ECONOMIC DEVELOPMENT

Functional Plan for Economic Development of NCR

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NATIONAL CAPITAL REGION PLANNING BOARD
Ministry of Urban Development, Government of India

Functional Plan for Economic Development of National Capital Region

(Approved in the 65th Meeting of the Planning Committee of NCR Planning Board held on 28th April, 2016)

NATIONAL CAPITAL REGION PLANNING BOARD

MINISTRY OF URBAN DEVELOPMENT, GOVERNMENT OF INDIA
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FOREWORD

National Capital Region Planning Board (NCRPB) was established in 1985 through an Act of Parliament with the concurrence of the legislatures of the participating States. NCR is a unique arrangement of an inter-state region and has become a model of metropolitan regional development in the world. It is one of the largest multi-state rural-urban regions in the world with an urbanisation level of 62.2%, which is expected to reach 73.3% by 2021. NCR covers an area of 53,817 sq. km., comprising of NCT-Delhi; thirteen districts of Haryana sub-region; seven districts of Uttar Pradesh sub-region and two districts of Rajasthan sub-region.

The National Capital Region is a hub of economic activities for the whole of North India. The economic structure of NCR is undergoing rapid transformation due to various economic forces such as constantly changing fiscal/monetary policy; legislations having a bearing on economic development; status of employment of a certain area/region, etc. There are certain physical/spatial forces which have contributed significantly or have the potential in shaping the economy of NCR, such as extension of the Delhi Metro upto the central NCR towns; expressways connecting Delhi to other parts of NCR; the peripheral expressways around NCT-Delhi; the Delhi-Mumbai Industrial Corridor (DMIC); the Dedicated Freight Corridor (DFC); development of Special Economic Zones (SEZs), Industrial Estates/Townships, etc. Therefore, it is imperative to analyze and assess the changing economic base of NCR in light of the physical & economic forces and thereafter, recommending policies and proposals to channelize the future directions of growth in an economically, socially & environmentally sustainable manner.

As mandated by the NCRPB Act, 1985, NCR Planning Board prepared the Regional Plan-2021 (RP-2021) for National Capital Region (NCR). The RP-2021 is an inter-related policy framework relating to settlement systems, economic activities, transportation, telecommunication, regional land use, infrastructural facilities such as power and water, social infrastructure, environment, disaster management, heritage and tourism. The Regional Plan is a broad policy document at the macro level. The policies and proposals of the Regional Plan are to be elaborated by the NCR

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Participating State Governments in the lower hierarchy Plans, such as Sub-Regional Plans and Master/Development Plans. However, in order to assist the NCR Participating States, NCR Planning Board has undertaken Studies in various sectors to comprehensively assess the existing situation, identify the issues/problem areas and thereafter firming up the Strategies/Recommendations/Action Plan for holistic development.

With a view to understand various aspects related to economic development, NCR Planning Board carried out the "Study of Economic Profile of NCR", which was prepared after extensive consultation with all participating States and their Departments/Agencies, concerned Ministries/Departments of the Central Government and other Agencies, etc. The preliminary findings and draft recommendations of the said Study were also discussed with all stakeholders in a Workshop held on 08.05.2015. Subsequently, the Final Report of the Study of Economic Profile of NCR was also circulated to all concerned.

Based on the findings and recommendations of the Study of Economic Profile of NCR, a draft Functional Plan for Economic Development of NCR was prepared and the same was placed before the statutory Planning Committee of the Board for consideration. Planning Committee deliberated on the same in its 65th meeting held on 28.04.2016 and after detailed discussions, the said Functional Plan was approved.

The Functional Plan for Economic Development of NCR has closely examined various aspects/indicators related to economic development, such as Gross Domestic Product and Per Capita Income; workforce distribution; industrial development; rural economy; informal sector; policy framework of the NCR participating States, etc. The Functional Plan provides an in-depth analysis not only in terms of various categories/sectors of a certain indicator of economic development, but also contains spatial analysis of the same, which would be extremely crucial for identifying the locations which are experiencing maximum issues and hence require highest level of interventions.

This Functional Plan for Economic Development of NCR provides for detailed issues and recommendations, both cluster specific, sector specific and sub-region & district specific. The Functional Plan also provides a list of proposed projects to achieve holistic economic development of a particular area/district/sub-region. However, in order to transform these proposals into reality, they have to be detailed out by the participating States and their concerned agencies, by means of undertaking detailed technical & financial feasibility; institutional mechanism to implement them; identification of sources of funding through convergence with other government programmes/schemes, etc. Similarly, the Central Ministries will have to integrate this Plan with their respective Plans/Schemes. I urge the NCR participating States to take this Functional Plan as a base and implement the recommendations to ensure balanced economic development of NCR.

I congratulate NCR Planning Board for its efforts to prepare "Functional Plan for Economic Development of NCR", which would significantly contribute towards holistic economic development of NCR in a sustainable manner. I am convinced that with the cooperation of the NCR Participating States and their Agencies, Central Ministries/Departments and enthusiastic support of the people, this Functional Plan would foster further economic growth and balanced development in NCR.

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ACKNOWLEDGMENT

The Functional Plan for Economic Development of NCR has been prepared for guidance of the NCR participating States by means of detailing out the broad policies & proposals of the Regional Plan-2021 pertaining to economic development. This Plan is the result of concerted efforts by a number of individuals and institutions, who/which have played crucial role in successfully preparing & publishing the Plan.

First and foremost, I am grateful to Shri B K Tripathi, Member Secretary, National Capital Region Planning Board, who is the main driving force behind preparation of this Functional Plan. I am grateful to him for his vision, constant guidance & encouragement, without which this Plan would not have been completed.

I would like to acknowledge the sincere cooperation and constant support extended by the Central Government Ministries/Departments and the NCR Participating State Governments and their Agencies/Departments. I would also like to thank the officers of the NCR Planning & Monitoring Cells of the four sub-regions of NCR who have efficiently coordinated with various departments and agencies in providing data in timely manner as well as for having provided valued inputs in the Study.

I would also like to put on record my sincere appreciation to M/s. Apex Cluster Development Services Pvt. Ltd., the Consultant through which the Study of Economic Profile of NCR was carried out by NCRPB. The present Functional Plan has been prepared based on the findings and recommendations of the said Study.

Last but not the least, I would like to acknowledge the concerted efforts by officers and staff of NCR Planning Board, who have made this endeavour a success and which has resulted in the publication of the Functional Plan for Economic Development of NCR. I thank the team in NCR Planning Board, particularly Shri J. N. Barman, Consultant, NCRPB and former Director (Technical), NCRPB; Ms. Ruchi Gupta, Joint Director (Technical), NCRPB; and Shri Partha Pratim Nath, Deputy Director (Technical), NCRPB, whose hard work has made the preparation of this Functional Plan possible.

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ASI	Annual Survey of Industries
BPO	Business Process Outsourcing
CBA	Cluster Based Approach
CFC	Common Facility Centre
CRM	Customer Relationship Management
DCB	Delhi Cantonment Board
DDA	Delhi Development Authority
DDP	Desert Development Programme
DFC	Dedicated Freight Corridor
DGET	Directorate General of Employment and Training
DGID	Delhi Government Industries Department
DMEs	Directory Manufacturing Enterprises
DMIC	Delhi Mumbai Industrial Corridor
DRDB	Delhi Rural Development Board
DSC	Dadri-Surajpur-Chalera
DSIIDC	Delhi State Industrial & Infrastructure Development Corporation
EPCH	Export Promotion Council for Handicrafts
ERP	Enterprise Resource Planning
FCA	Faridabad Complex Administration
GDP	Gross Domestic Product
GIS	Geographic Information System
GSDP	Gross State Domestic Product
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit
HH	House Hold Industry
HSIIDC	Haryana State Industrial and Infrastructure Development Corporation
I& FC	Irrigation and Flood Control Department
IAY	Indira Awaas Yojana
ICT	Information and Communication Technology
IDRV	Integrated Development of Rural Villages
ISO	International Organization for Standardization
IT	Information Technology
ITES	Information Technology Enabled Services
IWDP	Integrated Wasteland Development Projects
KMP	Kundli-Manesar-Palwal
MCD	Municipal Corporation of Delhi
MNC	Multi National Company
MPLADS	Members of Parliament Local Area Development Scheme
NASSCOM	National Association of Software and Service Companies
NCR	National Capital Region
NCT	National Capital Territory
NDMC	New Delhi Municipal Committee
NDMEs	Non Directory Manufacturing Enterprises
NEPZ	NOIDA Export Processing Zone
NIC	National Information Center

NNP	Net National Product
NOIDA	New Okhla Industrial Development Authority
NREGA	National Rural Employment Guarantee Act
NREGS	National Rural Employment Guarantee Scheme
NSS	National Sample Survey
NSSO	National Sample Survey Organization
OAMEs	Own Account Manufacturing Enterprises
OEM	Original Equipment Manufacturer
PPDC	Process and Product Development Centre
PPP	Public Private Partnership
RIICO	Rajasthan State Industrial Development and Investment Corporation
RMAI	Rural Marketing Association of India
RSVY	Rashtriya Sam Vikas Yojana
SEZ	Special Economic Zones
SGRY	Sampooran Grameen Rozgar Yojana
SGSY	Swarnjayanti Gram Swarozgar Yojana
SME	Small Medium Enterprise
SSI	Small Scale Industries
TUF	Technology Up-gradation Fund Scheme
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
UP	Uttar Pradesh
USD	United States Dollar

EXECUTIVE SUMMARY

Background

The National Capital Region (NCR) is a hub of economic activities for the whole of North India. The economic structure of NCR is undergoing rapid transformation due to several economic forces such as changes in economic/fiscal policy, legislations, privatization of public sector undertaking (PSUs), etc. Various effects of globalisation are increasingly shaping the economy of the NCR. There are certain infrastructure developmental forces which have significantly shaped the economy of NCR, such as extension of the Delhi Metro to the central NCR towns, construction of Expressways connecting Delhi to other parts of NCR, the upcoming Delhi-Mumbai Industrial Corridor (DMIC) & Dedicated Freight Corridor (DFC), development of Special Economic Zones (SEZs), Industrial Estates/Townships, etc. In view of the constantly changing economic scenario of NCR, it is, therefore, pertinent to analyze and assess the changing economic base of NCR in the light of the economic and infrastructural forces and thereafter, recommending policies and proposals to channelize the future directions of growth in an economically, socially and environmentally sustainable manner.

The Functional Plan for Economic Development of NCR aims to respond to the above-mentioned need, with an overall objective to facilitate decision makers identify sustainable future growth trends, and to formulate an adequate planning response to these.

Objective and Methodology

The objective of the Functional Plan for Economic Development for NCR is to detail out the broad policies and proposals of the Regional Plan-2021 for guidance of the participating States, as per the provisions of Section 16 of the National Capital Region Planning Board Act, 1985. The Functional Plan has been prepared based on the analysis & findings of the Study of Economic Profile of NCR conducted by the NCR Planning Board through Consultant.

Brief findings pertaining to various indicators related to the economic structure of NCR are summarized as follows:

Gross Domestic Product (GDP)

- NCR significantly contributes to the national GDP. India's GDP at constant (2004-05) prices in 2009-10 was Rs. 45,160.70 billion, whereas the GDP of NCR for the same period was Rs. 3,193.40 billion, accounting for 7.1% of India's GDP.
- Within NCR, Delhi has consistently been the largest contributor (more than 50%, as recorded from 2004-05 to 2009-10) to GDP of NCR.
- Haryana sub-region has recorded the highest Average Annual Growth Rate (12.40%), followed by NCT-Delhi sub-region (11.50%), Rajasthan sub-region (9.60%) and Uttar Pradesh sub-region (8.7%) during the period 2005-06 to 2009-10, as against the National average of 8.74% and NCR's 11.20% during the same period.

- It is observed that during 2009-10, Baghpat, Jhajjar, Mewat, Palwal and Rohtak districts have recorded GDP figures below Rs. 50,000 Millions.
- During 2009-10, Gautambuddha Nagar (Rs. 141,557 Millions) and Gurgaon (Rs. 269,906 Millions) districts have recorded the highest GDP, whereas Baghpat and Mewat districts have recorded the lowest GDP in Uttar Pradesh and Haryana sub-region respectively. Mewat district has also recorded the lowest GDP among all districts in NCR. Further, Baghpat and Mewat have consistently recorded the lowest GDP figures during the period 2004-05 to 2009-10.

Per Capita Income

- There is a wide variation in the per capita income of different sub-regions of NCR. In 2009-10, NCT-Delhi recorded the highest per capita income (Rs. 98,262), followed by Haryana sub-region (Rs. 74,457), Uttar Pradesh sub-region (Rs. 35,036) and Rajasthan sub-region (Rs. 29,300), as against the NCR average (Rs. 59,264) and national average (Rs. 33,901) during the same period.
- Gurgaon district has recorded the highest per capita income (Rs. 2,29,208) in NCR during 2009-10, followed by Faridabad (Rs. 106,896), Panipat (Rs. 79,047), Gautambuddha Nagar (Rs. 71,961). It is observed that all districts of U.P. sub-region except Gautambuddha Nagar (Bulandshahr: Rs. 23,909, Meerut: Rs. 25,536, Ghaziabad including Hapur: Rs. 26,426 and Baghpat: Rs. 27,348); Alwar district (Rs. 29,300) of Rajasthan sub-region; and Mewat district (Rs. 27,327) of Haryana sub-region have recorded per capita income below the national average per capita income.

Sectoral Trends

- Contribution of the primary sector and the secondary sector has been decreasing in NCR. In 2007-08, the tertiary sector accounted for about 67% share in NCR's GDP, followed by secondary sector (25%) and remaining with primary sector (8%). The reasons for the shift in the sectoral composition of the NCR economy may be attributed to the rapid urbanization and ensuing reduction in agricultural and related activities on one hand; and considerable increase in activities related to the services sector on the other.
- Higher per capita income in Gurgaon and Gautambuddha Nagar districts may primarily be attributed to growth of IT and ITES, whereas Panipat district is rapidly emerging as an important trade center. NCT-Delhi has become the main center for various service providers. Uttar Pradesh and Rajasthan sub-regions are dominated by agriculture on the other hand Haryana sub-region is a mix of industries and service sector growth.

Workforce

- NCR has recorded total 157.35 Lakhs workers in 2011, out of which the highest number of workers (43.07%) are engaged in NCT-Delhi sub-region, followed by Uttar Pradesh sub-region (36.77%), Haryana sub-region (28.29%) and Rajasthan sub-region (13.17%).

- In 2011, Rajasthan sub-region has recorded the highest Workforce Participation Rate (WPR) at 46.50%, whereas all other sub-regions have recorded around 33% WPR. The high WPR in Rajasthan sub-region may be attributed to the significantly higher proportion of workers engaged in agricultural activities.
- Cultivators and agricultural labourers constituted the largest portion (25.53%) of the workforce in the NCR (as per classification in Census of India 2001), followed by construction workers (16%). Share of primary sector has been declining in NCR and share of tertiary (service) and the secondary sector has been increasing. Share of primary sector has declined from 44.3% in 1971 to 29.06% in 2001, while share of secondary sector has increased from 18.98% in 1971 to 42.63% in 2001. NCT-Delhi has the least proportion of workers engaged in the primary sector. Within the primary sector, share of cultivators and agricultural labourers has declined from 42.98% in 1971 to 25.53% in 2001, whereas the share of construction within secondary sector has significantly increased from 2.77% in 1971 to 16.2% in 2001.
- Uttar Pradesh sub-region has recorded the highest concentration of workers engaged in primary sector. In 2001, out of total workers engaged in agricultural activities (cultivators and agricultural labourers) and livestock & forestry activities in NCR, U.P sub-region has recorded 40.64% (cultivators & agricultural labourers) and 43.06% (livestock & forestry) of total workers in NCR in these categories. Within U.P. sub-region, Bulandshahr district has recorded the highest share [40.44% of workers engaged in (cultivators & agricultural labourers) and 55.08% of (livestock & forestry) activities in U.P. sub-region].
- Gurgaon district has the largest share of its total working population in the service; Faridabad in manufacturing; and Alwar in agricultural activities respectively.
- In 2011, share of marginal workers to total workers in Rajasthan sub-region is the highest (30.97%), followed by Haryana sub-region (20.27%) and U.P. sub-region (19.88%), whereas NCT-Delhi has recorded the lowest share (5.01%). In terms of distribution of marginal workers in NCR in 2011, highest concentration is observed in U.P. sub-region (37.91% of total marginal workers in NCR), followed by Haryana (29.75%) and Rajasthan (21.16%) sub-regions, while NCT-Delhi sub-region has recorded the lowest concentration (11.18%). Within U.P. sub-region, Bulandshahr district has recorded the highest concentration (30.38%), followed by Ghaziabad including Hapur (28.22%) and Meerut (21.06%).

Industrial Development

The organized industrial sector that consists of large and medium units and small scale industries (SSI) in the NCR has developed both horizontally (number of units) and vertically (growth of different industries). Haryana sub-region has emerged as hub of manufacturing industries. In 2010-11, Haryana sub-region recorded total 60,674 no. of registered units, employing total 5,94,467 workers. Within Haryana sub-region, Gurgaon district has recorded the highest concentration of units as well as employment (3,29,340 workers in 22,491 units), followed by Faridabad (1,04,452 workers in 17,291 units) and Sonipat (59,707 workers in 8,743 units). In terms of category of units, ‘Wearing Apparel, Dressing and Dyeing of Fur’ has recorded the highest (63.03%) growth in number of units between 2003-04 to 2008-09, followed by ‘Food Products and Beverages’ (38.42%). U.P. sub-region has recorded total

4,55,955 workers employed in total 70,601 registered units in 2010-11. Electric machinery, metal products and parts, chemical products and parts, textile products are the major units in UP sub-region. Ghaziabad including Hapur has recorded the highest concentration of units as well as employment (2,26,824 workers in 45,282 units), followed by Gautambuddha Nagar (1,41,295 workers in 9,880 units). The high employment concentration in Gautambuddha Nagar may be attributed to the presence of units in IT & ITES and R&D. In case of Rajasthan sub-region, 57,379 units employed 15,06,572 workers in 2010-11 in the major clusters, with Auto Component and Textile units contributing the highest share.

NCT-Delhi sub-region has recorded total 3,78,361 workers employed in 8,219 industrial units. The industrial units which contributed higher level of employment during 2011 is textile products (36%) followed by metal products and parts of machinery (19%). It has been observed that during the period 2007 to 2011, number of industrial units as well as employment in NCT-Delhi has increased at a slow rate. This may be in compliance with the Supreme Court order in 2005 relating to closure/shifting of various polluting industries from NCT-Delhi. This may also be attributed to the inability of the units to comply with the safety standards stipulated by Central Pollution Control Board and Delhi Pollution Control Committee. A number of industrial units in Delhi have shifted to the neighbouring States. Apart from the regulatory and administrative intervention that imposed significant restriction on the expansion/ growth of large/medium scale industries in NCT-Delhi, the lack of regulation and powerful market forces in SSI and tiny sector has led to a rise to a laissez-faire situation which led to the mushrooming of tiny and small industries especially in the unorganized sector.

The major industrial clusters are located in Meerut (Auto Parts, Power loom and Sports Goods), NOIDA (IT/ITES, Readymade Garment, General Engineering, Auto), Ghaziabad, Gautambuddha Nagar, Bulandshahr, NCT-Delhi (Okhla Readymade Garment Cluster), Gurgaon (IT/ITES, Auto Component), Manesar, Bawal, Faridabad (General Engineering), Kundli, Murthal, and Panipat (Textile). There are more than 50 industrial clusters in NCR besides a number of micro enterprises concentrations in NCT-Delhi. The approximate number of persons employed in the above-mentioned industrial clusters are about a million with a total turnover of about Rs 10,02,090 millions.

Rural Economy

As per Census of India 2011, rural population constitutes 37.41% of total population in NCR. Rajasthan sub-region has the highest proportion of the rural population (82.19%). In Haryana and Uttar Pradesh sub-regions also, considerable population lives in rural areas (56.73% and 51.71% respectively), while NCT-Delhi has negligible rural population (2.50%).

Rural workers constitute 36.13% (62.26 Lakhs) of total rural population of NCR, out of which 58.41% are engaged as cultivators and agricultural labourers (cultivators: 39.87% and agricultural labourers: 18.54%). In terms of workforce distribution, proportion of rural workforce is the highest in Rajasthan sub-region (87.09%), followed by Haryana (57.10%), Uttar Pradesh (52.96%) and NCT-Delhi (2.33%) sub-regions.

Analysis of sector-wise growth in rural workforce indicates that during the period 1971 to 2001, proportion of workers engaged in primary sector declined from 44.3% to 37.29%, while proportion of workers in secondary sector increased from 18.98% to 34.35%. The proportion of workers engaged in the tertiary sector reduced from 36.72% to 28.37% over the same period.

It is observed that rural infrastructure in the NCR, in terms of market yards, cold storage are significantly short of demand. There are 65 regulated markets, 74 sub yards and 261 cold storages in the NCR. The highest number of regulated markets and yards are located in Haryana sub-region of NCR, whereas the highest number of cold storages has been recorded in Uttar Pradesh sub-region, followed by NCT-Delhi. Meerut has the maximum number of cold storages amongst all districts of NCR.

There are 23 major fruits and vegetable markets in the NCR. Maximum number of markets is in Bulandshahr district of Uttar Pradesh sub-region. The fodder markets are developed in Haryana and NCT-Delhi sub-regions.

Informal Sector

At NCR level, there are 15.64 Lakhs of informal sector enterprises in 2005. There are total of 8.30 Lakhs of Own Account Enterprises (OAE), out of which 0.58 Lakhs are in agricultural sector and remaining 7.72 Lakhs are in non-agricultural sectors.

At sub-region level, NCT-Delhi has the highest concentration of informal sector enterprises (7.58 Lakhs), followed by Uttar Pradesh (3.96 Lakhs), Haryana (3.21 Lakhs) and Rajasthan (0.89 Lakhs) sub-regions. Sector level analysis indicates that in NCT-Delhi sub-region, about 99.47% (7,54,453) of total enterprises are in non-agricultural activities, whereas this proportion is 88.43% (3,50,200), 94.87% (3,04,660) and 90.42% (80,952) in Uttar Pradesh, Haryana and Rajasthan sub-regions respectively.

In NCT-Delhi, the manufacturing sector contributes to about 9.38% of the Gross State Domestic Product (GSDP), out of which 7% is contributed by the unorganized sector and 2.38% comes from the organized manufacturing sector. As per the NSS survey (62nd Round) in 2006-2007, the total number of unorganized manufacturing enterprises was about 1 Lakh. Out of the total enterprises, 20.30% were located in rural areas, and 79.70% were operating in urban areas of Delhi. Wearing Apparels, Dressing and Dyeing enterprises contribute to 28.29% of total number of unorganized manufacturing enterprises, followed by Manufacture of Fabricated Metal Products units (22.00%) and Manufacture of Furniture units (7.25%). According to NSS data (2005-06), total employment generated by the unorganized manufacturing enterprises was about 4.82 lakhs.

At district level, after NCT-Delhi, Meerut has maximum (1.19 Lakhs) number of enterprises, followed by Ghaziabad (1.18 Lakhs). Jhajjar district of Haryana sub-region has least number of enterprises (24,469). Gautambuddha Nagar also has the highest number of OAE in the agriculture sector (refer Table 6.5).

Policy Framework

There are certain projects at regional level such as Dedicated Freight Corridor (DFC), the Delhi Mumbai Industrial Corridor (DMIC), Eastern (Kundlui-Ghaziabad-Palwal) & Western (Kundli-Manesar-Palwal) Peripheral Expressways which would significantly contribute as well as would channelize the economic development of NCR. Further, various flagship programmes/schemes by Govt. of India, such as Skill India, Make in India, Digital India etc. would have profound impact on the level of economic development of NCR.

The NCR participating States have also formulated various industrial, investment and location development policies. NCT-Delhi policies primarily focus on skill-based high-tech and environment-friendly industries, while Haryana's policies primarily concentrate on providing a suitable business environment for growth of manufacturing activities by providing adequate infrastructure. Recently, emphasis on the use of public-private partnerships (PPPs) to develop infrastructure is also observed. Uttar Pradesh provides a number of incentives and inducement for new firms including development of suitable infrastructure for the industry. Rajasthan government provides fiscal and other benefits including development of infrastructure for new industries. Cluster based approach for SSI development remains common to all sub-regions.

Issues

- **Wide Variation in Level of Economic Growth in NCR:** There is a wide variation in GDP growth as well as disparity in per capita income among the sub-regions of NCR. Haryana sub-region has been growing at the fastest rate in NCR, whereas growth rate of Uttar Pradesh and Rajasthan sub-regions is less than that of NCR. Owing to lack of adequate interventions in the secondary and tertiary sector activities in the districts of Bulandshahr, Meerut, Ghaziabad including Hapur and Baghpat in Uttar Pradesh sub-region; Mewat district in Haryana sub-region; and Alwar district in Rajasthan sub-region, low GDP growth as well as per capita income below the national average have been recorded. Baghpat and Mewat have consistently recorded the lowest GDP figures during the period 2004-05 to 2009-10.

- **Disguised employment in agriculture sector:** Substantial share of workers are engaged in primary sector activities in NCR. Rajasthan sub-region has recorded the highest share of 77%, followed by Haryana sub-region with 52%, Uttar Pradesh sub-region with about 48%. Further, proportion of workers engaged in agricultural activities (cultivators and agricultural labourers) is significant in Rajasthan sub-region (65.30%), followed by Haryana sub-region (34.09%) and Uttar Pradesh sub-region (31.81%). This leads to inadequate per capita income as well as lack of productive full time employment, besides contributing lesser to the overall GDP, compared to secondary and tertiary sector activities.

- **Uneven distribution of main workforce:** Share of marginal workers to total workers is the highest in Rajasthan sub-region, followed by Haryana sub-region and U.P. sub-region. However, in terms of concentration of marginal workers, U.P. sub-region is the highest, wherein marginal workers are mostly concentrated in the districts of Bulandshahr, Ghaziabad including Hapur and Meerut.

- **Industrial Development:** The major issues observed in most of the Industrial Clusters/Areas of NCR are inadequate infrastructure and common facility centres including quality power supply; lack of infrastructure of effective treatment and disposal of polluting industries; limited availability of skilled manpower in immediate vicinity and a general shortage of manpower; lack of critical support system such as common facilities making it difficult for micro and small enterprises to flourish; issues relating to land acquisition and land availability; and SEZ/EPZ unable to develop as per plans.

Inadequate/old technological base of the traditional/old industrial clusters, such as Panipat, Meerut, Ghaziabad, etc. adversely affects their productivity and competitive advantage. Inadequate technological, financial, skill development and marketing support to the traditional micro and small enterprises. It has been observed that the rate of growth of enterprise creation is comparatively slow, especially in districts like Bulandshahr, Jhajjar, Alwar, and Sonepat.

- **Rural Economy:** Major issue is relating to limited non-farm sector employment in rural areas of NCR. Proportion of workers in rural areas engaged in non-farm activities is insignificant, compared to total workers in the rural areas. Another major issue is inadequate rural infrastructure like Mandi and marketing facilities, common storage and cold storage facilities and inadequate food, fruits and vegetables processing facilities/industries.

- **Informal Sector:** The major issue in the informal sector including micro enterprises is relating to inadequate skill base of the workers engaged. At the same time, street vending, which constitutes a major component of the informal activities, need to be integrated in the formal Urban Planning mechanisms to ensure certainty of their livelihood.

- **Uniform GDP Data at District Level:** Lack of uniform district level GDP data in NCR poses problem in comparability and compatibility.

Recommendations

General:

- **Balanced Economic Growth in NCR**: Interventions in development of secondary and tertiary sector activities, especially in the districts which have consistently recorded lower GDP, per capita income, such as Baghpat, Mewat, Bulandshahr, etc. are required to ensure increase GDP as well as per capita income and thereby contributing in reducing the wide disparity and ensuring balanced economic development of NCR.

- **Employment Generation and Mainstreaming of marginal workers:** In order to increase the share of workers in non-agricultural activities, it is required to create a facilitating business environment in the sub-regions, especially in Rajasthan and Uttar Pradesh, to support the Small Scale Industries (SSIs), which have huge potential for employment generation. There is a need to formulate an effective employment policy in industrial sector for promoting Micro, Small and Medium Enterprises (MSME) in these sub-regions. Mainstreaming of the marginal workers is to be ensured by their skill up-gradation through various training programmes and providing full time productive employment.

- **Industrial Development**: Provision of adequate and efficient infrastructure and service delivery mechanism in the industrial clusters/areas as well as technological & skill up-gradation are prerequisite for ensuring steady and sustainable growth of the industrial sector in NCR. There is a need to evolve proper policy structure and intervention in the manufacturing sector, besides emphasis by the NCR participating States on the service sector since 2000. There is also a need to create infrastructure to encourage entrepreneurship in the districts of Bulandshahr, Jhajjar, Alwar, and Sonepat. It is recommended that cluster based approach should be adopted to optimize the resources for industrial activities, especially in the micro, small and medium enterprises (MSME), especially in the textiles, auto component, general engineering, sports goods etc. All MSMEs in the clusters should have access to Common Facility Centers (CFC) for informal workforce. It is recommended that a combination of hard and soft measures, including technological and skill up-gradation measures, are undertaken to revitalize the traditional/old industrial clusters, such as Panipat, Meerut, Ghaziabad, etc.

The role of Research & Development (R&D) will become crucial in economic development, especially in the tertiary sector activities. Presently, there is a good base for R&D activities in some parts of NCR, for example knowledge and innovation centres at Rai (Sonepat), Rohtak and Greater Noida. However, it is recommended that more such centres be established in NCR.

- **Regional Infrastructure Development:** Regional infrastructures such as the Eastern and Western (KMP) Peripheral Expressways, Regional Rapid Transit System (RRTS), Dedicated Freight Corridor (DFC), Delhi-Mumbai Industrial Corridor (DMIC), Integrated Freight Complexes (IFC), proposed additional transport linkages including expressways, railways, etc. and augmentation of the existing ones are required to be implemented at the earliest in order to foster increased industrial growth in the NCR, especially in areas which are not yet developed such as Mewat, Baghpat, Alwar, Jhajjar, Rewari, etc.

- **Rural Economy**: It is recommended that value added rural infrastructure such as cold storages, common storage, mandis etc. are provided to establish the forward and backward linkages to enhance economic development in rural areas of NCR.

Sector-specific recommendations:

- **Agro-based and Food Processing Industry:**
  - Establishment of Food testing laboratories in Haryana sub-region.
  - Setting up of Fruit and Vegetable Processing Park in Bulandshahr district of U.P. sub-region and Jhajjar district in Haryana sub-region for horticulture produce.
- **Electronics and Information & Communication Technology**
  - It is recommended that appropriate policy interventions are made for operationalisation of the approved SEZs to boost export.
  - Software Development in NCT-Delhi, Gurgaon and NOIDA (need intensification especially in case of NCT-Delhi).
- **Automobiles & Automotive Components**
  - Induced cluster at IMT Manesar and Bawal for automobiles and auto components including provision of skilled manpower and infrastructure like workers' hostel etc.
  - Adequate level of support infrastructure, including forward and backward linkages, to be established for the Auto-Park (e.g. upcoming Auto-Park at

Alwar) and Research Institutes (e.g. upcoming National automotive testing, research and development infrastructure project in Haryana).
    - Infrastructure support for auto component industries for Faridabad, Gurgaon, NOIDA, Meerut and Alwar.
- **Handloom, Hosiery, Textile and Garments Manufacturing**
    - Apparel park in Gurgaon SEZ and at Barhi (Sonepat) under the Apparel Park for Exports Scheme of Government of India.
    - International Trade and Convention Center at Panipat.
    - International Trade Center at Gurgaon for promotion of garments.
    - Textile Park in Alwar District.
    - Dyeing Houses in Faridabad and Ghaziabad Districts.
    - Textile Skill Development Centre at Okhla.
- **Footwear, leather garments and accessories**
    - Infrastructure for leather development at Bahadurgarh, Haryana.
- **General Engineering**
    - Infrastructure development for the existing general engineering clusters/areas in Faridabad, NOIDA and Gurgaon.
- **Logistics**
    - Considering the DFC and the DMIC projects which includes part of Haryana and Uttar Pradesh sub-regions, it is recommended that logistics infrastructure such as Inland Container Depots (ICDs), Container Freight Stations (CFS), Integrated Freight Complexes (IFCs) be set up in these sub-regions at strategic locations.

