponding to the level of their education.

3.3: District Wise Spatial Pattern of Educational Attainment of SC Population in Higher Education

When things are generalized at a broader level, many times the gaps which should be apparent are overshadowed by general classification. When districts are categorized into regions sometimes the real spatial pattern gets skewed. So it is necessary to see the things in their holistic perspective. Therefore, it is important to map out the spatial pattern of educational attainment of SC population in higher education at district level. Map 3.1 is an effort to bring out this spatial pattern. This map indicates to the presence of two belts, a northern belt and a southern belt. Though, these are not so clear but it seems that southern belt comprises of districts which show high to medium percentages of SC graduates and above.

¹³ S. Srinivas Rao, *op. cit.*

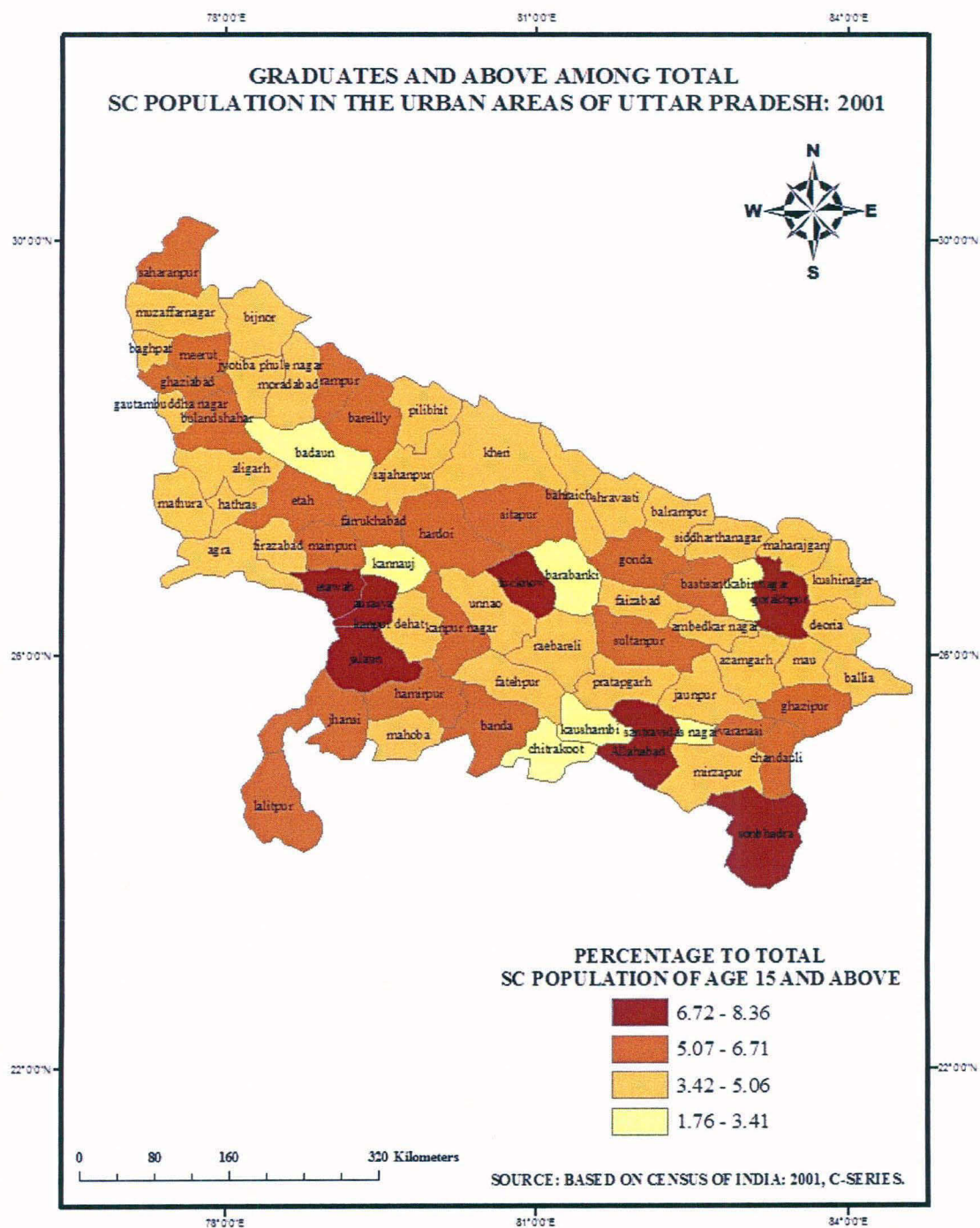
¹⁴ *Ibid.*

¹⁵ D. Dunn, 1993. 'Gender inequality in education and employment in the scheduled castes and tribes of India'. *Population Research and Policy Review* 12, pp.53-70.

¹⁶ Rana Hasan and Aashish Mehta, 2006. 'Under-representation of Disadvantaged Classes in Colleges What Do the Data Tell Us? *Economic and Political Weekly*, 41(35), pp. 3791-3796.

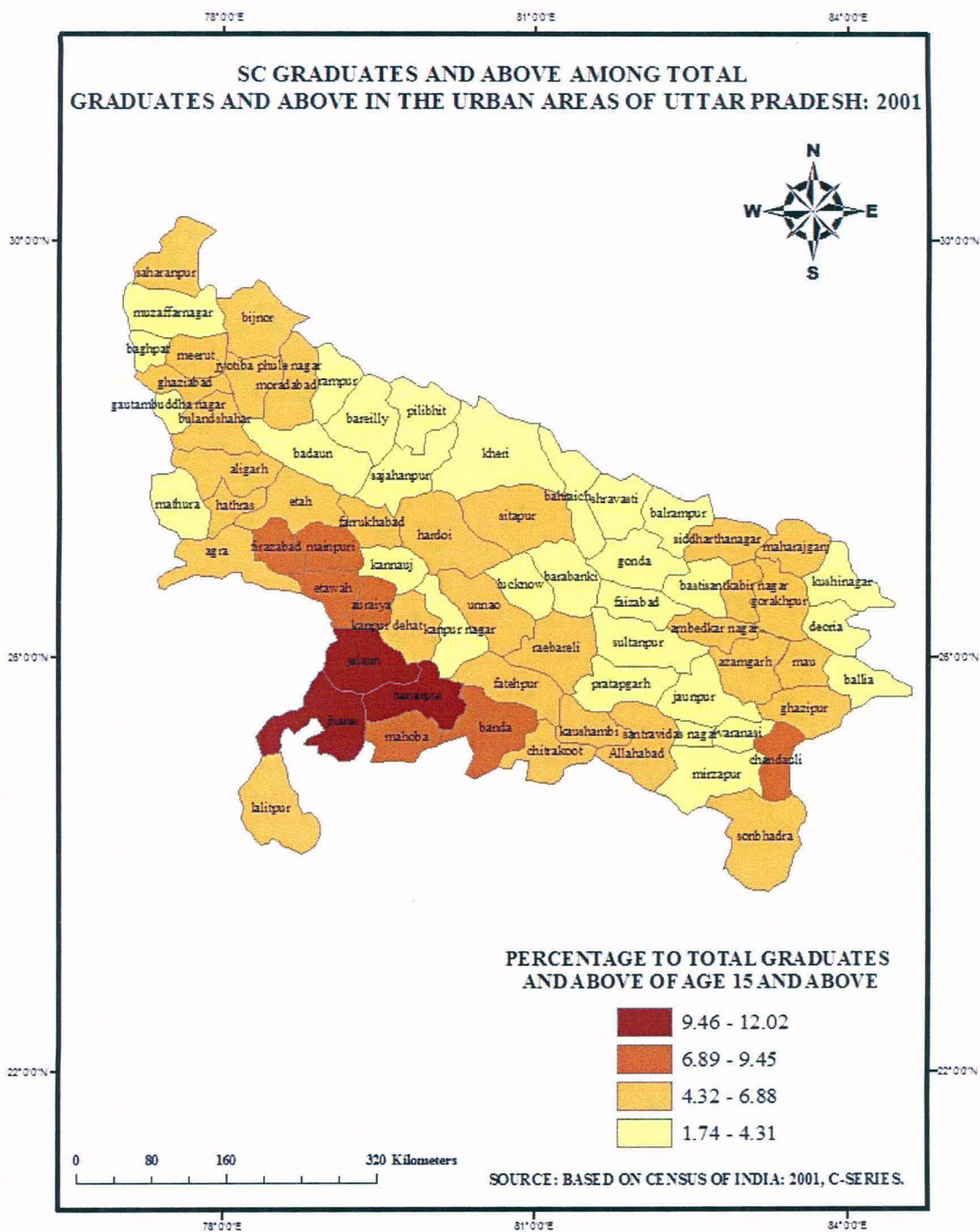
¹⁷ Nandu Ram, 1995. *Beyond Ambedkar—Essays on Dalits in India*. New Delhi: Har-Anand Publications.

Map 3.1: Spatial Pattern of Educational Attainment of SCs in Higher Education in U.P.



Only knowing about the proportion of graduates and above among total SC population is not enough, one should consider the position of SC graduates and above among total graduates and above. This is presented in the following Map:

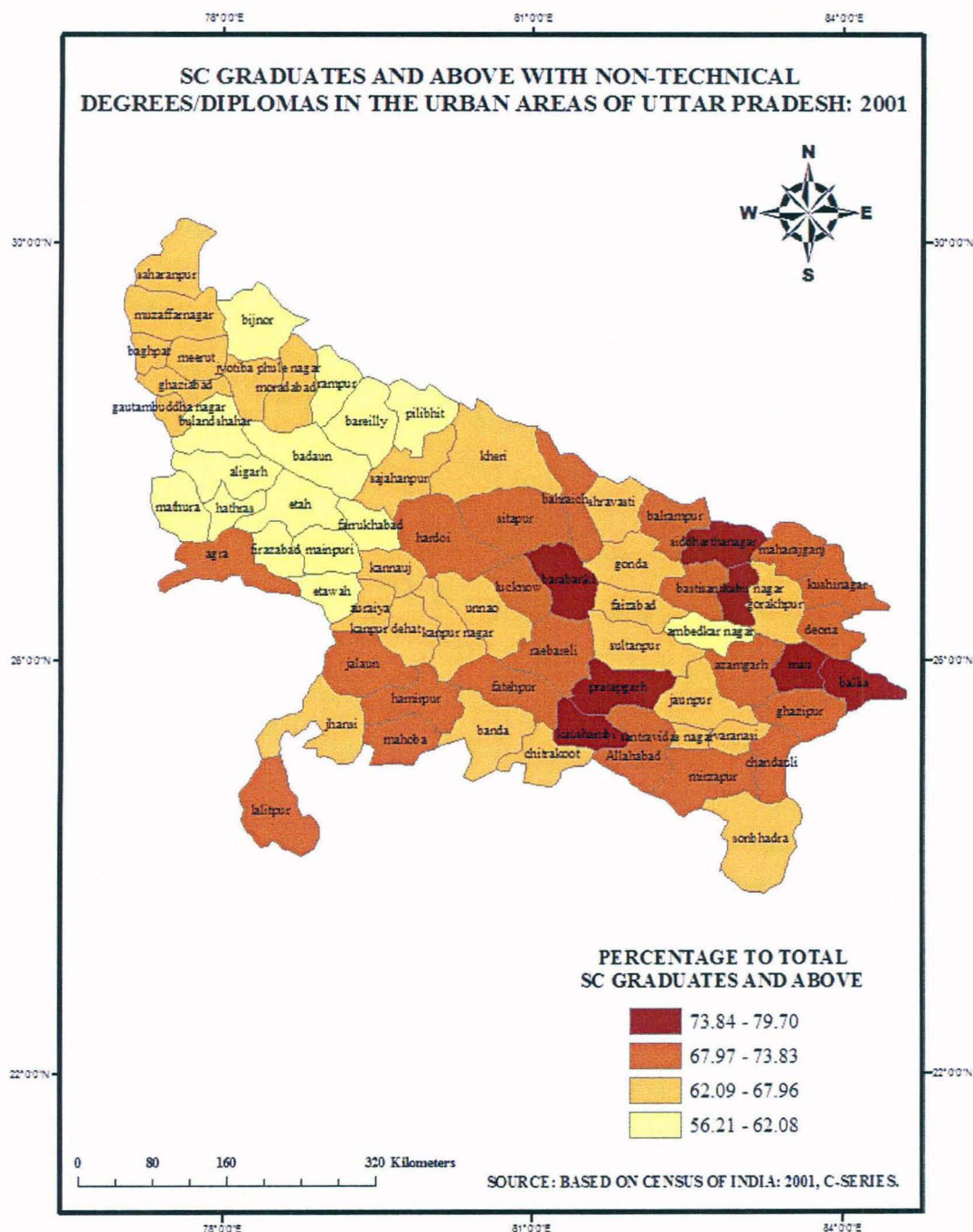
Map 3.2: Spatial Pattern of Educational Attainment of SCs in Higher Education in U.P.



There are many districts of Urban U.P. which exhibit very low percentages of SC graduates and above among total graduates and above. It seems that upper north belt falls under this category. And lower southern belt shows districts with medium percentages of SC graduates and above among total graduates and above. Very few districts come under the category of districts with high to very high percentages of SC graduates and above among total graduates and above.

While discussing about the components of higher education it was found that a majority of the SC graduates and above have attained their graduate or post graduate degrees or diploma simply with pass courses and there were very few who attained their degrees or diplomas in technical or professional courses. So it is important to map out this problem.

Map 3.3: Spatial Pattern of SC Graduates and Above With Non-Technical Degrees in U.P.



Though all the districts of Urban Uttar Pradesh suffer from the problem of having high percentages of SC graduates and above with non-technical degrees/diplomas, districts of Low Developed Region or geographically the most of the Eastern Uttar Pradesh show highest percentages of SC graduates and above without any technical degree or diploma. This region of the state is an underdeveloped region (Kozel and Parker, 2003)¹⁸ and is characterized by unavailability of the institutions of higher education catering to technological knowledge much needed for any region to prosper in this technological age (see Table 3.9). This is well reflected in the fact that a large population is without any technical degree or diploma.

Table 3.9: Technical Institutions affiliated with U.P. Technical University Lucknow in U.P.

REGIONS	NUMBER OF TECHNICAL INSTITUTIONS
VERY HIGHLY DEVELOPED REGION	209
HIGHLY DEVELOPED REGION	96
MEDIUM DEVELOPED REGION	380
LOW DEVELOPED REGION	40
UTTAR PRADESH	725

Source: http://www.uptu.ac.in/academics/inst_list.asp

3.4: Inequalities between SCs and Non SC/STs in Educational Attainments in terms of Higher Education

Over the decades, Scheduled caste population has bore the brunt of being denied of their most cherished fundamental human right of attainment of higher education. From the very beginning of their childhood they were discriminated against non SC/STs in educational arena on the grounds of belonging to a lower caste (Omvedt, 2008)¹⁹. That is why they seldom reach the highest level of education. Thus they have been always educationally marginalized and a victim of socially sanctioned exclusion

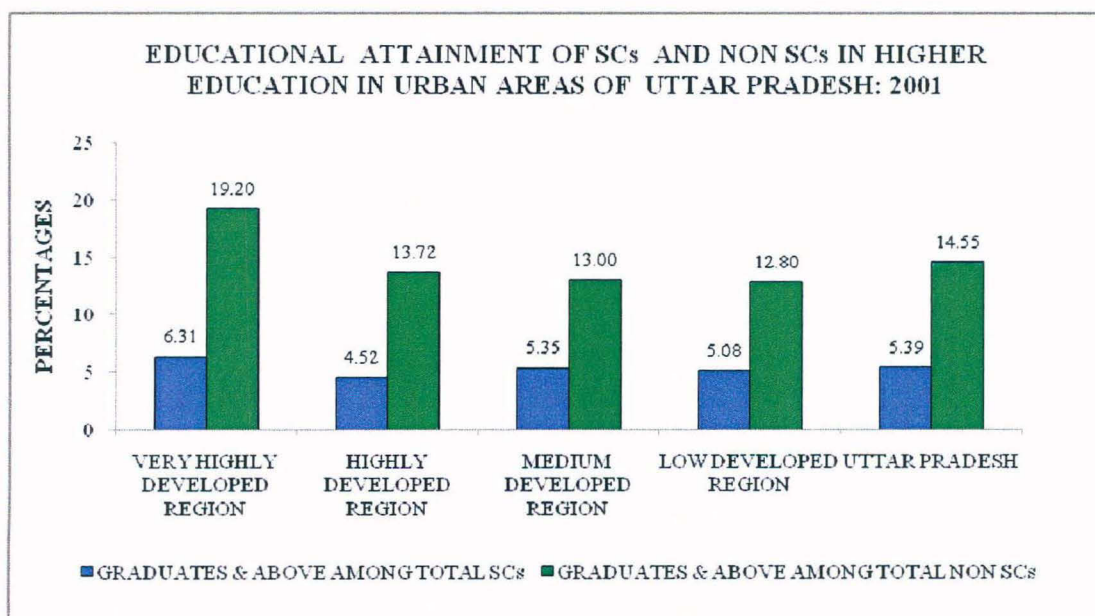
¹⁸ Valerie Kozel and Barbara Parker, 2003. 'A profile and diagnostic of poverty in Uttar Pradesh'. *Economic and Political Weekly*, 38(4), pp. 385-403.

¹⁹ Gail Omvedt, 2008. 'Caste is the cruellest exclusion'. *InfoChange Agenda*, 13, pp. 17-22. Pdf available at: infochangeindia.org/index2.php?option=com_content&do_pdf=1...[Accessed on 22 Feb. 2011].

and discrimination (Heyer and Jayal, 2009)²⁰. All this has resulted into their lower access to higher education and a dismal attainment in tertiary education.

Non SC/ST population exhibits higher percentages of the persons who have attained graduate or post graduate degrees or diplomas. In urban Uttar Pradesh as far as SCs are concerned, only 5.39 per cent of the total SC population of age 15 and above have attained graduate or post graduate degree or diploma while in case of non SC/ST population almost 15 per cent of the total non SC/ST population of age 15 and above have attained graduate or post graduate degree or diploma which is thrice the educational attainment of SC population in higher education (Mohanty, 2006)²¹. It is evident from Figure 3.2 that in every region the number of non SC/ST graduates and above are exceeding in comparison to SC graduates and above.

Figure 3.2: Educational Attainment of SCs and Non SC/STs in Higher Education in U.P.