Cluster Specific Recommendations

- **Auto-Component (Meerut, Gurgaon, Faridabad and Noida):** There is a strong requirement for technological up-gradation through introduction of advanced equipments, improvisation of shop floor practices, induction of quality systems and promotion of standardization for the micro or small units, where full automation has not been undertaken.
- **Handloom and Powerloom (Panipat and Meerut):** It is recommended that interventions in design inputs, workers' skill up-gradation and improved dyeing practices be made in a sustained manner. At the same time, direct market linkages are recommended to be established for these clusters.
- **Sports Goods (Meerut):** The cluster has immense scope for enhancement & promotion of productivity by means of technical upgradation within the existing set of manufactured item as well as diversifying to newer sports segments.
- **Textiles (Okhla, Gurgaon):** It is recommended to focus on the quality improvements, technological up-gradation, skill enhancement and encouraging the entrepreneurs to be a member of global supply chain. It is also recommended that soft activities such as cutting room layout and workflow; lean manufacturing; manpower training; and production improvement through technology adoption be undertaken to enhance productivity and make them competitive.
- **General Engineering (Faridabad, NOIDA, Gurgaon):** It is recommended that adequate support to the units, which are mostly MSME in nature, be extended, especially in the areas of marketing initiatives, technology and availability of raw materials.

Sub-region wise recommendations:

NCT-Delhi

- More focus is required on major value-add sectors like software, BPO, communications and biotechnology.
- Policies to encourage MSMEs in clean technologies.
- Better infrastructure (roads, water, sanitation etc.) in industrial areas.
- Cluster based craft policies.

Haryana sub-region

- Development of infrastructure in industrial clusters/areas, including uninterrupted and quality power supply, roads and water supply and infrastructure/facilities for combating environmental pollution in industrial towns such as Bahadurgarh, Faridabad, Panipat etc. It is also recommended that appropriate policies be formulated and necessary interventions be made to ensure industrial development in the districts not yet developed, such as Mewat, Jhajjar and Rewari.
- Strengthening rural infrastructure to promote agro base industries.
- Implementation of the regional infrastructure projects like KMP Expressway.
- Support to MSME units by adopting cluster development programs in major industrial clusters.

Uttar Pradesh sub-region

- It is recommended that development of infrastructure in traditional/old industrial clusters/areas be undertaken. It is also recommended that appropriate policies be formulated and necessary interventions be made to ensure industrial development in the districts not yet developed, such as Baghpat and Bulandshahr.
- Need to provide common infrastructure (power, roads, etc.) for industries especially in the existing industrial areas
- Need to address congestion and pollution in industrial areas of Ghaziabad.
- Special package for industrial revival of Meerut.
- Comprehensive policy for micro, small and medium enterprises (MSMEs).
- Need to improve rural infrastructure to avail opportunities of modernization of non-farm activities; and
- Proper infrastructure including technological and marketing support for traditional craft clusters in Khurja, Ghaziabad etc.

Rajasthan sub-region

- Need to adopt induced cluster based approach with strong support infrastructure for manufacturing activities, especially in the already existing & upcoming areas, i.e. (i) Bhiwadi-Tapookara-Khushkhera Complex, (ii) Alwar and (iii) Shahjahanpur-Neemrana-Behror Complex.
- Need for encouraging investment in greenfield auto and textile sector.

1. INTRODUCTION

1.1 Background

The Indian economy has undergone a massive transformation in the recent years. India is the 12th largest economy in the world and third largest in Asia after China and Japan. It is not only the series of internal reforms but also the powerful forces of globalization are shaping the new economy. The focus is now shifting towards the development of the urban centers that contribute to more than 60% of the country's total Gross Domestic Product (GDP). However, the contribution of agriculture to the national economy has reduced rapidly due to globalization. Various effects of globalisation are increasingly shaping the economy of the National Capital Region (NCR). Tertiary sector is increasingly becoming the pre-dominant sector in the NCR.

The 2011 Wealth Report has ranked Delhi at 37th globally, which is the core of NCR. In terms of economic activity, Delhi (ranked 39 globally) is ranked above cities like Jakarta and Johannesburg. As per Wealth Report, Delhi is to move further up the ranks over the next 10 years. As per the ranking by Mercer, Delhi is the most expensive city in India and ranked at 85 globally, followed by Mumbai (95) and Bangalore (185).

The nature of economic activities in the NCR is rapidly evolving. Improved infrastructure, such as introduction of Delhi Metro and its extensions works in central NCR, construction of expressways, investments in roads and other infrastructure such as Delhi-Mumbai Industrial Corridor and Dedicated Freight Corridor, setting up of Industrial Estates/Model Industrial Townships/SEZs, etc. are expected to increase the economic activity within the NCR. The growing concentration of tertiary sector and other value-added services are emerging as a major source of employment and income in NCR. In view of the constantly changing economic scenario of NCR, it is imperative to analyze and assess the economic development trends in NCR, alongwith economic/fiscal policies and suggest future directions of growth.

1.2 Need for a Functional Plan for Economic Development for NCR

The Regional Plan-2001, notified in 1989, visualized the significance of "a balanced and harmoniously developed region, leading to dispersal of economic activities and immigrants to Delhi, thereby leading to a manageable Delhi". The Plan proposed "a policy of strict control on creation of employment opportunities within the Union Territory of Delhi, moderate control in the Delhi Metropolitan Area and, encouragement with incentives, in the areas outside Delhi Metropolitan Area within the NCR".

The National Capital Region Planning Board has now prepared a Regional Plan for the perspective year 2021 for the NCR notified on 17.9.2005. The policy of restricted growth of Delhi has been reviewed and the Regional Plan-2021 proposes "to harness the spread of the developmental impulse and agglomeration economies generated by Delhi for harmonized, balanced and environmentally sustainable spatio-economic development of the NCR with effective cooperation of the participating States".

The changes in economic policy; the process of privatization of PSUs and downsizing of government; elimination of subsidies and tax incentives for industry will act as a set of essential tools with which the economic structure of the NCR will undergo a rapid transformation in a significant manner. Furthermore, new developments, such as introduction of the Delhi Metro and its extensions in Central NCR, construction of Western Peripheral (KMP) and Eastern Peripheral Expressways, and other expressways, construction of Delhi-Mumbai Industrial Corridor, Dedicated Freight Corridor and development of Industrial Estates/Model Industrial Townships/SEZs and new towns, etc. will have a significant impact on the economy of NCR.

Since, the National Capital Region is a highly agglomerated urban region, the City Cluster Development Approach can also be implemented as to facilitate orderly economic development of NCR.

In view of the above, it is necessary to understand & analyse the dynamics of economic development in NCR and prepare a Functional Plan for Economic Development to make recommendations for accelerated & sustainable economic development.

1.3 Objective and Scope

The objective of the Functional Plan for Economic Development for NCR is to detail out the broad policies and proposals of the Regional Plan-2021 for guidance of the participating States, as per the provisions of Section 16 of the NCRPB Act, 1985.

This Functional Plan has analysed spatial-economic characteristics of different elements of NCR with special focus on income levels, establishments, industrial growth, industry clusters, current and future new developments, level of informal activities, structural changes in the economy of NCR, future growth areas, action plan for clusters, different industrial locations and investment policies, suggestions on industrial sites and service sector growth, strategy and action plan for future growth with its impact on employment and GDP.

1.4 Methodology

The Functional Plan for Economic Development for NCR has been prepared based on the analysis & findings of the Study of Economic Profile of NCR (covering the area of NCR prior to the notifications dated 01.10.2013 and 24.11.2015) conducted by NCR Planning Board through Consultant. The Study was consducted based on data/information published by Govt. of India and the participating State Governments as well as as per the information providd by various industry associations. The Study Report was prepared after extensive consultations with concerned Ministries/Departments of the Central Govt., NCR participating States and their Departments/Agencies. The draft findings & recommendations of the Study were also discussed in a Stakeholders' Workshop held on 08.05.2015. The Report was finalized after addressing/incorpotrating the views/comments/suggestions received from various Stakeholders. The Final Report of the Study of Economic Profuile of NCR was subsequently approved by the Consultancy Review Committee (CRC) in its meeting held on 14.08.2015.

Details of various indicators such as GDP, Per Capita Icome, Work Participation Rate, etc. used in the Plan as well as various tools & methods used for GDP projections are given at Annexure-1.1.

1.5 Data Limitation

There were constraints related to availability of data, especially in terms of drawing comparisons among the different sub-regions on select development indicators. Furthermore, in certain cases, time series analysis of certain parameters has not been possible. Therefore, in some cases, findings are limited to determining data at two points of time. Data for district level GDP is available from 2004-05 to 2009-10; the analysis of NCR sub-regions and districts is limited to this period.

1.6 National Capital Region (NCR)

The National Capital Region includes NCT-Delhi, nine districts of Haryana, six districts of Uttar Pradesh and one district of Rajasthan. Total area of the region is 34,144 sq. km. (Map 2.1 National Capital Region Regional Plan-2021: Constituent Areas). Subsequent to the preparation of the Regional Plan-2021, a few districts were bifurcated and reorganized by the participating States. The administrative units and their land areas are as follows (Map 1.1):

a) National Capital Territory of Delhi (1,483 sq. km.) accounting for 4.4% of the total area of NCR.
b) Haryana sub-region with an area of 13,428 sq. km. accounting for 30.3% of the area of the State and 39.3% of the area of NCR comprising the districts of Faridabad, Gurgaon, Rohtak, Sonepat, Panipat, Jhajjar, Rewari, Mewat and Palwal.
c) Rajasthan sub-region comprises Alwar district which has an area of 8,380 sq. km. This account for 2.5% of the total area of the State and 24.5% of the area of NCR.
d) Uttar Pradesh sub-region with an area of 10,853 sq. km. accounting for 4.5% of the area of the State and 31.8% of the area of NCR comprising the districts of Meerut, Ghaziabad, Gautam Budh Nagar, Bulandshahr, Baghpat and Hapur.

Government of India vide Gazette Notification dated 1.10.2013 has added Bhiwani and Mahendragarh districts of the State of Haryana and Bharatpur district of the State of Rajasthan in NCR. Subsequently, Government of India vide Gazette Notification dated 24.11.2015 has added Jind and Karnal districts of State of Haryana and Muzaffarnagar district of State of Uttar Pradesh in NCR. Accordingly, now Haryana sub-region has 13 districts, Uttar Pradesh sub-region has seven districts and Rajasthan sub-region has two districts in NCR. Area of Haryana Sub-region is 25,327 sq. km., area of Uttar Pradesh sub-region is 13,560 sq. km. and that of Rajasthan sub-region is 13,447 sq. km. Consequent to the notifications, the area of NCR is 53,817 sq. km.

NCR plays an important role in the Indian economy. NCR is a hub of economic activities and contributes 6.7% of GDP of India. It is evolving as one of the largest metropolitan regions of the world.

Population of NCR is about 460 lakhs[1], as per Census of India, 2011. The sub-regions of NCT-Delhi, Haryana, Rajasthan and Uttar Pradesh shares 36.44%, 23.95%, 7.98% and 31.64% of NCR's population respectively (refer Table 1.1).

[1] Excluding the newly added districts of Bhiwani, Mahendragarh, Jind, Karnal, Bharatpur and Muzaffarnagar

Table 1-1: Sub-Region wise Distribution of Population in NCR

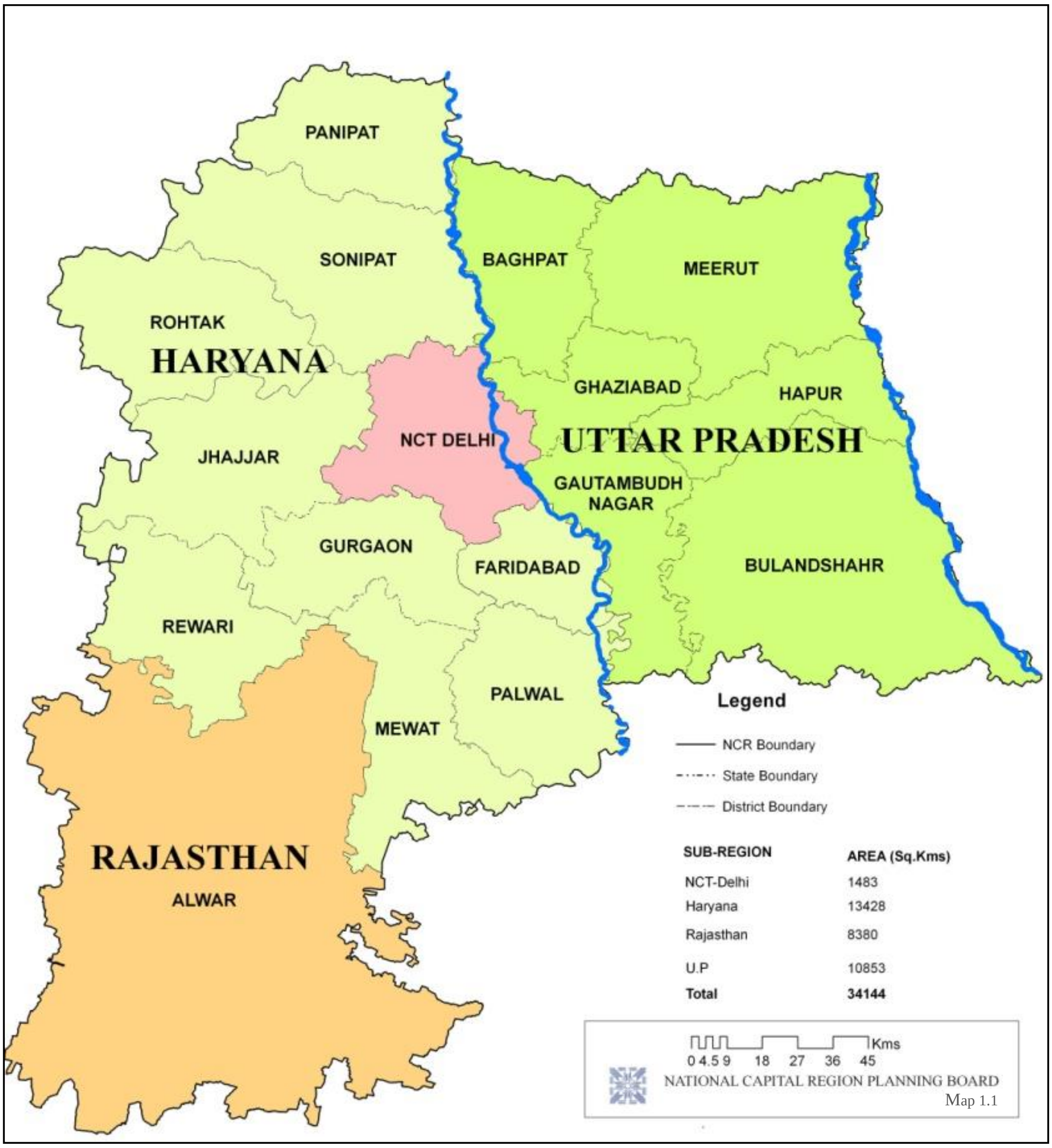
	Population				Decadal Growth (%)			Share of population in 2011 (%)
Year	**1981**	**1991**	**2001**	**2011**	**1981-1991**	**1991-2001**	**2001-11**	**2011**
NCT-Delhi sub-region	62,20,406	94,20,644	1,38,50,507	1,67,87,941	51.45	47.02	21.21	36.44
Rajasthan sub-region	17,55,575	22,96,580	29,92,592	36,74,179	30.82	30.31	22.78	7.98
Haryana sub-region	49,38,541	66,43,604	86,87,050	1,10,31,515	34.53	30.76	26.99	23.95
Uttar Pradesh sub-region	69,68,646	90,01,704	1,15,70,117	1,45,75,668	29.17	28.53	25.98	31.64
NCR	**1,98,83,168**	**2,73,62,532**	**3,71,00,266**	**4,60,69,303**	**37.62**	**35.59**	**24.18**	**100**

Source: Regional Plan-2021 fro NCR, Census of India 1981, 1991, 2001 & 2011

In 2011, NCT Delhi had the highest population concentration at 167.88 Lakh and Rajasthan sub-region had the lowest concentration at 36.74 Lakh.

The maximum decadal population growth in 2001-11 was recorded in Haryana sub-region (26.99%), followed by Uttar Pradesh sub-region (25.98%) and Rajasthan sub-region (22.78%). The minimum decadal growth in this period was recorded in NCT-Delhi sub-region (21.21%).

Map 1.1: NCRConstituent Areas



1.7 Regional Plans for NCR

NCR Planning Board prepared the Regional Plan-2001 for NCR which was notified in 1989. Subsequently, NCRPB has also prepared the Regional Plan-2021 for NCR which was notified in 2005 and presently in force. The objectives of the Regional Plan-2021 for NCR are as under:

The Regional Plan-2021 aims "To promote growth and balanced development of the National Capital Region" as per Section 10, Sub-section (2) of the Act, 1985.

The above aim is sought to be achieved through:

i Providing suitable economic base for future growth by identification and development of regional settlements capable of absorbing the economic development impulse of NCT Delhi.
ii Providing efficient and economic rail and road based transportation networks (including mass transport systems) that are well integrated with land use .
iii Minimizing the adverse environmental impact that may occur in the process of development of the NCR.
iv Developing selected urban settlements with urban infrastructural facilities such as transport, power, communication, drinking water, sewerage, drainage, etc. comparable with NCT of Delhi.
v Providing a rational land use pattern in order to protect and preserve good agricultural land and utilize unproductive land for urban uses.
vi Promoting sustainable development in the region to improve the quality of life.
vii Improving the efficiency of existing methods of resource mobilization and adopt innovative methods of resource mobilization and facilitate, attract and guide private investment in desired direction.

1.8 Summary of NCR Profile

1.8.1 Growth Differentials

The comparative data amongst all constituents of the NCR, indicates that there are marked differences in their growth patterns. Areas such as Noida and Gurgaon have grown faster than other areas such as Rohtak, Jhajjar, and Alwar. Keeping in view the long term objective to develop the NCR as a sustainable region, it is necessary to look at the socio-economic attributes of these regions. As per analysis carried out and projections made by “City Mayors”, Ghaziabad and Faridabad are among the fastest growing cities and urban areas in the world from 2006 to 2020 and are ranked (globally) second and eighth respectively.

1.8.2 Industry

The industrial sector of NCR comprises of both large & medium scale units as well as small scale industries and tiny unorganized units (SSI). The industrial sector of NCR has grown both in terms of volume as well number of units. In Haryana sub-region, units which manufacture machine tools, engineering goods consisting of metal products & parts of electric machinery show highest percentage distribution. In case of U.P. Sub-Region, electrical machinery, metal products and parts, chemical products, textile products constitute the major sectors. In Rajasthan sub-region, metal products and parts, textile products and transport equipments along with non-metallic mineral products, chemicals, and basic metal products constitute the major sectors. There is also a need for rural industrialization as an instrument for balanced regional growth, as this will also help in improving agricultural productivity. There is a need to harness traditional skill levels (Craft and Handloom) along with major agro-processing facilities in the region.

1.8.3 Settlement Pattern

(a) Urban Settlements

According to Census 2011, the number of urban settlements in the region increased from 108 in 2001 to 168 in 2011. Of these, there are 22 Class-I cities (including Delhi Metropolis), 13 Class-II towns, 41 Class-III, 43 Class-IV, 44 Class-V and 5 Class-VI towns in 2011. The Class-I cities accommodated about 89% of the total urban population of the region. The rest of the urban population was distributed among the 146 towns of Class-II to Class-VI. Delhi urban agglomeration alone accounted for about 57% of the total urban population of the region. The number of metropolitan cities (more than ten lakhs population) within the region increased from one (Delhi) in 1991 to three (Delhi, Meerut, and Faridabad) in 2001 to four (Delhi, Faridabad, Ghaziabad and Meerut) in 2011. There are 65 urban settlements in Haryana sub-region, 16 in Rajasthan sub-region and 86 in Uttar Pradesh sub-region. Excluding NCT of Delhi in NCR, there are eight Class-I urban centers in Haryana sub-region, two Class-I urban center in Rajasthan sub-region and 11 Class-I urban centers in Uttar Pradesh sub-region.

(b) Rural Settlements

According to the Census 2011, there are 7,206 rural settlements of various sizes in the National Capital Region. Of these, 103were in NCT of Delhi, 2199 in Haryana sub region, 2021 in Rajasthan and 2,883 in Uttar Pradesh sub-region. More than 172 lakhs population resided in rural areas in NCR in 2011, accounting for about 37% of the total population in NCR.

1.8.4 Proposed Settlement Pattern in the Regional Plan-2021 for NCR

The Regional Plan-2021 for NCR has proposed six-tier settlement system i.e. Metro Centre, Regional Centre, Sub-Regional Centre, Service Centre, Central Village and Basic Village. The Six-tier Hierarchy of Settlements alongwith the population range is given in Table 1.2.

Table 1-2: Six–tier Hierarchy of Settlements proposed in the Regional Plan-2021 for NCR

1. Metro Centre	10 lakhs and above
2. Regional Centre	3 – 10 Lakhs
3. Sub-regional Centre	0.5 – 3 Lakhs
4. Service Centre	10,000 to 50,000
5. Central Village	5,000 to 10,000
6. Basic Village Below	5,000

Source: Regional Plan-2021 for NCR,

The Metro and Regional Centers as proposed in the Regional Plan-2021 are given in Table 1.3.

Table 1-3: Proposed Metro & Regional Centers in NCR as per the Regional Plan 2021 for NCR

Sr. No.	Sub-region	Metro Centre (City/Complex)	Regional Centre (City/Comlex)
1	Haryana sub-region	• Faridabad-Ballabgarh • Gurgaon-Manesar • Sonepat-Kundli	• Bahadurgarh • Panipat • Rohtak • Palwal • Rewari
2	Uttar Pradesh sub-region	• Ghaziabad-Loni • NOIDA • Greater Noida	• Hapur-Philkhua • Bulandshahr-Khurja • Baghpat-Baraut

Sr. No.	Sub-region	Metro Centre (City/Complex)	Regional Centre (City/Comlex)
		• Meerut	
3	Rajasthan sub-region	-	• Alwar • Greater Bhiwadi • Shahjahanpur-Neemrana-Behror

Source:Regional Plan-2021 for NCR

Metro Centres can act as powerful growth nodes to attract capital functions and activities and help in population dispersal from the NCT Delhi. Due to their special functional status and size, a high level of social, physical and economic infrastructure better than that in the Capital is required to be developmed in these towns/complexes. There is a need to provide an efficient intra-urban mass transportation system, as well as transport and communication linkages with Delhi and other Metro Centers and NCR towns. The respective participating states and their agencies would not only be required to create the necessary infrastructure themselves in these Metro Centers but also facilitate private sector investments therein.

The proposed **Regional Centres**, which are well-established urban centers, marked by highly specialized secondary and tertiary sector activities and providing job opportunities, which normally cannot be performed by other lower-order centers. These centers are being developed for advanced industrial and other economic activities and will have concentrations of administrative and higher order service functions, which are expected to exert an increasingly dynamic influence on attraction of investment and creation of conducive living and working environments.

The Regional Plan-2021 for NCR has propsed strategies for development of the settlement system. Development of a well-knit regional settlement system, as proposed in the Regional Plan-2021 for NCR, is desired, where Delhi and other cities/ townships in the region would be allowed to grow to their carrying capacity so as to harness the development potential. Creation of high-quality infrastructure, robust transport and communication linkages, high-quality residential areas, industrial and commercial complexes is the need of the day. New townships could be set up as nodes along the key transport corridors, proposed expressways, orbital rail corridors and other suitable locations on virgin land. Secondly, development of small and medium towns in the region, as they are sub-regional centers or service centers, is also essential. These cities would play a significant role in supporting the socio-economic development of their rural hinterland by providing access to education and health facilities, agricultural extension services and agro industries based on local products. Rural development also needs to be encouraged by providing facilities and services in an appropriate hierarchy, which further stimulates production and increases income of the rural population, diversifying the economy. Hence, making the rural areas of NCR attractive to live in & work at and helps in checking migration towards urban centers.

1.9 Chapterisation of Functional Plan

The Functional Plan for Economic Development of NCR comprises of eight chapters. Each chapter begins with an outline summary of significant findings of the respective sectors. An outline of the chapters is below.

Chapter 1: Introduction provides the background and covers the method and approach.

Chapter 2: GDP and Income Analysis present trends of GDP growth in the NCR, specifically at sub-region and district levels; this gives a better understanding of growth inequalities among different sub-sets of the NCR. The chapter also covers Net National Product (NNP) and Per Capita Income and GDP at sub-sectoral level.

Chapter 3: Workforce in NCR highlights employment levels in different sectors of the economy.

Chapter 4: Industrial Development in NCR presents the status of industrial development in the NCR at district and sub-region level. This chapter also scans major industrial clusters in the NCR and outlines their importance in the NCR economy.

Chapter 5: Rural Economy of NCR presents the drivers of a rural economy including different government schemes on rural development. The chapter gives details of sizes and types of infrastructure existing in rural areas that support farm and non-farm activities.

Chapter 6: Informal sector provides an outline of the informal sector economy, its size, growth and challenges in NCR.

Chapter 7: Policy Framework for NCR reviews and lists different policy measures taken by the sub-regional governments to stimulate investment in their respective areas.

Chapter 8: Issues and Recommendations: gives an outline of the key findings, issues identified, and recommendations for promoting sustainable economic growth of the NCR. The chapter also presents lessons from projects being undertaken at different locations.

2. GROSS DOMESTIC PRODUCT AND INCOME ANALYSIS

2.1 Background

Gross Domestic Product (GDP) refers to the market value of all final goods and services produced in a country in a given period. GDP is universally accepted as a critical indicator of growth. In order to understand the economic strength of NCR, the district level GDP have been aggregated. District level GDP estimates are prepared by the NCR constituent States and therefore, there may be difference in the approach for calculating GDP. Furthermore, comparable district GDP figures are available till 2009-10 and therefore, status and changes in GDP trends in NCR and its constituent sub-regions is limited to this period. [2]

NCR significantly contributes to the national GDP. India's GDP at constant (2004-05) prices in 2009-10 was Rs. 45,160.70 billion, whereas the GDP of NCR for the same period was Rs. 3,193.40 billion, accounting for 7.1%. In the year 2009-10, the GDP of India has seen a growth rate of 8.6% as per CSO and total GDP in year 2013-14 was recorded at Rs. 57417.91 billion. The average growth rate of GDP in the NCR (11.2%) is greater than that of India (8.7%) during 2004-05 to 2009-10. Details of GDP figures of NCR for 2004-05, 2005-06, 2006-07, 2007-08, 2008-09 and 2009-10 are given in Table 2.1.

NCR is rapidly emerging as a world-class region and is among the fastest growing economic regions of India. The NCR economy was driven primarily by the service sector, which accounted for 66% of its GDP (2007-08). Analysis of sectoral growth in Gross State Domestic Product (GSDP) in the NCR reveals that the contribution of the primary sector is rapidly decreasing while contribution of the tertiary or service sector is increasing. GDP of India, States and NCR at both constant (2004-05) prices and current prices (2013-14) are given in Annexure-2.1. Per capita income of States at both constant (2004-05) prices and current prices (2013-14) are given in Annexure-2.2. As observed from the Annexure 2.1 and Annexure 2.2, NCR is the sixth largest contributor to India's GDP when compared to GDP of various states at constant (2004-05) prices for the year 2013-14. Per capita income in NCR at constant (2004-05) prices during 2009-10 (Rs. 59,264/-) is much higher than the average per capita income at national level (Rs. 39,904/-) for the year 2013-14.

2.2 Trends and Structure of NCR Economy

2.2.1 NCR GDP Trends

(a) GDP Trends at NCR and Sub-regional level

Among various sub-regions of NCR, NCT-Delhi recorded the highest GDP followed by Haryana, Uttar Pradesh and Rajasthan respectively (refer Table 2.1). Among NCR districts (excluding NCT-Delhi), Gurgaon has the highest GDP followed by Faridabad, while Mewat has the lowest GDP.

[2] Comparable data of district level GDP was available only till 2009-10 for all the districts of NCR. However, in case of some districts and sub regions data available till 2013-14.

Table 2-1: District wise Gross Domestic Product (GDP) of NCR from 2004-05 to 2009-10 (at Constant 2004-05 Prices) (In Rs Millions)

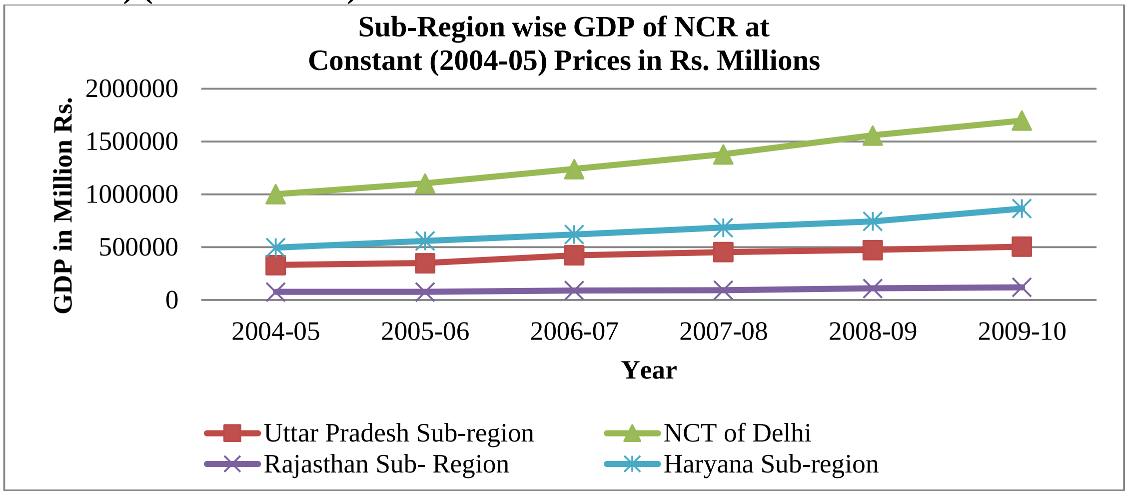
Sub-Region/ District	Gross Domestic Product (GDP)					
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Meerut	71,760.60	81,598.94	85,739.00	91,741.00	93,859.00	101,255.00
Bagpat	29,072.70	28,550.69	30,676.00	32,878.00	34,721.00	38,426.00
Gaziabad + Hapur	89,271.38	97,684.35	16,073.00	24,786.00	131,284.00	36,476.00
Gautambuddha Nagar	73,533.04	75,276.19	17,302.00	126,290.00	131,114.00	141,557.00
Bulandshahr	68,799.56	66,288.34	74,341.00	78,725.00	83,337.00	88,740.00
U.P. sub-region	**332,437.28**	**349,398.51**	**224,131.00**	**354,420.00**	**474316**	**406,454.00**
% to NCR	17.41%	16.71%	9.43%	13.56%	16.43%	12.73%
Nct-Delhi sub-region	**1,003,245**	**110,4061**	**1,240,796**	**1,379,609**	**1,557,911**	**1,698,390**
% to NCR	52.53%	52.79%	52.20%	52.77%	53.96%	53.18%
Alwar	77,420.30	77,425.70	90,451.30	93,576.10	10,109.80	121,901.00
Rajasthan sub-region	**77,420.30**	**77,425.70**	**90,451.30**	**93,576.10**	**10,109.80**	**121,901**
% to NCR	4.05%	3.70%	3.81%	3.58%	0.35%	3.82%
Faridabad	1,11,351.30	21,775.90	36,363.00	51,289.00	1,62,484.00	1,90,015.00
Gurgaon	66,984.40	1,80,864.00	2,02,167.00	2,27,494.00	2,42,418.00	2,69,906.00
Jhajjar	28,356.30	30,757.10	34,253.00	36,861.00	40,157.00	44,948.00
Panipat	65,641.00	72,170.50	79,053.00	88,334.00	00,821.00	99,298.00
Rewari	43,623.80	47,154.90	51,646.00	56,207.00	60,465.00	65,931.00
Rohtak	32,447.20	34,565.70	37,593.00	40,121.00	41,931.00	47,052.00
Sonipat	48,414.20	52,734.50	58,440.00	62,898.00	68,729.00	77,068.00
Mewat	-	20,637.40	21,934.00	23,363.00	27,919.00	29,968.00
Palwal	-	-	-	-	-	42,546.50
Haryana sub-region	**285,466.9**	**279,796**	**319,282**	**359,073**	**239,201**	**406,811.5**
% to NCR	14.95%	13.38%	13.43%	13.74%	8.28%	12.74%
Total NCR	**1,909,921**	**2,091,545**	**2,376,825**	**2,614,171**	**2,887,262**	**3,193,474.3**

Source: Economic Survey of Delhi, 2012-13; Department of Economic and Statistical Analysis, Haryana; Directorate of Economic and Statistics, Rajasthan; updes.up.nic.in

The sub-region wise GDP figures indicate that GDP of NCR doubled from 2004-05 to 2009-10 (at constant prices, i.e. 2004-05), in which NCT-Delhi account for the maximum share, followed by Haryana, Uttar Pradesh, and Rajasthan respectively.

GDP of NCT-Delhi is almost equal to the combined GDP of other sub-regions. During the period 2004-05 to 2009-10, GDP of Haryana has nearly doubled and that of NCT-Delhi has increased by about 1.7 times. GDP of Haryana sub-region increased at a rate faster than compared to other sub-regions, particularly after 2004-2005 (refer Figure 2.1). GDP of Rajasthan sub-region has increased at a very slow pace. Uttar Pradesh and Haryana sub-regions reported GDP trends on almost similar lines till 2006-07, after which the trend varied when Haryana sub-region started making better progress, probably due to heavy investments during this time in Gurgaon and Manesar. Till 2004-05, the difference in growth rate in GDP among the four sub-regions was comparatively narrow; however, the difference became wider after 2005-06.

Figure 2.1: Sub-Region wise Gross Domestic Product (GDP) of NCR (at Constant 2004-05 Prices) (In Rs Millions)



Comparative analysis of the Annual Average Growth Rate (AAGR) of GDP at national level, NCR and the four sub-regions from 2004-05 to 2009-10, indicates that the AAGR of GDP of NCR was higher (11.2%) than that of India (8.7%). Haryana sub-region (12.4%) recorded the maximum AAGR in GDP followed by sub-regions of NCT-Delhi (11.5%), Rajasthan (9.6%) and Uttar Pradesh (8.7%). It is also observed that Rajasthan (9.6%) and Uttar Pradesh (8.7%) sub-regions have recorded similar AAGR of GDP (refer Table 2.2, Figure 2.2 and Figure 2.3).

AAGR of Haryana, Uttar Pradesh and Rajasthan sub-regions (12.4%; 8.7% and 9.6% respectively) were higher than those of their corresponding states (9.86%, 6.81% and 7.63% respectively). The highest growth rate of GDP of NCR has been recorded in the year 2006-07 at 13.64%. The growth rate of GDP of both the NCR and India were the closest in the year 2005-06 at 9.51% and 9.48%% respectively and the farthest in the next year 2006-07 at 13.64% and 9.57% respectively (refer Table 2.2, Figure 2.2 and Figure 2.3).

Table 2-2: Sub-Region wise AAGR of Gross Domestic Product of NCR from 2004-05 to 2009-10 (at Constant 2004-05 Prices)

Sub-Region/State	YoY%	YoY%	YoY%	YoY%	YoY%	
	2005-06	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**AAGR**
Uttar Pradesh sub-region	5.10	21.39	7.14	4.38	6.78	8.7
NCT-Delhi sub-region	10.05	12.38	11.19	12.92	9.02	11.5
Rajasthan sub-region	0.01	16.82	3.45	17.67	10.71	9.6

Sub-Region/State	YoY% 2005-06	YoY% 2006-07	YoY% 2007-08	YoY% 2008-09	YoY% 2009-10	AAGR
Haryana sub-egion	12.85	10.84	10.48	8.50	16.4	12.4
NCR	**9.51**	**13.64**	**9.99**	**10.45**	**9.13**	**11.2**
Uttar Pradesh State	**6.51**	**8.07**	**7.32**	**6.99**	**6.58**	**6.81**
Rajasthan State	**6.68**	**11.67**	**5.14**	**9.09**	**6.70**	**7.63**
Haryana State	**9.20**	**11.22**	**8.45**	**8.17**	**11.72**	**9.86**
India	**9.48**	**9.57**	**9.32**	**6.72**	**8.59**	**8.7**

Source(s): Economic Survey of Delhi 2012-13; Department of Economic and Statistical Analysis, Haryana; Directorate of Economic and Statistics, Rajasthan; updes.up.nic.in

Figure 2.2: Comparative Annual Growth Rate of GDP during 2005-06 to 2009-10 of NCR and India (at Constant 2004-05 Prices)

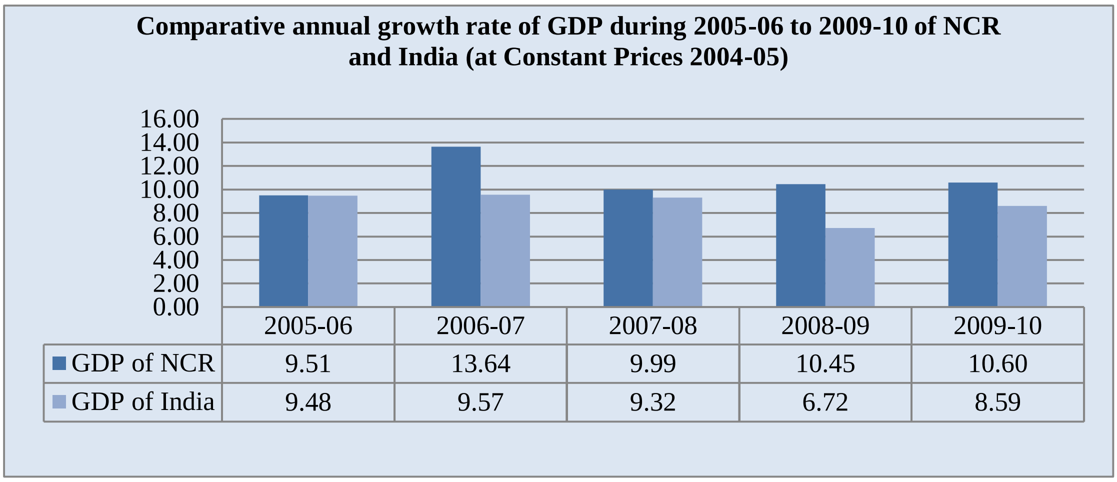
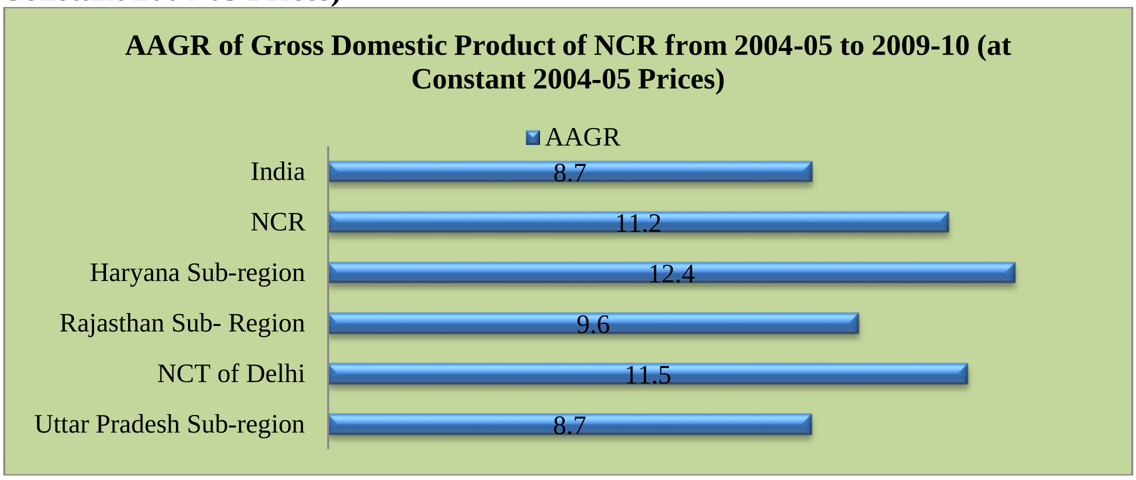


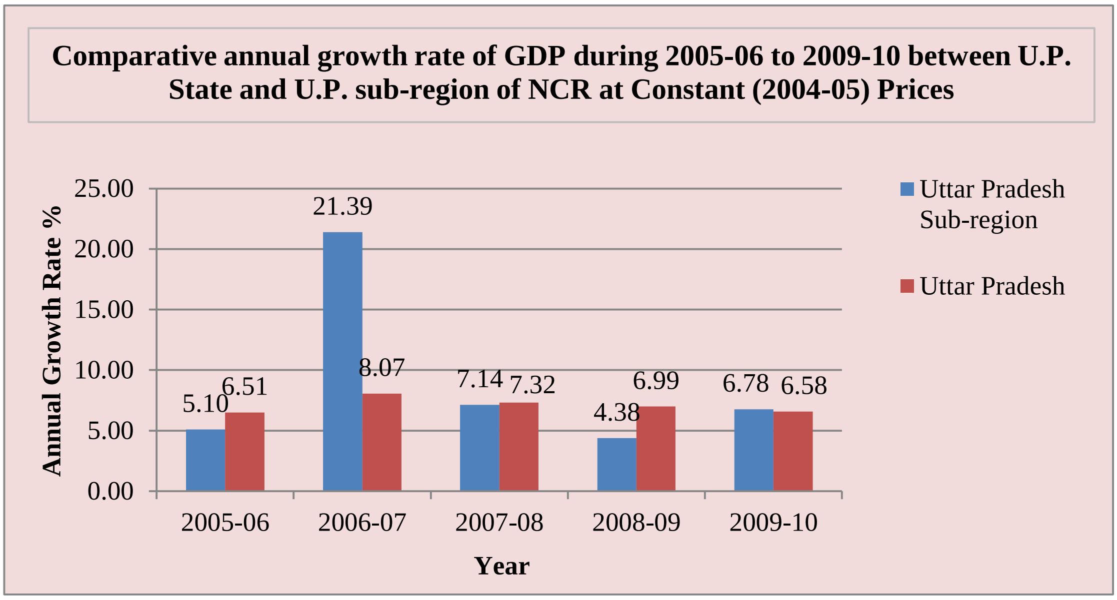
Figure 2.3: AAGR of Gross Domestic Product of NCR from 2004-05 to 2009-10 (at Constant 2004-05 Prices)



(b) Comparative Analysis of AAGR between the NCR constituent States and respective sub-regions

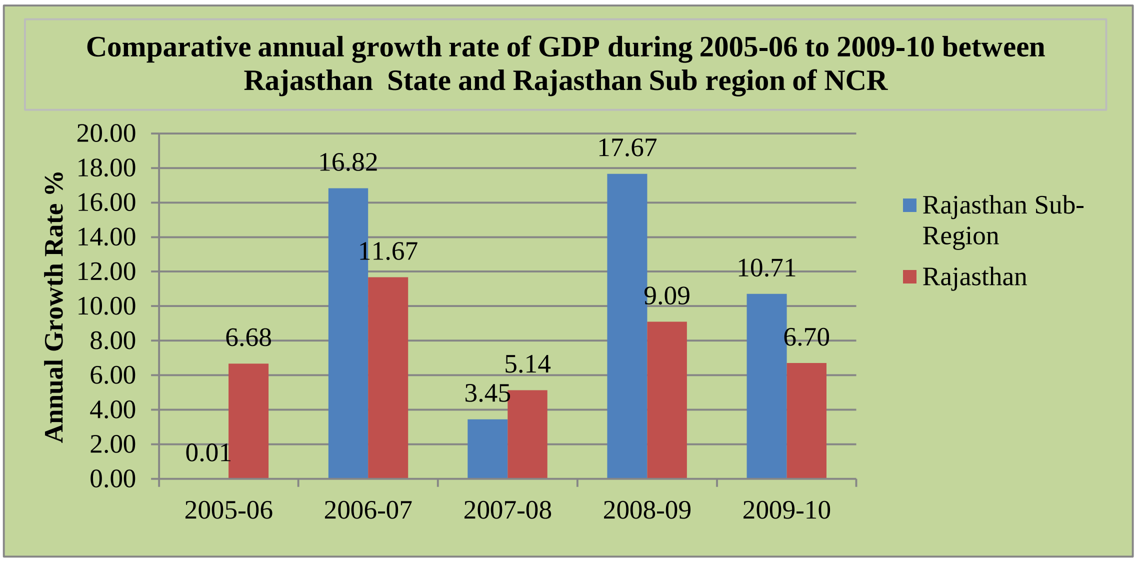
Uttar Pradesh sub-region recorded the highest growth in the year 2006-07 (21.39%) and the lowest growth in the year 2008-09 (4.38%). However, Uttar Pradesh State recorded higher annual growth rate in GDP than Uttar Pradesh sub-region, except 2006-07 and 2009-10. It is also observed that in 2009-10, both U.P. sub-region and U.P. State recorded 6.78% and 6.58 % annual growth rate of GDP respectively (refer Figure 2.4).

Figure 2.4: Comparative Annual Growth Rate of GDP during 2005-06 to 2009-10 between U.P. State and U.P. Sub-Region of NCR at Constant (2004-05) Prices



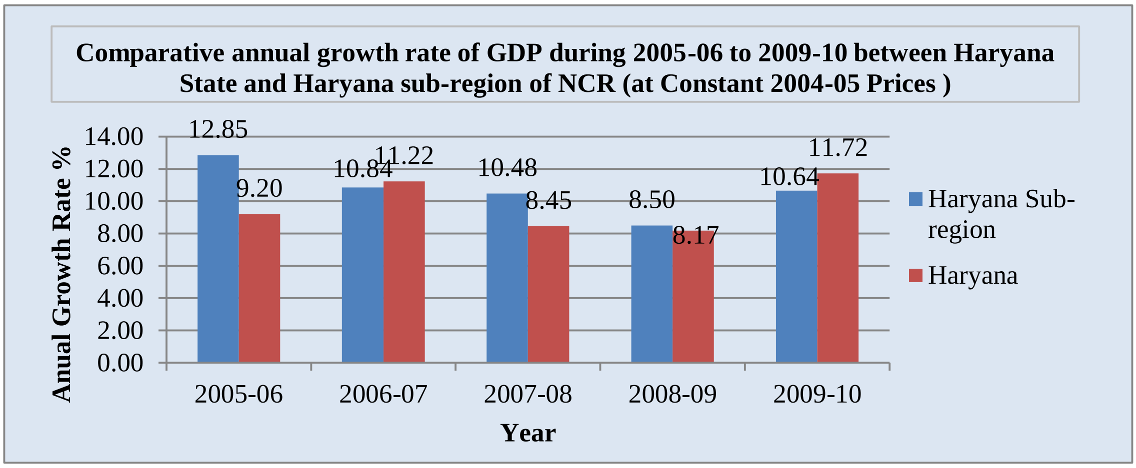
Rajasthan sub-region has recorded a wide variation in annual growth rate, with AGR of 0.01% in 2005-06; 16.82% in 2006-07; 3.45% in 2007-08; 17.67% in 2008-09 and 10.71 in 2009-10. Rajasthan State also has recorded similar variation, with AGR of 6.68% in 2005-06; 11.67% in 2006-07; 5.14% in 2007-08; 9.09%in 2008-09 and 6.70% in 2009-10. Rajasthan sub-region recorded higher annual growth rate in GDP than Rajasthan State, except 2005-06 and 2007-08 (refer Figure 2.5).

Figure 2.5: Comparative annual growth rate of GDP during 2005-06 to 2009-10 Rajasthan and Rajasthan Sub-Region of NCR



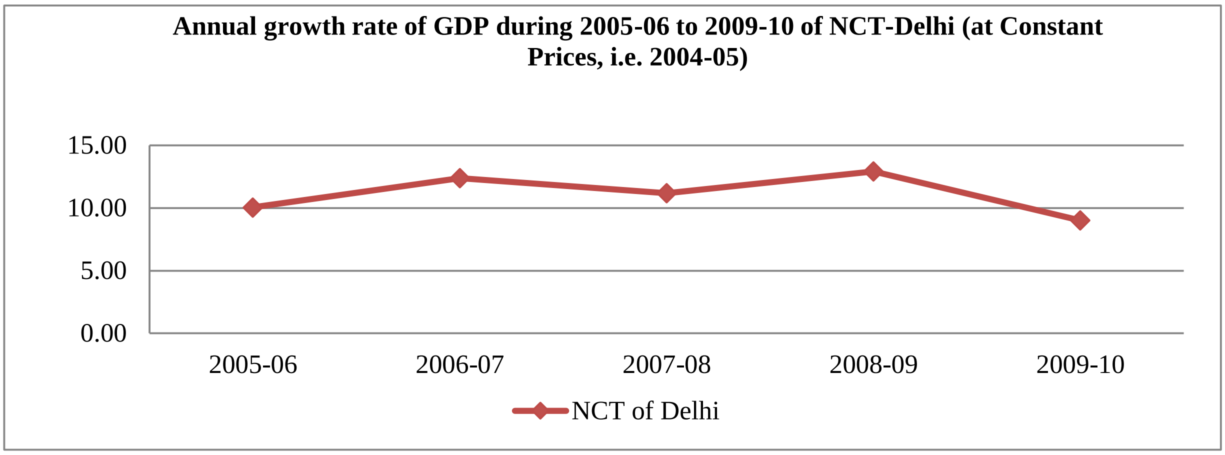
Haryana sub-region demonstrates a comparatively consistent growth, with annual growth rate of GDP of 12.85%, 10.84%, 10.48%, 8.50% & 10.64% compared to 9.20%, 11.22%, 8.45%, 8.17% & 11.72% for the periods 2005-06, 2006-07, 2007-08, 2008-09 and 2009-10 respectively (refer Figure 2.6).

Figure 2.6: Comparative Annual Growth Rate of GDP during 2005-06 to 2009-10 Haryana and Haryana Sub-Region of NCR (at Constant 2004-05 Prices)



The annual growth rate of GDP of NCT-Delhi sub-region had a positive start in 2005-06 at 10.05%; in 2006-07 it was 12.38%, slightly dipped in the successive year to 11.19%, again picked up in 2008-09 to 12.92% but came down to just above 9% in 2009-10. Although the highest growth rate was observed in 2009-10 at 12.92%, the pace of the growth was slow (refer Figure 2.7).

Figure 2.7: Annual Growth Rate of GDP during 2005-06 to 2009-10 of NCT of Delhi (at Constant 2004-05 Prices)



(c) District-wise Comparative Analysis of GDP in the respective sub-regions

Uttar Pradesh sub-region

In 2009-10, the highest GDP was recorded in Gautambuddha Nagar (Rs. 1,41,557.06 Million), which was almost four times that of Baghpat (Rs. 8,426.16 Million). The GDP in Meerut, Ghaziabad (including Hapur) and Gautambuddha Nagar districts were competitive at Rs. 1,01,254.56 Million, Rs. 1,36,475.9 Million and Rs. 1,41,557.06 Million respectively. Growth of GDP of Baghpat, Bulandshahr, Gautambuddha Nagar, Ghaziabad and Meerut showed similar growth pattern throughout 2005-10. Gautambuddha Nagar has recorded the highest growth of GDP in comparison to other districts, wherein GDP in absolute number has grown by Rs. 68,024.02 Million between 2004-05 and 2009-10. The lowest GDP has been recorded in Baghpat District at Rs. 29,072.2 Million in 2004-05. In the subsequent years also, growth of GDP in Baghpat District has remained low, which reached to Rs. 38,426.16 Million (refer Table 2.3 & 2.4 and Figure 2.8).

Table 2-3: District wise GDP of Uttar Pradesh Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices) (In Rs Millions)

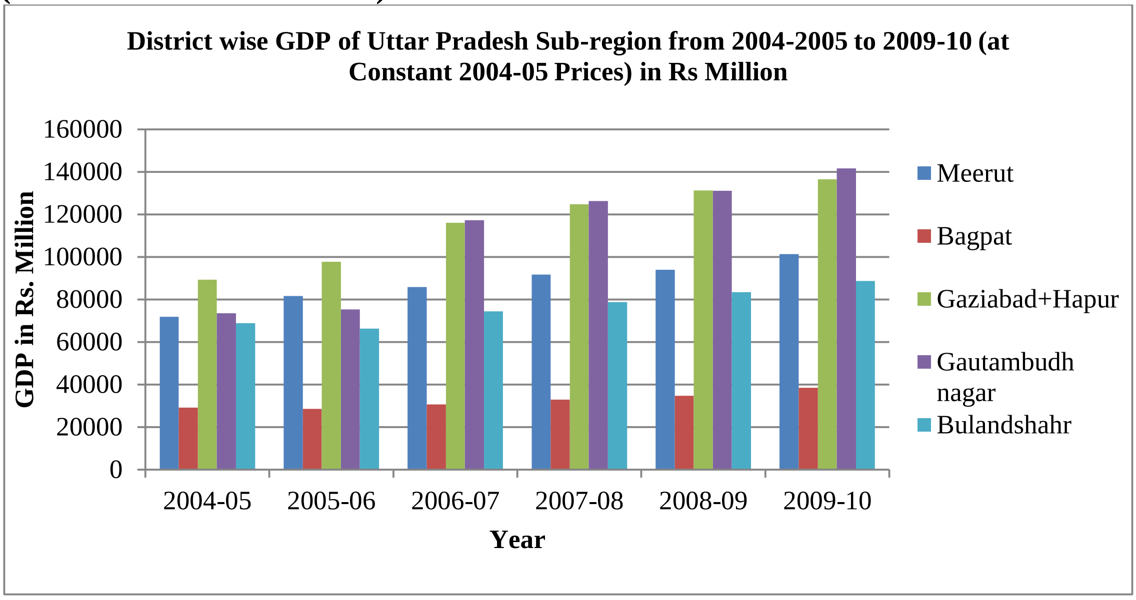
Districts	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Meerut	71,760.60	81,598.94	85,739.16	91,741.39	93,859.36	101,254.56
Bagpat	29,072.70	8,550.69	30,675.61	32,878.24	34,721.48	38,426.16
Gaziabad+Hapur	89,271.38	97,684.35	1,16,072.75	1,24,785.67	1,31,283.90	1,36,475.90
Gautambuddha nagar	73,533.04	75,276.19	1,17,301.88	1,26,289.94	1,31,114.00	1,41,557.06
Bulandshahr	68,799.56	66,288.34	74,341.09	78,724.65	83,337.35	88,739.50

Source: Directorate of Economic and Statistics, Uttar Pradesh, <updes.up.nic.in>

Table 2-4: District wise Annual Growth (YoY) rate of GDP of Haryana Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices)

Districts	2005-06	2006-07	2007-08	2008-09	2009-10
Meerut	13.71%	5.07%	7.00%	2.31%	7.88%
Bagpat	-1.80%	7.44%	7.18%	5.61%	10.67%
Gaziabad+Hapur	9.42%	18.82%	7.51%	5.21%	3.95%
Gautambuddha nagar	2.37%	55.83%	7.66%	3.82%	7.96%
Bulandshahr	-3.65%	12.15%	5.90%	5.86%	6.48%

Figure 2.8: District wise GDP of Uttar Pradesh Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices) in Rs Million



Haryana sub-region

Gurgaon has accounted for the largest share in GDP of Haryana sub-region at Rs. 2,69,905.5 Million in 2009-10; Mewat was created as a separate district in the year 2006. Throughout 2005-06 to 2009-10, the share of Mewat district in the GDP of Haryana sub-region has been the lowest. Palwal, also a newly created district, has recorded a GDP of Rs. 42,546.5 Million in the year 2009-10. Faridabad is the second largest contributor in total GDP of Haryana sub-region and has recorded a GDP of Rs. 1,90,014.60 Million in 2009-10, followed by Panipat (Rs. 99,297.5 Million), Sonipat (Rs. 77,067.6 Million), Rewari (Rs. 65,930.6 Million) and Rohtak (Rs. 47,052.3 Million) during the year 2009-10 (refer Table 2.5 & 2.6 and Figure 2.9).

Table 2-5: District wise GDP of Haryana Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices) (In Rs Millions)

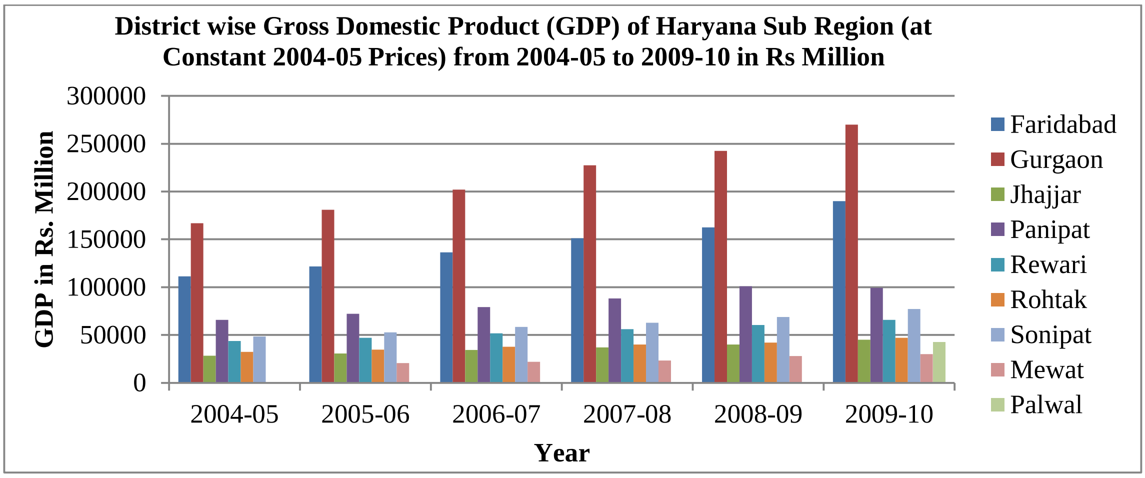
Districts	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Faridabad	1,11,351.3	1,21,775.9	1,36,362.8	1,51,289.1	1,62,483.8	1,90,014.6
Gurgaon	1,66,984.4	1,80,864	2,02,167	2,27,493.5	2,42,417.8	2,69,905.5
Jhajjar	28,356.3	30,757.1	34,252.7	36,861.3	40,157	44,947.9
Panipat	65,641	72,170.5	79,052.8	88,334.2	1,00,821.3	99,297.5
Rewari	43,623.8	47,154.9	51,646.3	56,206.5	60,465.4	65,930.6
Rohtak	32,447.2	34,565.7	37,592.9	40,120.7	41,930.8	47,052.3
Sonipat	48,414.2	52,734.5	58,439.5	62,897.9	68,729.4	77,067.6
Mewat	NA	20,637.4	21,933.9	23,362.9	27,919.4	29,967.8
Palwal	-	-	-	-	-	42,546.5

Table 2-6: District wise Annual Growth (YoY) rate of GDP of Haryana Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices)

District/ year	2005-06	2006-07	2007-08	2008-09	2009-10
Faridabad	9.36	11.98	10.95	7.40	16.94
Gurgaon	8.31	11.78	12.53	6.56	11.34
Jhajjar	8.47	11.37	7.62	8.94	11.93
Panipat	9.95	9.54	11.74	14.14	-1.51
Rewari	8.09	9.52	8.83	7.58	9.04
Rohtak	6.53	8.76	6.72	4.51	12.21
Sonipat	8.92	10.82	7.63	9.27	12.13
Mewat	NA	6.28	6.52	19.50	7.34
Haryana Sub-region	**12.85**	**10.84**	**10.48**	**8.50**	**16.40**

Source: Haryana, Department of Economic and Statistical Analysis; Planning Commission Data Tables

Figure 2.9: District wise GDP of Haryana Sub-Region (at Constant 2004-05 Prices) from 2004-05 to 2009-10 in Rs Million



Year-wise GDP of NCR at district and sub-region level from 1999-2000 to 2007-08 at Constant Prices (Base Year 1999-2000) are given at Annexure-2.5 to Annexure-2.13.

2.2.2 Per Capita Income (PCI) Trends in NCR

(a) Per Capita Income at NCR and Sub-regional level

There is a wide variation in the Per Capita Income (PCI) of different sub-regions of NCR. In 2009-10, NCT-Delhi recorded the highest per capita income (Rs. 98,262), followed by Haryana sub-region (Rs. 74,457), Uttar Pradesh sub-region (Rs. 35,036) and Rajasthan sub-region (Rs. 29,300). PCI of NCT-Delhi sub-region and Haryana sub-region is higher than that of NCR (Rs. 59,264). Rajasthan and Uttar Pradesh sub-regions have lower per capita income than that of NCR.

Haryana sub-region has the highest CAGR (10.65%) of per capita income during the period 2004-05 and 2009-10, as compared with other sub-regions of NCR and is greater than the CAGR of NCR (8.86%). NCT of Delhi had a CAGR of 9%, Rajasthan sub-region with 7.17% and Uttar Pradesh sub-region with 6.53%. Among the various districts, Gurgaon (22.98%) surpassed all other districts, followed by Faridabad (20.78%). In Uttar Pradesh sub-region, Gautambuddha Nagar (9.77%) has recorded the highest CAGR of per capita income, followed by Meerut (5.07%) and Ghaziabad including Hapur (4.93%). Most NCR districts report a CAGR in the range of 1%-10%, with the only exception being Gurgaon and Faridabad.

Haryana and NCT-Delhi sub-regions cater to industrial sector with presence of MNCs and MSMEs involved in production, manufacturing, IT and ITES sector to a great extent contributing largely to GDP and thus raising the level of per capita income (refer Table 2.7 & 2.8 and Figure 2.10 & 2.11).