Source: Census of India 2001- C Series

The Very High Developed Region of Urban Uttar Pradesh records the highest percentages of non SC/ST graduates and above in comparison to SC graduates and above in the same region, while Low Developed Region of Urban Uttar Pradesh

²⁰ Judith Heyer and Niraja Gopal Jayal, 2009. 'The Challenge of Positive Discrimination in India'. Working Paper No. 55. Centre for Research on Inequality, Human Security and Ethnicity. Pdf available at: www.crise.ox.ac.uk/pubs/workingpaper55.pdf [Accessed on 22 Feb.2011].

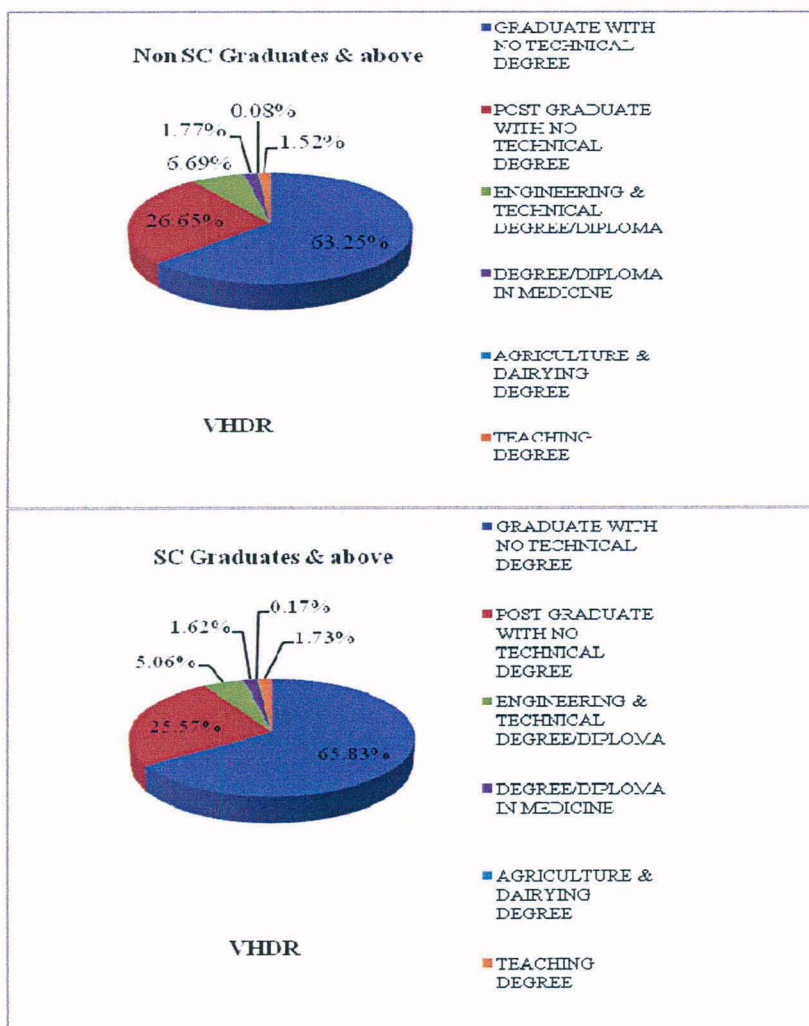
²¹ Mritunjoy Mohanty, 2006. 'Social Inequality, Labour Market Dynamics and Reservation'. *Economic and Political Weekly*, 41(35), pp.3777-3789.

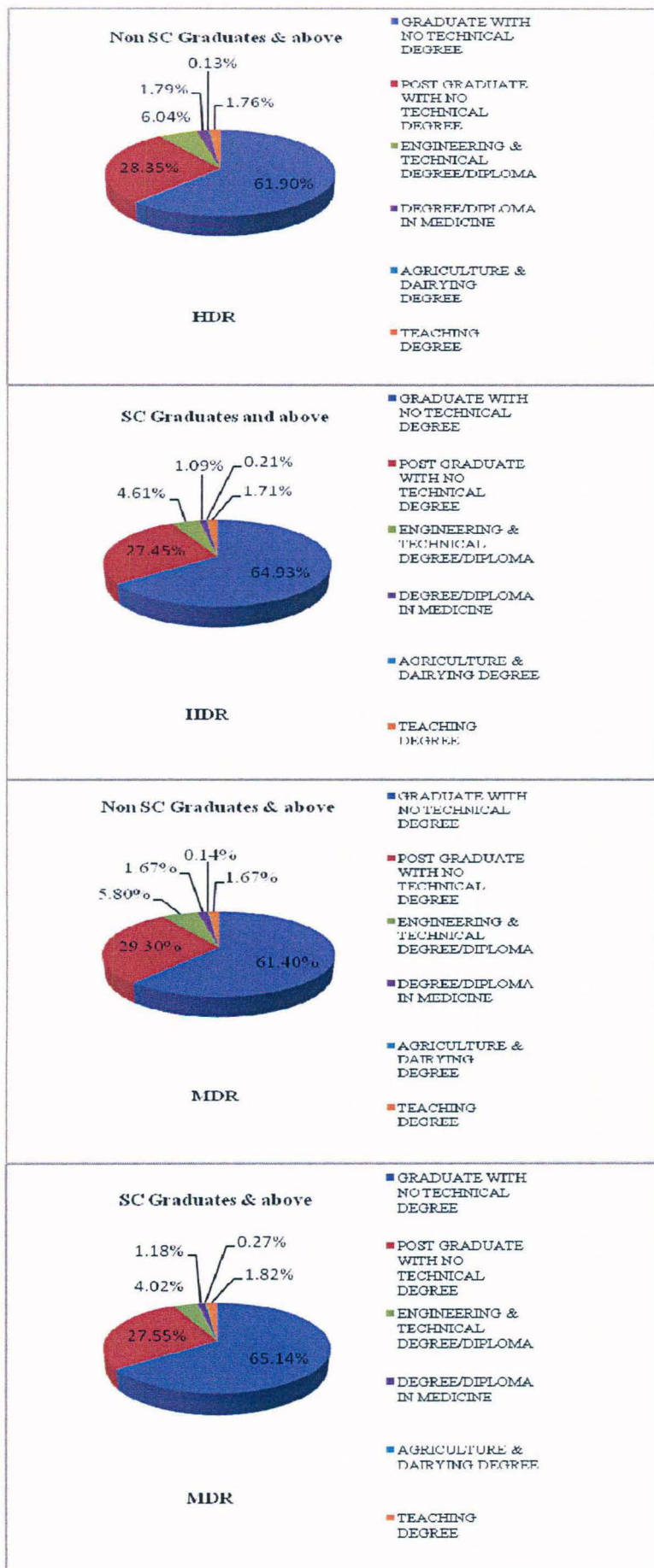
documents lowest percentages of non SC/ST graduates and above in comparison to SC graduates and above in the same region. These inequalities between both the SC and non SC/ST graduates and above in terms of attainment of higher education can be attributed to the chronic poverty.

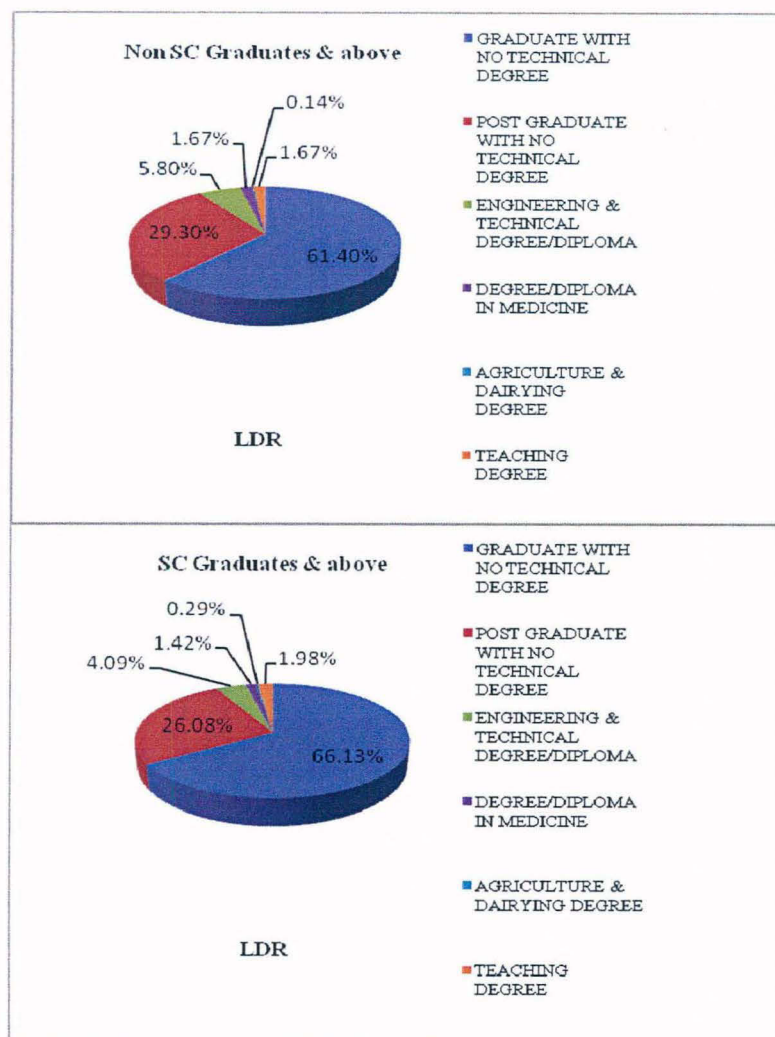
3.4.1. Region Wise Inequalities in Educational Attainment of SC and Non SC/ST Populations in Components of Higher Education in U.P.

Educational attainments measured as the percentages of graduate and above among SC and non SC/ST populations presents a generalized picture. In order to see the depths of educational inequalities, component wise analysis of higher education becomes necessary. The following figures bring out this inequality in higher education:

Fig. 3.3: Inequalities in Attainments in Components of Higher Education in Regions of U.P.







Source: Census of India 2001-C Series

Figure 3.3 shows clearly that in every region there are more than 60 per cent graduates and above who do not possess any technical degree. In case of SC population this scenario becomes graver as all the regions register very high percentages (more than or equal to 65 per cent) of graduates and above with no technical degree or diploma (Rao, 2002)²². When postgraduates and above with no technical degree are taken into consideration, percentages favour the SC population. But no need to get elated as in fact it indicates that SC graduates become aware of the importance of the technical degree only after completing their graduation because if most of them (more than or equal to 65 per cent) completed their graduation with no technical degree, it becomes pretty difficult if not impossible to get any post graduate technical degree as in India students continue postgraduate with one of the subjects studied at the

²² S. Srinivas Rao, *op. cit.*

graduate level. So if one has not completed one's graduation with any technical degree, chances to pursue technical degree in post graduate classes becomes almost impossible. It means SC postgraduates do not possess any technical degree as such but they have completed their post graduation with technical 'Diplomas' not 'Degrees'. This problem arises because of the data classification by census of India which does not provide separate data for diploma holders. It combines both the technical degree and diploma holders. In case of Engineering and Medicine also SC graduates and above lag far behind than that of their non SC/ST counterparts almost in every region of the state (*Ibid.*)²³. Interestingly, in every region SC graduates and above with degree in Agriculture & Dairying outnumbered their non SC/ST counterparts. It shows that the SC population still pursue the traditional courses in higher education and this in long term affects their market value (*Ibid.*)²⁴. Figure 3.3 shows that there is a higher percentage of SC graduates and above who attained their degree in Teaching. But as Teaching Professionals they are even less than a percent (*Ibid.*)²⁵. This indicates to the underemployment of SCs with teaching degrees. So as far as components of higher education are concerned, there are intrinsic and inherent and deep-rooted inequalities for SC population in comparison to non SC/ST population.

3.4.2: Spatial Patterns of Inequalities in Educational Attainments of SC and Non SC Population in Components of Higher Education

Any interpretation is incomplete until it encompasses the element of space in it. So, in order to capture the inequalities in educational attainments in higher education, spatial pattern must be considered as a vital explanatory tool. Map 3.4 brings out the spatial patterns of inequalities in educational attainments of SC and non SC/ST population in components of higher education.

Though there emerges a mixed kind of spatial pattern of higher educational inequalities, the map indicates that many districts of the LDR fall in the category of districts showing high inequalities in terms of educational attainment for SC and non SC/ST population in higher education. Out of total seventy districts of Uttar Pradesh

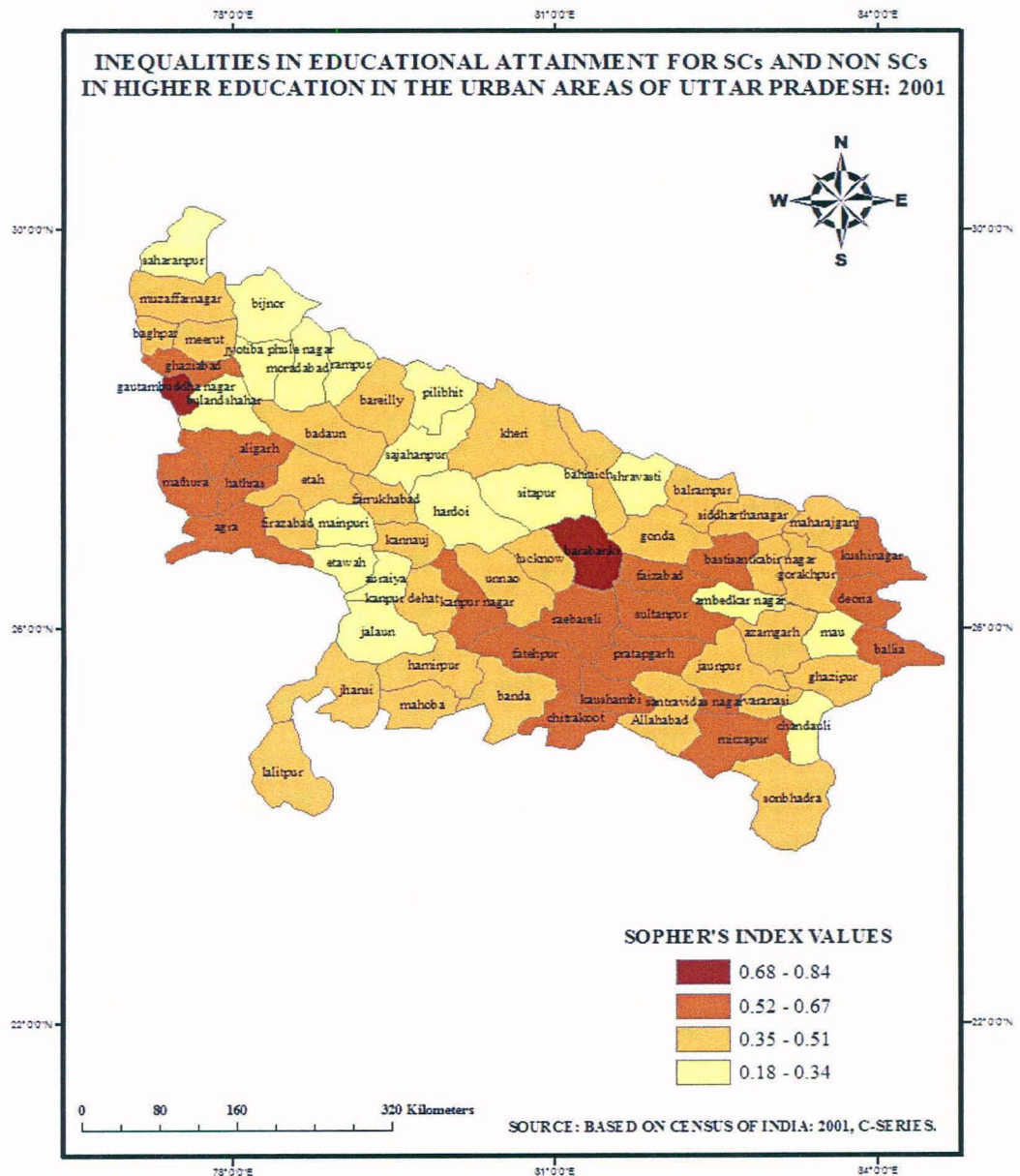
²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*

only eighteen districts exhibit lowest levels of inequalities in attainment of higher education for SCs and non SC/STs and the rest of them range from medium levels of inequalities to the highest level of inequalities in educational attainment for the populations in question. It indicates that there are huge inequalities in educational attainment between SC and non SC/ST populations in higher education in Uttar Pradesh.