Table 2-7: District and Sub-Region wise Per Capita Income of NCR at Constant (2004-05) Prices from 2004-05 to 2009-10

District/sub-region	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	CAGR
NCT-Delhi	**63,877**	**69,128**	**76,243**	**83,243**	**91,845**	**98,262**	**9.00**
Meerut	19,946.28	22,148.51	22,925.14	23,923.94	24,043.62	25,536.35	5.07
Bagpat	21,779.58	21,090.75	22,471.80	23,776.14	24,937.65	27,348.20	4.66
Gaziabad+Hapur	20,775.18	21,863.16	25,032.36	25,637.83	26,109.19	26,426.39	4.93
Gautambuddha Nagar	45,148.22	44,420.84	67,374.48	67,961.93	68,516.28	71,960.92	9.77
Bulandshahr	20,051.06	18,903.35	20,922.42	21,737.87	22,750.01	23,909.02	3.58
Uttar Pradesh sub-region	**25,540.06**	**25,685.32**	**31,745.24**	**32,607.54**	**33,271.35**	**35,036.18**	**6.53**
Faridabad	41,590	49,408	54,359	58,882	61,787	1,06,896	20.78
Gurgaon	81,478	1,65,878	1,81,730	1,99,095	2,06,817	2,29,208	22.98
Jhajjar	26,820	28,525	31,238	32,824	35,032	38,665	7.59
Mewat	NA	17,715	17,764	18,529	21,706	27,327	11.45
Panipat	57,436	61,273	66,607	73,095	81,678	79,047	6.60
Rewari	46,259	50,036	52,634	55,463	58,120	63,075	6.40

District/sub-region	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	CAGR
Rohtak	28,959	29,624	32,219	33,665	34,429	38,167	5.68
Sonipat	31,723	33,441	36,879	38,747	41,496	46,071	7.75
Palwal						41,658	NA
Haryana sub-region	**44,895**	**54,487**	**59,179**	**63,788**	**67,633**	**74,457**	**10.65**
Alwar	20,721	20,423	23,522	23,638	27,030	29,300	7.17
Rajasthan sub-region	**20,721**	**20,423**	**23,522**	**23,638**	**27,030**	**29,300**	**7.17**
NCR	**38,758**	**42,431**	**47,672**	**50,819**	**54,945**	**59,264**	**8.86**

Source: Uttar Pradesh <updes.up.nic.in>, Department of Economic and Statistical Analysis, Haryana; Directorate of Economics and Statistics, Rajasthan

Table 2-8: Names and No. of Districts in NCR with CAGR of Per Capita Income Range

Range of CAGR	No. of Districts	Name of Districts
1 to 5	4	Bulandshahr, Bagpat, Ghaziabad, Hapur
5 to 10	9	Meerut, Rohtak, Rewari, Panipat, Alwar, Jhajjar, Sonipat, NCT of Delhi, Gautambuddha nagar
10 and above	3	Faridabad, Gurgaon, Mewat
NA	1	Palwal

Figure 2.10: Sub-Region wise Per Capita Income of NCR at Constant 2004-05 Prices from 2004-05 to 2009-10

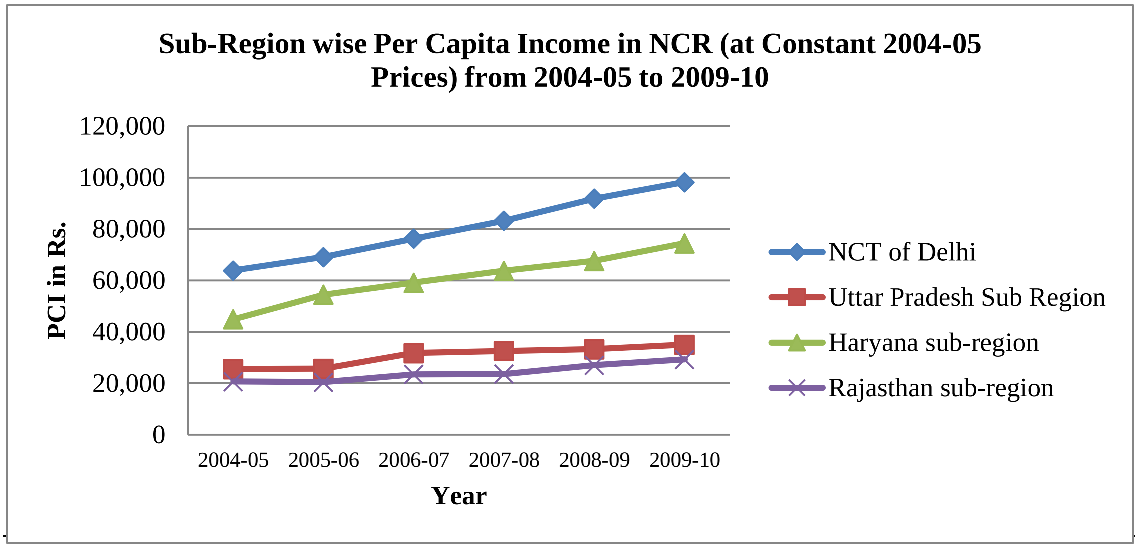
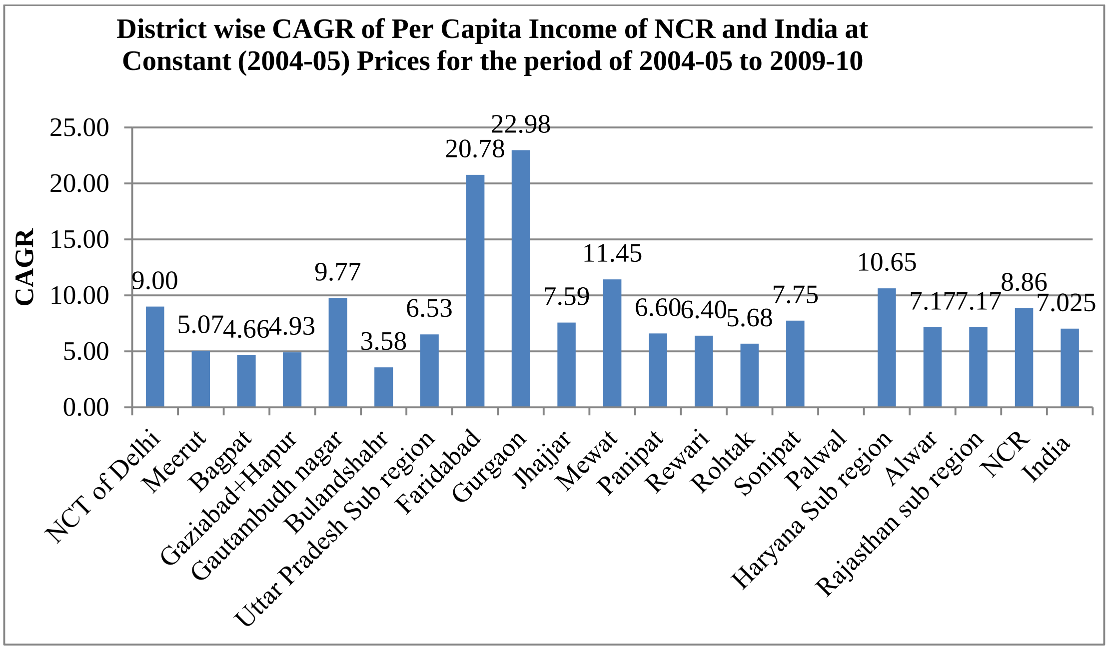


Figure 2.11: Sub-Region wise Per Capita Income of NCR at Constant 2004-05 Prices from 2004-05 to 2009-10

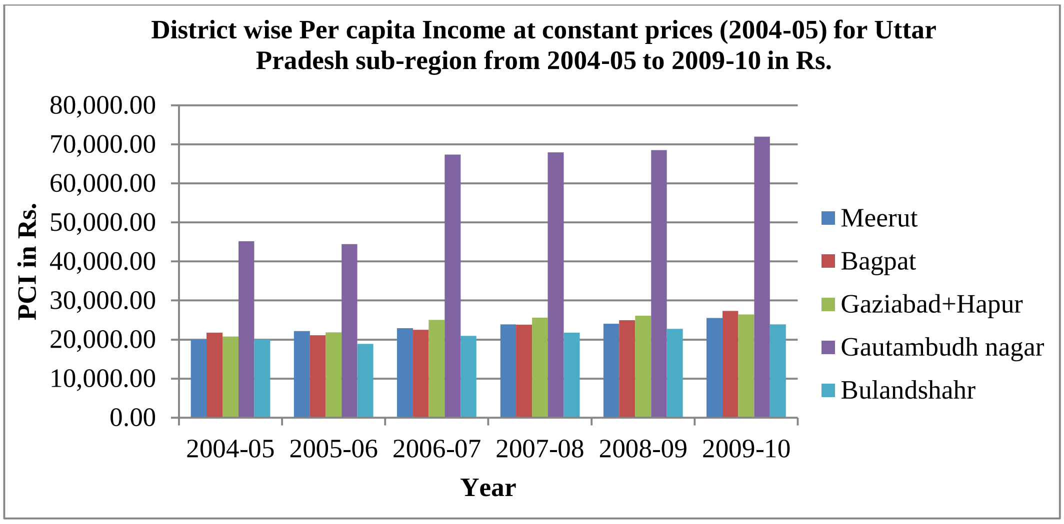


(b) District-wise Comparative Analysis of Per Capita Income in Haryana and Uttar Pradesh sub-regions

Uttar Pradesh sub-region

Per capita income of Gautambuddha Nagar was significantly higher than per capital income of other districts of Uttar Pradesh sub-region. During 2009-10, Gautambuddha Nagar (Rs. 71,960.92) recorded the highest per capita income in the sub-region, which is almost double of any other disctrict of the sub-region till 2005-06 and almost three times of the other districts during the period 2006-07 to 2009-10. Bulandshahr (Rs. 23,909) has the lowest per capita income in the sub-region in the year 2009-10. Except Gautambuddha Nagar, all other districts in Uttar Pradesh sub-region have recorded less than half of the national average (Rs. 59,264) per capita income during the period 2009-10 (refer Table 2.7 and Figure 2.12).

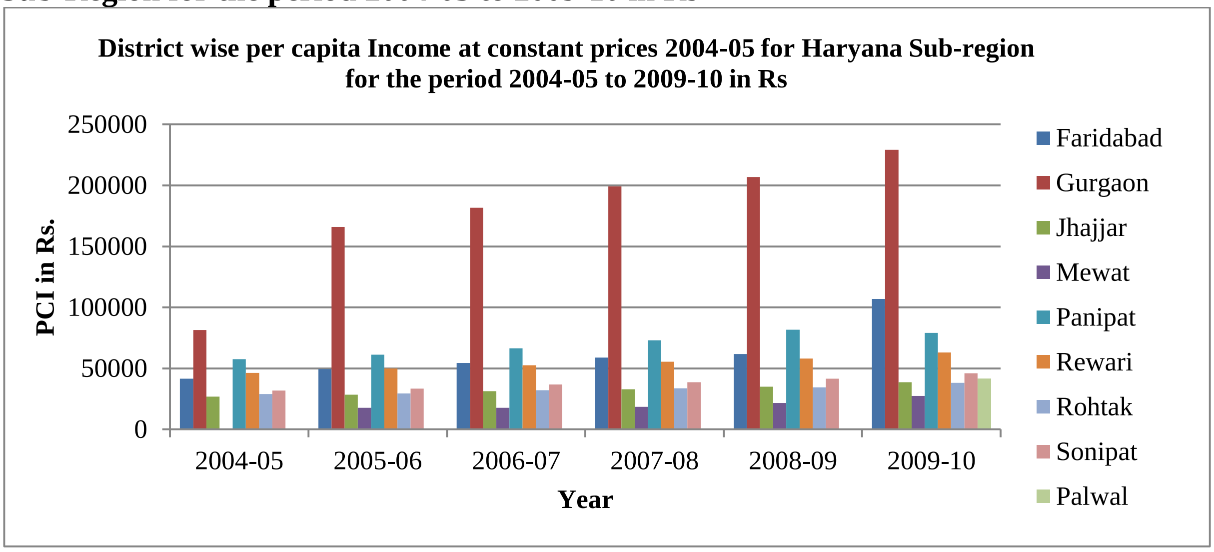
Figure 2.12: District wise Per Capital Income at Constant 2004-05 Prices for Uttar Pradesh Sub-Region from 2004-05 to 2009-10 in Rs



Haryana Sub-Region

As mentioned above, Gurgaon (Rs. 2,29,208) has the highest Per Capita Income in Haryana sub-region of NCR, followed by Faridabad (Rs. 1,06,896), Panipat (Rs. 79,047) and Rewari (Rs. 63,075) during 2009-10.Mewat has the lowest per capita Income (Rs. 27,327). Among the remaining four districts, Rohtak & Jhajjar have similar per capita income, which is above Rs. 38,000, while Sonipat and Palwal have a higher per capita than them of over Rs. 40,000. After 2005, there has been a manifold increase in the per capita income in Gurgaon district, which may be attributed to the developments in real estate and IT/ITES sector (refer Table 2.7 and Figure 2.13).

Figure 2.13: District wise Per Capita Income at Constant (2004-05) Prices for Haryana Sub-Region for the period 2004-05 to 2009-10 in Rs



2.3 NCR Sectoral Trends

The analysis of sectoral growth of GDP at constant prices indicates that the contribution of the primary sector (consisting of agriculture, livestock, fishing, forestry, mining & quarrying) and the secondary sector (consisting of manufacturing, electricity, gas, water-supply) has been decreasing in NCR. In 2007-08, the tertiary sector accounted for about 67% share in NCR's GDP followed by secondary sector (25%) and remaining with primary sector (8%). The reasons for the shift in the sectoral composition of the NCR economy may be attributed to the rapid urbanization and ensuing reduction in agricultural and related activities on one hand; and considerable increase in activities related to the services sector on the other (refer Table 2.11 and Figure 2.14).

Table 2-9: Sector Wise Contribution of GDP at Constant Prices (1999-2000) (Rs. in Millions)

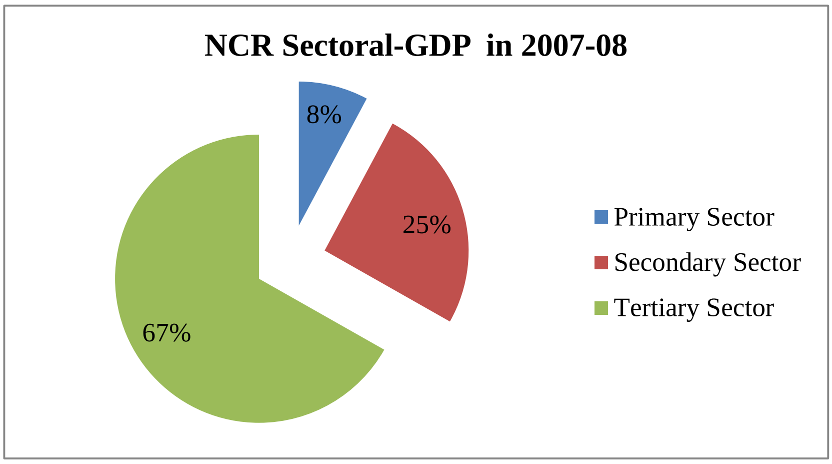
Sectors	**1999-00**	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Primary	7,633	7,827	7,673	7,549	7,676	7,675	7,406	7,409	7,134
Secondary	1,00,817	1,11,293	1,07871	1,24,232	1,24,448	1,50,117	1,67,832	1,79,558	1,87,879
Tertiary	4,43,751	4,56,926	4,82,769	5,11,748	5,47,950	6,02,028	6,68,532	7,83,890	8,96,995
NCT-Delhi sub-region	**5,52,201**	**5,76,046**	**5,98,313**	**6,43,529**	**6,80,074**	**7,59,820**	**8,43,770**	**9,70,857**	**10,92,008**
Primary	14,896	14,535	15,804	12,066	20,237	17,939	16,865	20,815	20,984
Secondary	16,781	15,802	14,001	16,195	17,638	19,320	20,109	21,920	31,140
Tertiary	21,604	21,683	21,407	22,108	24,261	26,161	27,295	31,540	41,451
Rajasthan sub-region	**53,281**	**52,020**	**51,212**	**50,369**	**62,136**	**63,420**	**64,269**	**74,275**	**93,575****
Primary*	43,255	45,323	46,756	44,270	46,508	51,154	54,872	57,096	59,410
Secondary*	91,077	97,664	1,06,578	1,13,300	1,25,539	1,40,025	1,56,879	1,71,792	1,88,123
Tertiary*	93,986	1,28,788	1,46,565	1,63,675	1,79,952	2,01,663	2,35,574	2,74,645	3,20,195
Haryana sub-region	**2,28,318**	**2,71,775**	**2,99,899**	**3,21,245**	**3,51,999**	**3,92,842**	**4,47,325**	**5,03,532**	**5,67,728**
Primary	59,312	63,851	61,988	64,404	66,114	70,179	70,268	75,013	75,704
Secondary	79,195	74,492	74,721	75,287	79,039	90,215	96,886	1,09,306	1,22,705
Tertiary	80,017	90,562	93,284	96,885	1,02,323	1,10,678	1,18,032	1,25,823	1,35,858
U.P. sub-region	**2,18,524**	**2,28,905**	**2,29,993**	**2,36,576**	**2,47,476**	**2,71,072**	**2,85,186**	**3,10,142**	**3,34,266**
Primary	**1,25,096**	**1,31,536**	**1,32,221**	**1,28,289**	**1,40,536**	**1,46,947**	**1,49,410**	**1,60,333**	**1,63,231**
Secondary	**2,87,870**	**2,99,251**	**3,03,171**	**3,29,014**	**3,46,619**	**3,99,446**	**4,43,059**	**4,82,576**	**5,29,846**
Tertiary	**6,39,358**	**6,97,959**	**7,44,025**	**7,94,416**	**8,54,454**	**9,40,358**	**10,50,078**	**12,15,897**	**13,94,499**
NCR	**10,52,324**	**11,28,746**	**11,79,417**	**12,51,719**	**13,41,609**	**14,86,751**	**16,42,547**	**18,58,806**	**20,87,577**

Source: www.planning commission.nic.in and http://updes.up.nic.in/

* indicates that in Haryana 2006 and 2007 data has been extrapolated on CAGR of previous years

** indicates that in Rajasthan 2007 data has been at base price of 2004-05

Figure 2.14: NCR Sectoral-GDP in 2007-08



Sub-region wise Analysis of Sectoral Trends

NCT-Delhi Sub-Region

Sectoral trends indicate that the tertiary sector is the major contributing sector to the GDP of NCT-Delhi sub-region (85% of total GDP) comprising primarily of transport, communications, real estate, financial services, wholesale trade and other business related services.

Although the primary sector has been experiencing a negative growth rate in the years 2005-06, 2007-08 and 2008-09, but has done quite well in 2009-10 with a recorded growth rate of 26.8%. However, in the case of secondary sector, it has experienced a stable growth rate between 5%-6% during 2005-06 to 2009-10, with higher growth rate (7.1%) recorded in 2006-07.

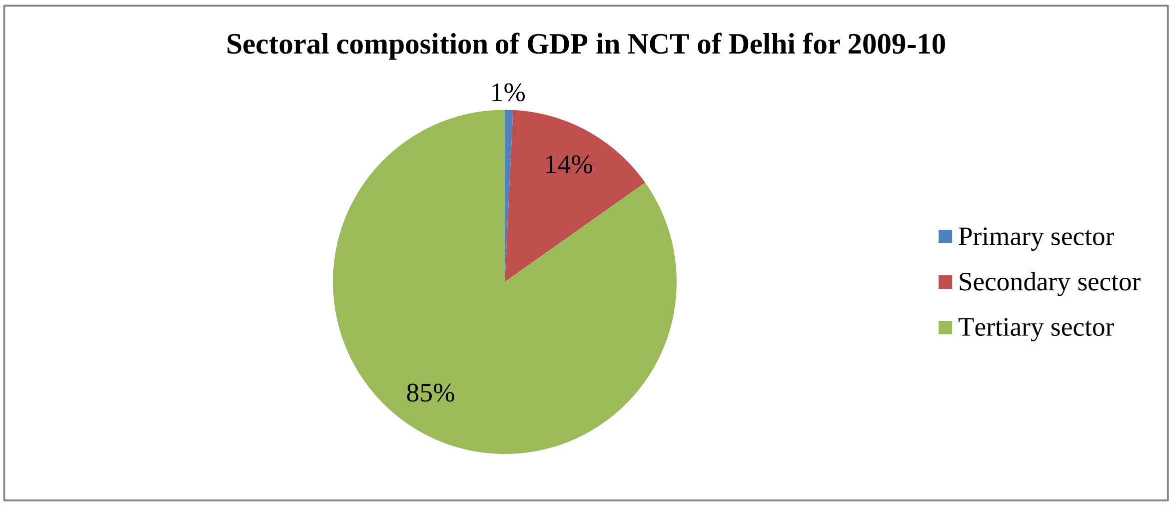
The contribution of the primary sector to the GDP of NCT-Delhi has declined over the last decade (during 2002-03 to 2007-08, share of primary sector to total GDP has been less than 1%). From 2004-05 to 2009-10, the primary sector has witnessed an AAGR of 3.2%, since it has negative YoY growth in the previous years. The secondary sector has grown at an AAGR of 5.4% and contributes to 14% share in the GDP of NCT-Delhi. This sector has performed comparatively better than the other two sectors and has recorded an AAGR of 13.1% for the same period (refer Table 2.12).

Table 2-10: Sector wise YoY% growth rate of GDP of NCT-Delhi Sub-Region during the period 2005-06 to 2009-10

Sector/ field	2005-06	2006-07	2007-08	2008-09	2009-10 (R)	AAGR
Primary sector	-3.8	1.1	-2.8	-0.6	26.8	3.2
Secondary sector	5.6	7.1	5.1	5.8	5.5	5.4
Tertiary sector	11.3	13.7	12.6	14.4	9.5	13.1
NCT of Delhi	10	12.4	11.2	12.9	9	11.5

Source: Directorate of Economics & Statistics, Delhi; Estimates of State Domestic Product, Delhi, 2012-13

Figure 2.15: Sectoral composition of GDP in NCT of Delhi for 2009-10



Source: Directorate of Economics & Statistics, Delhi; Estimates of State Domestic Product, Delhi, 2012-13

Rajasthan Sub-Region

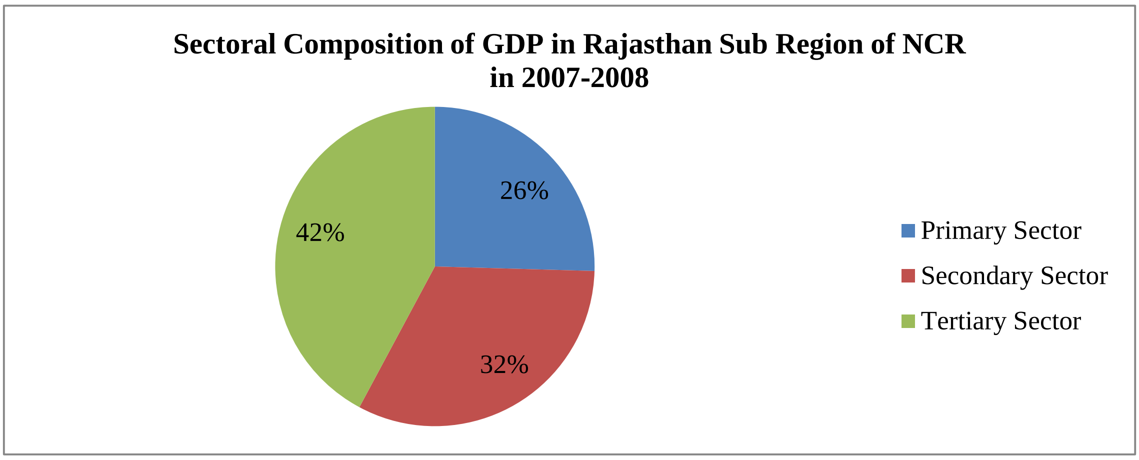
In Rajasthan sub-region, growth has been observed in primary sector (average growth rate of 7.8% for 8 years), while the Secondary Sector has recorded a similar growth rate of 9.5% and the Tertiary Sectorhas recorded a growth rate of 7.3%. Thus in Rajasthan sub-region, annual average growth rate is similar for three sector.

Wide variation in growth rate has been observed in the primary sector. During the period 2001-02 and 2002-03, the primary sector recorded negative growth rate of 8.7% and 23.7% respectively. During 2003-04, the rate of growth of primary sector was very high (67.7%), which declined to 11.4% during 2004-05. Subsequently, the growth rate was again negative during 2005-06 (-6%) and again improved in 2006-07 (23.4%), while secondary and tertiary sectors contributed 32% and 42% respectively (refer Table 2.13 and Figure 2.15).

Table 2-11: Sector wise YoY growth rate of GDP in Rajasthan Sub-Region of NCR for the Period 2001 to 2008

Sectors / Region	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	AAGR
Primary Sector	-2.4	-8.7	-23.7	67.7	11.4	-6.0	23.4	0.8	7.8
Secondary Sector	-5.8	11.4	15.7	8.9	-9.5	4.1	9.0	42.1	9.5
Tertiary Sector	0.4	1.3	3.3	9.7	-7.8	4.3	15.6	31.4	7.3
Rajasthan Sub-Region	-2.4	1.6	-1.6	23.4	-2.1	1.3	15.6	26.0	7.7

Figure 2.16: Sectoral composition of GDP in Rajasthan Sub-Region of NCR



Haryana Sub-Region

In Haryana sub-region, trends indicate a rapid growth in tertiary sector with eight years annual average growth recorded at 10.3% during the period 1999-2000 to 2007-2008. Secondary sector has recorded annual average growth rate of 4.3% in the same period. Haryana sub-region demonstrates the highest CAGR collectively for all the three sectors at 13.0%. Both primary and secondary sectors recorded a CAGR of 5.3% while tertiary sector recorded a growth rate of 9.8% over 2000-2008 periods.

The contribution of the Primary Sector has been steadily declining while the overall share remains comparatively insignificant.

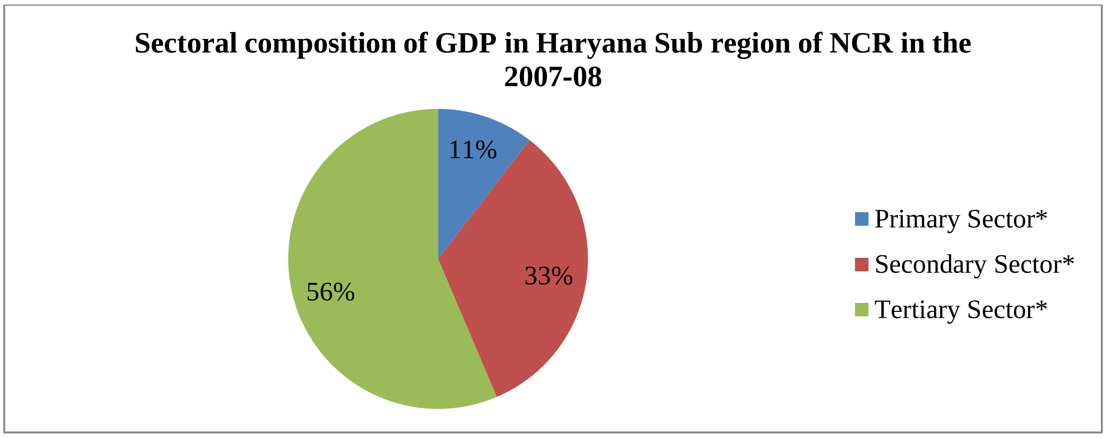
Secondary sector has recorded a growth rate of 12.5% which may be attributed to rising real estate development and infrastructural projects. Secondary sector's contribution to GDP in the year 2007-08 was 33.1% while tertiary sector also demonstrates a healthy growth contributing to more than half (56.4%) of the overall GDP of the Haryana Sub-region (refer Figure 2.17). Similarities in GDP growth pattern of NCT-Delhi and Haryana sub-region are also observed, especially in terms of growth of the Secondary and tertiary sectors over the last decade (refer Table 2.14 and Figure 2.17).

Table 2-12: Sector wise YoY growth rate of GDP of Haryana Sub-Region for the Period 2000-01 to 2007-08

Sectors / Region	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	AAGR
Primary Sector	4.8	-3.2	-5.3	5.1	-10.0	7.3	4.1	4.1	0.8
Secondary Sector	7.2	-9.1	6.3	10.8	-11.5	12.0	9.5	9.5	4.3
Tertiary Sector	37.0	-13.8	11.7	9.9	-12.1	16.8	16.6	16.6	10.3
Haryana sub-region	**19.0**	**-10.3**	**7.1**	**9.6**	**-11.6**	**13.9**	**12.6**	**12.7**	**6.6**

Source: Department of Economic and Statistical Analysis, Haryana; Department of Economicand Statistical Analysis, Uttar Pradesh; Department of Economic and Statistical Analysis, Delhi; Department of Economic and Statistical Analysis, Rajasthan; Planning Commission, Govt. of India

Figure 2.17: Sectoral composition of GDP in Haryana Sub-Region of NCR in the 2007-08



Uttar Pradesh Sub-Region

Primary, secondary and tertiary sectors contributed 18%, 40% and 42%, respectively towards the GDP of the sub-region in 2008-09 (refer Table 2.11). Secondary and tertiary sector are mainly developed in the districts of Gautambuddha Nagar and Ghaziabad (including Hapur) districts. The district Bagpat had a very small contribution to the GDP of the sub region, provided the GDP of primary and tertiary sector is better than the manufacturing or secondary sector (refer Table 2.15 & 2.16 and Figure 2.18).

Table 2-13: GDP composition of U.P. Sub-Region at Constant (2004-05) Prices for the year 2008-09 (In crores)

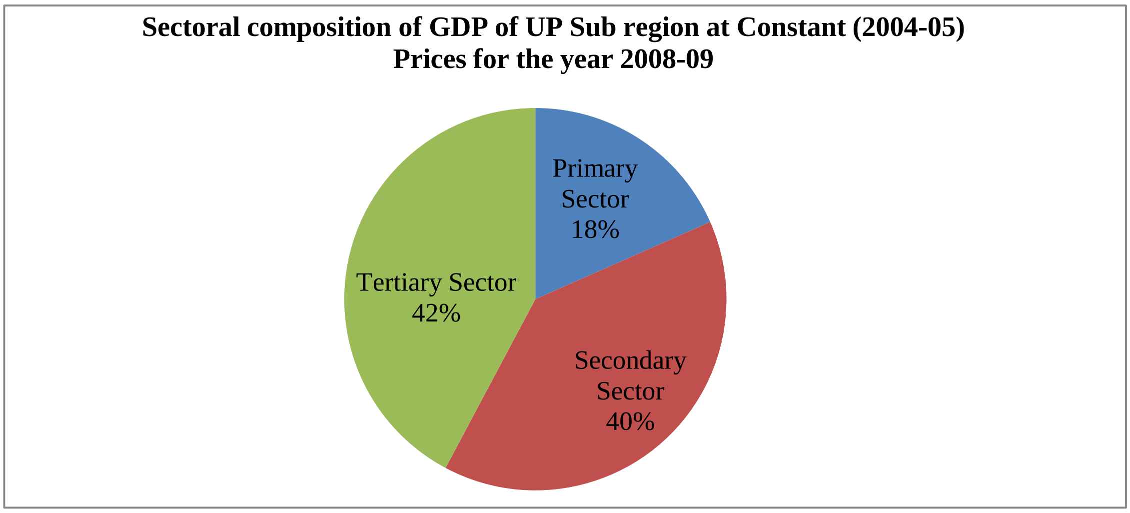
Sectors/ Regions	Meerut	Bagpat	Ghaziabad +Hapur	Gautambuddha nagar	Bulands hahr	UP Sub region
Primary Sector	2,278.78	1,272.83	1,860.05	688	2,620.66	8,720.32
Secondary Sector	2,707.88	587.92	5,113.81	8186.95	2,092.2	18,688.75
Tertiary Sector	4,399.28	1,611.4	6,154.53	4236.44	3,620.88	20,022.5
GDP	**9,385.94**	**3,472.15**	**13,128.39**	**13111.4**	**8,333.73**	**47,431.16**

Source: updes.up.nic.in

Table 2-14: Sector wise YoY growth rate of GDP of U.P. Sub-Region for the Period 2000-01 to 2007-08

Sectors / Region	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	AAGR
Primary Sector	7.65%	-2.92%	3.90%	2.66%	6.15%	0.13%	6.75%	0.92%	3.15%
Secondary Sector	-5.94%	0.31%	0.76%	4.98%	14.14%	7.39%	12.82%	12.26%	5.84%
Tertiary Sector	13.18%	3.01%	3.86%	5.61%	8.17%	6.64%	6.60%	7.98%	6.88%
U.P. sub-region	4.75%	0.48%	2.86%	4.61%	9.53%	5.21%	8.75%	7.78%	5.50%

Figure 2.18: Sectoral composition of GDP of UP Sub-Region at Constant (2004-05) Prices for the year 2008-09



Details of sector-wise contribution of GDP at Constant Prices (1999-2000) for all sub-regions are given at Annexure-2.4.

2.4 Projection of GDP

GDP projections are made for the year 2021 & 2031, based on the CAGR computed for the period 2004-05 to 2009-2010 with hands-off scenario at constant 2004-05 prices (refer Annexure-2.3 and Table 2.17). The impact of various factors might result in deviation from the projected figures. Still the projected data give a fair idea of the trends of economic growth of the region. Impact of four most important factors namely; growth in physical capital stock, growth in labour force, human capital development and technological progress, will influence the GDP growth of the NCR.

As per the projections based on the CAGR from 2004-05 to 2009-10, the GDP of NCR in 2021 & 2031 will become three times and nine times respectively of the GDP in 2009-10 at constant prices (2004-05). By 2031, Gurgaon and Panipat will register about 7.5 times and 5.7 times growth respectively in GDP from 2009-10 level (refer Annexure 2.3 and Table 2.17).

NCT-Delhi sub-region

Tertiary sector is the main contributor to the GDP of NCT-Delhi sub-region. Human capital development and technological progress will be the key factor impacting economic growth of the region. Development of NCT-Delhi as a hub for hi-tech industry and trade centre will lead to higher levels of GDP. Balanced development of NCR will lead to reduced migration of labour force in NCT-Delhi. GDP of NCT-Delhi is projected to increase by 3.18 times by 2021 and 9.13 times of the GDP in 2009-10 level at constant (2004-05) prices (refer Table 2.17).

Haryana sub-region

GDP of Haryana sub-region is projected to increase by 3.40 times by 2021 and 10.35 times of the GDP in 2009-10 level at constant (2004-05) prices (refer Table 2.17).

Gurgaon and Faridabad districts have already created a higher level of physical capital stock and have emerged as major industry centers. In the coming years, this will have a positive impact on GDP of these two districts and will change the projected value in a positive way. However, high GDP levels may be attributable to high real estate prices and entry of MNCs and strong IT/ITES sector and unless these high levels are managed, the projected GDP could be lower.

Rohtak and Jhajjar districts have the potential for positive growth on account of presence of large numbers of educational and training institutions. Good quality infrastructure developments and proximity to Delhi means that Jhajjar is well-positioned for reaping the spillover benefits of Delhi. Initiatives like R&D centers and higher-level academic and technical institutions could take these districts to the next level of technological progress.

Rewari and Panipat districts are experiencing an increase in availability of labour force mainly due to migration of skilled workers from nearby areas. It is expected that infrastructure projects like KMP expressway, DMIC (for Rewari), etc. will attract further investments in these districts.

Mewat and Palwal are newly created districts. Mewat is behind on almost all fronts like availability of physical and human capital, innovations and technology level. However, substantial capital, both physical and human, is being invested in Palwal district that could provide a base for higher level of GDP growth.

There are a fairly large number of initiatives being taken related to infrastructure development, innovation, technology and human resource development in Sonipat district. These will have significant impact on the long term economic growth of the region.

Uttar Pradesh sub-region

GDP of Uttar Pradesh sub-region is projected to increase by 2.52 times by 2021 and 5.86 times of the GDP in 2009-10 level at constant (2004-05) prices (refer Table 2.17).

Gautambuddha Nagar and Ghaziabad are already moving along a high growth trajectory. Upcoming infrastructural projects in Greater NOIDA and Yamuna Expressway Industrial Authority Area (YEIDA) will have a positive impact on GDP.

Bhagpat and Meerut have very high potential for development but are low in human capital development and technological progress. Consequently, an average GDP growth rate is expected.

Bulandshahr also lacks availability of physical and human capital, and is limited by low technological progress. There is inadequate number of educational and technical training institutions in the district and GDP growth at current low level of CAGR is expected.

Rajasthan sub-region

GDP of Rajasthan sub-region is projected to increase by 2.71 times by 2021 and 6.73 times of the GDP in 2009-10 level at constant (2004-05) prices (refer Table 2.17).

Though the current rate of GDP growth is low, the State Government is investing a lot in this sub-region.

In summary,

- Haryana sub-region has recorded the highest CAGR at 11.77% (between 2004-05 and 2009-10) which is even higher than that of NCT of Delhi (11.10%) and CAGR of whole of the NCR.
- The CAGR for Rajasthan and Uttar Pradesh sub-regions for the aforesaid period has been projected at 9.50% and 8.78% respectively.
- Two districts viz. Bagpat and Bulandshar of Uttar Pradesh Sub region are projected to manage a CAGR just above 5%.
- The CAGR of GDP of Gautambuddha Nagar district for the abovementioned period is the highest (14.00%), followed by Faridabad (11.28%), Gurgaon (10.08%), Jhajjar (9.65%), Mewat (9.77%), Sonipat (9.74%), Ghaziabad (8.86%), Panipat (8.63%), and Rewari (8.61%) districts.
- NCT-Delhi and Faridabad district in Haryana sub-region and Gautambuddha Nagar district in Uttar Pradesh sub-region have a projected CAGR higher than that of the NCR as a whole.

Table 2-15: GDP of NCR for 2009-10 and projected GDP for 2021 & 2031 at Constant (2004-05) Prices

Rs. in Millions

Sub-region/District	GDP in 2009-10 at constant (2004-05) prices	CAGR between 2004-05 and 2009-10 (%)	Projected GDP for 2021	Projected GDP for 2031
Meerut	1,01,254.56	7.13	2,15,962	4,29,966
Bagpat	38,426.16	5.74	70,980	1,24000
Gaziabad+Hapur	1,36,475.9	8.86	3,47,226	8,11,521
Gautambuddha nagar	1,41,557.06	14.00	5,98,025	22,16,243
Bulandshahr	88,739.5	5.22	1,55,341	2,58,433
Total of Uttar Pradesh Sub-Region	**5,06,453.18**	**8.78**	**12,78,687**	**29,67,724**
Delhi	16,98,389.8	11.10	54,07,842	1,54,98,318
Total of Delhi Sub-Region	**16,98,389.8**	**11.10**	**54,07,842**	**1,54,98,318**
Alwar	1,21,901	9.50	3,30,935	8,20,441
Total of Rajasthan Sub- Region	**1,21,901**	**9.50**	**3,30,935**	**8,20,441**
Faridabad	1,90,014.6	11.28	6,15,728	17,92,966
Gurgaon	2,69,905.5	10.08	7,76,230	20,27,973
Jhajjar	44,947.9	9.65	1,23,834	3,11,144
Panipat	99,297.5	8.63	2,46,841	5,64,863
Rewari	65,930.6	8.61	1,63,564	3,73,606
Rohtak	47,052.3	7.72	1,06,578	2,24,118
Sonipat	77,067.6	9.74	2,14,314	5,43,060

Sub-region/District	GDP in 2009-10 at constant (2004-05) prices	CAGR between 2004-05 and 2009-10 (%)	Projected GDP for 2021	Projected GDP for 2031
Mewat	29,967.8	9.77	83,590	2,12,400
Palwal	42,546.5	NA	NA	NA
Total of Haryana Sub-Region	**8,66,730.3**	**11.77**	**29,48,453**	**89,73,610**
Grand Total/ NCR	**3,19,3474.28**	**10.83**	**98,94,847**	**2,76,63,372**

Source: Directorate of Economic and Statistical, Rajasthan; Economic Survey of Delhi, 2012-13; Department of Economics & Statistics, Haryana; updes.up.nic.in; and Study on Economic Profile of NCR

3. WORKFORCE

3.1 Background

Employment level is an important indicator to understand the structure of an economy. During the initial years of planning, focus was on industrial development and the control over the population growth rate. However, the rate of growth of employment was much lower than the GDP growth rate of the economy.

However, India's ability to recover from the global crisis of 2008 can be largely attributed to government's recent policies and a mostly independent stable local economy. Furthermore, boosted by availability of educated, skilled and trained young population, the employment has been growing vigorously, which in turn has bolstered the local economy. It will be of further interest to understand the major characteristics of NCR workforce and its likely impact on the economy of NCR.

The NCR is one of the fastest growing regions in terms of population and employment. Historically, NCT-Delhi remained the main centre for employment creation not only for Delhi's increasing workforce but also for the migrant population. Consequently, NCR's economy needs to create sufficient additional high-quality employment in order to absorb the new entrants into the labor force; not only in NCT-Delhi but also in other sub-regions of NCR. As NCR is one of the top-five economic hubs of India, understanding the employment trends and providing opportunities for the growth of formal employment in the NCR is critical. This chapter presents the emerging trends of employment and workforce.

3.2 Distribution of Workers in NCR

As per Census 2011 data, NCR constitutes 3.27% of total workers of India, which has marginally increased from 3.23% in 2001 (refer Table 3.1). Analysis of the sub-region wise distribution of total number of workers indicates that NCT-Delhi (43.07%) has the highest share of workers in NCR, followed by Uttar Pradesh sub-region (36.77%), Haryana sub-region (28.29%) and Rajasthan sub-region (13.17%). Number of total workers has increased from 33.51% in 2001 to 43.07% in NCT-Delhi, which has recorded the highest growth rate in NCR, implying that the concentration of workers has primarily been concentrated is in NCT-Delhi.

Table 3-1: Share of NCR in total number of workers in India as per Census 2001 and 2011

Year	NCR	India	% Share of NCR to India
2001	1,29,72,094	40,22,34,724	3.23%
2011	1,57,34,929	48,18,88,868	3.27%

Source: Census of India, 2001 & 2011

Table 3-2: Share of the sub-regions in total number of workers in NCR

Year	NCR	NCT-Delhi sub-region		Haryana sub-region		Rajasthan sub-region		Uttar Pradesh sub-region	
		No. of Workers	% Share to NCR	No. of Workers	% Share to NCR	No. of Workers	% Share to NCR	No. of Workers	% Share to NCR
2001	1,29,72,094	43,46,710	33.51%	34,14,662	26.32%	14,58,686	11.24%	37,52,036	28.92%
2011	1,57,34,929	55,87,049	43.07%	36,69,197	28.29%	17,08,542	13.17%	47,70,141	36.77%

Source: Census of India, 2001 & 2011

3.3 Workforce Participation Rate

3.3.1 Category-wise distribution of Workforce at NCR and Sub-Region level

Workforce Participation Rate (WPR) in NCR for 2011 is 34.15%. It is observed that workforce participation trends in NCT-Delhi has slowed down during the period 1991-2001, whereas it has increased subsequently within the same period for Haryana, and Uttar Pradesh and Rajasthan sub-regions. But in the successive decade, i.e. 2001-2011, workforce participation rate in NCT-Delhi has increased and in Uttar Pradesh sub-region it has remained the same, while other sub-regions of Haryana and Rajasthan have witnessed a decline during this period. It is observed that Rajasthan Sub-Region has recorded the highest WPR (46.50) and Haryana sub-region has recorded the lowest WPR (33.26) (refer Table 3.3).

Table 3-3: Workforce Participation Rate of NCR, 1971-2011

Year	India	NCR	NCT-Delhi sub-region	Haryana sub-region	Rajasthan sub-region	Uttar Pradesh sub-region
1971	34.2	27.4	30.20	25.02	26.40	27.20
1981	35.7	28.7	31.80	27.70	25.60	27.00
1991	37.4	29.17	31.51	28.35	28.33	27.48
2001	39.1	34.20	29.14	39.69	49.31	32.75
2011	39.8	34.15	33.28	33.26	46.50	32.73

Source: Census of India, 1971, 1981, 1991, 2001, 2011

In 2011, the NCR has recorded a total workforce of 15,734,929 in which NCT-Delhi sub-region contributed the maximum number of workers (587,049) while Rajasthan sub–region has the lowest share of total workers in NCR though it has maximum WPR (refer Table 3.4)

Table 3-4: Number of workers in NCR and Sub-Regions: 2011

Sub-Region	Total workers	%
Haryana sub-region	36,69,197	23.3
Uttar Pradesh sub-region	47,70,141	30.3
Rajasthan sub-region	17,08,542	10.9
NCT Delhi sub-region	55,87,049	35.5
NCR	**1,57,34,929**	**100**

Source: Census of India, 2011

It is observed that cultivators and agricultural labourers constitute the largest portion (25.53%) of the workforce in the NCR in 2001, followed by construction workers (16%). Share of Primary Sector has been decreasing in NCR and share of tertiary (service) and the secondary sector has been increasing. Share of Primary Sector has declined from 44.3% in 1971 to 29.06% in 2001, while share of Secondary Sector has increased from 18.98% in 1971 to 42.63% ijn 2001. NCT-Delhi has the least proportion of workers engaged in the primary sector. Within the Primary Sector, share of cultivators and agricultural labourers has declined from 42.98% in 1971 to 25.53% in 2001, whereas the share of construction component within Secondary Sector has significantly increased from 2.77% in 1971 to 16.2% in 2001 (refer Table 3.5 and Figure 3.1)

Table 3-5: Distribution of Main Workforce in NCR (1971, 1991 and 2001)

Year	**1971**		**1991**		**2001**	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers**	**%**
(1)	(2)	(3)	(4)	(5)	(6)	7
Cultivators	12,70,942	32.66	17,90,347	23.16	27,33,141*	25.53
Agricultural Labourers	4,01,725	10.32	8,21,188	10.62	-	-
Livestock, Forestry etc.	44,485	1.14	58,378	0.76	3,39,775	3.17
Mining and Quarrying	6,457	0.17	13,884	0.18	38,098	0.36
Sub-total Primary Sector	**17,23,609**	**44.3**	**26,83,797**	**34.71**	**31,11,014**	**29.06**
a) Household Industries	1,66,572	4.28	1,28,661	1.66	7,73,216	7.22
b) Other than household Industries	4,64,125	11.93	12,81,140	16.57	4,60,199	4.3
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	7,08,680	6.62
Construction	1,07,937	2.77	3,54,049	4.58	17,34,125	16.2
Rural Industries	N.A.	N.A.	N.A.	N.A.	8,86,977	8.29
Sub-total Secondary Sector	**7,38,634**	**18.98**	**17,63,850**	**22.81**	**45,63,197**	**42.63**
Trade and Commerce	4,14,000	10.64	11,37,207	14.71	7,94,641	7.42
Transport, Storage and Communications	1,84,839	4.75	4,11,842	5.33	12,48,730	11.67
Other Services	8,29,850	21.33	17,34,993	22.44	9,92,787	9.28
Sub-total Tertiary Sector	**14,28,689**	**36.72**	**32,84,042**	**42.48**	**30,36,158**	**28.37**
Total Main Workers	**38,90,932**	**100**	**77,31,689**	**100**	**1,07,03,664**	**100**

Year	**1971**		**1991**		**2001**	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers**	**%**
(1)	(2)	(3)	(4)	(5)	(6)	7
Participation Ratio	**27.4**		**29**		**28.85**	

*Source: Census 1971, 1991 and 2001 Census of India, * includes agriculture labour also*

Analysis of concentration of workers in various categories at sub-regionl level indicates that Uttar Pradesh sub-region has the highest concentration of cultivators and agricultural labourers (40.64%), followed by Haryana sub-region (35.56%). In case of construction activity, highest concentration is in NCT-Delhi (58.92%), followed by Uttar Pradesh sub-region (21.68%) (refer Table 3.6).

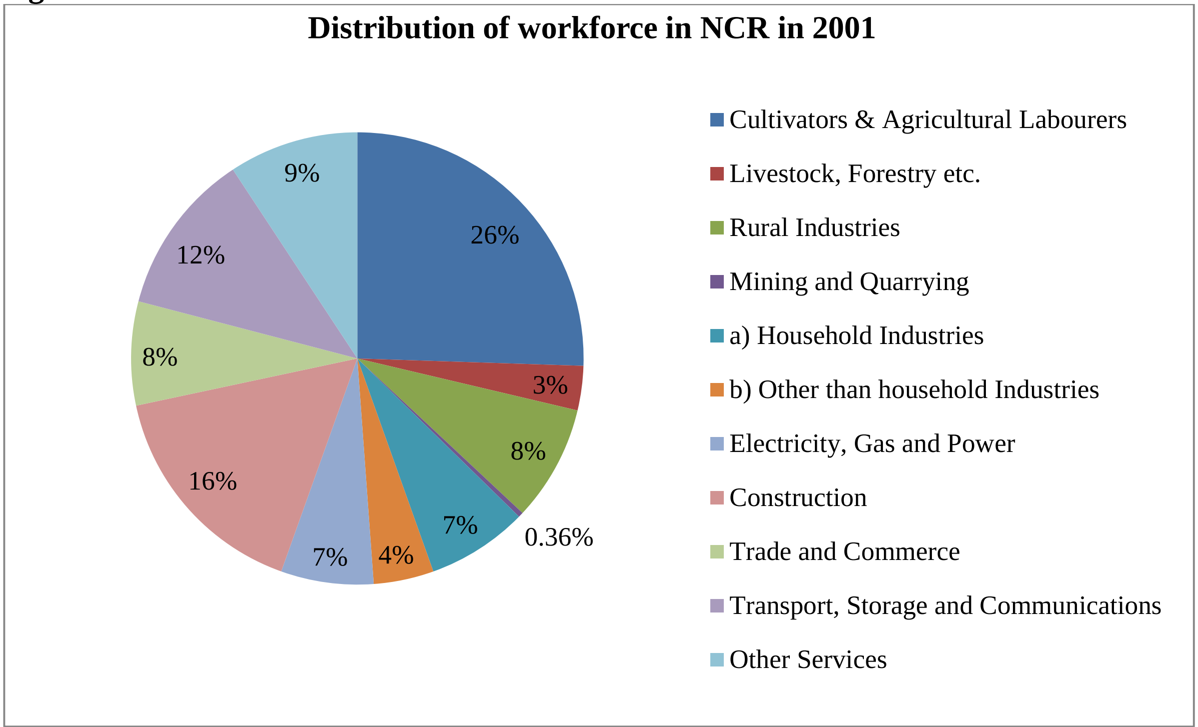
Table 3-6: Distribution of Main Workers in NCR and Sub-Regions: 2001

Sub-region	Agricultural Laborers & Cultivator		Livestock, Forestry etc.		Rural Industries		Mining and Quarrying		Household Industries		Other than household Industries		Electricity, Gas and Power		Construction		Trade and Commerce		Transport, Storage and Communications		Other Services		Total Main Workers	
	Workers	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**	**Workers**	**%**
Haryana	9,72,007	35.56	1,23,965	36.48	1,57,144	17.72	15,346	40.28	1,77,695	22.98	1,18,260	25.7	1,54,406	21.79	2,72,617	15.72	1,35,515	17.05	2,14,100	17.15	1,75,002	17.63	25,16,057	23.51
Uttar Pradesh	11,10,693	40.64	1,46,294	43.06	2,24,482	25.31	3,348	8.79	1,58,564	20.51	1,02,794	22.34	1,72,967	24.41	3,75,954	21.68	1,58,929	20	2,78,696	22.32	1,89,783	19.12	29,22,504	27.3
Rajasthan	6,11,306	22.37	35,375	10.41	35,632	4.02	4,299	11.28	36,437	4.71	14,843	3.23	38,311	5.41	63,738	3.68	34,581	4.35	32,487	2.6	40,578	4.09	9,47,587	8.85
NCT-Delhi	39,135	1.43	34,141	10.05	4,69,719	52.96	15,105	39.65	4,00,520	51.8	2,24,302	48.74	3,42,996	48.4	10,21,816	58.92	4,65,616	58.59	7,23,447	57.93	5,87,424	59.17	43,17,516	40.34
NCR	**27,33,141**	**100**	**3,39,775**	**100**	**8,86,977**	**100**	**38,098**	**100**	**7,73,216**	**100**	**4,60,199**	**100**	**7,08,680**	**100**	**17,34,125**	**100**	**7,94,641**	**100**	**1,24,8730**	**100**	**9,92,787**	**100**	**1,07,03,664**	**100**

Source: Census of India, 2001

District-wise details of Total Workforce (nine categories), Main Workforce, Marginal Workforce, Urban Workforce and Rural Workforce in 2001 are given in Annexure-3.1 to Annexure-3.5 respectively. Details of Distribution of Workforce (in Main & Marginal disaggregated into Urban & Rural) and details of Rural & Urban Workforce Participation Rate are given in Annexure-3.6 and 3.7 respectively.

Figure 3.1: Distribution of workforce in NCR in 2001



3.3.2 Distribution of Workforce in Rural & Urban Areas

At NCR level, as per Census of India 2011 data, workforce participation rate is higher in rural areas (36.13%) than urban areas (32.98%). The highest difference between rural and urban workforce participation rate is observed in Rajasthan sub-region, where the rural WPR (49.27%) is 15.56% higher than that of the urban WPR (33.71%). Rajasthan sub-region has also recorded the highest overall WPR amongst all the sub-regions at 46.50%, followed by NCT-Delhi (33.28%), Haryana sub-region (33.26%) and Uttar Pradesh sub-region (32.73%). In rural areas, Rajasthan sub-region has recorded the highest WPR (49.27%) and NCT-Delhi has recorded the lowest WPR (31.08%), implying a high primary sector composition of workforce in Rajasthan sub-region and a high tertiary sector composition of the workforce in NCT of Delhi. The urban workforce participation rate is the highest in Rajasthan sub-region at 33.71%, followed by Delhi region at 33.34%, and Uttar Pradesh sub-region at 32.07%. The least difference between the rural and urban workforce participation rate (0.50%) is observed in Haryana sub-region (refer Table 3.7).

Table 3-7: Sub-region wise Rural & Urban Workforce Participation Rate in 2011

Region	Rural	Urban	Total
NCT of Delhi	31.08	33.34	33.28
Uttar Pradesh Sub- Region	33.34	32.07	32.73
Haryana Sub- Region	33.48	32.98	33.26
Rajasthan Sub- Region	49.27	33.71	46.50
NCR	**36.13**	**32.98**	**34.15**

Source: Study on Economic Profile of NCR, Census of India 2011

3.3.3 Distribution of Main, Marginal and Non-Workers

Analysis of sub-region wise share of main and marginal workers to Total Workforce in NCR indicates that main workers constitutes over 84.11% share and the remaining 15.89% is marginal workers to total workforce. The highest share of main workers to total workers is observed in the NCT of Delhi sub-region (94.99%), followed by Uttar Pradesh sub-region (80.12%), Haryana sub-region 79.73% and Rajasthan sub-region (69.03%). In all the sub regions of NCR the share of main workers to total workers outnumbers marginal workers, with NCT-Delhi reporting the highest difference of 29.95% between main workers (31.61%) and marginal workers (1.67%). Rajasthan sub-region has recorded the highest share of marginal workers to total workers (30.97%), followed by Haryana (20.27%), Uttar Pradesh (19.88%) and NCT-Delhi (5.01%) sub-regions. This may be attributed to the fact that in Rajasthan sub-region, significantly higher proportion of the workforce in rural areas is engaged in the Primary Sector, as elaborated in subsequent section.

In Haryana sub-region, the lowest WPR is observed in Mewat district (26.62%), as per Census 2011 data. The highest workforce participation rate is observed in Rewari district at 37.15%.

In the Uttar Pradesh sub-region, Meerut has the lowest WPR (31.67%). The highest WPR is observed in Gautambuddha Nagar at 34.53%, this can be mainly because of the recent real estate and IT sector boom in the district.

The highest workforce participation rate in NCT-Delhi sub-region is in New Delhi district (41.93%), which has the lowest population of 142,004 among the districts of both NCT of Delhi as well as NCR. This may be due to lack of industry and manufacturing based employment opportunities in New Delhi district, thus do not attract working class migrants. The lowest WPR is in North-East district (29.50%), which has a population of 22,41,624 (as per census 2011). This may be because of rising employment opportunities available in the district like Gurgaon & Noida, which attracts migrant workers. As a whole, the Delhi sub-region has lower number of marginal-workers due to predominance of secondary and tertiary sectors over the primary sector (refer Table 3.8, Figure 3.2 and Map 3.1 & 3.2).

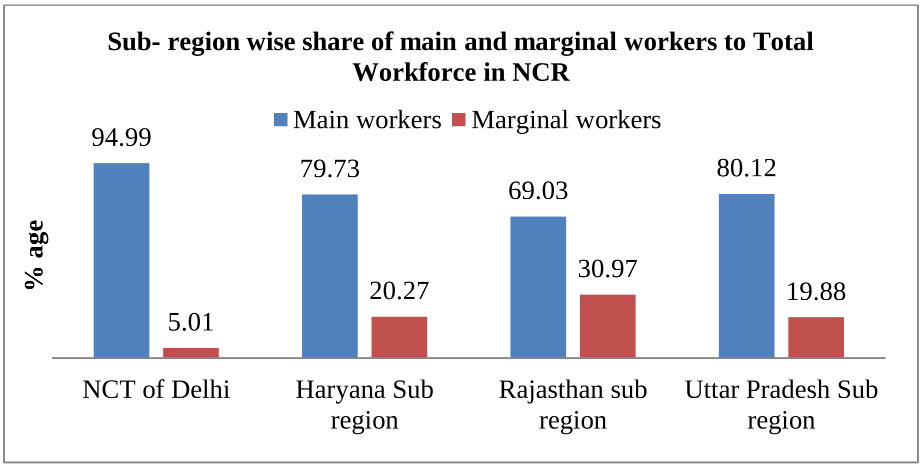
Table 3-8: District-wise Workforce Participation Rate in NCR: 2011

Sub-Region	Districts	Population	Total Workers	Workforce Participation Rate	Main Workers		Marginal Workers		Non - Workers
					Number	% to Total Workers	Number	% to Total Workers	
NCT-Delhi sub-region	North West	36,56,539	11,88,545	32.50%	11,35,126	95.51%	53,419	4.49%	24,67,994
	North	8,87,978	2,96,446	33.38%	2,83,583	95.66%	12,863	4.34%	5,91,532
	North East	22,41,624	6,61,386	29.50%	6,22,443	94.11%	38,943	5.89%	15,80,238
	East	17,09,346	5,79,692	33.91%	5,55,026	95.74%	24,666	4.26%	11,29,654

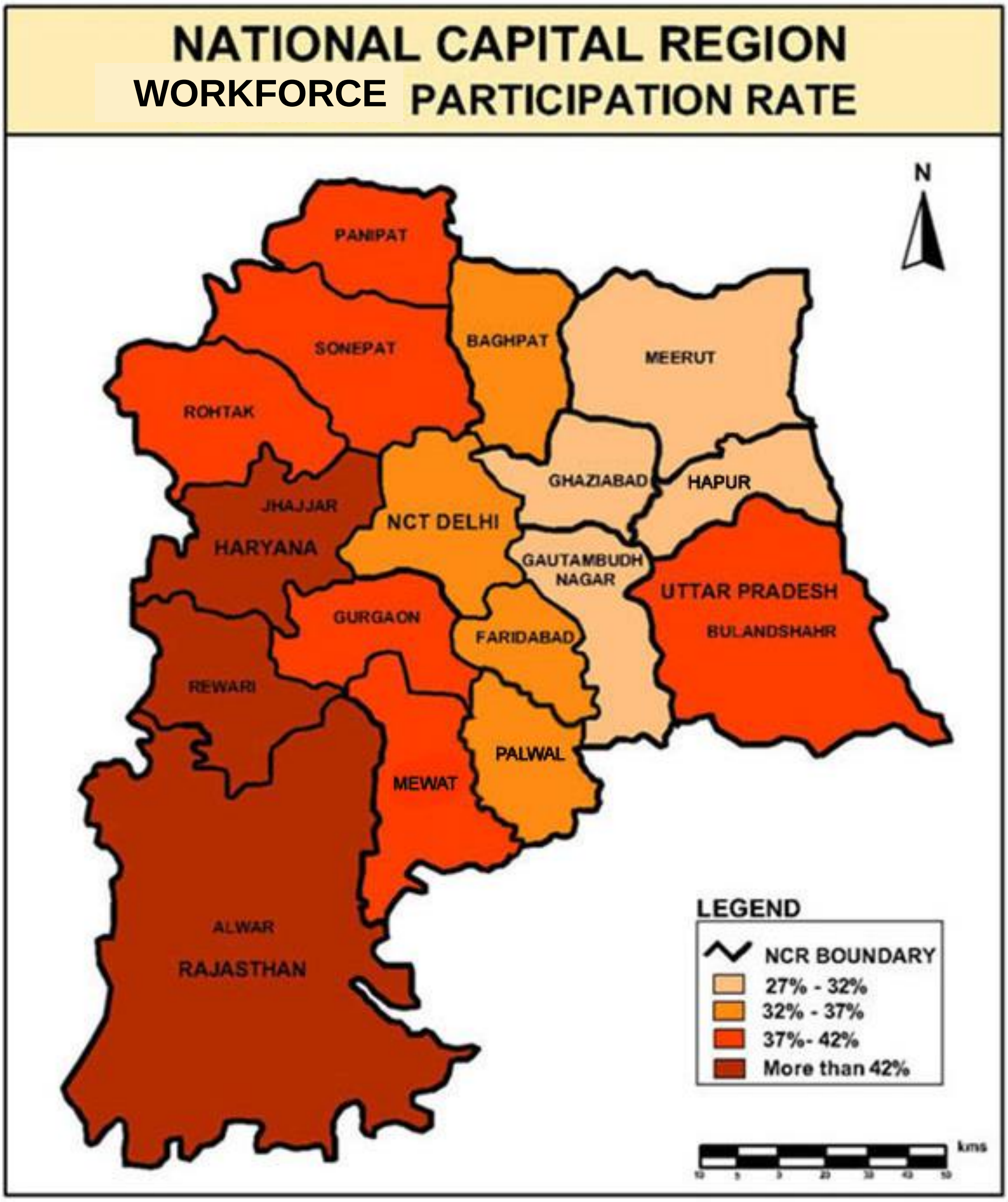
Sub-Region	Districts	Population	Total Workers	Workforce Participation Rate	Main Workers		Marginal Workers		Non - Workers
					Number	% to Total Workers	Number	% to Total Workers	
	New Delhi	1,42,004	59,541	41.93%	56,471	94.84%	3,070	5.16%	82,463
	Central	5,82,320	2,07,374	35.61%	1,95,978	94.50%	11,396	5.50%	3,74,946
	West	25,43,243	8,74,320	34.38%	8,39,621	96.03%	34,699	3.97%	16,68,923
	South West	22,92,958	7,95,352	34.69%	7,49,995	94.30%	45,357	5.70%	14,97,606
	South	27,31,929	9,24,393	33.84%	8,69,086	94.02%	55,307	5.98%	18,07,536
	NCT-Delhi	**1,67,87,941**	**55,87,049**	**33.28%**	**53,07,329**	**94.99%**	**2,79,720**	**5.01%**	**1,12,00,892**
Haryana sub-region	Faridabad	18,09,733	5,79,229	32.01%	4,95,316	85.51%	83,913	14.49%	12,30,504
	Gurgaon	15,14,432	5,44,716	35.97%	4,87,441	89.49%	57,275	10.51%	9,69,716
	Rewari	9,00,332	3,37,727	37.51%	2,50,219	74.09%	87,508	25.91%	5,62,605
	Rohtak	10,61,204	3,45,967	32.60%	2,88,949	83.52%	57,018	16.48%	7,15,237
	Sonipat	14,50,001	5,23,179	36.08%	3,96,763	75.84%	1,26,416	24.16%	9,26,822
	Panipat	12,05,437	4,12,318	34.20%	3,39,016	82.22%	73,302	17.78%	7,93,119
	Jhajjar	9,58,405	3,26,534	34.07%	2,46,457	75.48%	80,077	24.52%	6,31,871
	Mewat	10,89,263	2,89,964	26.62%	2,04,178	70.41%	85,786	29.59%	7,99,299
	Palwal	10,42,708	3,09,563	29.69%	2,16,932	70.08%	92,631	29.92%	7,33,145
	Haryana sub-region	**1,10,31,515**	**36,69,197**	**33.26%**	**29,25,271**	**79.73%**	**7,43,926**	**20.27%**	**73,62,318**
Rajasthan sub-region	Alwar	36,74,179	17,08,542	46.50%	11,79,461	69.03%	5,29,081	30.97%	19,65,637
	Rajasthan sub-region	**36,74,179**	**17,08,542**	**46.50%**	**11,79,461**	**69.03%**	**5,29,081**	**30.97%**	**19,65,637**
Uttar Pradesh sub-region	Baghpat	13,03,048	4,16,695	31.98%	3,34,519	80.28%	82,176	19.72%	8,86,353
	Bulandshahr	34,99,171	11,73,260	33.53%	8,85,216	75.45%	2,88,044	24.55%	23,25,911
	Gautambuddha nagar	16,48,115	5,69,109	34.53%	4,58,492	80.56%	1,10,617	19.44%	10,79,006
	Ghaziabad + Hapur	46,81,645	15,20,538	32.48%	12,52,911	82.40%	2,67,627	17.60%	31,61,107
	Meerut	34,43,689	10,90,539	31.67%	8,90,810	81.69%	1,99,729	18.31%	23,53,150
	U.P. sub-region	**1,45,75,668**	**47,70,141**	**32.73%**	**38,21,948**	**80.12%**	**9,48,193**	**19.88%**	**98,05,527**
NCR		**4,60,69,303**	**1,57,34,929**	**34.15%**	**1,32,34,009**	**84.11%**	**25,00,920**	**15.89%**	**3,03,34,374**

Source: Census of India, 2011

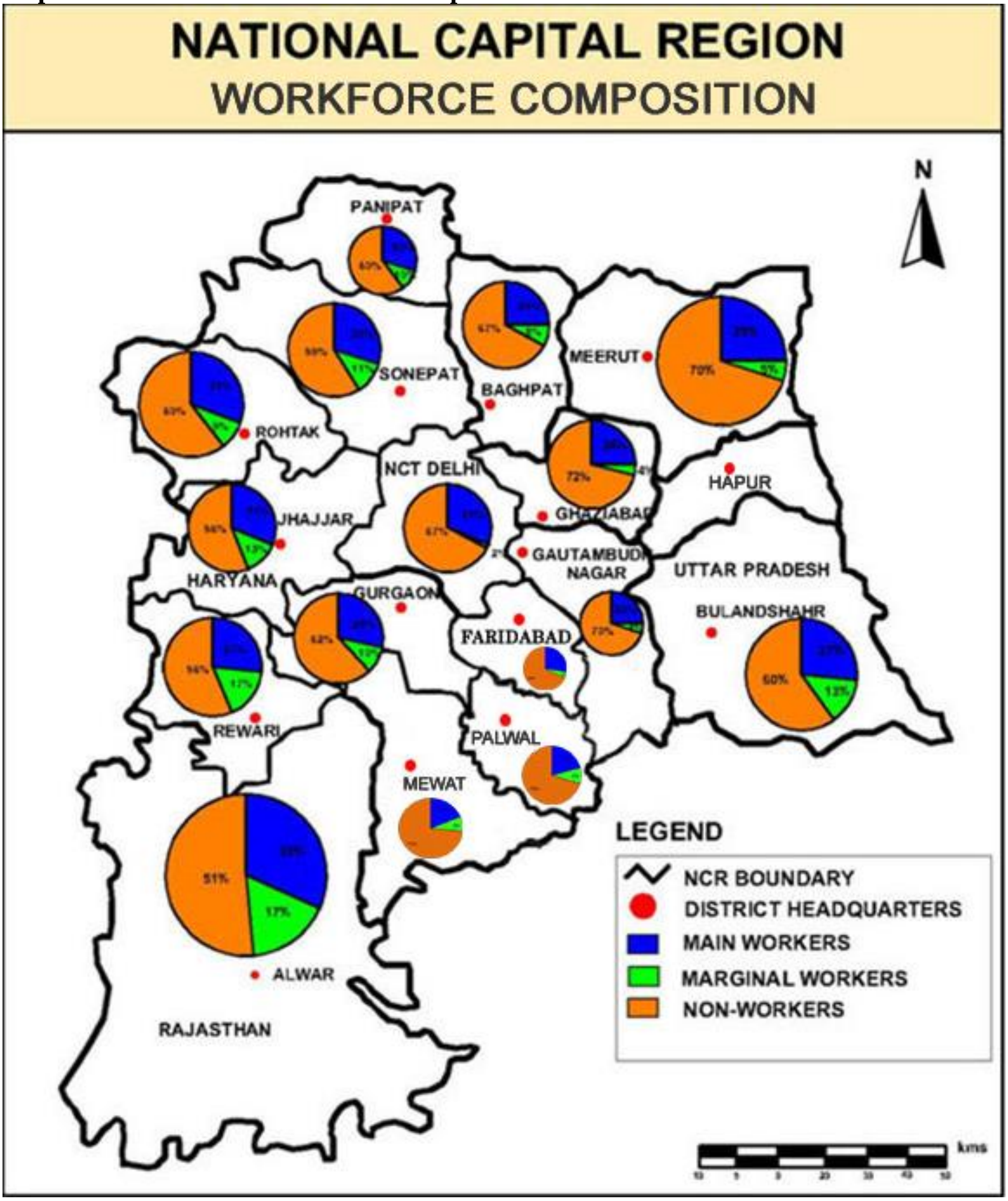
Figure 3.2: Sub-region wise share of Main and Marginal Workers to total Workforce in NCR in 2011



Map 3.1: District wise Worker's Participation Rate in NCR in 2011



Map 3.2: District wise Workforce Composition in NCR in 2011



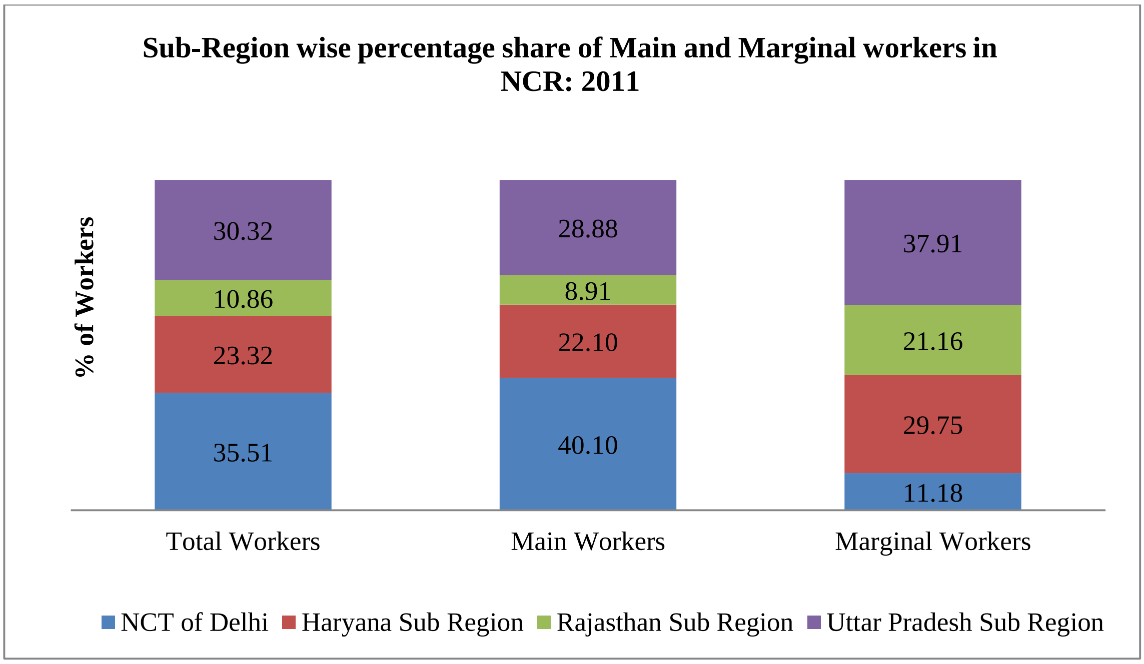
As per 2011 census, the majority of main workers in NCR is concentrated in NCT of Delhi (40.10%), followed by the Uttar Pradesh sub-region (28.88%), Haryana sub-region (22.10%) and Rajasthan sub-region (8.91%) (refer Table 3.9). In the case of marginal workers, NCT-Delhi has recorded the lowest proportion (11.18%), and higher concentration is observed in Uttar Pradesh sub-region (37.91%), followed by Haryana sub-region (29.75%) and Rajasthan sub-region (21.16%).