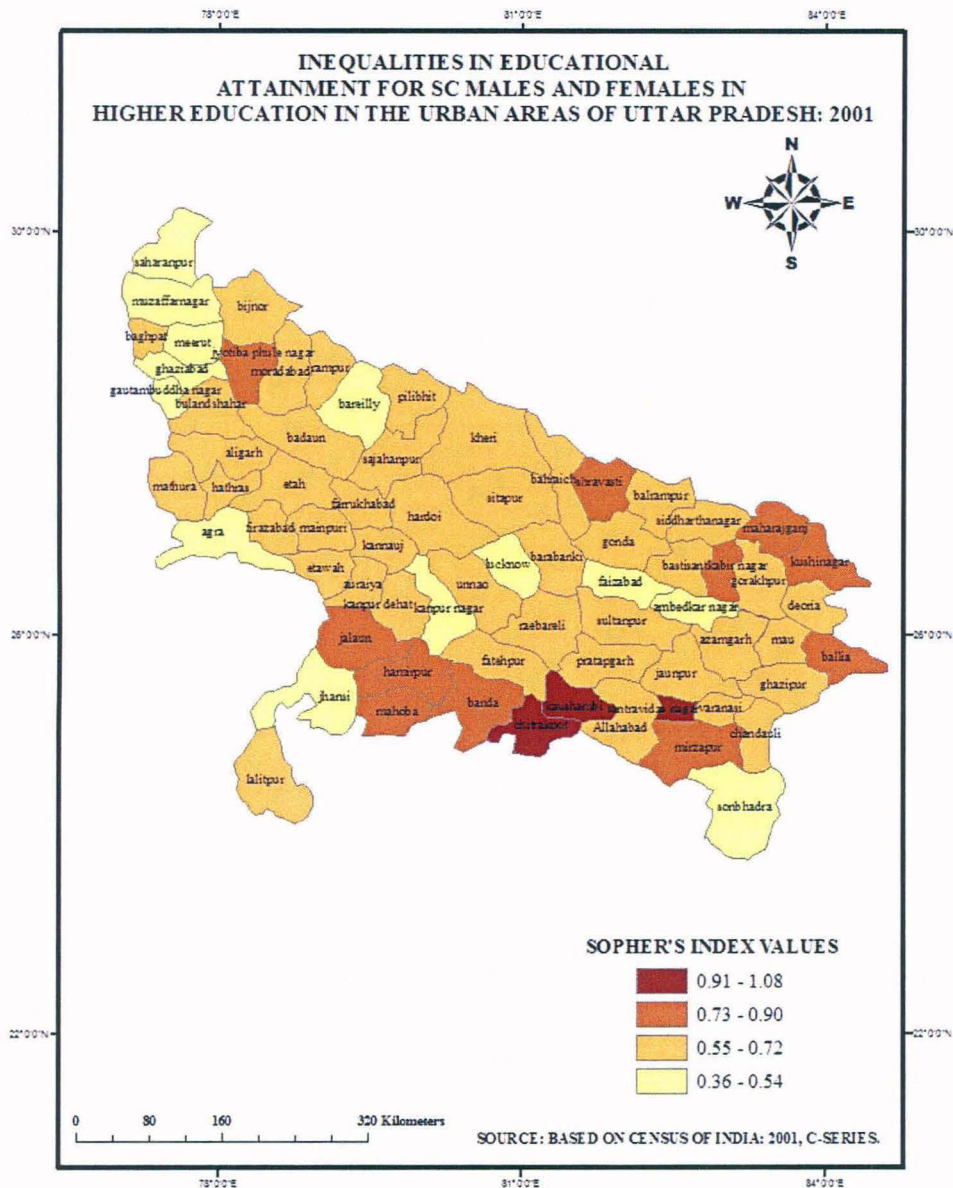
Map 3.4: Gaps between SC and Non SC/ST Population in Higher Education in Uttar Pradesh



Map 3.5 presents the gender gaps in educational attainment in higher education for SC graduates and above. The map shows that only thirteen districts fall in the category of districts showing lowest level of gender gaps in terms of attainment in higher

education and rest of them show medium to the highest levels of gender gaps in terms of attainment in higher education. A thick belt running from the western part of the state to the eastern part of the state indicates medium levels of gender gaps in terms of attainment in higher education. Districts showing high gender gaps are found in Low Developed Region and the Bundelkhand region of the state. Chitrakoot and Sant Ravidasnagar show highest level of gender gaps in terms of attainment in higher education.

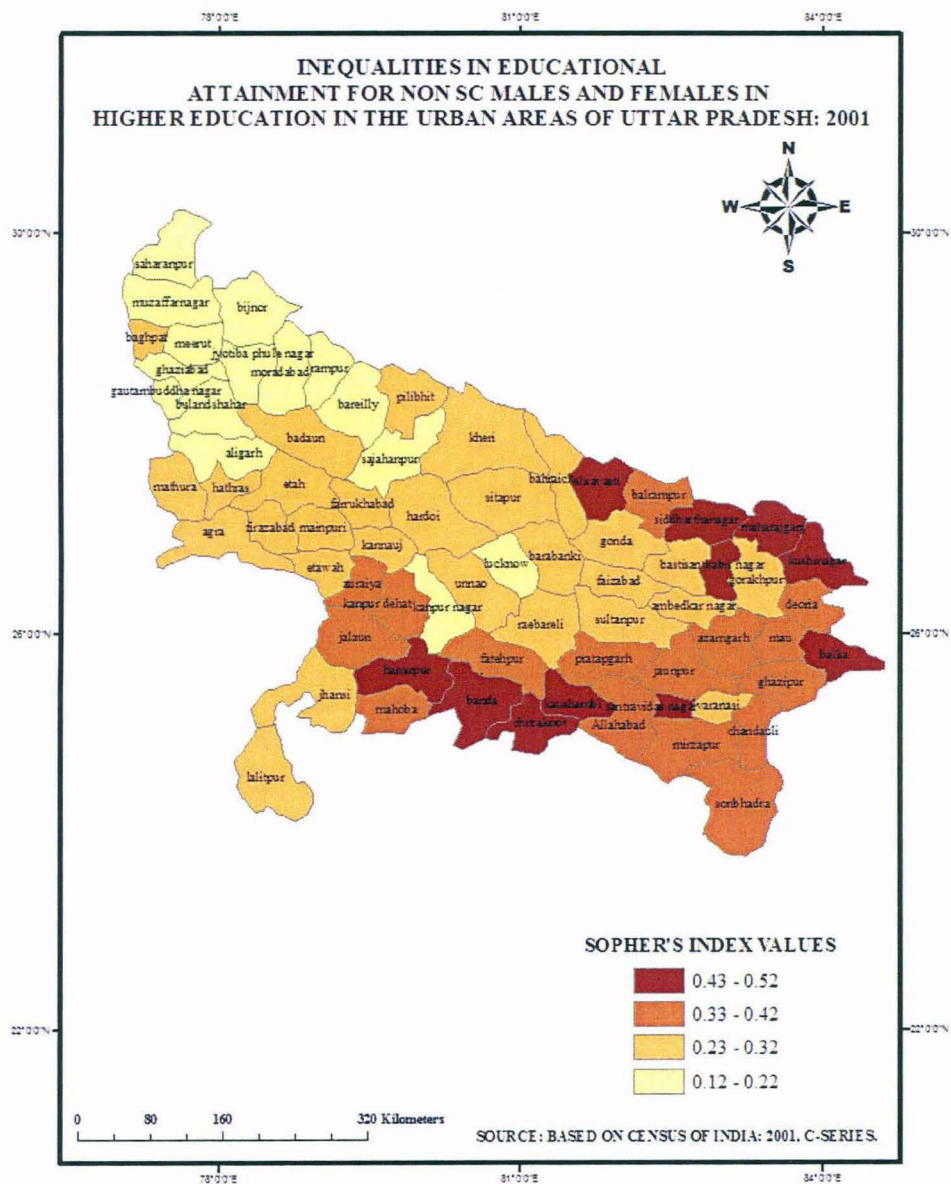
Map 3.5: Gender Gaps in Terms of Attainment in Higher Education for SC Population in U.P.



Map 3.6 brings out the gender gaps in terms of attainment in higher education for non SC population. Though the spatial pattern is the same as it was in case of SC

population but the numbers of districts showing high gender gaps have gone up for non SC/ST population and interestingly, again a major chunk of all these districts come from the Low Developed and Medium Developed Region of the state. Except Ballia and Sant Ravidasnagar all the districts showing highest levels of gender gaps in terms of attainment in higher education fall in the Low Developed Region of the state. So, the eastern part of the state exhibits high gender gaps in attainment of higher education for non SC/ST population. This is attributed to the low level of development and deep-seated beliefs about women's gender-role in society.

Map 3.6: Gender Gaps in Attainment of Higher Education for Non SC/STs in U.P.



3.5: Summary and Conclusions

The present chapter focuses on the educational attainment of SC population in higher education. This attainment was further examined in all the components of higher education i.e. Graduate and above, Graduate degree other than technical degree, Post graduate degree other than technical degree, Engineering & technical degree/diploma, Degree/diploma in medicine, Agriculture & dairying degree, Teaching degree. Percentage SC graduates and above with Veterinary Degree were not taken into consideration as their percentages were too low to present. But their actual strength is given in the Appendix I. Inequalities in the attainment of higher education between SC and non SC/ST populations were captured by suitable cartographic techniques. Gender gaps were also analysed for both the populations. The conclusions we draw from the analysis are as follows:

- * In urban Uttar Pradesh only 5.39 per cent of the total SC population of age 15 and above have attained the educational level of Graduate and above. There are many reasons for this dismal performance of SCs in educational attainment in higher education. For instance, SCs cannot afford the technical degrees, they do not get proper career counselling after senior secondary school etc. The unavailability of technical degree colleges and universities and sometimes the inability to cope up with the difficult syllabus of technical courses are other deterrents.
- * SC Female graduates and above record less than two percentage of the total SC urban population of the state. They are doubly disadvantaged.
- * In each of the regions, a majority of SC graduates (more than or equal to 65 per cent) and above do not possess any technical degree or diploma and have simply completed their graduation or post graduation merely with pass courses.
- * Upper north belt falls under the category of districts of urban U.P. which exhibits very low percentages of SC graduates and above among total graduates and above.

- * In case of non SC/ST population, almost 15 per cent of the total non SC/ST population of age 15 and above have attained graduate or post graduate degrees or diplomas which are thrice the educational attainment of SC population in higher education.
- * Most of the SC post-graduates do not possess any technical degree as such but have completed their post graduation merely with technical 'Diplomas' not 'Degrees'.
- * Many districts of the LDR fall in the category of districts showing high inequalities in terms of educational attainment for SC and non SC/ST population in higher education.
- * A thick belt running from the western part of the state to the eastern part of the state indicates medium levels of gender gaps in terms of attainment in higher education for SC population.
- * Eastern part of the state exhibits high gender gaps in attainment of higher education for non SC/ST population. This is attributed to the low level of development and deep-seated beliefs about women's gender-role in society.

CHAPTER IV

OCCURRENCE AND LEVELS OF REGIONAL DISPARITIES BETWEEN SC AND NON SC/ST POPULATIONS IN THE PROFESSIONAL OCCUPATIONS

4.1: Introduction

An occupation is the medium of sustenance, dignity and well-being. First of all it must be clarified that a job and an occupation are not the same thing. A job is a specific and sometimes unique bundle of activities carried out by a person in the expectation of economic remuneration while an Occupation is an abstract category used to group and classify similar jobs (Hauser and Warren, 1997)¹. Any study related to Occupation goes hand in hand with the concept of main worker. A person who has worked for a major part of the reference period (i.e., six months or more during the last one year preceding the date of enumeration) in any economically productive activity is termed as 'Main Worker'². Census data of occupation based on National Classification of Occupation-2004 excludes agricultural labourers and cultivators from the total urban main workers.

Economic strength of any country hinges on the pre-eminence of the professionals (Bell, 1974 cited in Lal, 2005, p.87)³. Persons who increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these three activities are called professionals⁴. According to NCO-2004 there are fifty six families of occupations under the 'Professionals' division in the urban areas of Uttar Pradesh. These are listed in Appendix II. All of the families of occupations listed in Appendix

¹ R.M. Hauser and J.R. Warren, 1997. 'Socio-Economic Indexes for Occupations: A Review, Update and Critique'. *Sociological methodology*, 27(1), pp. 177-298. Pdf available at: <http://onlinelibrary.wiley.com/doi/10.1111/1467-9531.271028> [Accessed on 17 Nov. 2010].

² Census of India: 2001, *Basic Census Concepts and Definitions*.

³ Kashmiri lal, 2005. 'In Quest of the Information Sector: Measuring Information Workers for India'. *Malaysian Journal of Library & Information Science*, 10(2), pp.85-104. Pdf available at: <http://majlis.fsktm.um.edu.my/document.aspx?filename=332.pdf> [Accessed 9 Jun. 2011].

⁴ National Classification of Occupations-2004

II were not found in each and every district of Uttar Pradesh. So, some prominent and commonly occurring families of occupations were identified in the districts of Uttar Pradesh. The 13 families of occupations which are prominent and are found in most of the districts of the state are as follows:

- I. Civil Engineers (2142)⁵
- II. Electrical Engineers (2143)
- III. Electronics and Telecommunication Engineers (2144)
- IV. Mechanical Engineers (2145)
- V. Chemical Engineers (2146)
- VI. Physicians and Surgeons, Allopathic (2221)
- VII. Physicians and Surgeons, Ayurvedic (2222)
- VIII. Physicians and Surgeons, Homeopathic (2223)
- IX. Physicians and Surgeons, Unani (2224)
- X. College, University and Higher Education Teaching Professionals (2310)
- XI. Lawyers (2421)
- XII. Judges and Magistrates (2422)
- XIII. Ordained Religious Workers (2461)

In order to facilitate the explanation similar families of occupations were clubbed together. Civil Engineers (2142), Electrical Engineers (2143), Electronics and Telecommunication Engineers (2144), and Mechanical Engineers (2145) were clubbed together to form one family called 'Engineers'. Physicians and Surgeons, Allopathic (2221), Physicians and Surgeons, Ayurvedic (2222), Physicians and Surgeons, Homeopathic (2223), and Physicians and Surgeons, Unani (2224) were combined together to form another single family named 'Doctors'. Rest of the

⁵ Numerals in the brackets signify families of occupations (4th level of National Classification of Occupations-2004) under 'Professionals' division of NCO-2004.

families were maintained as they were. So, six broad families of occupations were filtered out of the thirteen prominent and commonly occurring families of occupations. In the present chapter these six families of occupations have been studied for the urban Scheduled caste population in Uttar Pradesh.

4.2: Presence of Urban SC Main Workers in the Occupations Falling Under the ‘Professionals’ Division of NCO-2004

The economic strength of any society lies in the workforce consisting of main workers (Lewis, 1954)⁶. A larger proportion of marginal workers in the workforce indicate economic vulnerability of the society. Ideally a person should be engaged in meaningful occupation throughout the year. Though being the most populated state of India, U.P. still has low levels of main workers. Table 4.1 brings out the presence of urban SC main workers in the total urban workers.

Table 4.1: Proportion of Urban SC Main Workers among Total Urban Workers in U.P.

REGIONS	Urban SC Main Workers other than Agricultural Labourers and Cultivators among Total Urban Workers (In Percent)		
	Total	Males	Females
Very Highly Developed	9.42	8.35	1.07
Highly Developed	14.04	12.76	1.28
Medium Developed	8.00	7.07	0.92
Low Developed	8.28	7.30	0.98
Uttar Pradesh	9.04	8.04	1.01

Source: Census of India 2001, B-Series.

Table 4.1 clearly presents the dismal proportions of urban SC main workers among total urban main workers in the urban areas of Uttar Pradesh. Only 9 per cent of the total urban main workers come from the SC population. It again substantiates the lowly state of this population in the economic profile of the state. If such a low percentage of SC population is engaged as main workers, a large proportion of SC population fall in the category of marginal workers or labourers. That is why a large proportion of urban SC population have low standards of living (29.2 per cent of the

⁶ W. Arthur Lewis, 1954. ‘Economic Development with Unlimited Supplies of Labour’. *The Manchester School*, 22, pp. 400-449. Pdf available at: uni-leipzig.de [Accessed on 15 Nov. 2009].

total urban SC population in the state lives below the poverty line)⁷. Very Highly Developed and Highly Developed Regions of the state exhibit higher percentages of urban SC main workers as these regions are the nucleus of services, manufacturing and administrative activities.

Professionals are classified as main workers because they work almost throughout the year. Higher levels of occupations fall under the ‘Professionals’ division of NCO. Every rung of the society has equal rights to achieve top slots in the ‘Professionals’ division of NCO-2004. But reality is diametrically opposite and this varies across the social groups. Table 4.2a-4.2d presents the presence of urban SC population in ‘Professionals’ division of NCO in different context.

Tab. 4.2a-4.2d: Proportion of SC Professionals in Different Context of Populations in U.P.

Regions	SC Professionals among Total Urban SC Population (20-69years) (In Percent)		
	Total	Males	Females
Very Highly Developed Region	1.22	1.06	0.15
Highly Developed Region	0.76	0.69	0.07
Medium Developed Region	1.15	1.01	0.14
Low Developed Region	1.33	1.18	0.15
Uttar Pradesh	1.14	1.00	0.13

Table 4.2b

Regions	SC Professionals among Total Urban Population (20-69 Years) (In Percent)		
	Total	Males	Females
Very Highly Developed Region	0.13	0.12	0.017
Highly Developed Region	0.13	0.12	0.012
Medium Developed Region	0.13	0.11	0.015
Low Developed Region	0.15	0.13	0.017
Uttar Pradesh	0.13	0.12	0.016

⁷Urban Health Resource Centre, ca. 2007. Health of the Urban Poor in Uttar Pradesh:Key Results from the National Family Health Survey, 2005–06. Pdf available at: www.uhrc.in/downloads/UP_wall-chart.pdf

Table 4.2c

Regions	SC Professionals among Total Urban SC Main Workers (In Percent)		
	Total	Males	Females
Very Highly Developed Region	2.69	2.35	0.340
Highly Developed Region	1.72	1.56	0.160
Medium Developed Region	2.88	2.54	0.341
Low Developed Region	3.42	3.03	0.391
Uttar Pradesh	2.73	2.41	0.319

Table 4.2d

Regions	SC Professionals among Total Urban Main Workers (In Percent)		
	Total	Males	Females
Very Highly Developed Region	0.29	0.25	0.037
Highly Developed Region	0.29	0.26	0.027
Medium Developed Region	0.30	0.26	0.035
Low Developed Region	0.38	0.33	0.043
Uttar Pradesh	0.31	0.27	0.036

Source: Census of India 2001, B-Series & PCA (U.P.)

Table 4.2a shows that SC professionals in urban areas in the context of total urban SC population never exceed more than 1.33 per cent. All regions exhibit values around 1 per cent urban SC professionals out of total urban SC population. In the context of total urban population this proportion of SC professionals dips down to its lowest (less than 0.5 per cent). Again in the context of urban SC main workers this proportion is very low and varies from 1.72 per cent to 3.72 per cent. In the context of total urban main workers it again plunges down to its nadir (less than 0.5 per cent). In all contexts Highly Developed Region registers lowest proportion of urban SC professionals. This shows that this region is absorbing SC population in some other occupations. Most probably in manufacturing sector as this region is predominantly a hub of secondary economic activities (Parveen, 2005, p.45)⁸. Lowest percentages of SC professionals in total urban and main workers populations indicate that a large

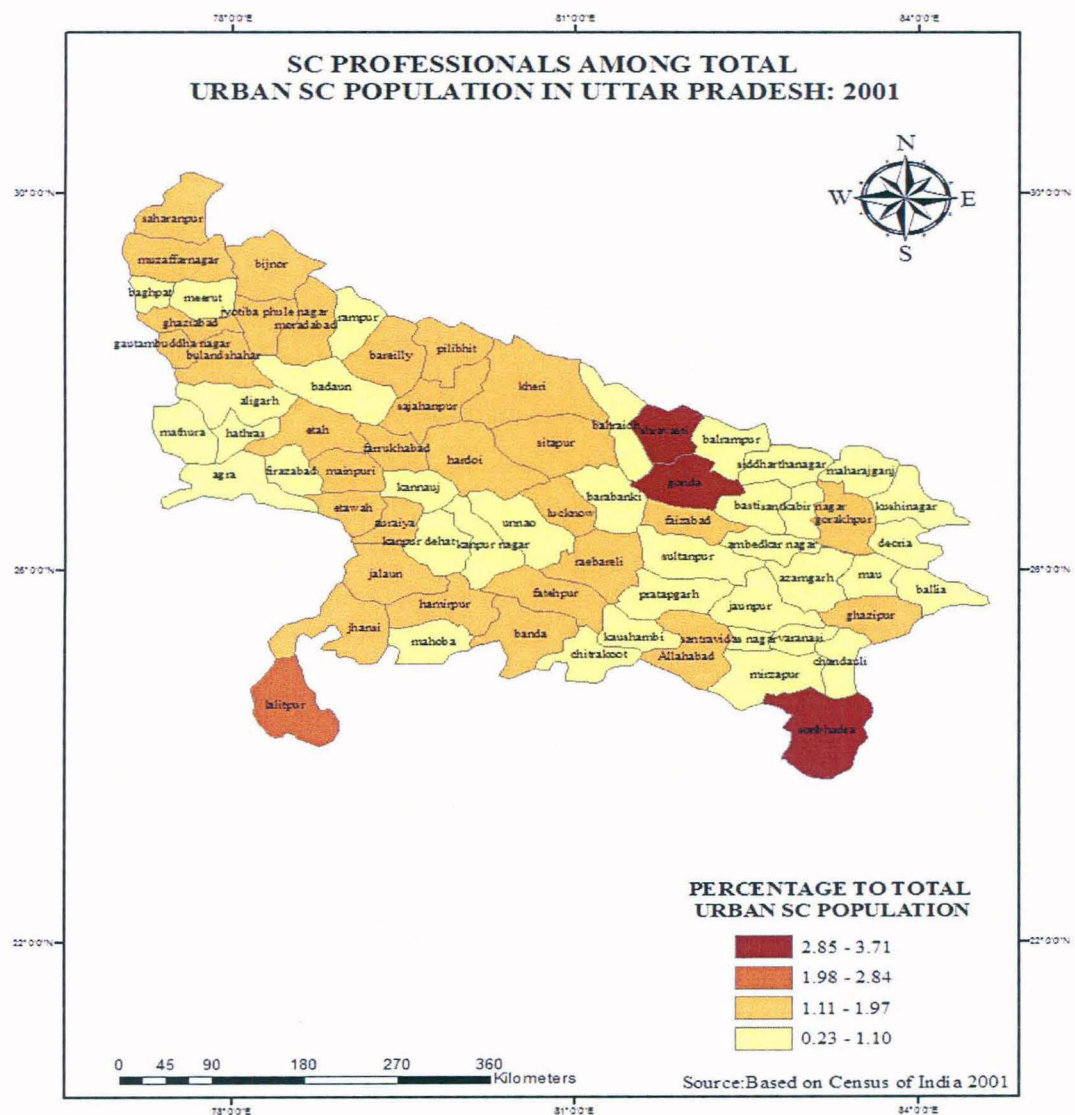
⁸ S. Parveen, *op. cit.* Chap. II, p.32

proportion of the urban SC population is engaged in lower levels of occupations (Banerjee and Knight, 1985)⁹.

4.3: Spatial Pattern of the Incidence of SC Professionals in the Districts of U.P.

It is assumed that Professionals are concentrated in some highly developed districts such as Lucknow, Kanpur, Varanasi etc. but the Map 4.1 gives a completely different picture.

Map 4.1: Proportion of SC Professionals in Total Urban SC Population in U.P.



⁹ Biswajit Banerjee and J.B. Knight, 1985. 'Caste Discrimination in the Indian Urban Labour Market' *Journal of Development Economics*, 17, pp. 277-307. Pdf available at: <http://www.sciencedirect.com/science/article/pii/030438788590094> [Accessed on 17 Jan. 2011].

This map shows the proportion of SC professionals in total urban SC population. Contrary to a common belief SC professionals are concentrated in some less developed districts like Sonbhadra, Gonda, and, Shrawasti. Sonbhadra is an industrial area. The highest percentages of SC engineers are found in Sonbhadra. So it shows the highest proportion of SC professionals.

Shrawasti has the highest Percentages of doctors (0.50 per cent of total urban SC population). That is why it shows a higher proportion of SC professionals. Gonda has high percentage of Lawyers, Higher Education Teaching Professionals and exhibits a higher proportion of SC professionals. Most of the districts show lower percentages of SC professionals. Agra, Aligarh, Hathras, Firozabad, Meerut districts also show lower percentages of SC professionals even though they are highly urbanized (Parveen, 2005 p. 226)¹⁰ and have an industrial background, which shows that these districts attract workers only in some lower levels of occupations (Jeffrey, 2005¹¹ and Deshpande, 2001¹²). Many districts of the Medium Developed Region register medium percentages of SC professionals. The Low Developed region exhibits lower proportions of SC professionals. This Region lags behind all the regions as literacy rate in this region is very low (less than 50 per cent).

Earlier six families of occupations have been mentioned under 'Professionals' division of National Classification of Occupation. Examining these families of occupations one by one for the urban Scheduled caste population may give us a deeper insight. Table 4.3a-4.3b presents the presence of SC engineers in the context of different populations. Only 0.14 per cent (2792 SC engineers out of 2020528 i.e. total urban SC populations of 20-69 years of age¹³) of total urban SC population of urban Uttar Pradesh is classified as SC engineers. When total urban population is taken into

¹⁰ S. Parveen, *op. cit.*, Ch. II, p.29.

¹¹ Craig Jeffrey, 2005. 'Reproducing Difference? Schooling, Jobs, and Empowerment in Uttar Pradesh, India'. *World Development*, 33 (12), pp. 2085–2101. Pdf available at: <http://www.sciencedirect.com/science/article/pii/S0305750X05001592> [Accessed on 6 sep. 2010]

¹² Ashwini Deshpande, 2001. 'Caste at Birth? Redefining Disparity in India.' *Review of Development Economics*, 5(1), 130–144. Pdf available at: onlinelibrary.wiley.com/doi/10.1111/1467-9361.00112/pdf [Accessed on 27 Feb. 2010].

¹³ Percentages of SC engineers have been calculated from the population between 20-69 years as this population includes the practical age for the occupation of an Engineer.

consideration, only 0.016 per cent (2792 SC engineers out of 17073911 i.e. total urban population of age 20-69 years,) of the total urban population falls under the category of SC engineers. It is unfortunate that in spite of offering numerous educational facilities and many other incentives through reservation in higher education and in various jobs, the proportion of engineers in the total urban SC population is not impressive at all. This can be attributed to the lower attainment of technical education of SC urban population (less than five per cent of the total graduates and above attained any technical degree)¹⁴

Table 4.3a-4.3b: Urban SC Engineers in Different Context of Populations in U.P.

Table 4.3a

Regions	Urban SC Engineers Among Total Urban SC Main Workers				
	Total Urban SC Main Workers	Urban SC Engineers			
		Total		Males*	Females*
		Actual Figures	Percentages		
Very Highly Developed	213712	980	0.46	968	12
Highly Developed	140210	190	0.14	180	10
Medium Developed	347932	926	0.27	916	10
Low Developed	128916	696	0.54	694	2
Uttar Pradesh	841722	2792	0.33	2758	34

[*Percentages for males and females are extremely low. So, instead of percentages actual figures have been used]

Table 4.3b

Regions	Urban Sc Engineers Among Total Urban Main Workers				
	Total Urban Main Workers	Urban Sc Engineers			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	1979166	980	0.050	968	12
Highly Developed	830836	190	0.023	180	10
Medium Developed	3358512	926	0.028	916	10
Low Developed	1166618	696	0.060	694	2
Uttar Pradesh	7431522	2792	0.038	2758	34

Source: Census of India 2001, B-series, PCA (U.P.)

¹⁴ Calculated from the data provided by census of India, 2001, C-series.

Both tables 4.3a and 4.3b demonstrate the gloomy picture of SCs' presence in higher level of occupations. Not even a single urban SC main worker out of total 100 urban SC main workers is expected to turn out to be an engineer. In case of total urban main workers, percentage of SC engineers plunges to the lowest. Interestingly here also, Highly Developed Region registers the lowest figures for urban SC engineers. This fact once again strongly advocates the conclusion that most of the urban SC main workers are engaged in lower levels of occupations (Deshpande, 2001)¹⁵.

Next family of occupation is 'Doctors' which includes Physicians and Surgeons from Ayurvedic, Allopathic, Homeopathic, and Unani field of medical study. This family of occupation holds high regards in the society. Urban SC Population badly needs people from this family of occupations. There are 3046 (0.15 per cent) doctors out of total 2020528 urban SC persons of age 20-69 yrs. In case of total urban population this percentage stands at 0.017. Table 4.4a and 4.4b depict the presence of SC Doctors in different context of two populations.

Table 4.4a- 4.4b: Urban SC Doctors among SC and Total Urban Main Workers in U.P.

Regions	Urban SC Doctors Among Total Urban SC Main Workers				
	Total Urban SC Main Workers	Urban SC Doctors			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	213712	756	0.35	668	88
Highly Developed	140210	434	0.31	406	28
Medium Developed	347932	1310	0.37	1236	74
Low Developed	128916	546	0.40	506	40
Uttar Pradesh	841722	3046	0.36	2816	230

Table 4.4b

Regions	Urban SC Doctors Among Total Urban Main Workers				
	Total Urban Main Workers	Urban SC Doctors			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	1979166	756	0.038	668	88
Highly Developed	830836	434	0.052	406	28
Medium Developed	3377214	1310	0.039	1236	74
Low Developed	1244306	546	0.044	506	40
Uttar Pradesh	7431522	3046	0.041	2816	230

Source: Census of India 2001, B-series, PCA (U.P.)

¹⁵ Deshpande, *op.cit.*

Once again it is found that even the most important occupations are out of SCs' reach as in medical field also their presence is minimal. If their presence in medical field is examined in the context of total urban population, they stand nowhere.

Highly educated people direct the society towards the right path. People look up to them for proper guidance and sound decisions. Lecturers, Professors etc. are people who fall in the occupation family of 'College, University and Higher Education teaching professionals'. In Uttar Pradesh, there are only 518 college, university and higher education teaching professionals in total urban SC population of 2020528 between 20-69 years of age. Table 4.5a and 4.5b present the regional distribution of college, university and higher teaching professionals among total urban SC main workers and total urban main workers.

Table 4.5a- 4.5b: Higher Education Teaching Professionals among Total Main Workers in U.P.

Regions	Urban SC College, University & Higher Education Teaching Professionals Among Total Urban SC Main Workers				
	Total Urban SC Main Workers	Higher Education Teaching Professionals			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	213712	152	0.07	104	48
Highly Developed	140210	56	0.04	48	8
Medium Developed	330406	196	0.06	148	48
Low Developed	113906	114	0.10	104	10
Uttar Pradesh	841722	518	0.06	404	114

Table 4.5b

Regions	Urban SC College, University & Higher Education Teaching Professionals Among Total Urban Main Workers				
	Total Urban Main Workers	Higher Education Teaching Professionals			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	1979166	152	0.008	104	48
Highly Developed	830836	56	0.006	44	8
Medium Developed	3159826	196	0.006	148	48
Low Developed	1003358	114	0.011	104	10
Uttar Pradesh	7431522	518	0.006	404	114

Source: Census of India 2001, B-series, PCA (U.P.)

As far as, this, one of the most important families of occupation is concerned; SC population is not faring better at all. All the regions exhibit the same low values as are found in case of other families of occupations.

Since atrocities and torture are not new to Scheduled caste community and most of the time they are denied justice, they should be aware of laws and Acts meant for their protection (Thorat, 2002)¹⁶. Hence, legal professionals are much needed professionals for this community. In Uttar Pradesh there are 2442 lawyers among total urban SC population (202058) of age between 20 and 69 years. Regional distribution of SC lawyers in urban areas of Uttar Pradesh is presented in Tables 4.6a and 4.6b.

Table 4.6a- 4.6b: SC Lawyers among Main Workers in U.P.

Regions	Urban SC Lawyers Among Total Urban Sc Main Workers				
	Total Urban Sc Main Workers	Urban SC Lawyers			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	213712	498	0.23	468	30
Highly Developed	140210	332	0.24	316	16
Medium Developed	350366	1150	0.33	1118	32
Low Developed	137434	462	0.34	452	10
Uttar Pradesh	841722	2442	0.29	2354	88

Table 4.6b

Regions	Urban SC Lawyers Among Total Urban Main Workers				
	Total Urban Main Workers	Urban Sc Lawyers			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	1979166	498	0.025	468	30
Highly Developed	830836	332	0.040	316	16
Medium Developed	3377214	1150	0.034	1118	32
Low Developed	1244306	462	0.037	452	10
Uttar Pradesh	7431522	2442	0.033	2354	88

Source: Census of India 2001, B-series, PCA (U.P.)

¹⁶ Sukhadeo Thorat, 2002. "Oppression and Denial: Dalit Discrimination in the 1990s". *Economic and Political Weekly*, 37(6), pp. 572-578.

After Doctors, Lawyers is the family of occupation which registers a little bit higher percentages in respect of total urban SC main workers. But in case of total urban main workers, there is not much improvement. Highly Developed Region registers higher values in respect of SC lawyers otherwise it is showing low percentages for all other Occupations in question.

Legal professionals also include 'Judges and Magistrates'. They deliver justice to the society. They thoroughly understand the law of the land and can provide right explanations of the various laws and Acts and are indispensable. Only 192 SC judges and Magistrates are there in the state of Uttar Pradesh. Table 4.7a and 4.7b show regional distribution of SC judges and Magistrates among SC main workers and total main workers.

Table 4.7a- 4.7b: SC Judges and Magistrates among Total Main Workers in U.P.

Regions	Urban SC Judges & Magistrates Among Total Urban SC Main Workers					
	Total Urban SC Main Workers	Urban SC Judges & Magistrates			Males	Females
		Total		Actual Figures		
		Percentages	Percentages			
Very Highly Developed	190434	30	0.016	26	4	
Highly Developed	140210	14	0.010	14	0	
Medium Developed	235776	84	0.036	80	4	
Low Developed	100488	64	0.064	64	0	
Uttar Pradesh	841722	192	0.023	184	8	

Table 4.7b

Regions	Urban SC Judges & Magistrates Among Total Urban Main Workers					
	Total Urban Main Workers	Urban SC Judges & Magistrates			Males	Females
		Total		Actual Figures		
		Percentages	Percentages			
Very Highly Developed	1671068	30	0.002	26	4	
Highly Developed	830836	14	0.002	14	0	
Medium Developed	2216990	84	0.004	80	4	
Low Developed	919276	64	0.064	64	0	
Uttar Pradesh	7431522	192	0.003	184	8	

Source: Census of India 2001, B-series, PCA (U.P.)

Once again all the regions exhibit low percentages for SC Judges and Magistrates. But Highly Developed Region again registers the lowest percentages for SC Judges and Magistrates among all other regions. This indicates that though the Highly Developed Region has a substantial working population, the population is engaged in some lower levels of various other families of occupations (Banerjee and Knight, 1985¹⁷ and Deshpande, 2000¹⁸).

Religion has always been a bone of contention between Scheduled caste population and the rest of the society. From the ages past this community is denied entry into religious places and are not allowed to perform rituals and rites or head any religious ceremony (Thorat, 2008)¹⁹. So, in order to have an equalitarian and egalitarian society it becomes almost indispensable to have people from this community in religious places. Only 172 SC Ordained Religious workers are there in Uttar Pradesh. Table 4.8a and 4.8b presents the proportion of Ordained Religious Workers in four regions of Uttar Pradesh.

Table 4.8a--4.8b: SC Ordained Religious Workers among main workers in U.P.

Regions	Urban SC Ordained Religious Workers Among Total Urban SC Main Workers					
	Total Urban SC Main Workers	Urban SC Ordained Religious Workers			Males	Females
		Total		Percentages		
		Actual Figures	Percentages			
Very Highly Developed	213712	18	0.008	16	2	
Highly Developed	105034	16	0.015	16	0	
Medium Developed	297204	104	0.035	94	10	
Low Developed	103590	32	0.031	28	4	
Uttar Pradesh	841722	170	0.020	154	16	

¹⁷ Banerjee and Knight, *op. cit.*

¹⁸ Ashwini Deshpande, 2000. 'Recasting Economic Inequality'. *Review of Social Economy*, 58(3) pp.381-99. Available online at: ideas.repec.org/a/taf/rsoc/ec/v58y2000i3p381-99.html [Accessed on 27 Feb. 2010].

¹⁹ Sukhadeo Thorat, 2008. 'Dalit exclusion: The empirical evidence'. *InfoChange Agenda*, 13, pp. 22-27. Pdf available at: infochangeindia.org/index2.php?option=com_content&do_pdf=1... [Accessed on 22 Feb. 2011].

Table 4.8b

Regions	Urban SC Ordained Religious Workers Among Total Urban Main Workers				
	Total Urban Main Workers	Urban SC Ordained Religious Workers			
		Total		Males	Females
		Actual Figures	Percentages		
Very Highly Developed	1979166	18	0.001	16	2
Highly Developed	571942	16	0.003	16	0
Medium Developed	2816716	104	0.004	94	10
Low Developed	949246	32	0.003	28	4
Uttar Pradesh	7431522	170	0.002	154	16

Source: Census of India 2001, B-series, PCA (U.P.)

Both the Tables confirm that still this community has minimal access to the religious areas. Very Highly Developed Region exhibits the lowest percentages for SC Ordained Religious Workers. Either religion takes a back seat or religious discrimination is prevalent in this region. Unfortunately literature supports the latter (Galanter, 1963 and Thorat, 2008)²⁰

Urban SC population does not have a healthy presence in all the six broad families of occupations. Higher occupations require higher educational qualifications. In case of SCs the root problems start at the very beginning itself. At the primary level they have very low Gross Enrolment Ratio (69) and high drop rate from class I-X (more than 60 per cent)²¹. There are only 24 universities and 865 degree colleges, 9 medical colleges, 8 engineering colleges in the state and only 5.39 per cent of the total population is enrolled in higher education²². Poverty is rampant among SC population. Around 30 per cent of the total urban SC population is still below poverty line (UHRC, 2007)²³. All this leads the SC population to inherent socio-economic handicap which results in lowest achievements in every family of occupations.

²⁰ Marc Galanter, 1963. 'Law and Caste in Modern India'. *Asian Survey*, 3(11), pp.544-559. Pdf available at: <http://www.jstor.org/stable/3023430>. [Accessed on 30 Jun. 2011].