Table 3-9: Sub-region wise Worker wise Percentage Share of Workers in NCR: 2011

Region	Total Workers	Main Workers	Marginal Workers
NCT of Delhi	35.51	40.10	11.18
Haryana Sub region	23.32	22.10	29.75
Rajasthan sub region	10.86	8.91	21.16
Uttar Pradesh Sub region	30.32	28.88	37.91
NCR	**100.00**	**100.00**	**100.00**

Source: Census of India, 2011

Figure 3.3: Sub-Region wise percentage share of Main and Marginal workers in NCR: 2011



3.3.4 Category-wise distribution of Workers in NCR

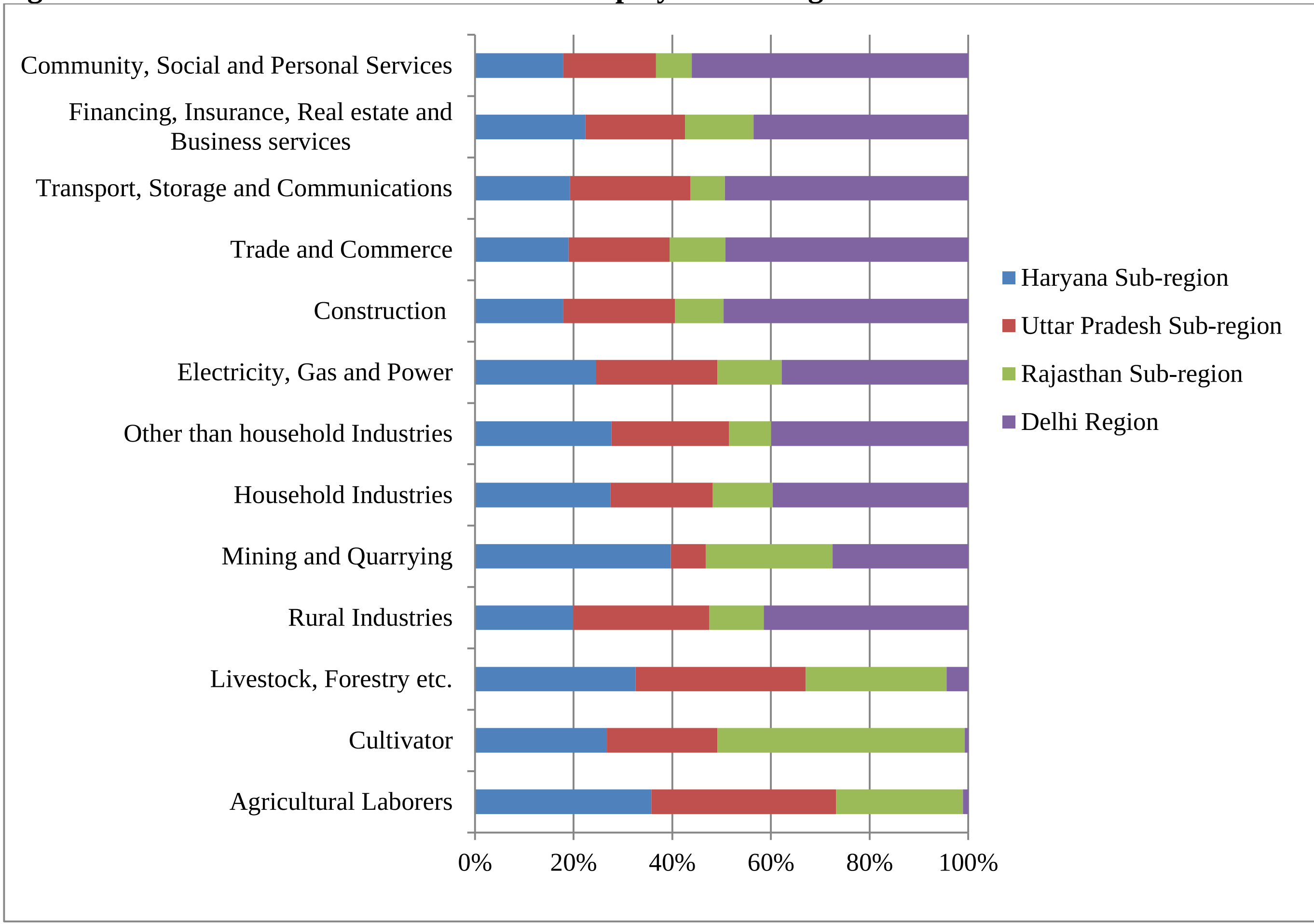
Disaggregating at sub-regional level workforce distribution in 2001, in most categories, it is observed that NCT-Delhi has the largest share in the workforce, barring agricultural laborers, cultivation and livestock, and forestry. NCT-Delhi has the highest number of workers in transport, storage and communications category. However, the lowest number of workers in agricultural laborers and mining and quarrying categories. Uttar Pradesh sub-region reported to have the maximum agricultural laborers, and second most to livestock and forestry sectors, and the least to mining and quarrying category.

At sector level, highest concentration of construction workers has been recorded in NCT-Delhi sub-region (57%) and the lowest in Rajasthan sub-region (4%). Similar trends can be observed in the trade and commerce sector. A reverse trend is observed for workers engaged in cultivation and agricultural laborers; while 1.28% of total cultivators & agricultural labourers are located in NCT-Delhi sub-region, 24.87% of them are located in Rajasthan sub-region (refer Table 3.9 and Figure 3.4).

Table 3-10: Category wise Total Workers distribution in 2001

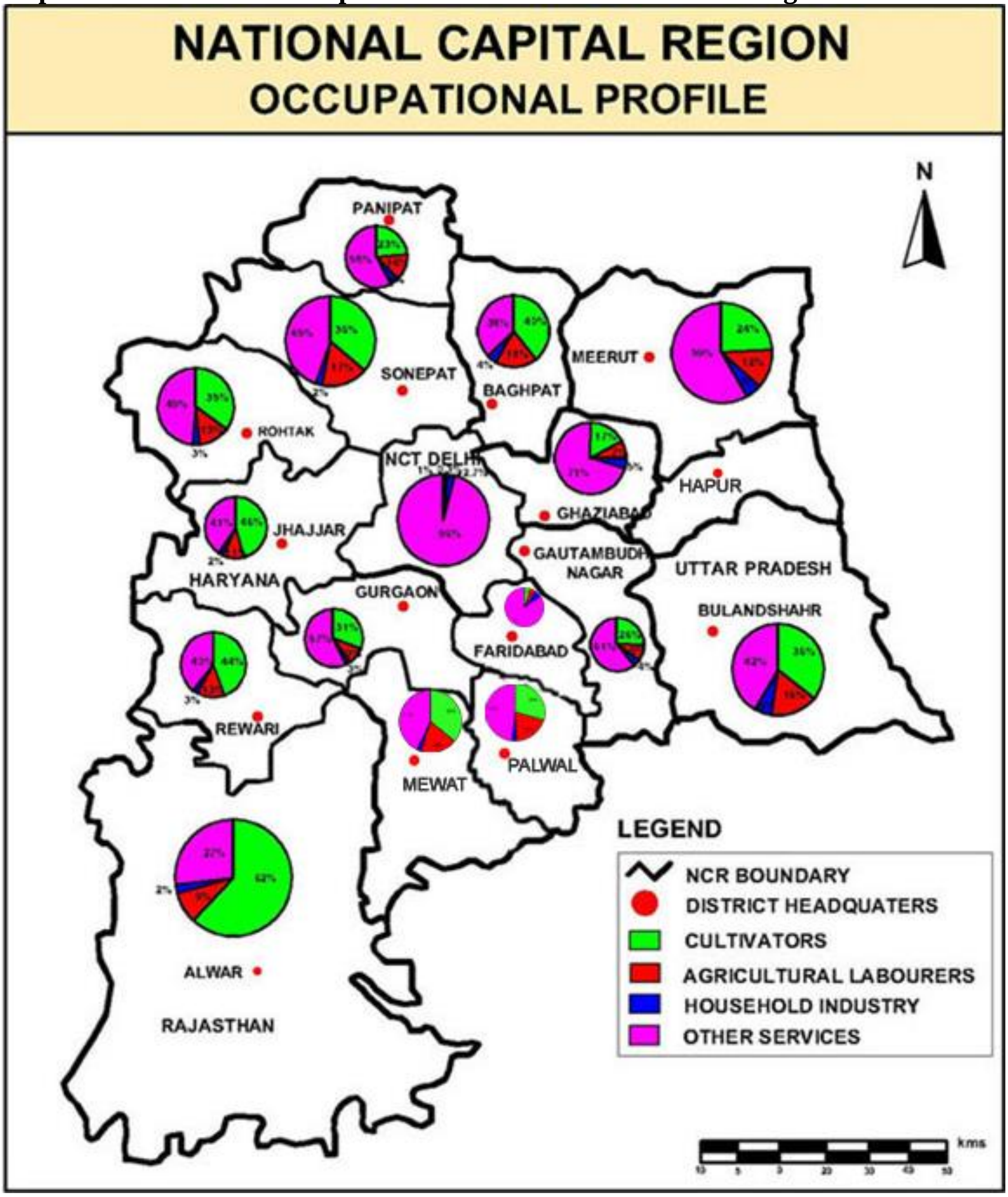
Category	1	2	3		4	5			6	7	8	9		1 to 9		
	Agricultural Laborers	Cultivator	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Manufacturing, Processing			Construction	Trade and Commerce	Transport, Storage and Communications	Other Services		Total Workers	Total Population	Participation Rate
Districts						a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power				Financing, Insurance, Real estate and Business services	Community, Social and Personal Services			
Haryana Sub-region	417282	1130246	218955	193533	18025	228243	128313	201215	300451	145440	225948	112526	85611	3414662	8687050	39.31
%	12.22%	33.10%	6.41%	5.67%	0.53%	6.68%	3.76%	5.89%	8.80%	4.26%	6.62%	3.30%	2.51%	100.00%		
Uttar Pradesh Sub-region	480625	1041911	255228	295045	3549	189430	121118	222669	420014	172696	316777	111410	98923	3752036	11567090	32.44
%	12.81%	27.77%	6.80%	7.86%	0.09%	5.05%	3.23%	5.93%	11.19%	4.60%	8.44%	2.97%	2.64%	100.00%		
Rajasthan Sub-region	128442	905207	82083	45703	4992	43016	16809	45810	70538	37133	34937	29883	14778	1458686	2992592	48.74
%	8.81%	62.06%	5.63%	3.13%	0.34%	2.95%	1.15%	3.14%	4.84%	2.55%	2.40%	2.05%	1.01%	100.00%		
Delhi Region	15773	37431	37353	512571	15873	419273	235541	395608	1061214	480580	738180	278482	341443	4346710	13850507	31.38
%	0.36%	0.86%	0.86%	11.79%	0.37%	9.65%	5.42%	9.10%	24.41%	11.06%	16.98%	6.41%	7.86%	100.00%		
NCR	1042122	3114795	593619	1046852	42439	879962	501781	865302	1852217	835849	1315842	532301	540755	12972094	37097239	34.97

Figure 3.4: Distribution of Workers across Employment Categories in 2001



Map 3.3 depicts the district wise occupational profile of the workers classified into four categories, i.e. cultivators, agricultural laborers, household industry workers and other workers in NCR in 2011.

Map 3.3: District wise Occupational Profile in NCR in Four Categories in 2011



3.3.5 Sector/District Wise Workforce

As per 2001 census, NCR has a total of 1,29,72,094 workers engaged in Primary, Secondary and Tertiary sectors. Of the total working population, largest proportion of the workers (45.02%) are employed in the primary sector, followed by secondary sector (31.60%) and the least (24.86%) in tertiary sector (refer Table 3.11). In Haryana, Uttar Pradesh and Rajasthan sub-regions, the majority of workforce is engaged in the primary sector, whereas the biggest portion of the workforce in NCT-Delhi sub-region is engaged in the secondary sector.

Table 3-11: Sector wise breakup of Total Workforce as per Census 2001

Sub-region	Districts/Sector	Primary sector	Secondary Sector	Tertiary sector	Total Workers
Haryana sub-region	Faridabad	3,59,491	268,460	1,57,005	7,85,762
	Gurgaon	3,62,923	1,55,938	1,17,704	6,29,658
	Jhajjar	2,49,254	80,659	53,054	3,88,715
	Panipat	2,39,535	96,869	450,735	3,82,801
	Rewari	2,26,185	61,306	41,957	3,33,622
	Rohtak	2,16,980	83,484	66,971	3,71,073
	Sonipat	3,27,691	1,11,506	82,099	5,23,031
	Total of Haryana sub-region	**19,78,041**	**8,58,222**	**5,69,525**	**34,14,662**
Uttar Pradesh sub-region	Baghpat	2,60,116	64,300	48,519	3,80,310
	Bulandshahar	8,39,491	2,00,760	1,33,575	11,73,805
	Gautam Budh Nagar	1,62,926	93,206	1,05,633	3,63,814
	Ghaziabad	3,59,459	3,36,180	2,38,801	9,38,251
	Meerut	4,54,366	2,58,785	1,73,278	8,95,856
	Total of Uttar Pradesh sub-region	**20,76,358**	**9,53,231**	**6,99,806**	**37,52,036**
Rajasthan sub-region	Alwar	11,66,427	1,76,173	1,16,731	14,58,686
	Total of Rajasthan sub-region	**11,66,427**	**1,76,173**	**1,16,731**	**14,58,686**
NCT-Delhi sub-region	North West	1,23,258	4,59,805	3,39,314	7,20,915
	North	28,596	1,32,507	96,700	2,56,596
	North East	89,315	2,59,363	1,51,041	5,00,425
	East	56,524	2,25,533	1,93,954	4,75,310
	New Delhi	3,035	15,884	49,638	67,594
	Central	36,238	1,16,178	76,524	2,23,851
	West	79,614	3,68,398	2,78,566	7,20,915
	South West	74,455	2,24,921	3,02,247	6,02,546
	South	1,15,643	3,09,047	3,50,701	7,78,558
	Total of NCT Delhi sub-region	**6,19,001**	**21,11,636**	**18,38,685**	**43,46,710**
NCR	**Total Workers in NCR**	**58,39,827**	**40,99,262**	**32,24,747**	**1,29,72,094**
% Share		**45.02%**	**31.60%**	**24.86%**	**100.00%**

Source: Census of India, 2001

3.4 Haryana Sub-Region

3.4.1 Workforce Distribution in Haryana Sub-Region in 2001

Category-wise main workers distribution at sub-region level

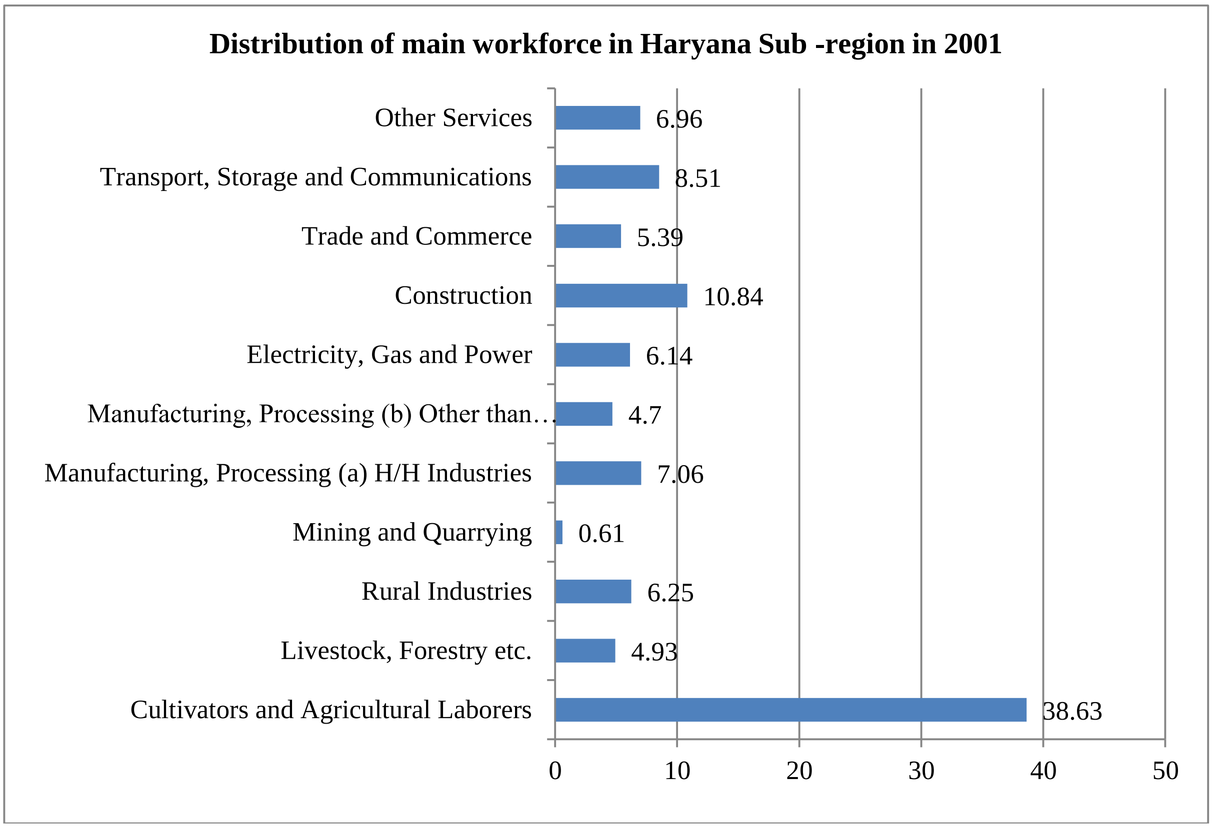
As per 2001 Census data, 38.63% of the total main workers is engaged in cultivation, followed by Construction (10.84%). This may be attributed to the increasing urbanization and associated construction activities in Haryana sub-region, especially in the districts adjacent to NCT-Delhi and are part of Central NCR. Analysis of Census 2001 data indicates that proportion of workers engaged in Construction has increased almost four times during 1991-2001 (from 2.8% in 1991 to 10.84% in 2001). Proportion of workers engaged in Transport, Storage and Communications has also more than doubled during 1991-2001 (refer Table 3.12).

Table 3-12: Distribution of Main Workforce in Haryana Sub-Region (1971, 1991 and 2001)

Year/	**1971**		**1991**		**2001**	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers**	**Percentage**
Cultivators	4,49,747	46.63	6,77,117	35.96	9,72,007*	38.63
Agricultural Laborers	1,32,687	13.76	2,86,950	15.24	-	-
Livestock, Forestry etc.	9,447	0.98	13,605	0.72	1,23,965	4.93
Rural Industries	N.A.	N.A.	N.A.	N.A.	1,57,144	6.25
Mining and Quarrying	2,501	0.26	4,462	0.24	15,346	0.61
Manufacturing, Processing						
a) Household Industries	38,723	4.01	26,371	1.4	1,77,695	7.06
b) Other than household Industries	85,321	8.85	2,48,635	13.2	1,18,260	4.70
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	1,54,406	6.14
Construction	19,355	2.01	52,744	2.8	2,72,617	10.84
Trade and Commerce	64,931	6.73	1,64,767	8.75	1,35,515	5.39
Transport, Storage and Communications	24,512	2.54	71,813	3.81	2,14,100	8.51
Other Services	1,37,363	14.24	3,36,704	17.88	1,75,002	6.96
Total Main Workers	**9,64,587**	**100**	**18,83,168**	**100**	**25,16,057**	**100.00**
Population	38,55,568		66,43,604		86,87,050	
Participation Ratio	25.02		28.35		28.96	

Source: Census, 1971, 1991 and 2001, Govt. of India,
** includes agriculture labor also*

Figure 3.5: Category Wise Distribution of Main Workforce in Haryana Sub-Region in 2001



Category-wise workers distribution at district level

In 2001, Agriculture is the major source of livelihood for all the six districts in the sub-region followed by household and other services, indicating the predominance of semi-skilled and unskilled workers. Cultivation, agriculture and non-household industries are the three major occupational profiles for these districts in the sub-region, while trade and commerce and transport are the ones at the bottom (refer Table 3.13 and Figure 3.6).

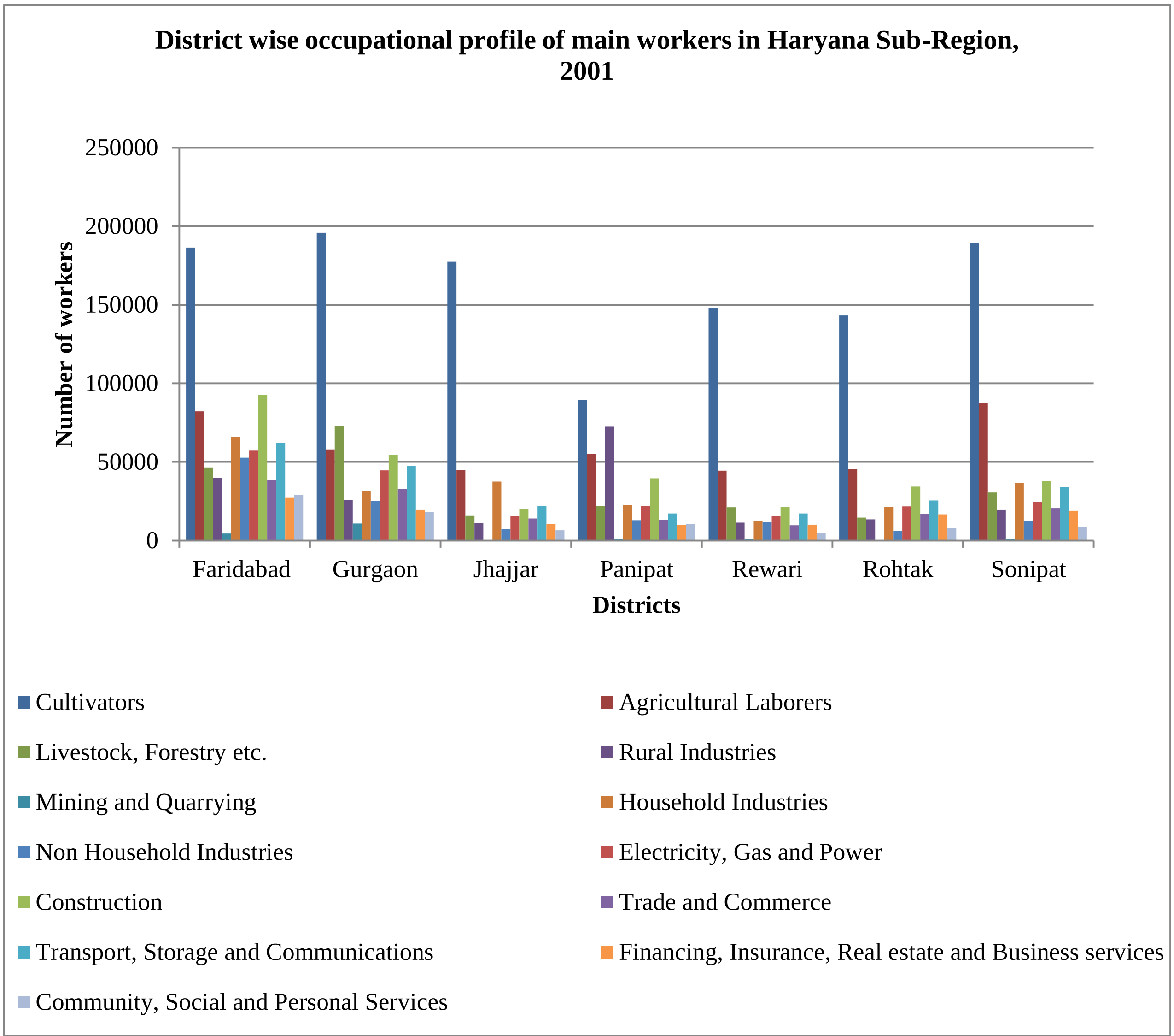
Table 3-13: District wise occupational profile of main workers in Haryana Sub-Region, in 2001

Districts	Cultivators	Agricultural Laborers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Household Industries	Other than household Industries	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services
Faridabad	1,86,403	82,175	46,513	39,924	4476	65,918	52,788	57,172	92,582	38,370	62,321	27,201	29,113
% share to Haryana sub-region	16.49%	19.69%	20.86%	20.63%	24.83%	28.88%	41.14%	28.41%	30.81%	26.38%	27.58%	24.17%	34.01%
Gurgaon	1,95,768	57,928	72,640	25,719	10868	31,668	25,199	44,611	54,460	32,733	47,504	19,397	18,070
% share to Haryana sub-region	17.32%	13.88%	32.58%	13.29%	60.29%	13.87%	19.64%	22.17%	18.13%	22.51%	21.02%	17.24%	21.11%
Jhajjar	1,77,377	44,844	15,765	11,027	241	37,547	7,217	15,602	20,293	14,025	22,031	10,505	6,493
% share to Haryana sub-region	15.69%	10.75%	7.07%	5.70%	1.34%	16.45%	5.62%	7.75%	6.75%	9.64%	9.75%	9.34%	7.58%
Panipat	89,493	55,042	21,867	72,535	598	22,445	12,926	21,975	39,523	13,266	17,259	9,816	10,394
% share to Haryana sub-region	7.92%	13.19%	9.81%	37.48%	3.32%	9.83%	10.07%	10.92%	13.15%	9.12%	7.64%	8.72%	12.14%
Rewari	1,48,218	44,441	21,187	11,481	858	12,622	11,837	15,437	21,410	9,703	17,297	10,018	4,939
% share to Haryana sub-region	13.11%	10.65%	9.50%	5.93%	4.76%	5.53%	9.23%	7.67%	7.13%	6.67%	7.66%	8.90%	5.77%
Rohtak	1,43,314	45,462	14,530	13,379	295	21,377	6,158	21,724	34,225	16,835	25,553	16,602	7,981

Districts	Cultivators	Agricultural Laborers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Household Industries	Other than household Industries	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services
% share to Haryana sub-region	12.68%	10.89%	6.52%	6.91%	1.64%	9.37%	4.80%	10.80%	11.39%	11.58%	11.31%	14.75%	9.32%
Sonipat	1,89,673	87,390	30,471	19,468	689	36,666	12,188	24,694	37,958	20,508	33,983	18,987	8,621
% share to Haryana sub-region	16.78%	20.94%	13.67%	10.06%	3.82%	16.06%	9.50%	12.27%	12.63%	14.10%	15.04%	16.87%	10.07%
Haryana Sub-Region	**11,30,246**	**4,17,282**	**2,22,973**	**1,93,533**	**18025**	**228243**	**128313**	**201215**	**3,00,451**	**1,45,440**	**2,25,948**	**1,12,526**	**85,611**

Source: Census of India, 2001

Figure 3.6: District wise Occupational Profile of Main Workers in Haryana Sub-Region, 2001

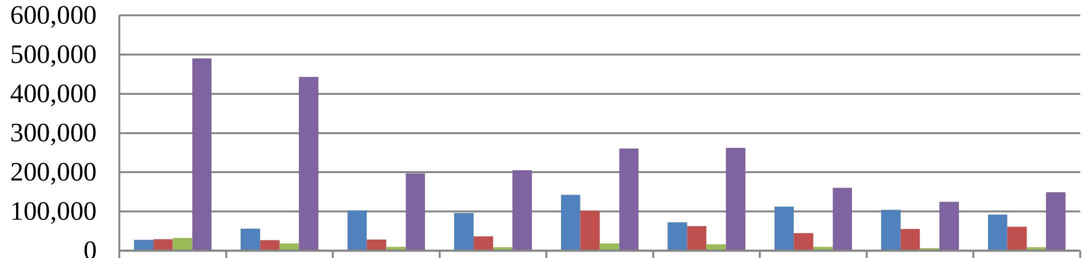


3.4.2 Workforce and Non-Workers in Haryna Sub-Region, 2011

A majority of workers in Haryana sub-region is engaged in tertiary sector activities and other than household industries followed by cultivation and other agricultural activities. In case of household industry, Faridabad district has recorded the highest number of workers engaged, while Mewat district has recorded the lowest number of workers employed in this category and (refer Figure 3.7).

Figure 3.7: District wise Occupational Profile of Total Workers in Haryana Sub-Region: 2011

Major Occupation wise districtwise All workers in NCR Harayana Sub Region, 2011



	Faridabad	Gurgaon	Rewari	Rohtak	Sonipat	Panipat	Jhajjar	Mewat	Palwal
Cultivators	27,705	56,046	102,698	95,732	142,344	72,120	112,389	104,237	91,506
Agriculture labor	29,288	27,097	28,215	36,568	101,733	62,358	44,845	55,278	60,685
HH Industries	32,286	18,228	9,782	8,521	18,184	15,824	9,254	6,023	8,566
Others	489,950	443,345	197,032	205,146	260,918	262,016	160,046	124,426	148,806

Source: Census of India, 2011

3.4.3 Workers and Non-Workers in Haryana Sub-Region, 2011

Haryana sub-region has a total of 36.69 Lakh of total workers, out of which 20.95 Lakhs are rural and 15.74 Lakhs are urban workers. Faridabad district has the maximum number of workers followed by Gurgaon district, out of which urban workers constitute a majority. Mewat has recorded the least number of workers followed by Palwal with rural workers constituting the majority. Haryana sub-region has a total 73.62 Lakhs of non-working population and majority of them are in the rural area. It is observed that Faridabad district has the maximum number of non-workers and the least in Mewat district (refer Table 3.14 and Figure 3.8).