²¹ Planning commission, GOI, 2005. Report of the task group on development of scheduled castes and sscheduled tribes

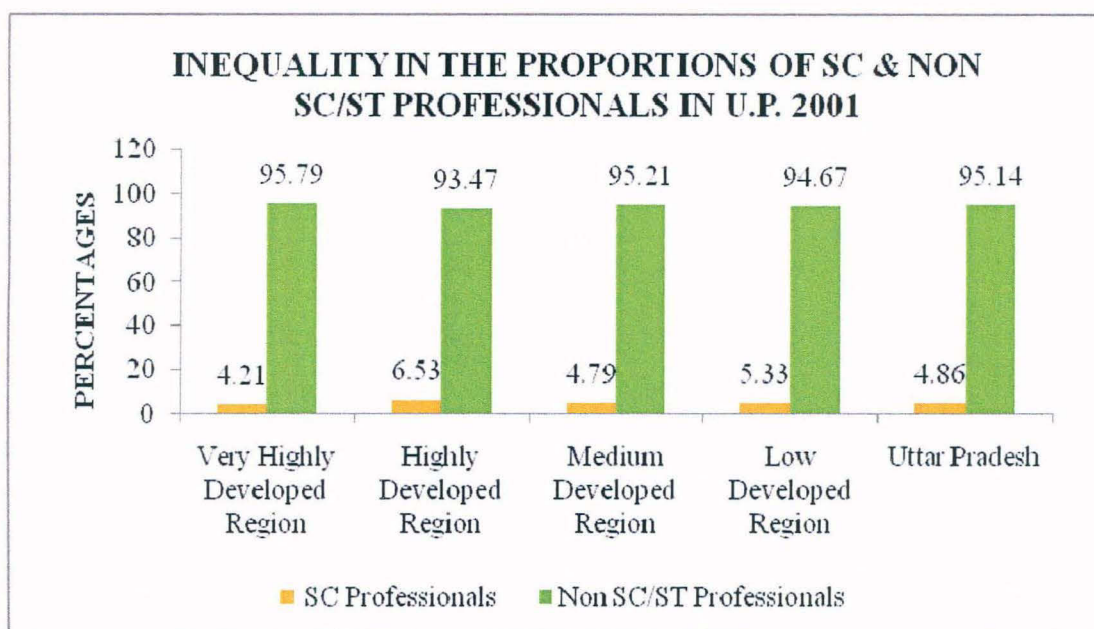
²² Government of Uttar Pradesh 2009. *Economic Review*.

²³ UHRC, *op. cit.*

4.4: Inequalities between SC and Non SC/ST Populations in respect of their Incidence in Six Broad Families of Occupations.

SC population always lag behind the non SC/ST population in each and every family of occupations. Now the question remains that what is the extent of this inequality. Figure 4.1 brings out the inequality in the percentages of SC and non SC/ST professionals among the total urban professionals.

Figure 4.1: SC and Non SC/ST Professionals among Total Urban Professionals in U.P.



Source: Census of India 2001, B-series

It is a cruel reality that in every region the non SC/ST professionals are leading by an incomparable margin. In all the regions their percentages are around 95 per cent of the total professionals in that region while SC professionals stand nowhere in comparison to their counterparts. Srinivas (1966)²⁴ also concludes that the “.....members of the higher castes dominated the professions; the higher level posts in the government, in fact all white-collar jobs, While the lower castes provided certain essential services and goods”. The reason behind this glaring inequality lies in the chronic poverty and the lower percentage of SC population in higher education (Jeffery and Lerche, 2003)²⁵.

²⁴ M.N. Srinivas, 1966. *Social Change in Modern India*. Berkeley: University of California Press.

²⁵ R. Jeffery and J. Lerche, eds. 2003. *Social and political change in Uttar Pradesh: European perspectives*. Delhi: Manohar.

Percentages of SC and non SC/ST populations in the six broad families of occupation may shed some light on this glaring inequality. Table 4.9 presents the inequality in the incidence of SC and non SC/ST populations in six broad families of occupations. It is very clear from the Table that non SC/ST population dominates in each and every important family of occupations. Not even a single SC person is able to compete with his counterpart in any of the six main families of occupations

Tab. 4.9: SCs and Non SC/STs in Main Families of Occupations among Total Professionals of U.P.

Six Broad Families Of Occupations	SC (Percent)	Non SC/ST (Percent)
Engineers	0.59	10.18
Doctors	0.65	12.57
College, University And Higher Education Teaching Professionals	0.11	4.72
Lawyers	0.52	13.47
Judges And Magistrates	0.04	0.39
Ordained Religious Workers	0.04	2.86

Source: Census of India 2001, B-series

So, it can be concluded that in spite of offering reserved places in public-sector employment, educational institutions, and government representative bodies, majority of SCs are concentrated in low-paid, dead-end jobs and some low-level secondary and tertiary occupations. (Banerjee & Knight 1985²⁶; Deshpande, 2000²⁷; Deshpande, 2001²⁸; Jeffrey, 2005²⁹; Mehrotra, 2006³⁰ and Thorat, Attewell & Rizvi, 2009³¹). Thus it is clear from both the present study and available literature that positive

²⁶ Banerjee and Knight, *op. cit*

²⁷ Deshpande, 2000. *op. cit.*

²⁸ Deshpande, 2001. *op. cit.*

²⁹ Jeffrey, 2005. *op. cit.*

³⁰ Santosh Mehrotra, 2006. 'Well-Being and Caste in Uttar Pradesh: Why UP is Not Like Tamil Nadu'. *Economic and Political Weekly*, 41(40), pp.4261-4271.

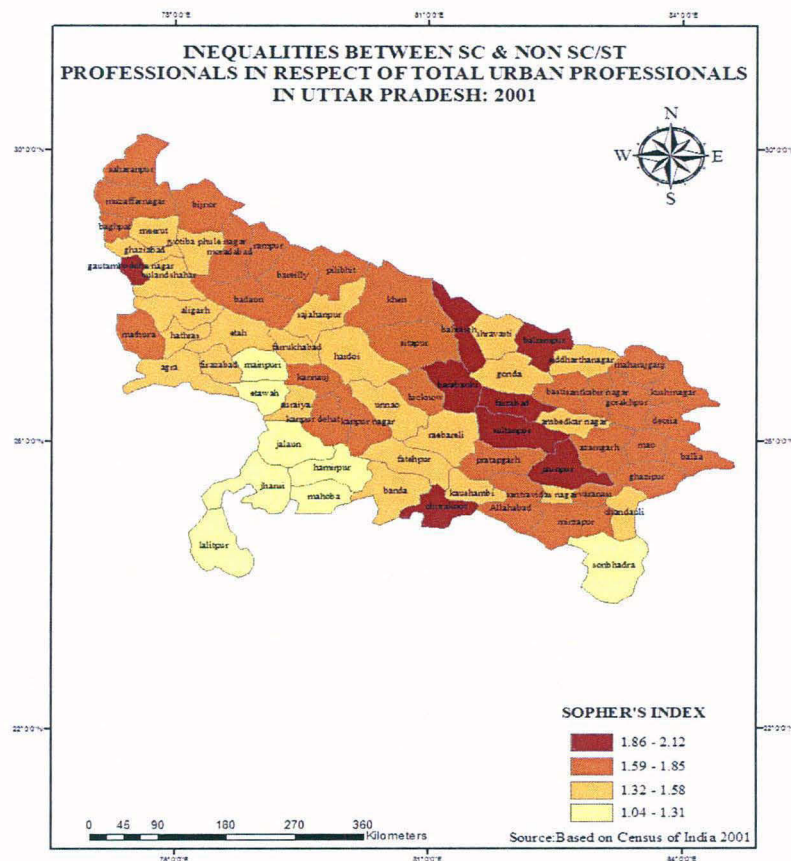
³¹ S.Thorat, Paul Attewell and Firdaus Fatima Rizvi, 2009. 'Urban Labour Market Discrimination'. *Working Paper Series: 3(1)*, pp.1-16. Indian Institute of Dalit Studies, New Delhi.

discrimination has failed to alter relationships of dominance and subordination based upon caste and class in Uttar Pradesh (Jeffery and Lerche, 2000)³².

4.5: Spatial Pattern of Inequalities in the Incidence of SC and Non SC/ST Professionals in Urban Areas of Uttar Pradesh

Sometimes space plays a pivotal role in the development of any region. It can hinder as well facilitate the process of regional development. Spatial pattern of any variable helps in planning the development of any region. Regions which are lagging behind other regions can easily be identified through spatial pattern of any developmental indicator. District level spatial pattern of inequalities in the incidence of SC and non SC/ST Professionals in urban areas of Uttar Pradesh is presented in Map 4.2.

Map 4.2: SC and Non SC/ST Professionals among Total Professionals in U.P.



The Map 4.2 clearly brings out that there are higher inequalities between SC and Non SC/ST professionals in each and every district of Uttar Pradesh. Two distinct belts are

³² C. Jeffrey and J. Lerche, 2000. 'Stating the difference: State, Discourse and class reproduction in Uttar Pradesh, India'. *Development and Change*, 31(4), pp. 857–878.

indicated. The upper northern belt starts from north-west of the state and grows thicker and thicker till it reaches the end of the Low Developed Region. It encompasses many districts of western part of Uttar Pradesh and central part of the state. It shows higher Sopher's index values which mean level of inequalities are higher in this part of the state. Gautam Buddha Nagar also shows highest levels of inequalities. It shows that SC population is not involved in higher levels of occupations but in some lower levels of occupations. Districts commonly considered as low developed such as Jalaun, Hamirpur, Mahoba, Jhansi, Lalitpur, Mainpuri, Etawah and Sonbhadra exhibit lower levels of inequalities. These districts have low percentages of both the SC and non SC/ST professionals. So they show a lower level of inequality.

4.6: Summary and conclusions

This chapter basically tries to study the occurrence of SC and non SC/ST populations in the 'Professionals' division of National Classification of Occupations. Spatial pattern of this occurrence was also incorporated in the study. Thirteen families of Occupation which were common in the most of the districts were selected and clubbed together to form six broad families of occupations. Inequalities between SC and non SC/ST populations in terms of professionals and six broad families of occupations were worked out at regional and district levels. Main findings of this chapter are given below:

- ❖ Among total professionals only 4.86 per cent of the professionals belong to SC population. In respect of total urban SC population only 1.14 per cent of this population pursue an occupation associated with professionals division of NCO-2004.
- ❖ There is high concentration of SC professionals in low developed districts of the state.
- ❖ 2.73 per cent of the total urban SC main workers are professionals. Six broad families of occupations were studied in context of total urban SC main workers and total urban workers and in all of them SC population is less than 1 per cent.

- ❖ Each and every region of the state has around 95 per cent of non SC/ST professionals among total professionals. It confirms the cruel inequalities prevalent throughout the state.
- ❖ In respect of six broad families of occupations, non SC/ST population have more than satisfactory percentages which vary from 2.86 per cent (ordained religious workers) to 13.47 per cent (lawyers). Only the family of Judges and magistrates show the percentage below 1 per cent. This is because naturally there are few judges and Magistrates in the legal system of the state as well as in India.
- ❖ Interestingly, in spite of all educational facilities and incentives offered to SC community in the form of reservation, it has only 0.11 percent College, University and Higher Education Teaching Professionals out of total SC professionals.
- ❖ Positive discrimination has failed to alter relationships of dominance and subordination based upon caste and class in Uttar Pradesh.
- ❖ Two distinct belts are formed in case of spatial pattern of inequalities in the occurrence of SC and non SC/ST populations in the professional occupations. The upper northern belt which starts from north-west of the state and grows thicker and thicker till it reaches the end of the Low Developed Region, shows higher Sopher's index values which mean that the level of inequalities are higher in this part of the state.

So, it can be concluded that in terms of number of professionals, SC population stands nowhere in comparison to non SC/ST population. The root cause of these cruel inequalities lie in poverty, caste-based discrimination, low enrolment ratio and higher drop rates at school level which result in low percentages of SC population in higher education and this further leads to minimal presence of SC professionals in each of the regions and districts of Uttar Pradesh.

CHAPTER V

ANAMOLIES AND RELATIONSHIP BETWEEN URBANIZATION, HIGHER LEVELS OF EDUCATIONAL ATTAINMENT AND PROFESSIONAL OCCUPATIONS

5.1: Introduction

A man pursues higher education in order to enter a professional occupation. One expects that after completing one's graduation, one would not end up as a peon. But the reality in India is startling. First of all, all the graduates and postgraduates do not get jobs (Agarwal, 2006)¹. A very large proportion of graduates and post graduates remain unemployed for many years after the completion of their degrees (Prasad, 1979)². Even if some of them get a job, many of them end up in doing jobs which are not compatible with their educational achievement (Agarwal, 2006)³. Many graduates working as peons is a common phenomenon in Indian states including Uttar Pradesh. This chapter looks into the above mentioned anomalies and the relationship between urbanization, higher levels of educational attainment and professional occupations.

5.2: Guidelines laid down by National Classification of Occupations (NCO-2004) and Limitations of the Study

Data regarding educational levels is easily available in Census of India. Data pertaining to graduates and above who are of age fifteen or more is given for major sections of the society in C- Series of the Census of India 2001. Data pertaining to occupations at four digit level is also given for various social strata of the society in B-Series of the Census of India 2001. But the cross-sectional data for occupational levels at four digit level and educational levels is not given in the census. And this creates a problem in the investigation of the above mentioned anomaly. To overcome

¹ P. Agarwal, 2006. 'Higher Education and labour market in India: The Need for a Change'. *ICRIER Working Paper* No. 180, June. Pdf available at: siteresources.worldbank.org/INTABCDE-2007BEI/Resources/PAgrawal.pdf [Accessed on 15 Nov. 2010]

² K. V. Eswara Prasad, 1979. 'Education and Unemployment of Professional Manpower in India'. *Economic and Political Weekly*, 14(20), pp. 881-888.

³ Agarwal, *op. cit.*

this handicap, detailed study of National Classification of Occupation-2004 (NCO-2004) has been carried out and there, one gets a concept of ‘Skill Level’. This concept of skill level makes the study possible. “Skill” has been defined as the ability to carry out the tasks and duties of a given job which encompasses two dimensions namely:-

1. **Skill level** – this is a function of the complexity and range of the tasks and duties involved.

2. **Skill specialisation** – this shows the field of knowledge required, the tools and machinery used, the materials worked on and the kinds of goods and services produced. In view of the international character of the classification, only four broad skill levels have been used. This classification of skill levels has more or less been based on the educational categories and levels, which appears in the International Standard Classification of Education (ISCED). It is also worth keeping in view that the focus has been on the skills required to carry out the tasks and duties of an occupation and not on whether a worker working in a particular occupation is more or less skilled than another worker in the same occupation. Before codifying all the occupations on the pattern of ISCO-88 the skill levels, as defined in the International Standard Classification of Education (ISCED), were modified to suit Indian conditions taking particular cognizance of informal skill. As many a times, particularly in the Indian context, the skills necessary to perform the tasks and duties of a given job can be acquired not only through formal education but may be and often are acquired through informal training and experience. At times they are just passed on from generation to generation. This was finalized in consultation with the Steering Committee which inter-alia had two senior academicians as members. The four skill levels defined for NCO- 04 vis-à-vis the skill levels defined in ISCO-88 (International Standard Classification of Occupations-88) are given below:

LEVEL	ISCO 88	NCO 2004
I	Primary Education	Up to 10 years of formal education and/or informal skills.
II	Secondary Education	11-13 years of formal education.
III	First University Degree	14-15 years of formal education.

IV Post-Graduate University Degree More than 15 years of formal education.

The skill level of each newly identified occupation was decided on the basis of information about academic and technical qualifications and experience requirement as also the average job description of the occupation to see whether the job requirement was of administrative, managerial, supervisory nature or of a subordinate/ repetitive nature in the Indian context⁴.

In keeping with the skill levels defined above to suit Indian conditions, following **Divisions** have been classified in tune with the defined skill levels to accommodate Occupations.

DIVISION	TITLE	SKILL LEVEL
1	Legislators, Senior Officials and Managers	Skill not Defined ⁵
2	Professionals	IV
3	Associate Professionals	III
4	Clerks	II
5	Service Workers and Shop & Market Sales Workers	II
6	Skilled Agricultural and Fishery Workers	II
7	Craft and Related Trades Workers	II
8	Plant and Machine Operators and Assemblers	II
9	Elementary Occupations	I

According to the above guidelines for skill levels and concerned occupational division, the analysis has been carried out to check the compatibility between graduates and above and who are professional by their occupation. According to NCO-2004 persons who increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these three activities are called professionals. According to NCO classification a professional must be a post graduate. As

⁴National Classification of Occupation (NCO-2004) Guidelines.

⁵ The concept of skill level has not been applied in the case of legislators, senior officials & managers as skills for executing task and duties of these occupations vary to such an extent that it would be impossible to link them with any of the four broad skill levels.

educational data for post graduates is not given separately, it includes graduates also. This is one kind of data limitation.

5.3: Anomalies between Educational Levels and Occupational Levels for SC Population

The anomalies have been explored only for the second division of NCO-2004 i.e. for 'Professionals'. Main occupations under the 'Professionals' division of NCO-2004 include ENGINEERS (Civil engineers, Electrical engineers, Electrical and Telecommunication engineers, Mechanical engineers, Chemical engineers), PHYSICIANS & SURGEONS (Allopathic, Ayurvedic, Homeopathic, and Unani), COLLEGE, UNIVERSITY and HIGHER EDUCATION TEACHING PROFESSIONALS, LAWYERS, JUDGES & MEGISTRATES, and ORDAINED RELIGIOUS WORKERS. All of them should possess a postgraduate degree in their respective fields to get themselves entitled as 'Professionals'. Ideally all of the post graduates should get an occupation which falls under the 'Professionals' division of NCO-2004. But in reality every post graduate does not have the occupation which completely matches with his education level i.e. post graduation. This is the anomaly which this study takes into consideration in the present chapter and tries to examine the magnitude and extent of the anomaly.

Table 5.1 brings out the anomaly prevalent between urban SC graduates and above and urban professionals for the Scheduled caste population of the society:

Table 5.1: Anomalies between Total SC Graduates & Above and SC Professionals in U.P.

Regions	SC Professionals Among Total Urban SC Graduates & Above (In Percent)		
	Total	Males	Females
Very Highly Developed Region	14.89	13.00	1.88
Highly Developed Region	12.91	11.70	1.20
Medium Developed Region	16.60	14.63	1.96
Low Developed Region	20.59	18.23	2.35
Uttar Pradesh	16.29	14.38	1.90

Source: Census of India 2001: B & C Series.