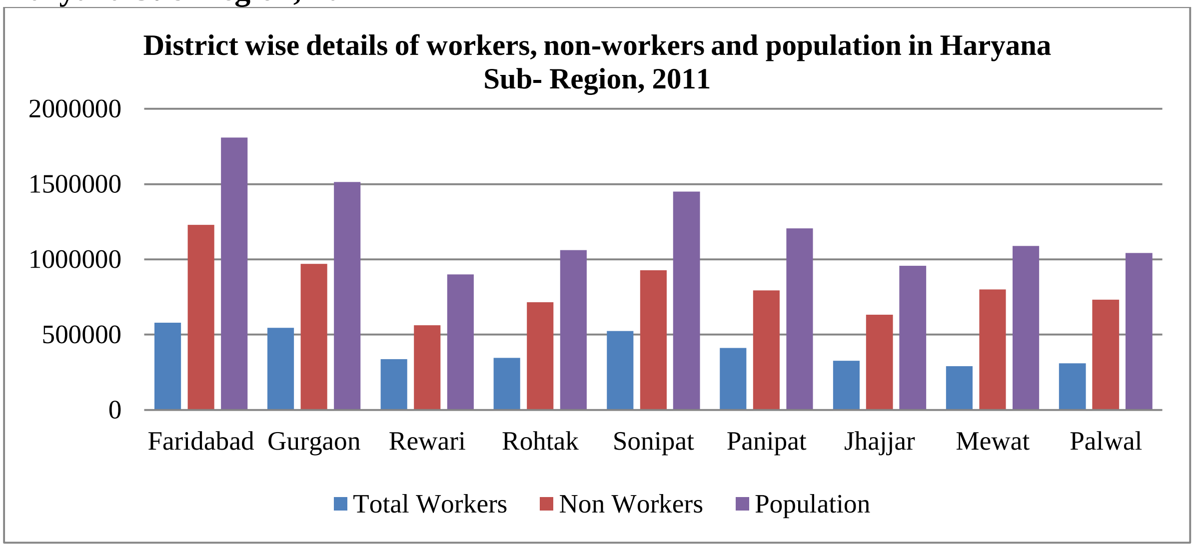
Table 3-14: District wise Workers and Non-workers in Haryana Sub-Region: 2011

Districts	Main workers			Marginal workers			Non workers			Total Workers (Main + Marginal)		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Faridabad	84,456	4,10,860	4,95,316	22,302	61,611	83,913	2,64,120	9,66,384	12,30,504	1,06,758	4,72,471	5,79,229
% share to Haryana Sub-Region	5.54%	29.33%	16.93%	3.91%	35.58%	11.28%	6.34%	30.21%	16.71%	5.10%	30.02%	15.79%
Gurgaon	1,24,933	3,62,508	4,87,441	33,529	23,746	57,275	3,13,717	6,55,999	9,69,716	1,58,462	3,86,254	5,44,716
% share to Haryana Sub-Region	8.195%	25.878%	16.663%	5.875%	13.712%	7.699%	7.535%	20.506%	13.171%	7.563%	24.539%	14.846%
Rewari	1,82,761	67,458	2,50,219	81,614	5,894	87,508	4,02,527	1,60,078	5,62,605	2,64,375	73,352	3,37,727
% share to Haryana Sub-Region	11.99%	4.82%	8.55%	14.30%	3.40%	11.76%	9.67%	5.00%	7.64%	12.62%	4.66%	9.20%
Rohtak	1,66,788	1,22,161	2,88,949	45,893	11,125	57,018	4,02,359	3,12,878	7,15,237	2,12,681	1,33,286	3,45,967

Districts	Main workers			Marginal workers			Non workers			Total Workers (Main + Marginal)		
	Rural	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
% share to Haryana Sub-Region	10.94%	8.72%	9.88%	8.04%	6.42%	7.66%	9.66%	9.78%	9.71%	10.15%	8.47%	9.43%
Sonipat	2,71,676	1,25,087	3,96,763	1,04,512	21,904	1,26,416	6,20,449	3,06,373	9,26,822	3,76,188	1,46,991	5,23,179
% share to Haryana Sub-Region	17.82%	8.93%	13.56%	18.31%	12.65%	16.99%	14.90%	9.58%	12.59%	17.95%	9.34%	14.26%
Panipat	1,67,683	1,71,333	3,39,016	54,248	19,054	73,302	4,28,421	3,64,698	7,93,119	2,21,931	1,90,387	4,12,318
% share to Haryana Sub-Region	11.00%	12.23%	11.59%	9.50%	11.00%	9.85%	10.29%	11.40%	10.77%	10.59%	12.10%	11.24%
Jhajjar	1,82,688	63,769	2,46,457	71,145	8,932	80,077	4,61,233	1,70,638	6,31,871	2,53,833	72,701	3,26,534
% share to Haryana Sub-Region	11.98%	4.55%	8.43%	12.47%	5.16%	10.76%	11.08%	5.33%	8.58%	12.12%	4.62%	8.90%
Mewat	1,79,382	24,796	2,04,178	79,339	6,447	85,786	7,06,436	92,863	7,99,299	2,58,721	31,243	2,89,964
% share to Haryana Sub-Region	11.77%	1.77%	6.98%	13.90%	3.72%	11.53%	16.97%	2.90%	10.86%	12.35%	1.98%	7.90%
Palwal	1,64,067	52,865	2,16,932	78,161	14,470	92,631	5,63,936	1,69,209	7,33,145	2,42,228	67,335	3,09,563
% share to Haryana Sub-Region	10.76%	3.77%	7.42%	13.69%	8.36%	12.45%	13.55%	5.29%	9.96%	11.56%	4.28%	8.44%
Haryana sub-region	**1,52,44,34**	**14,00,837**	**29,25,271**	**5,70,743**	**1,73,183**	**7,43,926**	**41,63,198**	**31,99,120**	**73,62,318**	**20,95,177**	**15,74,020**	**36,69,197**

Source: Census of India, 2011, Govt. of India

Figure 3.8: District wise composition of workers, non-workers and population in Haryana Sub-Region, 2011



3.4.4 Working Population in the Public and Private Sector in Haryana Sub-Region

Due to high growth rates, Faridabad and Gurgaon districts attract the maximum number migrants demonstrated through the higher share of private sector employment in these districts.

The share of private sector employment in Faridabad, Gurgaon and Sonepat districts recorded 68%, 77% and 60% respectively. The other three districts have a larger share of the workforce engaged in the public sector (refer Table 3.15).

Table 3-15: Percentage Distribution of Workforce in Public and Private Sector

District Name	Private Sector (%)	Public Sector (%)
Panipat	38.85	61.15
Rewari	51.92	48.08
Sonepat	59.87	40.13
Rohtak	38.50	61.50
Gurgaon	77.30	22.70
Faridabad	67.96	32.04

Source: Statistical Abstract of Haryana, 2008-09

3.5 Rajasthan Sub-Region

3.5.1 Workforce Distribution in Rajasthan Sub-Region in 2001

Category wise Workers Distribution at sub-region level:

Rajasthan sub-region has witnessed changing trends in workforce distribution over the last three decades. During the period 1991-2001, the sub-region has recorded the maximum increase (47%) in primary sector workers (from 2.61 Lakhs to 6.47 Lakhs) (refer Table 3.16 and Figure 3.9). The majority of workers are employed in agricultural activities laborers, followed by construction.

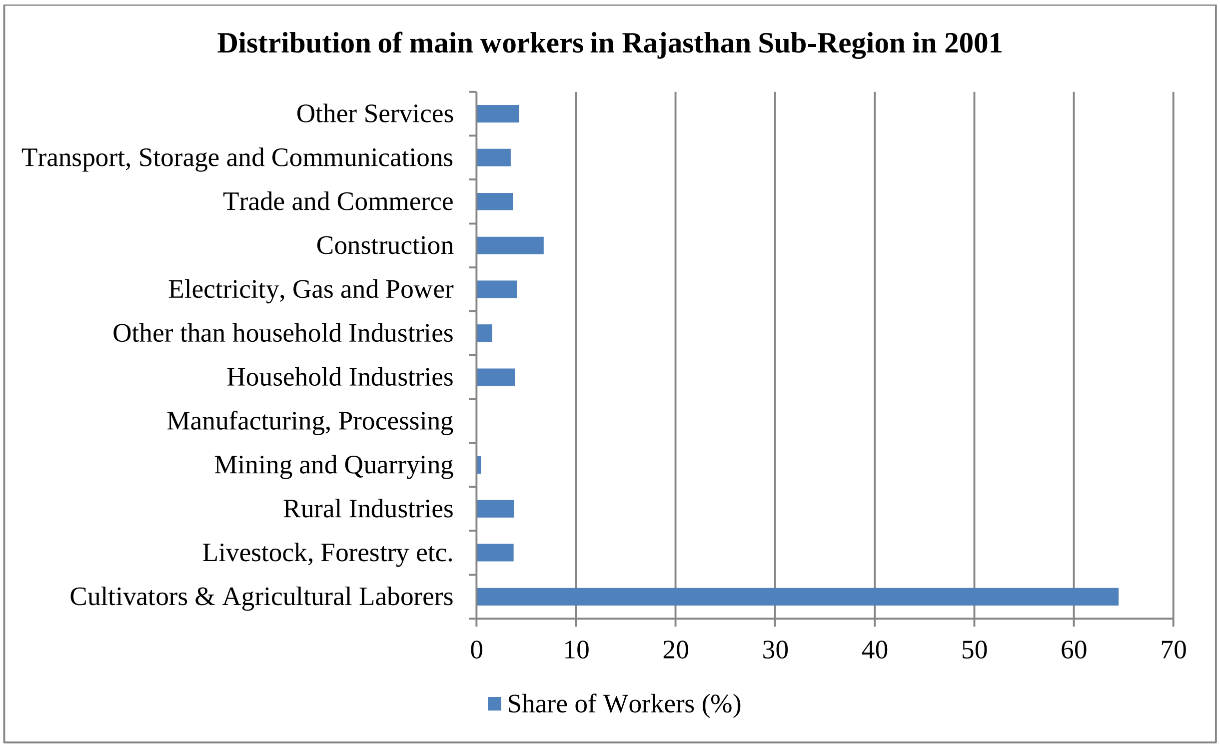
Table 3-16: Distribution of Main Workforce in Rajasthan Sub-Region (1971, 1991 and 2001)

Year/ Category of workers	1971		1991		2001	
	Workers	Percentage	Workers	Percentage	Workers	Percentage
Cultivators	1,35,956	63.08	2,22,065	54.58	6,11,306*	64.51
Agricultural Laborers	19,511	9.05	35,158	8.64	-	-
Livestock, Forestry etc.	2,347	1.09	4,087	1	35,375	3.73
Rural Industries	N.A.	N.A.	N.A.	N.A.	35,632	3.76
Mining and Quarrying	432	0.2	2,004	0.49	4,299	0.45
Manufacturing, Processing						
a) Household Industries	8,921	4.14	6,524	1.6	36,437	3.85
b) Other than household Industries	5,299	2.46	34,083	8.38	14,843	1.57
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	38,311	4.04
Construction	2,558	1.19	8,611	2.12	63,738	6.73

Year/ Category of workers	1971		1991		2001	
	Workers	**Percentage**	**Workers**	**Percentage**	**Workers**	**Percentage**
Trade and Commerce	10,717	4.97	29,796	7.32	34,581	3.65
Transport, Storage and Communications	3,156	1.46	11,370	2.79	32,487	3.43
Other Services	26,624	12.35	53,142	13.06	40,578	4.28
Total Main Workers	**2,15,521**	**100**	**4,06,840**	**100**	**9,47,587**	**100.00**
Participation Ratio	**26.4**		**28.33**		**31.66**	

Source: Census of India, 1971, 1991 and 2001
** includes agriculture labor also*

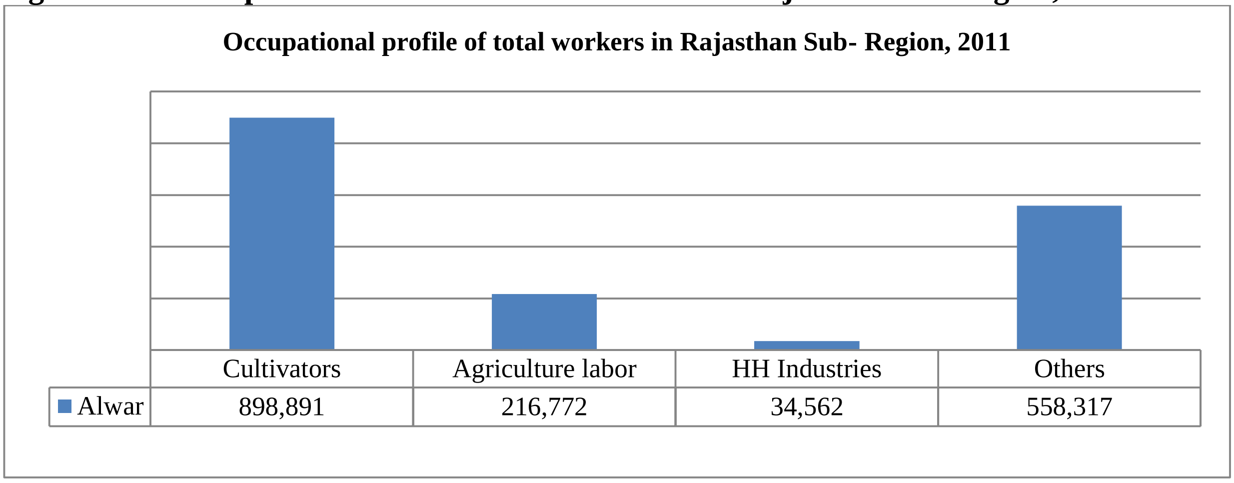
Figure 3.9: Distribution of main workforce in Rajasthan Sub-Region in 2001



3.5.2 Workers and Non-Workers in Rajasthan Sub-Region, 2011

As per Census 2011, there are over 11 lakh workers employed in the agriculture sector including cultivators (8.99 Lakhs) and agriculture laborers (2.17 lakhs) in the sub region (refer Figure 3.10).

Figure 3.10: Occupational Profile of Total Workers in Rajasthan Sub-Region, 2011



3.5.3 Workforce Distribution in Rajasthan Sub-Region, 2011

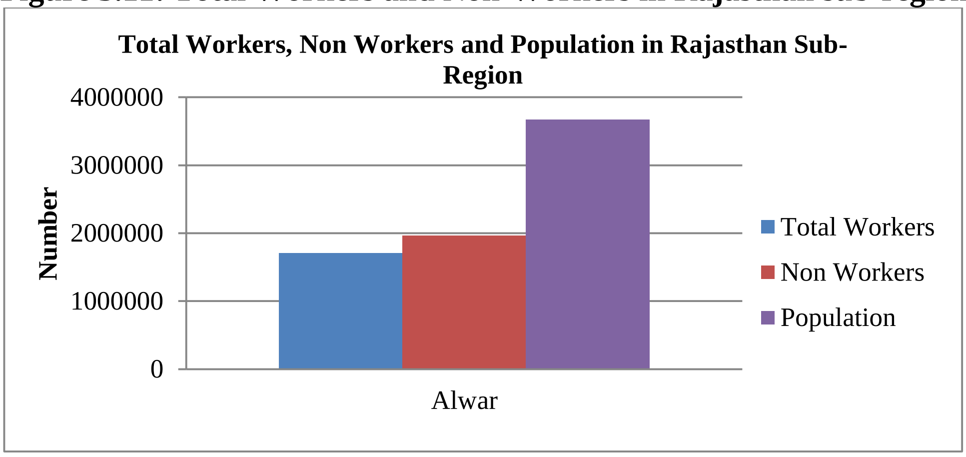
The majority of the workforce (both main and marginal workers) in this sub-region is in the rural areas (87%) in 2011. A high portion of the rural population is engaged in agricultural activities as disguised workers as compared to the urban sector workers. In terms of marginal workers, rural marginal workforce constitutes over 95% of the total marginal workforce. In terms of non-workers, rural workforce component contributes to nearly 78% of the total non working population. In terms of the total population of the sub region, the non-workers constitute 53.5% of the total population (refer Table 3.17).

Table 3-17: Workers and non-workers in Rajasthan Sub-Region, 2011

Districts	Main workers			Marginal workers			Non workers			Total Workers (Main + Marginal)		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Alwar	9,82,840	1,96,621	11,79,461	5,05,095	23,986	5,29,081	15,31,793	4,33,844	19,65,637	14,87,935	2,20,607	17,08,542
% Share	83.33%	16.67%	100.00%	95.47%	4.53%	100.00%	77.93%	22.07%	100.00%	87.09%	12.91%	100.00%

Source: Census of India, 2011

Figure 3.11: Total Workers and Non-Workers in Rajasthan sub-region: 2011



3.6 NCT-Delhi Sub-Region

3.6.1 Workforce Distribution in NCT-Delhi Sub-Region, 2001

In NCT-Delhi, highest proportion of the workforce is engaged in Construction (23.29%), followed by Transport, Storage & Communications (16.20%) and Rural Indutries (10.98%) in 2001. This implies that a majority of the workforce is engaged in the secondary and teritiary (service) sector. In terms of spatial distribution of the Workforce, majority of them are in North West Delhi district and South Delhi district while the least number of these workers are in the West Delhi district. The secondary (industry) sector was the second major employer in the sub-region and the primary sector had the least number of workers during the period. In secondary sector, the maximum number of workers was concentrated in the North West Delhi district followed by West Delhi district, while the least number is observed in New Delhi district. NCT-Delhi had lowest number of workers in the primary sector among all the sub-regions in NCR and majority of them reside in North West Delhi district and least in New Delhi district (refer Table 3.18, Figure 3.12 & 3.13).

Table 3-18: Category Wise Main Workers among in NCT-Delhi, 2001

Districts	Cultivator	Agricultural Labourers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Household Industries	Other than household Industries	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
North West	6,823	14,125	9,580	88,917	3,813	1,08,210	45,846	86,464	2,19,285	1,01,070	1,18,926	56,330	62,988	**9,22,377**
% Share to NCT-Delhi	43.26%	37.74%	25.65%	17.77%	24.02%	25.81%	19.46%	21.86%	20.66%	21.03%	16.11%	20.23%	18.45%	20.24%
North	1,163	1,477	1,651	23,621	684	24,327	14,000	16,153	78,027	31,972	30,942	15,597	18,189	**2,57,803**
% Share to NCT-Delhi	7.37%	3.95%	4.42%	4.72%	4.31%	5.80%	5.94%	4.08%	7.35%	6.65%	4.19%	5.60%	5.33%	5.66%
North East	615	1,256	4,622	81,352	1,470	59,879	32,084	39,958	1,27,442	52,190	55,105	25,432	18,314	**4,99,719**
% Share to NCT-Delhi	3.90%	3.36%	12.37%	16.26%	9.26%	14.28%	13.62%	10.10%	12.01%	10.86%	7.46%	9.13%	5.36%	10.97%
East	692	1,116	4,662	48,771	1,283	37,815	27,704	39,528	1,20,486	50,538	80,191	29,825	33,400	**4,76,011**
% Share to NCT-Delhi	4.39%	2.98%	12.48%	9.75%	8.08%	9.02%	11.76%	9.99%	11.35%	10.52%	10.86%	10.71%	9.78%	10.45%
New Delhi	84	105	292	2,466	88	1,460	1172	5,406	7,846	5,320	28,738	4,518	11,062	**68,557**
% Share to NCT-Delhi	0.53%	0.28%	0.78%	0.49%	0.55%	0.35%	0.50%	1.37%	0.74%	1.11%	3.89%	1.62%	3.24%	1.50%
Central	214	220	840	33,554	1,410	27,162	12,068	10,044	66,904	22,976	26,080	11,038	16,430	**2,28,940**
% Share to NCT-Delhi	1.4%	0.6%	2.2%	6.7%	8.9%	6.5%	5.1%	2.5%	6.3%	4.8%	3.5%	4.0%	4.8%	5.0%
West	837	2,998	2978	70,799	2,002	82,745	43,751	53,878	1,88,024	78,807	1,00,576	45,768	53,415	**7,26,578**
% Share to NCT-Delhi	5.31%	8.01%	7.97%	14.15%	12.61%	19.74%	18.57%	13.62%	17.72%	16.40%	13.62%	16.43%	15.64%	15.94%
South West	3,603	14,128	6,654	48,218	1,852	37,930	24,973	59,174	1,02,844	64,858	1,55,943	36,804	44,642	**6,01,623**
% Share to NCT-Delhi	22.84%	37.74%	17.81%	9.64%	11.67%	9.05%	10.60%	14.96%	9.69%	13.50%	21.13%	13.22%	13.07%	13.20%

Districts	Cultivator	Agricultural Labourers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Household Industries	Other than household Industries	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
South	1,742	2,006	6,074	1,02,550	3,271	39,745	33,943	85,003	1,50,356	72,849	1,41,679	53,170	83,003	**7,75,391**
% Share to NCT-Delhi	11.04%	5.36%	16.26%	20.50%	20.61%	9.48%	14.41%	21.49%	14.17%	15.16%	19.19%	19.09%	24.31%	17.02%
NCT-Delhi	**15,773**	**37,431**	**37,353**	**5,00,248**	**15,873**	**4,19,273**	**2,35,541**	**3,95,608**	**10,61,214**	**4,80,580**	**7,38,180**	**2,78,482**	**3,41,443**	**45,56,999**
% Share	**0.35%**	**0.82%**	**0.82%**	**10.98%**	**0.35%**	**9.20%**	**5.17%**	**8.68%**	**23.29%**	**10.55%**	**16.20%**	**6.11%**	**7.49%**	**100.00%**

Source: Census of India 2001

Figure 3.12: Distribution of Main Workforce in NCT-Delhi sub-region in 2001

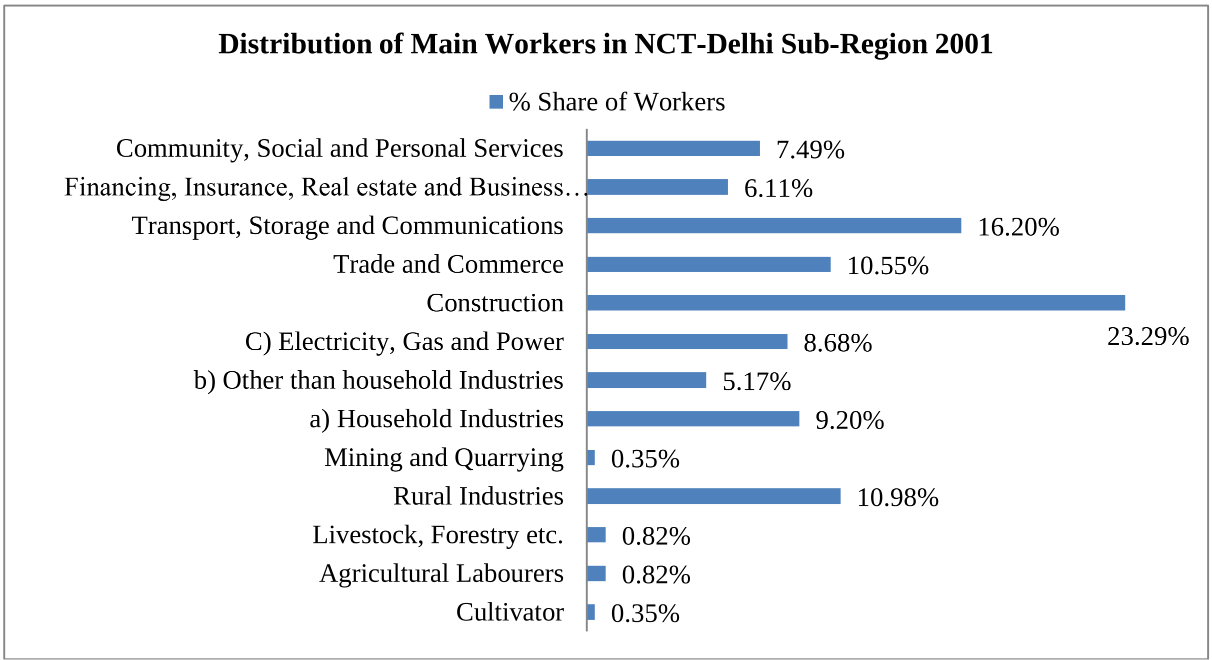
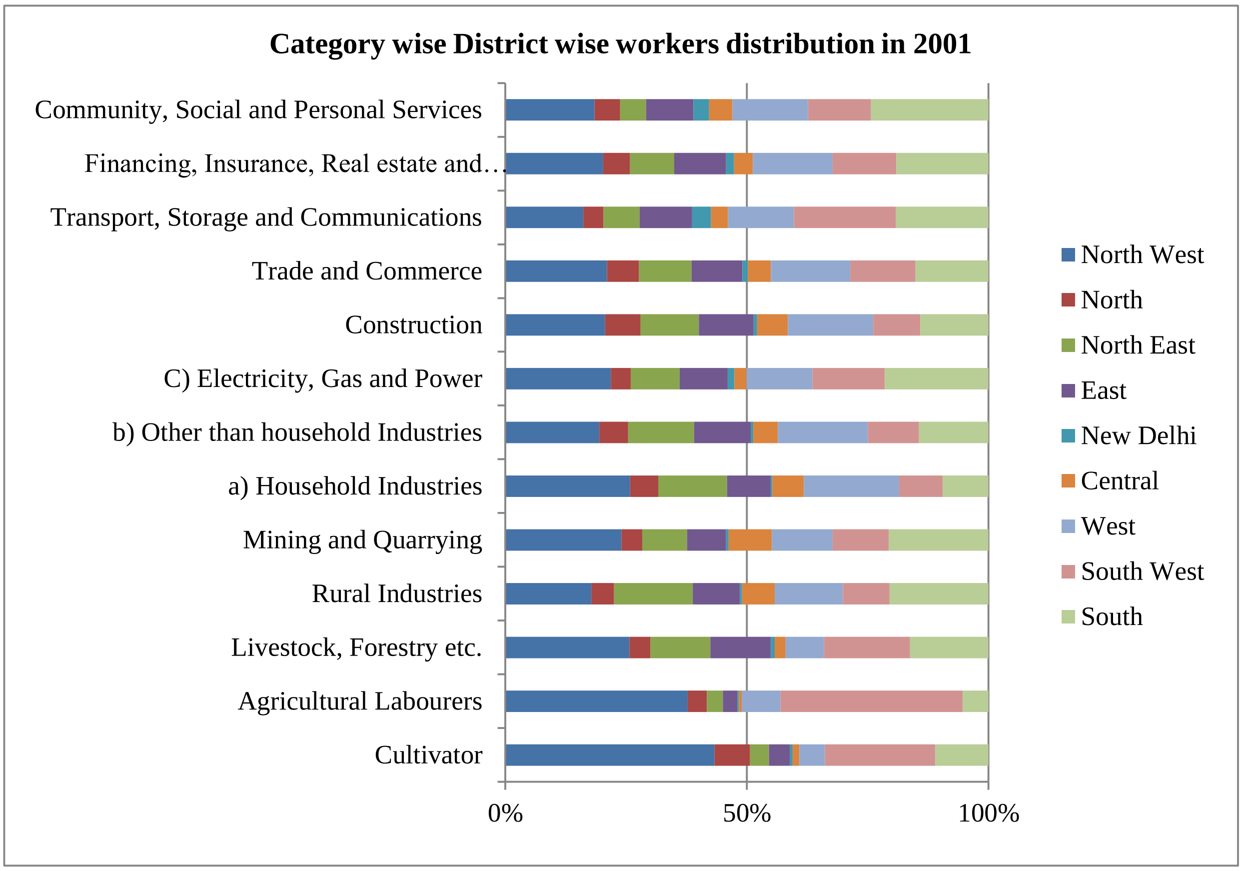


Figure 3.13: Category Wise Workers Distribution in various Districts of NCT-Delhi sub-region: 2001



3.6.2 Workers and Non-Workers in NCT-Delhi Sub-Region, 2011

According to Census 2011, in NCT of Delhi sub-region, the urban workforce dominates the total (main & marginal) worker force. It is observed that most workers are concentrated in North West Delhi District and South Delhi District; while the lowest concentration is recorded in New Delhi District followed by Central Delhi District.

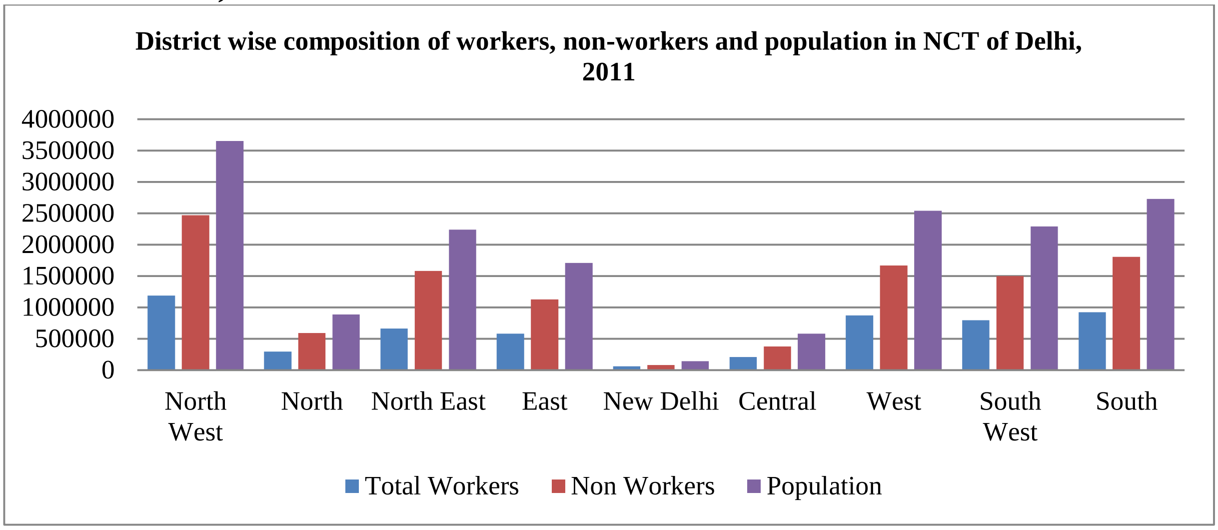
The total number of marginal workers in NCT-Delhi has seen a tremendous increase over the years due to enhanced job opportunities. This increase in the total workforce, both main and marginal, is mainly due to migration of the unemployed workers from the neighboring states. A study undertaken by the Planning Department, Govt. of NCT-Delhi revealed that 43% of the workforce registered with Employment Exchanges in NCT-Delhi is from the neighboring states (refer Table 3.19 and Figure 3.14).