Table 5.2: Anomalies between Total Graduates & Above and SC Professionals in U.P.

Regions	SC Professionals Among Total Urban Graduates & Above (In Percent)		
	Total	Males	Females
Very Highly Developed Region	0.59	0.52	0.075
Highly Developed Region	0.84	0.76	0.078
Medium Developed Region	0.83	0.73	0.098
Low Developed Region	0.99	0.88	0.113
Uttar Pradesh	0.78	0.69	0.091

Source: Census of India 2001: B & C Series.

Table 5.1 clearly shows that only around seventeen persons out of hundred urban SC graduates & above get an occupation which falls under the ‘Professionals’ division of NCO-2004, which means 83 per cent urban SC graduates and above are in occupations which do not match with their levels of education and most of them are unemployed (Rao, 2002)⁶. Thorat (2002)⁷ also substantiates this notion as he also found that the unemployment rate of SCs is much higher than that of other workers and they suffer from high underemployment as compared to other sections in Indian society. When this anomaly is examined in the context of total urban graduates and above (See Table 5.2), urban SC professionals stand nowhere as even a single urban SC graduate & above finds it difficult to register his presence as professional in comparison to hundred non SC/ST professionals (Rao, 2002)⁸. If this anomaly is examined for SC female professionals, the picture becomes much gloomier. In the context of total urban SC graduates, only two urban SC female professionals compete with their hundred male counterparts. In case of total urban graduates and above, presence of urban SC female professionals is almost non-existent (Dunn, 1993)⁹.

⁶ S Srinivasa Rao, 2002. ‘Dalits in Education and Workforce’. *Economic and Political Weekly*, 37(29), pp.2998-3000.

⁷ Sukhadeo Thorat, 2002. ‘Oppression and Denial: Dalit Discrimination in the 1990s’. *Economic and Political Weekly*, 37(6), pp. 572-578.

⁸ S. Srinivasa Rao, *op. cit.*

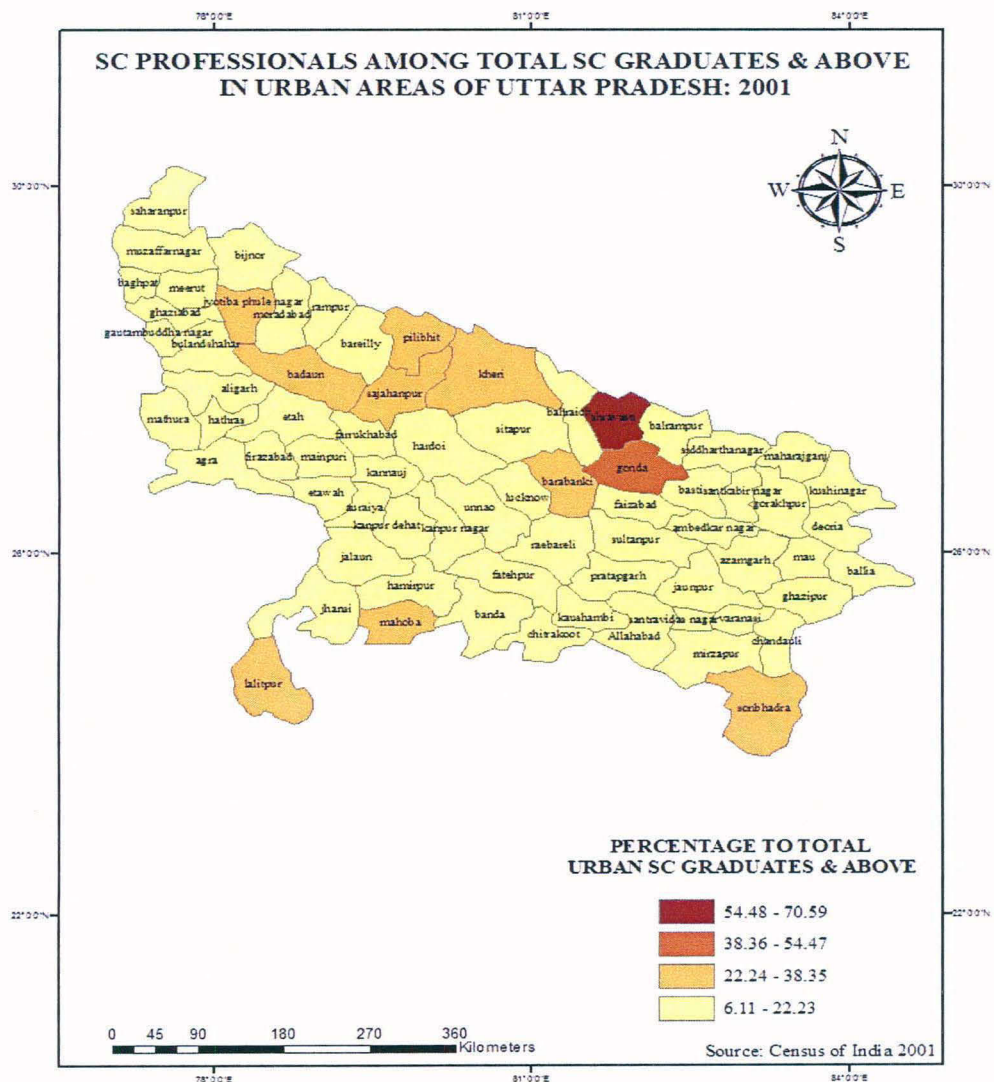
⁹D. Dunn, 1993. ‘Gender inequality in education and employment in the scheduled castes and tribes of India’. *Population Research and Policy Review* 12, pp.53-70.

5.4: Spatial Pattern of Anomalies between Educational Levels and Occupational Levels for SC Population

The anomalies between total urban graduates & above and professionals and total urban SC graduates & above and SC professionals vary according to space. Anomalies between educational levels and occupational levels at district level may bring deeper insights.

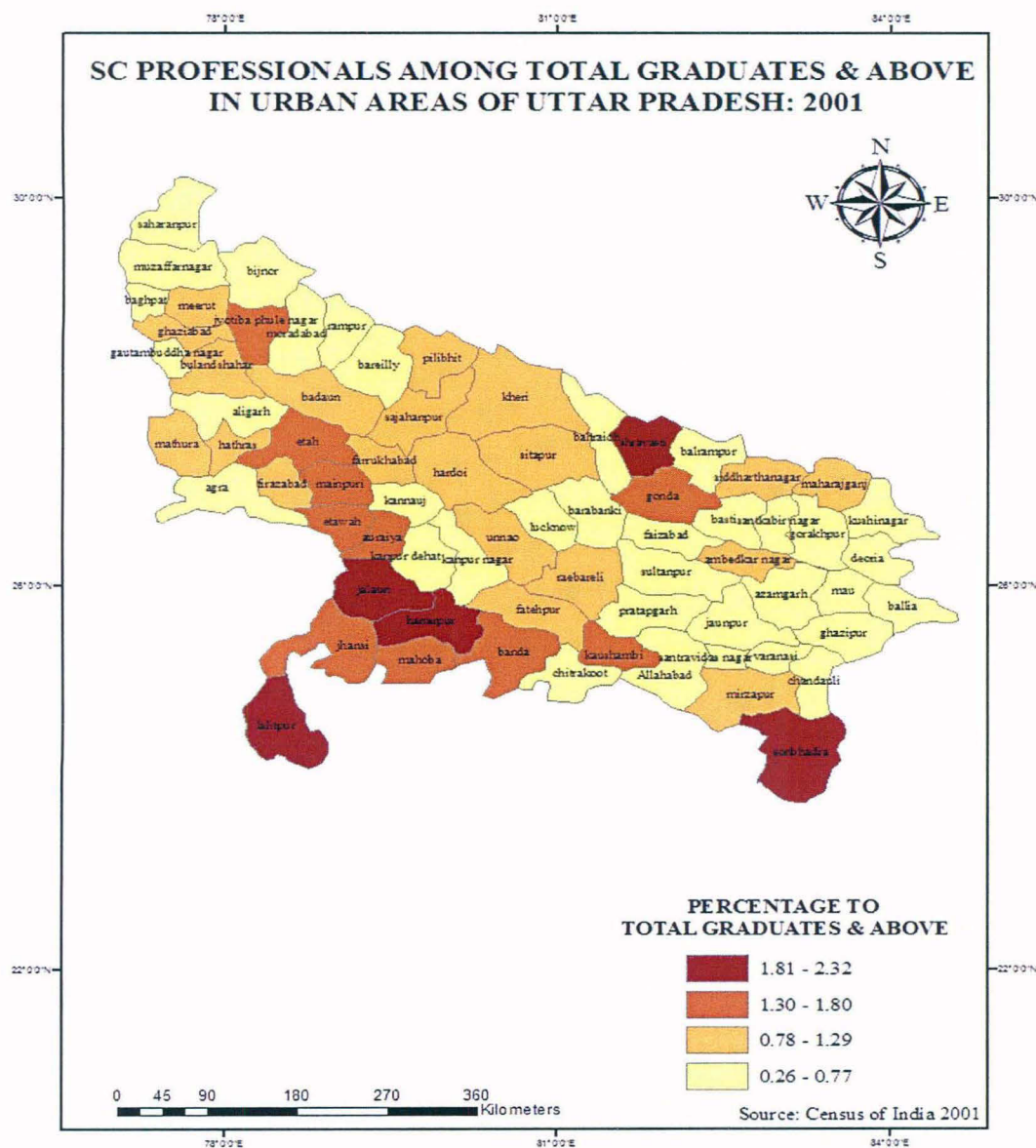
Map 5.1 tries to capture the anomaly between educational level and occupational level for urban SC graduates in respect to total urban SC graduates and above.

Map 5.1: Anomaly between SC graduates & above and SC professionals in U.P.



At the same time, Map 5.2 presents this anomaly in respect to total urban graduates and above. Both of the maps conclude that some of the districts namely, Shravasti, Gonda, Jyotiba Phule Nagar, Budaun, Pilibhit, Kheri, Barabanki, Lalitpur, Mahoba, and, Sonbhadra which fall under the Low Developed Region show higher percentages of urban SC professionals.

Map 5.2: Anomaly between total graduates & above and SC professionals in U.P.



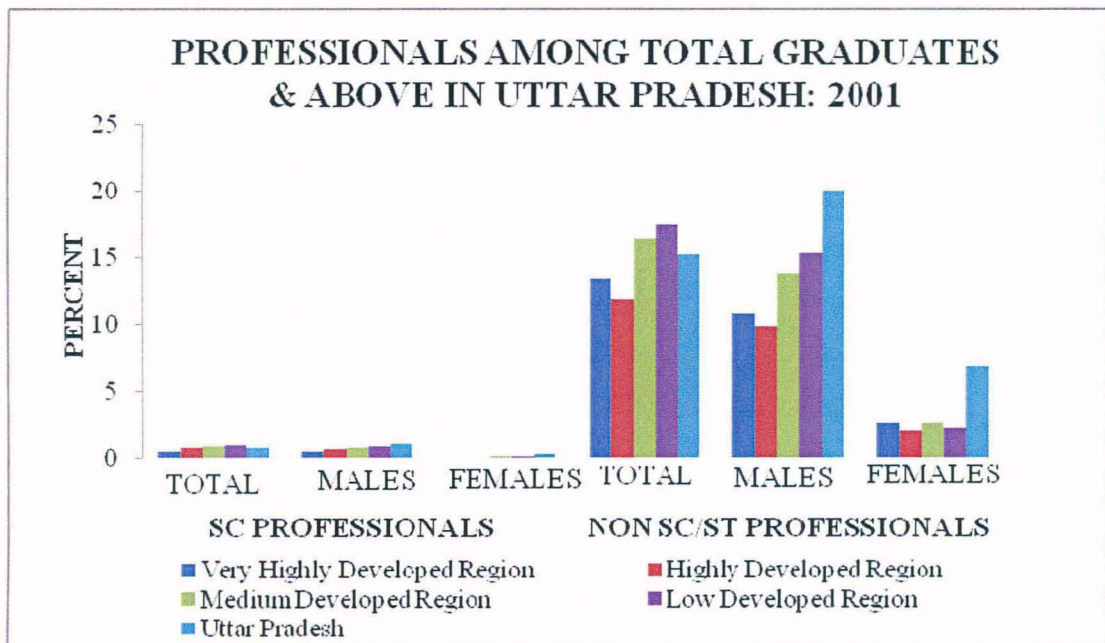
This implies a very important point. It indicates that most of the urban SC professionals are made to pursue their jobs in these underdeveloped districts as in these districts their own population of SC graduates & above is very low (less than 5 percent of total urban SC population). The rest of the districts of all the regions

exhibit low levels of urban SC graduates and above who have an occupation which falls in ‘Professionals’ division of NCO-2004.

5.5: Inequalities in the Anomalies between Educational Levels and Occupational Levels for SC and Non SC/ST Populations

Anomalies between educational levels and occupational levels are not the same across the social strata. Historically disadvantaged social group i.e. Scheduled caste population could not escape from bearing the brunt of this anomaly. As far as an inequality in this anomaly is concerned, they are the worst sufferers (Heyer and Jayal, 2009)¹⁰. Figure 5.1 substantiates this point.

Fig. 5.1: Inequalities in the percentages of professionals for SCs & Non SC/STs in U.P.



Source: Census of India 2001: B & C Series.

In urban Uttar Pradesh the proportion of graduates and above scheduled caste population involved in professional occupations is only 0.78 per cent whereas this proportion of non SC/ST female graduates in professional occupations is 6.77 per cent. This means that the SC graduates and above are not able to compete with even non SC/ST females leave alone the total non SC/ST graduates and above. The above

¹⁰ Judith Heyer and Niraja Gopal Jayal, 2009. ‘The Challenge of Positive Discrimination in India’. Working Paper No. 55. Centre for Research on Inequality, Human Security and Ethnicity. Pdf available at: www.crise.ox.ac.uk/pubs/workingpaper55.pdf [Accessed on 22 Feb.2011].

data also brings home that more than 99 per cent of the SC graduates and above are involved in occupations which are not compatible with their educational levels or most of them are unemployed (Louis, 2003)¹¹. The proportion of graduates and above non SC/ST population involved in professional occupations is 15.20 per cent. This figure for males is 20.07 per cent.

Figure 5.1 presents clearly that there are glaring disparities between males and females both for the SCs and non SC/STs. The proportion of non SC/ST female professionals out of total non SC/ST professionals is not as bad as it is in the case of SC female professionals. SC female professionals stand nowhere in comparison to their male counterparts (Dunn, 1993)¹²

When region wise analysis is done, the low developed region, medium developed region and highly developed region record the highest proportions of SC graduates and above working as professionals and the proportion for any region is not more than 0.99 per cent. For non SC/ST professionals this pattern is almost similar i.e. low developed region and medium developed region record the highest proportion of non SC/ST graduates and above working as professionals and the proportion for any region is not more than 18 per cent. It points out that in other regions graduates and above are involved in other occupations which are not compatible with their educational level.

5.6: Relationship between Urbanization, Higher Education and Professional Occupations.

In chapter I of the present study we have stated that theoretically urbanization, higher education, and professionals Occupations are inextricably woven with one another. This relationship was not established statistically. This chapter ascertains this relationship statistically using Pearson product moment method of correlation. This correlation is worked out between three variables i.e. Percentage of SC population in total urban population, Percentage of SC graduates & above in total urban graduates

¹¹ Prakash Louis, 2003. 'Scheduled castes and tribes: The reservation debate'. *Economic and Political Weekly*, 38(25), pp.2475-2478.

¹² D. Dunn, *op. cit.*

& above, and Percentage of SC professionals in total urban professionals. Table 5.3 indicates this relationship.

Table 5.3 shows that correlations between all the three variables vary from strong to medium. Correlation between percentage of SC population in total urban population and percentage of SC graduates & above in total graduates & above is strong (0.77) and significant at 0.01 level, which confirms the strong relationship between urbanization and higher education (Deshpande, 2006)¹³. Correlation between SC professionals and SC urban population (0.48) is medium. It means SCs are mostly concentrated in rural areas and chronic poverty hampers their mobility to urban areas (Dubey, Palmer-Jones and Sen 2004)¹⁴. SC graduates and above and SC professionals again show a strong correlation (0.64). This substantiates the strong relationship between the two (Pascarella and Terenzini, 2005)¹⁵

Table 5.3: Correlations for urban SC Population

		sc_urb	sc_grad	sc_prfsn
sc_urb	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	70		
sc_grad	Pearson Correlation	.775**	1	
	Sig. (2-tailed)	.000		
	N	70	70	
sc_prfsn	Pearson Correlation	.481**	.647**	1
	Sig. (2-tailed)	.000	.000	
	N	70	70	70

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

¹³ Satish Deshpande, 2006. 'Exclusive Inequalities: Merit, Caste and Discrimination in Indian Higher Education Today'. *Economic and Political Weekly*, 41(24), pp.2438-2444.

¹⁴ Amaresh Dubey, Richard PalmerJones and Kunal Sen, 2004. 'Surplus Labour, Social Structure and Rural to Urban Migration: Evidence from Indian Data'. *Paper presented at the Conference on the 50 th anniversary of the Lewis Model*, July 6-7. Pdf available at: www.sed.manchester.ac.uk/research-events/conferences/.../Sen2.pdf, [Accessed on 30 Jun. 2011].

¹⁵ E.T. Pascarella and P.T. Trenzini, 2005. *How college affects students (vol. 2)*. San Francisco: Jossey-bass, a wiley imprint

Where,

sc_urb = Percentage of SC population in total urban population.

sc_grad = Percentage of SC graduates & above in total urban graduates & above.

sc_prfsn = Percentage of SC professionals in total urban professionals.

Table 5.4: Correlations for urban Non SC/ST population

		P_urb_nonscst	p_grad&abv_nonscst	prfsnl_nonscst
P_urb_nonscst	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	70		
p_grad&abv_nonscst	Pearson Correlation	.774**	1	
	Sig. (2-tailed)	.000		
	N	70	70	
prfsnl_nonscst	Pearson Correlation	.614**	.806**	1
	Sig. (2-tailed)	.000	.000	
	N	70	70	70

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

Where,

P_urb_nonscst = Percentage of non SC/ST population in total urban population.

p_grad&abv_nonscst = Percentage of non SC/ST graduates & above in total urban graduates & above.

prfsnl_nonscst = Percentage of non SC/ST professionals in total urban professionals.

Table 5.4 presents the correlations for non SC/ST population. Correlations between all the three variables vary from strong to very strong. Correlation between non SC/ST graduates & above and non SC/ST urban population is strong (0.77), which confirms the strong relationship between urbanization and higher education in the

case of non SC/ST urban population too (Deshpande, 2006)¹⁶. Non SC/ST urban professionals and non SC/ST urban population shows strong correlation (0.61). This shows that they are the one who are concentrated in urban areas (Dubey, Palmer-Jones and Sen 2004)¹⁷. Non SC/ST urban professionals and non SC/ST graduates & above have a very strong correlation which means that higher educated non SC/STs achieve higher levels of occupations (Thorat, Attewell, and Rizvi, 2009)¹⁸.

5.6.1: Spatial Pattern of Relationship between Urbanization, Higher Education and Professionals Occupations

The relationship between urbanization, higher education, and occupational structure can be best shown through maps using overlay method of GIS (Geographical Information System). The nature of their influence on each other can clearly be understood from the maps. Map 5.3 shows this relationship for urban Scheduled caste population and map 5.4 shows this relationship for urban non SC/ST population.

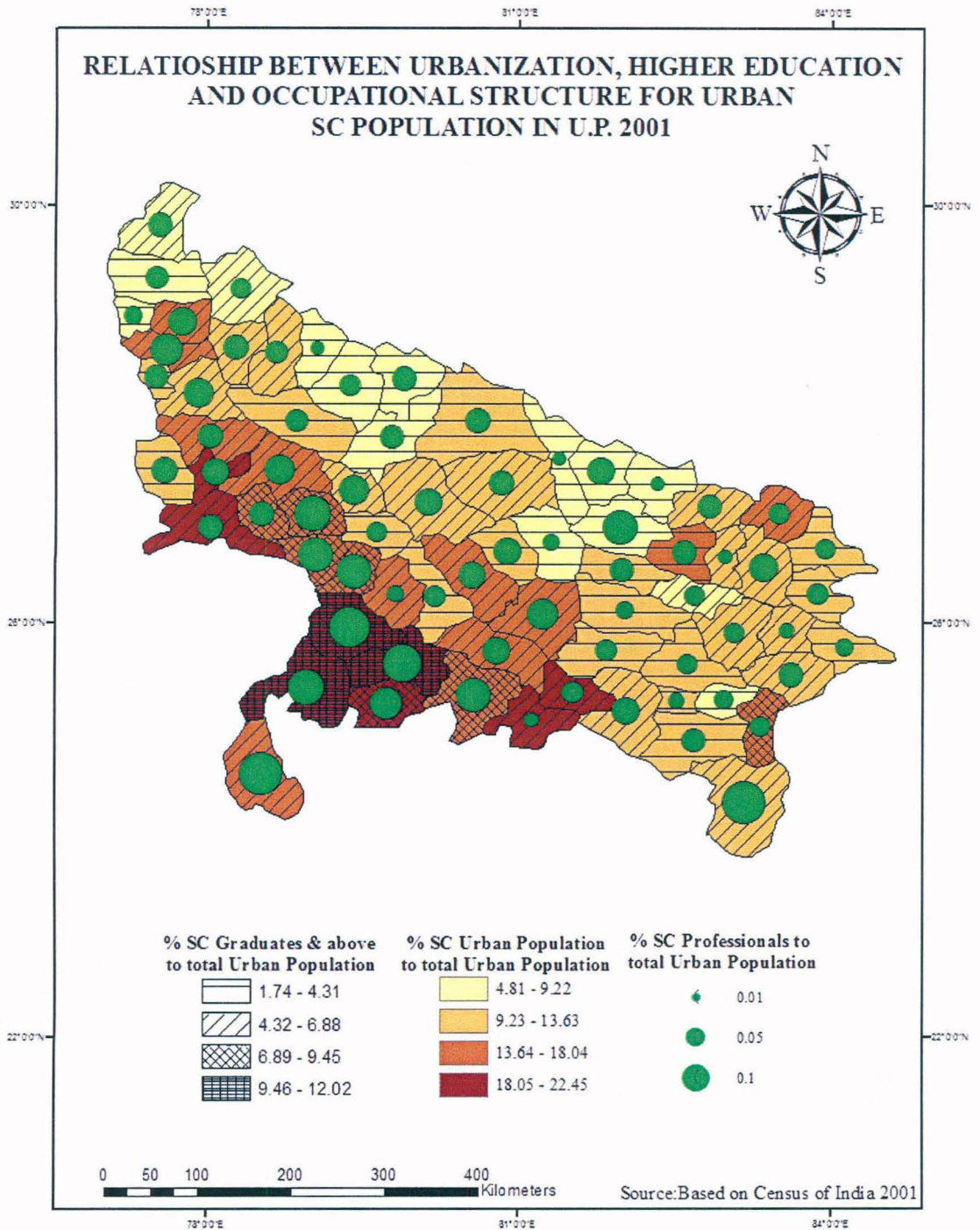
Map 5.3 shows that urbanization and professional occupations do not have a strong and constant relationship. For example, in case of Jhansi and Jalaun where urbanization levels are high, levels of professional occupations are also high but in case of Agra and Firozabad though levels of urbanization are high, the levels of professional occupations are low. So, as confirmed by correlation results, their relationship does not hold greater significance. But the relationship between higher education and urbanization holds greater significance as the map exhibits the direct proportional relationship between them. Except for a few districts, the relationship between higher education and professional occupations also holds well because as the levels of higher education rise, the levels of professional occupations soar up.

¹⁶ Deshpande, *op. cit.*

¹⁷ Dubey, Palmer-Jones and Sen, *op. cit.*

¹⁸ S.Thorat, Paul Attewell and Firdaus Fatima Rizvi, 2009. 'Urban Labour Market Discrimination'. *Working Paper Series*: Indian Institute of Dalit Studies, New Delhi, 3(1), pp.1-16

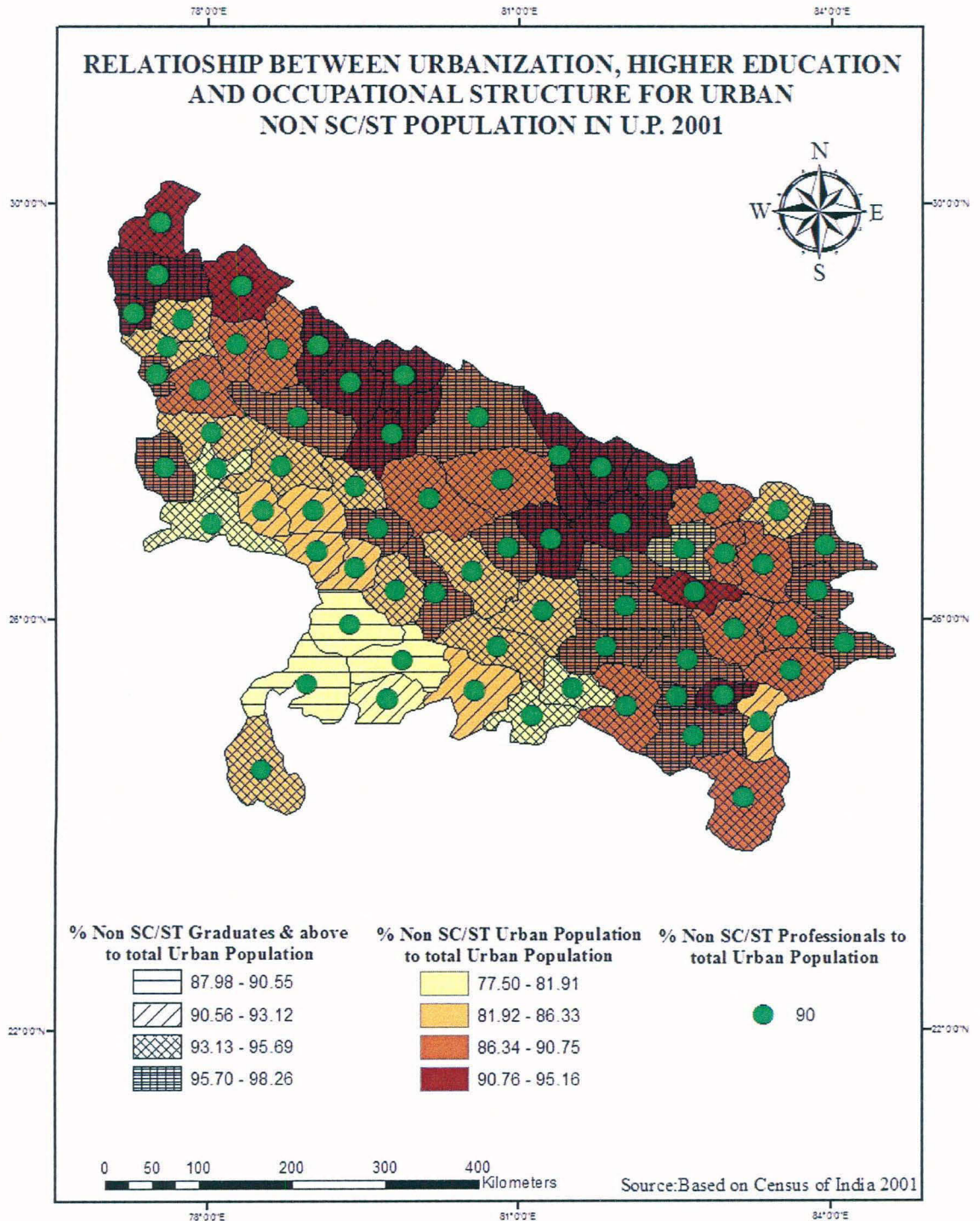
Map 5.3: Relationship between Urbanization, Higher Education, & Professional Occupations for SCs in U.P.



Map 5.4 presents the relationship between urbanization, higher education and professional occupations for non SC/ST population. For this population also all the relationships except the relationship between urbanization and professional occupations hold true. This relationship is not clear as in some of the districts such as Mahoba and Hamirpur where urbanization levels are low even though the levels of

professional occupations are high. As the urbanization levels go up the levels of higher education also spike up.

Map 5.4: Relationship between Urbanization, Higher Education, & Professional Occupations for Non SC/STs in U.P.



5.6.2: A Best Fit Linear Regression Model of the Relationship between Urbanization, Higher Education, and Professional Occupations

Though theoretically in the introductory chapter itself, it had been stated that all the three variables i.e. percentage of urban SC (or non SC/ST), percentage urban SC graduates and above (or non SC/ST), and urban SC (or non SC/ST) professionals (They represents urbanization, higher education, and professional occupations respectively) are so closely knitted to one another that sometimes it becomes pretty difficult to decipher which is being influenced by which. So it was required that this complex relationship should be examined statistically. Three models were examined for both the populations i.e. SC and non SC/ST. They are as follows:

$$\text{First Linear Regression Model: } X_1 = \alpha + \beta_1 Y_1 + \beta_2 X_2 + \varepsilon_i$$

$$\text{Second Linear Regression Model: } Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_i$$

$$\text{Third Linear Regression Model: } X_2 = \alpha + \beta_1 X_1 + \beta_2 Y_1 + \varepsilon_i$$

Where,

Y_1 = Percentages of urban SC Graduates & above (or urban non SC/ST graduates and above) in total urban graduates and above.

X_1 = Percentages of urban SC population (or urban non SC/ST population) in total urban population.

X_2 = Percentages of urban SC Professionals (or urban non SC/ST professionals) in total urban professionals.

Table 5.5 shows that the second model indicates a best fit model as the value of R-squared for this model is high ($R^2 = 0.6984$) and F-statistic [$F(2, 67) = 77.56$ and (Prob > F=0.0000)] is also highly significant. Regression results for the other two models are given in Appendix III. The value of R^2 given above indicates that 69.84 per cent variation in higher education among urban SC graduates and above is explained by two explanatory variables i.e. percentage urban SC and percentage urban SC professionals. The F value is also significant at '0' percent level implying that the systematic variation is considerably larger than should be explained by chance. Adj-

R² Value (0.6894) shows that the addition of extraneous predictors would not have larger impact on the model.

Table 5.5: Regression Results for Urban SC Graduates and above as Dependent Variable

Variables	Coefficients	t-value
Intercept	0.3951432	0.97
sc_professionals	9.103084*	4.68
sc_urban	0.2744504*	7.88
No. of observations		70
F(2, 67)		77.56
Prob > F		0.0000
R- squared		0.6984
Adj. R-squared		0.6894

Note: * Represents significance at 1% level

Where,

sc_professionals = Percentage of SC professionals in total urban professionals.

sc_urban = Percentage of urban SC population in total urban population.

The regression coefficient of the variable, percentage urban SC professionals has been found to be positive and significant at 1 per cent level. This implies that 1 unit increase in percentage SC graduates and above will foster an increase of around 9 units in percentage urban SC professionals. This result again substantiates the very strong relationship between higher education and urbanization (Deshpande, 2006)¹⁹. The regression coefficient of the variable percentage urban SCs is also positive and significant at 1 per cent level. This indicates that an increase of 1 unit in percentage SC graduates and above will result in an increase of 0.27 units in urban SC population. This indicates the lower incidence of urban SC population (Dubey, Palmer-Jones and Sen 2004)²⁰. Dependence of higher education on professional occupations

¹⁹ Deshpande, *op. cit.*

²⁰ Dubey, Palmer-Jones and Sen, *op. cit.*

indicates the ‘occupational focus’ (Yashpal, 2009)²¹ or ‘commodification’ (Tilak, 2008)²² of higher education. Most of the people pursue higher education as this gives them better chances to obtain higher levels of professional occupations. For example, a boom in MBA education was witnessed during the last decade. This boom is attributed to the lucrative job prospects job seekers had with an MBA degree.

Table 5.6 presents the same second model as above but it shows the regression results for urban non SC Graduates and above as dependent variable. The other two models for the non SC/ST population are given in Appendix III.

Table 5.6: Regression Results for Urban Non SC/ST Graduates and above as Dependent Variable

Variables	Coefficients	t-value
Intercept	36.24809*	8.04
non_sc_st_professionals	0.4314352*	7.22
non_sc_st_urban	0.2032492*	6.10
No. of observations	70	
F(2, 67)	115.12	
Prob > F	0.0000	
R- squared	0.7746	
Adj. R-squared	0.7679	

Note: * Represents significance at 1% level

Where,

non_sc_st_professionals = Percentage of non SC/ST professionals in total urban professionals.

non_sc_st_urban = Percentage of urban non SC/ST population in total urban population.

²¹ *Committee on Renovation and Rejuvenation of Higher Education*, 2009. (Yashpal Committee – Report), New Delhi: MHRD.

²² J.B.G. Tilak, 2008. ‘Transition from higher education as a public good to higher education as a private good: The saga of Indian experience’. *Journal of Asian Public Policy*, 1(2), pp.220-234.

The value of R^2 in Table 5.6 indicates that 77.46 per cent variation in higher education among urban non SC/ST graduates and above is explained by two explanatory variables i.e. percentage urban non SC/ST and percentage urban non SC/ST professionals. The F value [$F(2, 67) = 115.2$ and $(\text{Prob} > F = 0.0000)$] is also significant at '0' percent level implying that the systematic variation is considerably larger than should be explained by chance. Adj- R^2 Value (0.7679) shows that the addition of extraneous predictors would not largely affect the model. The regression coefficient of the variable, percentage urban non SC/ST professionals has been found to be positive and significant at 1 per cent level. This implies that 1 unit increase in percentage non SC/ST graduates and above will foster an increase of around 0.43 units in percentage urban non SC/ST professionals. This result again substantiates the very strong relationship between higher education and urbanization for also non SC/ST population (Deshpande, 2006)²³. The regression coefficient of the variable percentage urban non SC/ST is also positive and significant at 1 per cent level. This indicates that an increase of 1 unit in percentage non SC/ST graduates and above will result in an increase of 0.20 units in urban non SC/ST population.

Thus, it can be concluded that in case of non SC/ST population, the relationship of higher education with urbanization and professional occupations is much clearer than that of the SCs'. This indicates that for inter-generational social mobility and an increase in the proportion of SCs in higher education, higher proportion of SC population should be based in urban areas and should be engaged in professional occupations.

5.7: Summary and Conclusions

This chapter presents the guidelines of NCO-2004 to define the skill levels associated with each and every occupational division. This also explain the relationship between urbanization, higher education and professional occupations, and tries to explore a statistically fit model showing causal relationship between them. Major findings of this chapter are concluded in the following way:

²³ Deshpande, *op. cit.*

- ❖ In urban Uttar Pradesh the proportion of graduates and above scheduled caste population involved in professional occupations is less than 1 percent (0.78 percent), which means more than 99 per cent of the SC graduates and above are involved in occupations which are not compatible to their educational levels.
- ❖ SC graduates and above are not able to compete with even non SC/ST females leave alone the total non SC/ST graduates and above.
- ❖ The proportion of non SC/ST female professionals out of total non SC/ST professionals is not as bad as it is in the case of SC female professionals. SC female professionals stand nowhere in comparison to their male counterparts.
- ❖ There are huge gaps between SC and non SC/ST professionals in respect of total urban professionals as only around 5 per cent of the total professionals come from SC background and the rest belong to non SC/ST population.
- ❖ Most of the SC professionals are concentrated in the districts falling under medium developed region or low developed region while least of the non SC/ST professionals are found in low developed region. It indicates that SC professionals have limited access to metros of Uttar Pradesh.
- ❖ The relationship between urbanization and professional occupations is weak and ambiguous while the relationship between other two variables is strong and absolutely obvious.
- ❖ The best fit regression model indicates that when higher education is considered as dependent variable, all the three variables show a healthy relationship with one another.
- ❖ In case of non SC/ST population the relationship of higher education with urbanization and professional occupations is much clearer than that of in SCs' case. This indicates that for inter-generational social mobility and an increase in the proportion of SCs in higher education, higher proportion of SC population should be based in urban areas and should be engaged in professional occupations.

Thus it can be concluded that there is a huge anomaly between level of education and level of corresponding occupations in every district of Uttar Pradesh. These anomalies in case of SC professionals are really stark as even less than 1 per cent of the total SC graduates and above have found occupations according to their educational level and rest of them i.e. more than 99 per cent graduates and above are still struggling to find their rightful place in high level occupations. The relationship between urbanization, higher Education, and professionals occupations exhibits a moderate to strong relationship with one another and the relationship between urbanization, higher education, and professionals occupations is healthy only and only when higher education is treated as a dependent variable.

CHAPTER VI

SUMMARY AND CONCLUSIONS

6.1: Introduction

This study aims to decipher the complex relationship between urbanization, higher education and professional occupations. Urbanization, higher education, and professional occupations influence one another to such an extent that sometimes it becomes pretty difficult to ascertain as which is being influenced by which. So, the present study endeavours to capture the best fit causal relationship between urbanization, higher education, and professional occupations for the urban Scheduled castes population, one of the most disadvantaged and deprived sections of the Hindu society in Uttar Pradesh. As the whole realm of literature on discrimination portrays this section of society as the most discriminated one at each and every front of the life, it becomes imperative to explore the levels of this cruel and socially sanctioned discrimination in the crucial indicators of development i.e. higher education and professional occupations. In order to investigate the relative position of SCs in higher education and professional occupations, this study incorporates the dominant castes i.e. non SCs. Chapters two to four demonstrate the glaring inequalities in urban incidence, attainment of higher education and professional occupations for both the SC and non SC populations. Existence of gender gaps in the attainment of higher education and professional occupations indicate an important dimension of entitlement failure that threatens sustainable human development. Hence, gender gaps in the attainment of higher education and professional occupations find an important consideration in the present study. In all the Indian states including Uttar Pradesh, there exists a serious mismatch between the level of education and corresponding level of occupation. This anomaly between higher education and professional occupations has been dealt thoroughly in chapter five. The present chapter draws on the major findings of the study and spells out the policy implications. It also offers a way forward and scope for further research.

6.2: Chapter-wise summary of the study

6.2.1: Summary of Chapter II

This chapter clarifies the incidence of urban SC population in three respects i.e. Total SC Population, Total Population, and Total Urban Population. Magnitude as well as the spatial pattern of the incidence of urban SC population is presented through various cartographic techniques. It also examines the inequalities in the incidence of SC and non SC/ST populations in the urban areas of Uttar Pradesh. These inequalities were also studied in terms of the gender dimension. The main findings in this chapter are:

- * Urbanization in Uttar Pradesh is '*top-heavy*' or '*lopsided*' i.e., a few large cities and metropolises contain a large proportion of the urban population and others are still upcoming areas on the scene of a strong economy.
- * According to Census of India 2001, total urban SC population stands only 2.60 per cent of the total population of the state.
- * If total SC population is taken into consideration, only 10.69 per cent of the total SC population is residing in the urban areas of Uttar Pradesh.
- * Only 8.99 per cent of the total urban population of the state belongs to SC population.
- * Medium Developed and Low Developed Regions show low percentage of urban SC population as districts falling under these regions are historically backward areas accounting for a substantial number of UP's poor and socially marginalized who are unable to migrate to urban centres. Moreover, urban centres in these regions are smaller in comparison to other prominent urban centres such as Kanpur, Lucknow and Ghaziabad etc. and also are not able to attract people because of their weak industrial base.
- * Urban SC population in the state is concentrated into two belts i.e. northern and southern belts, running from the north-west to the south-east of the state. Northern belt exhibits relatively lower concentration of urban SC population while southern belt records high concentration of urban SC population. This belt shows higher concentration of urban SC population because the districts falling under this belt already have high incidence of SC population.

- * Even the hubs of administrative and manufacturing activities i.e. Very Highly Developed Region and Highly Developed Region are not able to attract large proportion of urban SC population. The lower incidence of SC urban population can be attributed to chronic poverty and low levels of educational attainment which in turn hampers their mobility from rural areas to urban centres.
- * According to 2001 Census, 23.04 per cent non SC/ST population out of total population is living in urban areas of Uttar Pradesh. This share for SC population is only 2.60 per cent indicating, a gap of more than 21 percentage points. So, it is clear that urban SC population stands nowhere in comparison to urban non SC/ST population.
- * As far as gender dimension is concerned, gaps between urban male and female population in all the regions of the state are not so stark. However in comparison to the urban non SC/ST female population, urban SC female population stands nowhere.

6.2.2: Summary of Chapter III

Third chapter focuses on the educational attainment of SC population in higher education. This attainment was further examined in all the components of higher education i.e. Graduate and above, Graduate degree other than technical degree, Post graduate degree other than technical degree, Engineering & technical degree/diploma, Degree/diploma in medicine, Agriculture & dairying degree, Teaching degree. Percentage SC graduates and above with Veterinary Degree were not taken into consideration as their percentages were too low to present. But their actual strength is given in the Appendix I. Inequalities in the attainment of higher education for SC and non SC population were captured by suitable cartographic techniques. Gender gaps were also analysed for both the populations. The conclusions we draw from the analysis are as follows:

- * In urban Uttar Pradesh only 5.39 per cent of the total SC population of age 15 and above have attained the educational level of Graduate and above. There are many reasons for this dismal performance of SCs in educational attainment in higher education e.g. SCs cannot afford the technical degrees; they do not get proper career counselling after senior secondary school etc. The

unavailability of technical degree colleges and universities and sometimes the inability to cope up with the difficult syllabus of technical courses are other deterrents.

- * SC Female graduates and above record less than two percentage of the total SC Urban population of the state. They are doubly disadvantaged.
- * In each of the regions, a majority of SC graduates (more than or equal to 65 per cent) and above do not possess any technical degree or diploma and have simply completed their graduation or post graduation merely with pass courses.
- * Upper north belt falls under the category of districts of urban U.P. which exhibit very low percentages of SC graduates and above among total graduates and above.
- * In case of non SC/ST population, almost 15 per cent of the total non SC/ST population of age 15 and above have attained graduate or post graduate degrees or diplomas which are thrice the educational attainment of SC population in higher education.
- * Most of the SC post-graduates do not possess any technical degree as such but have completed their post graduation merely with technical 'Diplomas' not 'Degrees'.
- * Many districts of the LDR fall in the category of districts showing high inequalities in terms of educational attainment for SC and non SC/ST population in higher education.
- * A thick belt running from the western part of the state to the eastern part of the state indicates medium levels of gender gaps in terms of attainment in higher education for SC population.
- * Eastern part of the state exhibits high gender gaps in attainment of higher education for non SC/ST population. This is attributed to the low level of development and deep-seated beliefs about women's gender-role in society.

6.2.3: Summary of Chapter IV

This chapter basically tries to study the occurrence of SC and non SC/ST populations in the 'Professionals' division of National Classification of Occupations. Spatial pattern of this occurrence was also incorporated in the study. Thirteen families of Occupation which were common in the most of the districts were selected and clubbed together to form six broad families of occupations. Inequalities between SC and non SC/ST populations in terms of professionals and six broad families of occupations were worked out at regional and district levels. Main findings of this chapter are given below:

- ❖ Among total professionals only 4.86 per cent of the professionals belong to SC population. In respect of total urban SC population only 1.14 per cent of this population pursue an occupation associated with professionals division of NCO-2004.
- ❖ There is high concentration of SC professionals in low developed districts of the state.
- ❖ 2.73 per cent of the total urban SC main workers are professionals. Six broad families of occupations were studied in context of total urban SC main workers and total urban workers and in all of them SC population is less than 1 per cent.
- ❖ Each and every region of the state has around 95 per cent of non SC/ST professionals among total professionals. It confirms the cruel inequalities prevalent throughout the state.
- ❖ In respect of six broad families of occupations, non SC/ST population have more than satisfactory percentages which vary from 2.86 per cent (ordained religious workers) to 13.47 per cent (lawyers). Only the family of Judges and magistrates show the percentage below 1 per cent. This is because naturally there are few judges and Magistrates in the legal system of the state as well as in India.
- ❖ Interestingly, in spite of all educational facilities and incentives offered to SC community in the form of reservation, it has only 0.11 percent College,

University and Higher Education Teaching Professionals out of total SC professionals.

- ❖ Positive discrimination has failed to alter relationships of dominance and subordination based upon caste and class in Uttar Pradesh.
- ❖ Two distinct belts are formed in case of spatial pattern of inequalities in the occurrence of SC and non SC/ST populations in the professional occupations. The upper northern belt which starts from north-west of the state and grows thicker and thicker till it reaches the end of the Low Developed Region, shows higher Sopher's index values which mean that the level of inequalities are higher in this part of the state.

So, it can be concluded that in terms of number of professionals, SC population stands nowhere in comparison to non SC/ST population. The root cause of these cruel inequalities lie in poverty, caste-based discrimination, low enrolment ratio and higher drop rates at school level which result in low percentages of SC population in higher education and this further leads to minimal presence of SC professionals in each of the regions and districts of Uttar Pradesh.

6.2.4: Summary of Chapter V

This chapter presents the guidelines of NCO-2004 to define the skill levels associated with each and every occupational division. This also explain the relationship between urbanization, higher education and professional occupations, and tries to explore a statistically fit model showing causal relationship between them. Major findings of this chapter are concluded in the following way:

- ❖ In urban Uttar Pradesh the proportion of graduates and above scheduled caste population involved in professional occupations is less than 1 percent (0.78 percent), which means more than 99 per cent of the SC graduates and above are involved in occupations which are not compatible to their educational levels.
- ❖ SC graduates and above are not able to compete with even non SC/ST females leave alone the total non SC/ST graduates and above.

- ❖ The proportion of non SC/ST female professionals out of total non SC/ST professionals is not as bad as it is in the case of SC female professionals. SC female professionals stand nowhere in comparison to their male counterparts.
- ❖ There are huge gaps between SC and non SC/ST professionals in respect of total urban professionals as only around 5 per cent of the total professionals come from SC background and the rest belong to non SC/ST population.
- ❖ Most of the SC professionals are concentrated in the districts falling under medium developed region or low developed region while least of the non SC/ST professionals are found in low developed region. It indicates that SC professionals have limited access to metros of Uttar Pradesh.
- ❖ The relationship between urbanization and professional occupations is weak and ambiguous while the relationship between other two variables is strong and absolutely obvious.
- ❖ The best fit regression model indicates that when higher education is considered as dependent variable, all the three variables show a healthy relationship with one another.
- ❖ In case of non SC/ST population the relationship of higher education with urbanization and professional occupations is much clearer than that of in SCs' case. This indicates that for inter-generational social mobility and an increase in the proportion of SCs in higher education, higher proportion of SC population should be based in urban areas and should be engaged in professional occupations.

Thus, the present study by eschewing the watertight categorization of east and west U.P. as usually pursued in the literature and adopting a broader regional categorization of the state showed that two belts of development are emerging in the state; a northern belt, consisting of underdeveloped districts and a southern belt, consisting of relatively developed districts. But it is quite disheartening to note that, even today, urban SC population is at the bottom of educational pyramid in each of the districts of these belts which consequently results in their concentration in low paid, dead-end and casual jobs and lower incidence in urban areas. In each and every respect, they still lag behind the non SC/ST population. Their females are doubly

disadvantaged. All this can be attributed to their chronic poverty levels and their social identity. This is very true in India where poverty, inequality and caste are co-terminus. On the one hand, inequality creates material conditions for the survival of the caste system and on the other hand, caste perpetuates and reproduces poverty (Trivedi, 2007)¹ which again entraps them in a vicious cycle of underdevelopment.

6.3: Policy Implications

The present study establishes that higher education is inextricably linked to urbanization and professional occupations. This relationship was explored for SCs and non SC/STs. It has important policy implications.

The study shows that even hubs of secondary and tertiary activities such as Lucknow, Kanpur Nagar, and Ghaziabad etc. have lower incidence of urban SC population. Urban areas are characterized by high price levels of essential commodities. This restrains their mobility from rural to urban areas. The whole realm of literature available on poverty in Uttar Pradesh proves this argument. Higher education is concentrated in urban areas in Uttar Pradesh. When they are not able to make it to the urban areas, in a way they lose the greatest opportunity of their lives. This in turn results into lower attainment of professional occupations. The study itself substantiates this point as it shows that among total urban professionals there are only 4.86 per cent SC urban professionals. This implies that a large chunk of this society is underemployed and unemployed. This also indicates the higher concentration of SCs in low paid, dead-end and casual jobs. It also points out the continuation of the past social identity based exclusion and discrimination in the labour market. Lower attainment in professional occupations further implies a vicious cycle of poverty and deprivation which entraps them sooner or later.

It is found that most of the SC graduates and above have completed graduation or post graduation with general courses in humanity and social sciences. Minimal attainment of technical degrees among SC graduates and above is a common phenomenon in

¹ Prashant Kumar Trivedi, 2007. 'Disparity and development in Uttar Pradesh'. *Social Change* , 37 (1), pp. 162-178. Pdf available at:<http://sch.sagepub.com/content/37/1/162.full.pdf+html> [Accessed on 23 Mar. 2011].

each of the regions of Uttar Pradesh. This again indicates their inability to afford such technical degrees. This also indicates unavailability of sufficient government technical institutions as it is a fact that most of them cannot afford technical courses even if they are given an opportunity in private technical institutions even on highly subsidized fee.

High gender gaps in higher education and professional occupations for both the SCs and non SC/STs signify the deep seated beliefs about women's gender-role in the society. Lowest attainment in higher education and professional occupation for SC females implies that they are doubly disadvantaged.

SCs' minimal attainment in higher education and professional occupations raises a serious question on the proper implementation of affirmative action programme i.e. reservation policy, a constitutional right. It indicates that the positive discrimination has failed to alter relationships of dominance and subordination based upon caste and class in Uttar Pradesh.

All this implies that something is seriously wrong with the implementation and supervision of governmental policies in respect of higher education and professional occupations.

6.4: The way ahead

Paucity of data on poverty e.g. urban poverty data at district level imposes a restraint on profound research. Extensive field work in this area can fathom some unexplored avenues for an array of developmental indicators. Mobilization of SCs has failed to garner equitable gains to all scheduled castes. So, an enquiry into the intra-caste inequalities among scheduled castes can also be undertaken as an academic exercise. This study indicates the emergence of two belts, a northern belt consisting of underdeveloped districts and a southern belt, consisting of relatively developed districts. Further research to explain this may unravel a shift in the development trajectory in Uttar Pradesh.

APPENDIX- I

Regions	Graduates and Above With Veterinary Degree Among Total Urban SCs		
	Total	Males	Females
Very Highly Developed Region	4	3	1
Highly Developed Region	1	1	0
Medium Developed Region	6	3	3
Low Developed Region	3	3	0
Uttar Pradesh	14	10	4

Regions	Graduates and Above With Veterinary Degree Among Total Urban Non SCs		
	Total	Males	Females
Very Highly Developed Region	133	125	8
Highly Developed Region	64	58	6
Medium Developed Region	140	128	12
Low Developed Region	60	59	1
Uttar Pradesh	397	370	27

APPENDIX- II

Fifty six Families of Occupations under the 'Professionals' Division in the Urban Areas of Uttar Pradesh

Physicists and Astronomers, Chemists, Physical Scientists, n.e.c.(not elsewhere classified), Mathematicians, Statisticians and Related Professionals, Mathematicians and Related Professionals, Statisticians, Mathematicians, Statisticians and Related Professionals, n.e.c., Computing Professionals, Computer Systems Designers and Analysts, Computer Programmers, Computer Professionals, n.e.c., Architects, Engineers and Related Professionals, Architects, Town and Traffic Planners, Civil Engineers, Electrical Engineers, Electronics and Telecommunication Engineers, Mechanical Engineers, Chemical Engineers, Mining Engineers, Metallurgists and Related Professionals, Cartographers and Surveyors, Architects, Engineers and Related Professionals, n.e.c., Life Science and Health Professionals, Life Science Professionals, Biologists, Botanists, Zoologists and Related Professionals, Pharmacologists, Pathologists and Related Professionals, Agronomists and Related Professionals, Life Science Professionals, n.e.c., Health Professionals (except nursing), Physicians and Surgeons, Allopathic, Physicians and Surgeons, Ayurvedic, Physicians and Surgeons, Homeopathic, Physicians and Surgeons, Unani, Dental Specialists, Veterinarians, Health Professionals (Expect Nursing), n.e.c., Nursing Professionals, Nursing Professionals, Teaching Professionals, College, University and Higher Education Teaching Professionals, College, University and Higher Education Teaching Professionals, Secondary Education Teaching Professionals, Senior Secondary and Secondary School Teaching Professionals, Other Teaching Professionals, Education Methods Specialists, School Inspectors, Teaching Professionals, n.e.c., Other Professionals, Business Professionals, Accountants, Personnel and Careers Professionals, Business Professionals, n.e.c., Legal Professionals, Lawyers, Judges and Magistrates, Legal Professionals, n.e.c., Archivists, Librarians and Related Information Professionals, Archivists and Curators, Librarians and Related Information Professionals, Social Science and Related Professionals, Economists, Sociologists, Anthropologists and Related Professionals, Philosophers, Historians and Political Scientists, Philologists, Translators and Interpreters, Psychologists, Social Work Professionals, Writers and Creative or

Performing Artists, Authors, Journalists and Other Writers, Sculptors, Painters and Related Artists, Composers, Musicians and Singers, Choreographers and Dancers, Film, Stage and Related Actors and Directors, Religious Professionals, Ordained Religious Workers, Non-Ordained Religious Workers.

Appendix III

Table I: Regression Results for Urban SC population as Dependent Variable

Variables	Coefficients	t-value
Intercept	3.938456	4.3
sc_professionals	-2.010109*	-0.36
sc_graduates	1.751614*	7.88
No. of observations	70	
Prob > F	0	
R- squared	0.6006	
Adj. R-squared	0.5887	

Table II: Regression Results for Urban SC professionals as Dependent Variable

Variables	Coefficients	t-value
Intercept	0.0088099	0.39
sc_urban_population	-0.0009356	-0.36
sc_graduates	0.0270419*	4.68
No. of observations	70	
Prob > F	0	
R- squared	0.4202	
Adj. R-squared	0.4029	

Table III: Regression Results for Urban non SC/ST population as Dependent Variable

Variables	Coefficients	t-value
Intercept	-74.51353*	-4.6
non_sc_st_professionals	-0.0488937	-0.21
non_sc_st_graduates	1.754994*	6.1
No. of observations	70	
Prob > F	0	
R- squared	0.5995	
Adj. R-squared	0.5876	

Table IV: Regression Results for Urban non SC/ST professionals as Dependent Variable

Variables	Coefficients	t-value
Intercept	-0.28755	-0.03
non_sc_st_urban_population	-0.0133107	-0.21
non_sc_st_graduates	1.014168*	7.22
No. of observations	70	
Prob > F	0	
R- squared	0.6498	
Adj. R-squared	0.6394	

Note: * Represents significance at 1 per cent level

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