Table 3-19: District wise Workers and Non-workers in Delhi sub-region 2011

	Main workers			Marginal workers			Non workers			Total Workers (Main + Marginal Workers)		
Districts	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
North West	61,679	10,73,447	11,35,126	5,813	47,606	53,419	1,46,458	23,21,536	24,67,994	67,492	11,21,053	11,88,545
% Share to NCT-Delhi	52.05%	20.69%	21.39%	49.61%	17.76%	19.10%	50.71%	21.27%	22.03%	51.83%	20.54%	21.27%
North	5,052	2,78,531	2,83,583	226	12,637	12,863	12,468	5,79,064	5,91,532	5,278	2,91,168	2,96,446
% Share to NCT-Delhi	4.26%	5.37%	5.34%	1.93%	4.72%	4.60%	4.32%	5.31%	5.28%	4.05%	5.34%	5.31%
North East	5,773	6,16,670	6,22,443	215	38,728	38,943	15,539	15,64,699	15,80,238	5,988	6,55,398	6,61,386
% Share to NCT-Delhi	4.87%	11.88%	11.73%	1.83%	14.45%	13.92%	5.38%	14.34%	14.11%	4.60%	12.01%	11.84%
East	1,316	5,53,710	5,55,026	32	24,634	24,666	2,182	11,27,472	11,29,654	1,348	5,78,344	5,79,692
% Share to NCT-Delhi	1.11%	10.67%	10.46%	0.27%	9.19%	8.82%	0.76%	10.33%	10.09%	1.04%	10.60%	10.38%
New Delhi		56,471	56,471		3,070	3,070	0	82,463	82,463	0	59,541	59,541
% Share to NCT-Delhi	0.00%	1.09%	1.06%	0.00%	1.15%	1.10%	0.00%	0.76%	0.74%	0.00%	1.09%	1.07%
Central		1,95,978	1,95,978		11,396	11,396	0	3,74,946	3,74,946	0	2,07,374	2,07,374
% Share to NCT-Delhi	0.00%	3.78%	3.69%	0.00%	4.25%	4.07%	0.00%	3.44%	3.35%	0.00%	3.80%	3.71%
West	1680	8,37,941	8,39,621	166	34,533	34,699	4,574	16,64,349	16,68,923	1,846	8,72,474	8,74,320
% Share to NCT-Delhi	1.42%	16.15%	15.82%	1.42%	12.89%	12.40%	1.58%	15.25%	14.90%	1.42%	15.99%	15.65%
South West	39,104	7,10,891	7,49,995	4,945	40,412	45,357	99,627	13,97,979	14,97,606	44,049	7,51,303	7,95,352
% Share to NCT-Delhi	33.00%	13.70%	14.13%	42.20%	15.08%	16.22%	34.50%	12.81%	13.37%	33.82%	13.77%	14.24%
South	3,906	8,65,180	8,69,086	320	54,987	55,307	7,967	17,99,569	18,07,536	4,226	9,20,167	9,24,393
% Share to NCT-Delhi	3.30%	16.67%	16.38%	2.73%	20.52%	19.77%	2.76%	16.49%	16.14%	3.25%	16.86%	16.55%
NCT of Delhi	**1,18,510**	**51,88,819**	**53,07,329**	**11,717**	**2,68,003**	**2,79,720**	**2,88,815**	**1,09,12,077**	**1,12,00,892**	**1,30,227**	**54,56,822**	**55,87,049**

Source: Census of India, 2011

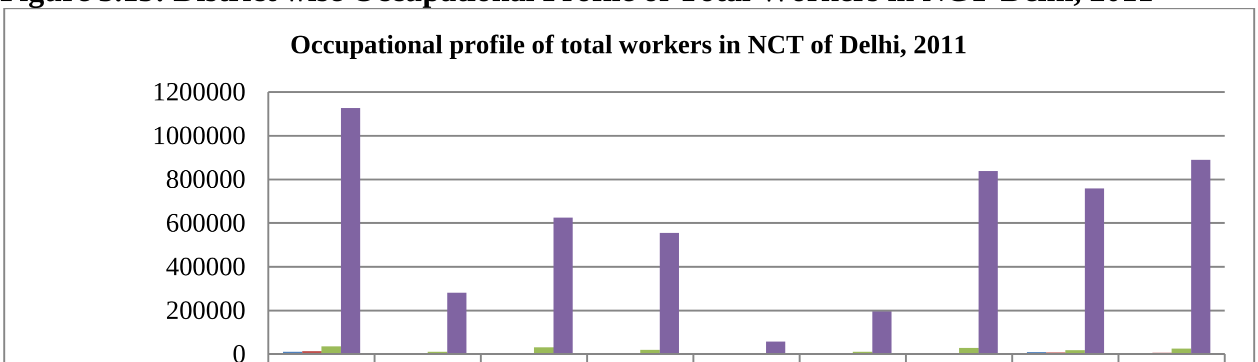
Figure 3.14: District wise Composition of Total Workers, Non-Workers and Population in NCT of Delhi, 2011



3.6.3 Workforce Distribution in NCT-Delhi Sub-Region, 2011

North West Delhi district has the maximum number of workers, with majority of them being other workers (11.27 Lakhs), followed by Household industries workers (35,896), Agriculture labourers (39,475) and the least number is observed as cultivators (11,433). All the districts in NCT-Delhi sub-region report the same pattern, except for North and South West district which have more of cultivators than agriculture labors (refer Figure 3.15).

Figure 3.15: District wise Occupational Profile of Total Workers in NCT-Delhi, 2011



	North West	North	North East	East	New Delhi	Central	West	South West	South
Cultivators	11433	2187	2235	1156	121	597	2952	9733	2984
Agriculture labor	13289	1791	2406	3094	275	601	4358	7753	5908
HH Industries	35896	11028	30738	19541	1030	10902	29022	18614	25081
Others	1127927	281440	626007	555901	58115	195274	837988	759252	890420

3.7 Uttar Pradesh Sub-Region

3.7.1 Workforce Distribution in Uttar Pradesh Sub-Region, 2001

Category Wise Workers Distribution at Sub-Region level:

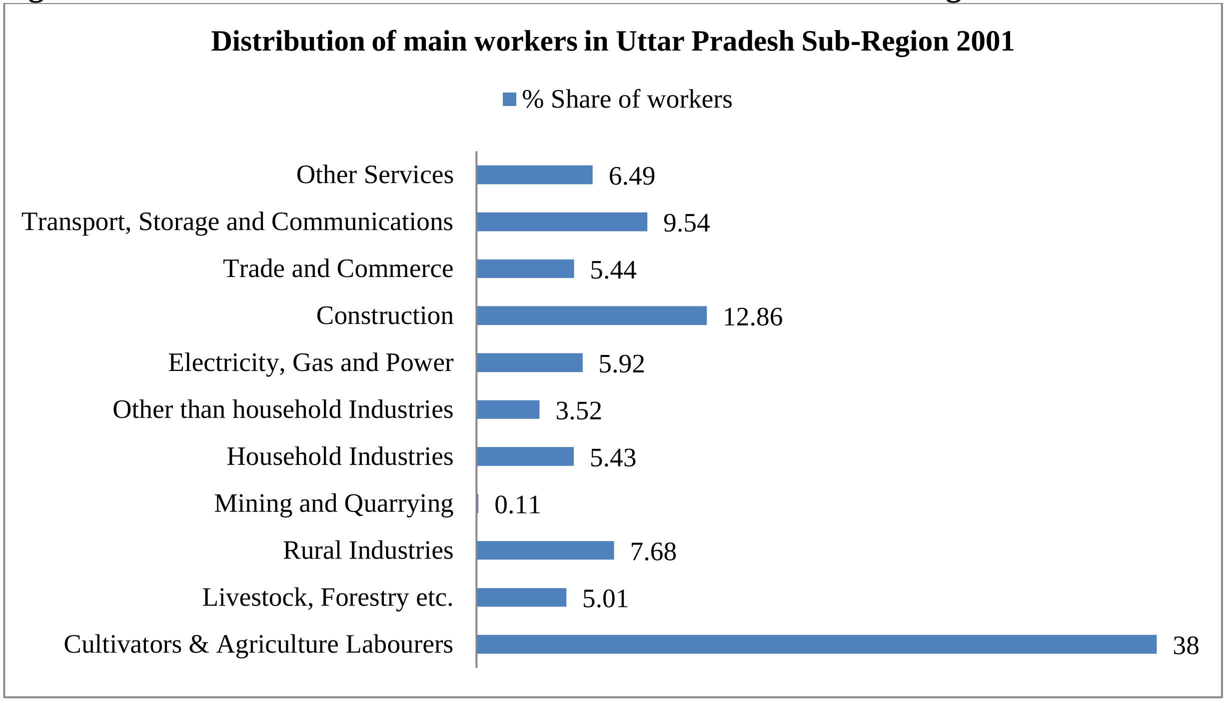
As per 2001 Census data, 38.00% of the total main workers is engaged in cultivation, followed by Construction (12.86%). This may be attributed to the increasing urbanization and associated construction activities in Uttar Pradesh sub-region, especially in the districts which are adjacent to NCT-Delhi. Analysis of Census 2001 data indicates that proportion of workers engaged in Construction has increased almost five times during 1991-2001 (from 2.47% in 1991 to 12.86% in 2001). Proportion of workers engaged in Transport, Storage and Communications has also almost tripled during 1991-2001 (refer Table 3.20 and Figure 3.15).

Table 3-20: Distribution of Main Workforce in Uttar Pradesh Sub-Region (1971, 1991 and 2001)

Year	**1971**		**1991**		**2001**	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers***	**Percentage**
Cultivators	6,53,043	44.05	8,57,869	34.69	11,10,693	38.00
Agricultural Laborers	2,34,258	15.8	4,73,885	19.16	-	-
Livestock, Forestry etc.	22,364	1.51	21,662	0.88	1,46,294	5.01
Rural Industries	N.A.	N.A.	N.A.	N.A.	2,24,482	7.68
Mining and Quarrying	460	0.03	376	0.02	3,348	0.11
Manufacturing, Processing						
a) Household Industries	90,998	6.14	53,978	2.18	1,58,564	5.43
b) Other than household Industries	1,09,850	7.41	3,09,259	12.5	1,02,794	3.52
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	1,72,967	5.92
Construction	20,886	1.41	61,123	2.47	3,75,954	12.86
Trade and Commerce	93,755	6.32	2,33,030	9.42	1,58,929	5.44
Transport, Storage and Communications	42,195	2.85	82,169	3.32	2,78,696	9.54
Other Services	2,14,618	14.48	3,79,953	15.36	1,89,783	6.49
Total Main Workers	**14,82,427**	**100**	**24,73,304**	**100**	**29,22,504**	**100.00**
Population	54,40,296		90,01,704		1,15,67,090	
Participation Ratio	27.25		27.48		25.27	

*Source: Census of India, 1971, 1991 and 2001, Govt. of India, * includes agriculture labor also*

Figure 3.16: Distribution of Main Workforce in Uttar Pradesh sub-region in 2001



Category Wise Workers Distribution at District level:

Ghaziabad district contributes the maximum to the workforce of most categories, followed by Meerut and Bulandshahar districts. Baghpat district makes the least contribution to the workforce of all the categories. Ghaziabad district is the biggest contributor of workforce in the mining and quarrying category, followed by Gautam Budh Nagar district. The only categories, it doesn't significantly contribute towards working population, are cultivation and agricultural labourers in which Bulandshahar district is the biggest contributor, followed by Meerut district (refer Table 3.21 and Figure 3.16).

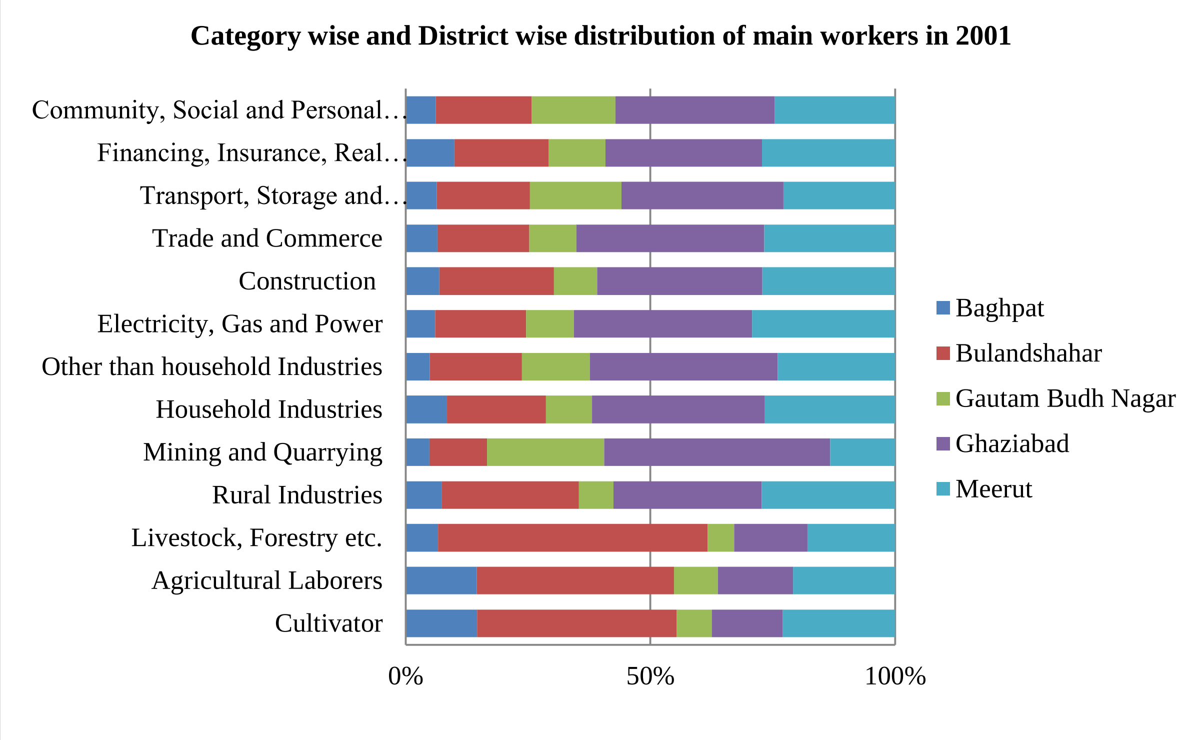
Table 3-21: Category Wise Workforce Dstribution at District Level in Uttar Pradesh Sub-Region 2001

Districts	Cultivator	Agricultural Laborers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
Baghpat	70,220	1,51,325	16,827	21,571	173	15,989	5,975	13,478	28,858	11,145	20,196	11,068	6110	3,72,935
% Share to U.P. sub-region	14.61%	14.52%	6.59%	7.31%	4.87%	8.44%	4.93%	6.05%	6.87%	6.45%	6.38%	9.93%	6.18%	

Districts	Cultivator	Agricultural Laborers	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
Bulandshahar	1,95,852	4,19,885	1,40,583	82,754	417	38,343	22,806	41,351	98,260	32,489	60,295	21,461	19330	11,73,826
% Share to U.P. sub-region	40.75%	40.30 %	55.08%	28.05%	11.75%	20.24%	18.83%	18.57%	23.39%	18.81%	19.03%	19.26%	0.1,95,4045	
Gautam Budh Nagar	34,338	93,015	13,884	20,839	850	17,772	16,761	21,637	37,036	16,594	59,172	12,950	16,917	3,61,765
% Share to U.P. sub-region	7.14 %	8.93 %	5.44 %	7.06 %	23.95%	9.38 %	13.84%	9.72 %	8.82 %	9.61 %	18.68%	11.62%	17.10 %	
Ghaziabad	69,775	1,60,566	38,113	89,367	1,638	66,885	46,526	81,035	1,41,734	66,229	1,04,783	35,586	32,203	9,34,440
% Share to U.P. sub-region	14.52%	15.41 %	14.93%	30.29%	46.15%	35.31%	38.41%	36.39%	33.75%	38.35%	33.08%	31.94%	32.55 %	
Meerut	1,10,440	2,17,120	45,821	80,514	471	50,441	29,050	65,168	1,14,126	46,239	72,331	30,345	24,363	8,86,429
% Share to U.P. sub-region	22.98%	20.84 %	17.95%	27.29%	13.27%	26.63%	23.98%	29.27%	27.17%	26.77%	22.83%	27.24%	24.63 %	
U.P. Sub-Region	**4,80,625**	**10,41,911**	**2,55,228**	**2,95,045**	**3,549**	**1,89,430**	**1,21,118**	**2,22,669**	**4,20,014**	**1,72,696**	**3,16,777**	**1,11,410**	**98,923**	**37,29,395**

Source: Census of India 2001

Figure 3.17: Category wise District wise Distribution of all Workers in 2001



Source: Census of India, 2001, Govt. of India

3.7.2 Workers and Non-Workers in Uttar Pradesh Sub-Region, 2011

As per Census 2011, the sub-region has a total of 47.70 Lakhs of workers and over half of them pertains to rural areas. Ghaziabad (including Hapur) district recorded the maximum number of workers (15.20 Lakhs), out of which 10.24 Lakhs were in urban area and 4.96 Lakhs were in rural area. Baghpat district recorded the least number of workers of 4.17 lakhs. The sub-region had a total of 38.22 lakhs and 9.48 lakhs of main and marginal workers respectively. The maximum number of main workers were observed in Ghaziabad district and the least in Baghpat district, however it was Bulandshahr district that had the maximum number of marginal workers (2.88 lakhs) and Baghpat recorded the least (0.82 lakhs). The sub-region recorded a total of 98.05 lakhs of non-workers, of which over half of them are in rural areas. Ghaziabad district recorded the maximum number of non workers, of which about one third are in urban areas. Baghpat district recorded the least number of non workers, however it is observed that the district had the minimum population during the same period in the sub-region (refer Table 3.22).

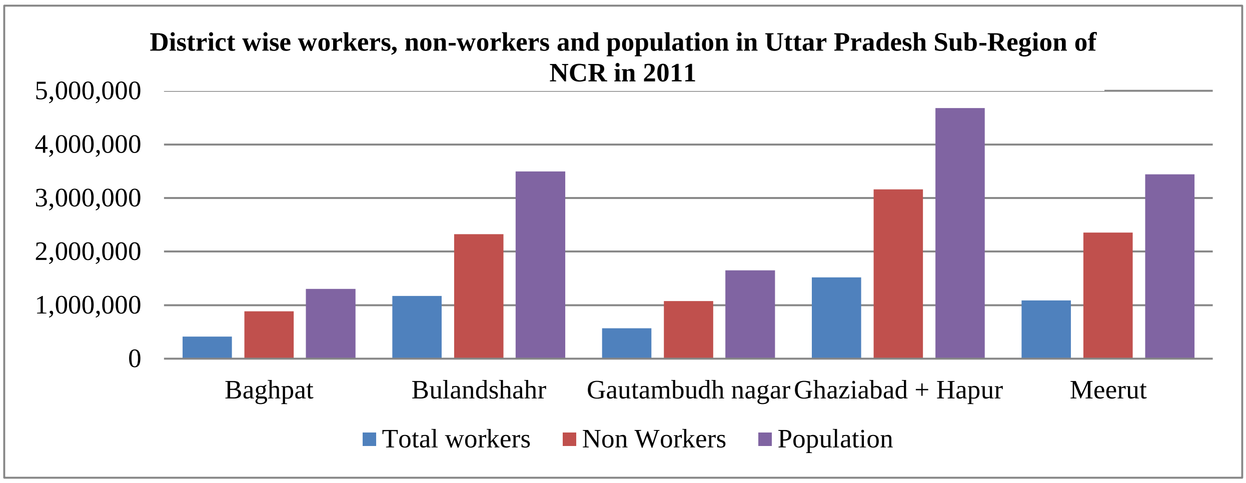
Distribution of district-wise population indicates that Ghaziabad (including Hapur) district had the maximum population (46.81 lakhs) in the sub-region with maximum workers (15.21 lakhs) while Baghpat district had the minimum population (13.03 lakhs) and total workers (4.17 lakhs) in the sub-region (refer Figure 3.18).

Table 3-22: District wise workers and non-workers in Uttar Pradesh Sub-Region, 2011

Districts	Main workers			Marginal workers			Non workers			Total Workers (Main + Marginal Workers)		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Baghpat	2,66,268	68,251	3,34,519	71,295	10,881	82,176	6,90,460	1,95,893	8,86,353	3,37,563	79,132	4,16,695
% Share to UP Sub-Region	13.99%	3.56%	8.75%	11.70%	3.21%	8.67%	13.74%	4.10%	9.04%	13.43%	3.51%	8.74%
Bulandshahr	6,66,615	2,18,601	8,85,216	2,52,858	35,186	2,88,044	17,12,269	6,13,642	23,25,911	9,19,473	2,53,787	11,73,260
% Share to UP Sub-Region	35.02%	11.40%	23.16%	41.49%	10.39%	30.38%	34.08%	12.83%	23.72%	36.59%	11.24%	24.60%
Gautam Budh Nagar	1,56,310	3,02,182	4,58,492	60,363	50,254	1,10,617	4,57,133	6,21,873	10,79,006	2,16,673	3,52,436	5,69,109
% Share to UP Sub-Region	8.21%	15.75%	12.00%	9.90%	14.84%	11.67%	9.10%	13.01%	11.00%	8.62%	15.62%	11.93%
Ghaziabad + Hapur	3,85,408	8,67,503	12,52,911	1,10,669	1,56,958	2,67,627	10,23,021	21,38,086	31,61,107	4,96,077	10,24,461	15,20,538
% Share to UP Sub-Region	20.25%	45.22%	32.78%	18.16%	46.34%	28.22%	20.36%	44.72%	32.24%	19.74%	45.39%	31.88%
Meerut	4,29,083	4,61,727	8,90,810	1,14,283	85,446	1,99,729	11,41,141	12,12,009	23,53,150	5,43,366	5,47,173	10 ,90,539
% Share to UP Sub-Region	22.54%	24.07%	23.31%	18.75%	25.23%	21.06%	22.71%	25.35%	24.00%	21.62%	24.24%	22.86%
Uttar Pradesh Sub-Region	**19,03,684**	**19,18,264**	**38,21,948**	**6,09,468**	**3,38,725**	**9,48,193**	**50,24,024**	**47,81,503**	**98,05,527**	**25,13,152**	**22,56,989**	**47,70,141**

Source: Primary Census Abstract, Census of India, 2011, Govt. of India

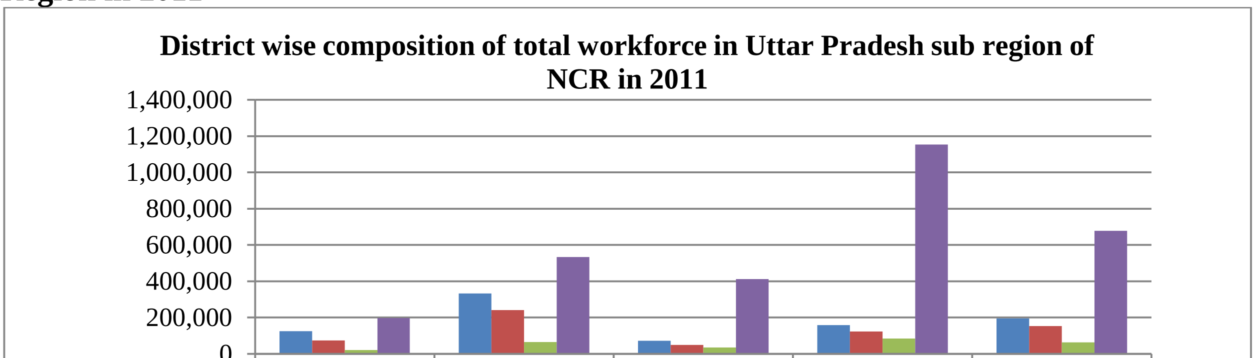
Figure 3.18: District wise composition of workers, non-workers and population in Uttar Pradesh Sub-Region of NCR in 2011



3.7.3 Workforce Distribution in Uttar Pradesh Sub-Region: 2011

In terms of the number of cultivators and agricultural laborers in the sub-region, Bulandshahr district recorded the maximum number of cultivators, followed by Meerut district and least in Gautambuddha Nagar district, followed by Baghpat district. Ghaziabad (including Hapur) district (11.54 lakhs) has the maximum number of industrial and tertiary sector workers in the sub region in 2011, followed by Meerut district (6.77 lakhs), Bulandshahr district (11.73 lakhs) and the least in Baghpat district (1.97 Lakhs). In case of household Industries, Ghaziabad district (83,672) has recorded the highest number of workers, followed by Bulandshahr district (65,937), Meerut district (63,096), Gautambuddha Nagar district (35,400) and Baghpat district (20,347) (refer Figure 3.19).

Figure 3.19: District wise occupational profile of total workers in Uttar Pradesh Sub-Region in 2011



	Baghpat	Bulandshahr	Gautambudh nagar	Ghaziabad + Hapur	Meerut
Cultivators	124,718	332,475	72,668	158,868	196,068
Agriculture labor	74,500	241,137	48,845	123,680	153,995
HH Industries	20,347	65,937	35,400	83,672	63,096
Others	197,130	533,711	412,196	1,154,318	677,380

Source: Primary Census Abstract, Census of India, 2011

3.8 Employment Projection for 2021 & 2031

The employment projection in NCR is based on two scenarios, i.e. (a) Constant participation rate and (b) Variable participation rate. In case of constant participation rate, the changes in the employment projections happened due to changes in the population growth. However, in case of variable participation due to change in the economic structure of the region, the employment levels under different categories will be different. It is expected that due to change in the economic structure, there is likely to be decline in participation rate in agriculture sector by 1 to 2 percentage points in all districts of Haryana, Uttar Pradesh and Rajasthan sub-regions. At the same time due to industrial policies and other investment impact there is likely increase in manufacturing sector in Rewari, Sonipat, Rohtak, Jhajjar, Bulandshahr and Baghpat districts by 1 to 2 percentage points. At the same time districts with higher level of economic maturity will observe increase in tertiary sector participation rates such as Gurgaon, Faridabad, Ghaziabad, and Meerut by 1 to 2 percentage points.

Total workforce in NCR is projected to increase from 131.55 Lakhs in 2001 to 194.75 Lakhs in 2021 and 234.12 Lakhs in 2031. The highest share of the workforce is expected to be employed in agricultural activities, followed by construction and manufacturing in both 2021 & 2031 (refer Table 3.23).

Projection of workforce for 2021 and 2031 based on current (2001) participation rate and adjusted participation rate are given at Annexure-3.9 to Annexure-3.12 respectively.

Table 3-23: Activity wise Employment Projections for 2021 & 2031

Year	Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
2001 Actual	57,89,083	42,439	13,81,743	8,65,302	18,52,217	8,35,849	13,15,842	5,32,301	5,40,755	1,31,55,531
2021 Constant Participation rates	86,07,549	64,301	20,36,919	12,81,750	26,95,338	12,16,754	19,32,741	7,72,535	7,84,393	1,93,92,280
2021 adjusted Participation rates	78,87,272	64,301	21,96,595	12,81,750	29,20,969	13,88,529	19,53,202	9,97,889	7,84,393	1,94,74,900
2031 Constant Participation rates	1,04,49,079	74,841	24,42,944	15,39,133	32,03,048	14,43,364	23,09,591	9,16,913	9,27,448	2,33,06,361
2031 adjusted Participation rates	95,73,701	74,841	26,40,878	15,39,133	34,84,477	16,50,411	23,34,060	11,87,410	9,27448	2,34,12,359

Source: Study on Economic Profile of NCR

The activity-wise workforce growth indicates that workforce is likely to grow at faster rate in the activities of real estate, financial services, trade and commerce and manufacturing in NCR (refer Table 3.24).

Table 3-24: Activity Wise Workforce Growth from 2001 to 2021 & 2031

Year	Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total
2001 to 2021 constant (% age)	48.69	51.51	47.42	48.13	45.52	45.57	46.88	45.13	45.06	47.41
2001 to 2021 adjusted (% age)	36.24	51.51	58.97	48.13	57.7	66.12	48.44	87.47	45.06	48.04
2001 to 2031 constant (% age)	80.5	76.3	76.8	77.9	72.9	72.7	75.5	72.3	71.5	77.2
2001 to 2031 adjusted (% age)	65.4	76.3	91.1	77.9	88.1	97.5	77.4	123.1	71.5	78

Source: Study on Economic Profile of NCR

4. INDUSTRIAL DEVELOPMENT

4.1 Background

Industrial activities in the NCR have evolved over the last three-four decades. To a great extent, industrial activity in the NCR is characterized by existence of large and medium units, small-scale industries (SSIs) and tiny unorganized units.

Industrialization in NCR is concentrated in the sub-regions of Uttar Pradesh (general manufacturing), Haryana (automobile, electronics, and handloom) and Rajasthan (marble, leather, and textile). The region accounts for a substantial part of the country's production of cars, motorcycles, and tractors. Industrialization in and around NCR is expected to receive further boost through development of various Industrial Estates/Model Industrial Towns/Special Economic Zones (SEZs). It is observed that a number of SEZs are operational in NCR (refer Table 4.1). A list of SEZs in NCR, which were granted formal approvals under the SEZ Act, 2005 is given at Annexure-4.1.

Table 4-1: List of Operational SEZs in NCR (as on 5th Dec, 2014)

Sl. No.	Name of SEZ	Type
1	Noida Special Economic Zone	Multi product
2	DLF Cyber City, Gurgaon	IT/ITES
3	DLF Limited Gurgaon	IT/ITES
4	GurgaonInfospace Ltd	IT/ITES
5	HCL Techmnologies	IT/ITES
6	Moser Baer SEZ	Non-conventional Energy including solar energy equipments/ cell
7	WIPRO Ltd. Greater Noida	IT/ITES
8	Seaview Developers Limited	IT/ITES
9	HCL Technologies Ltd, NOIDA	IT/ITES
10	Achavish Softech (M/s. Falcon Kaltek (P) Ltd.), Noida	IT/ITES
11	NIIT Technologies Ltd., Noida	IT/ITES
12	Arshiya Northern FTWZ Limited, Bulandshahr	FTWZ
13	Ansal City & IT Parks, Noida	IT/ITES
14	ASF Insignia SEZ Pvt. Ltd. (Formerly Canton Buildwell Pvt. Ltd.), Village Gawal Pahari, Tehsil Sohna Gurgaon	IT/ITES
15	Unitech Realty Projects Limited, Gurgaon	IT/ITES
16	Anant Raj Industries Ltd., Sonipat	IT/ITES

Source: SEZ in India, Departmnt of Commerce, Ministry of Commerce & industry, Govt. of India, sezindia.nic.in

As per 2005 data published by National Sample Survey Organisation (NSSO), NCT-Delhi sub-region has about one lakh manufacturing units employing nearly six lakhs workers, with the majority of units operating in the unorganized sector. It is estimated that 97,636 manufacturing units in the unorganized sector employ 4.5 lakhs workers in NCT-Delhi sub-region. According to data published by Annual Survey of Industries in 2005, NCT-Delhi sub-region has 3,312 units in the organized sector employing 1.2 lakhs workers. NCT-Delhi has a significant presence of garment and furniture manufacturers followed by electrical machinery production and repair services. Manufacturing in Delhi is mainly small-scale and low-skilled, making Delhi a preferred destination for the migrants from neighboring sub-regions, putting strain on its resources and infrastructure. On the other hand, skilled people residing in Delhi travel every day to work in other cities like Gurgaon and NOIDA. Further, being small-scale in nature, the units in Delhi are inadequately invested in upgrading technology and installing pollution control equipments. The robust Small Scale Industries (SSI) sector in this sub-region provides repair services for capital goods and principally engaged in manufacturing of metal products, leather and fur products, wooden furniture, food processing.

The industrial performance of Rajasthan sub-region is mostly driven by Micro Small and Medium Enterprises (MSMEs). These enterprises generate seven times the employment generated by the medium and large industries, and are thus critical from the employment generation point of view. However, the sub-region also has a large number of medium and large units; Alwar has over 300 medium and large units across 15 industrial areas developed by Rajasthan State Industrial Development & Investment Corporation Limited (RIICO). The main industries in the sub-region include agro industries, cement products, ceramic, food processing, hand tools, handicraft, handmade paper, gems & jewelry, marble, the oil industry and stone quarrying.

The robust secondary sector in the Uttar Pradesh sub-region is driven by comparatively developed industrial infrastructure. The Greater NOIDA area has 19% land reserved for industrial use. An integrated Agro-food processing zone is proposed in Hapur. Apart from this, about 40 IT/ITES Parks, a knowledge park, and two biotech zones are also proposed in the sub-region. Integrated logistics hubs (Free Trade Warehousing Zones) have also been proposed in collaboration with IL&FS, Mineral and Mining Trading Corporation and Mitsui (Japan) under the DMIC project.

The important industrial locations in NCR are Meerut, Ghaziabad, Gautambuddha Nagar, Bulandshahr, Delhi, Gurgaon, Faridabad, and Panipat. There are more than 40 industrial concentrations in the area such as auto component, textiles, general engineering, power looms, carpet, etc. However, regulatory mechanisms to a considerable extent did not allow expansion/growth of large/medium scale industries. In addition, lack of regulation and powerful market forces created a laissez-faire situation resulting in mushrooming of small and tiny industries anywhere and everywhere in the unorganized sector, especially in NCT-Delhi. On the other hand in large parts of NCR excluding Delhi, the growth of large and medium industries and small scale industries could be ascribed partly to regulatory mechanisms and partly to historical factors.

Delhi-Mumbai Industrial Corridor (DMIC)

DMIC is a mega infrastructure project aiming high-speed connectivity between Delhi and Mumbai. DMIC and Dedicated Freight Corridor (DFC) will be a necessary addition to the infrastructure in NCR. Under DMIC, three investment regions (IRs) in NCR are proposed, namely:

- Dadri-Noida-Ghaziabad Investment Region in Uttar Pradesh sub-region as general manufacturing investment region;
- Manesar-Bawal Investment Region in Haryana sub-region as auto component/automobile investment region; and
- Khushkhera-Bhiwadi-Neemrana Investment Region in Rajasthan sub-region as general manufacturing/ automobile/auto component investment region.

Two important junctions alongside DFC in NCR are Rewari for traffic commuting to/from Rewari-Hissar-Ludhiana/Bathinda Routes and Pirthala (Tughlakabad) for traffic to/from Tughlakabad (and ICD Tughalakabad).

4.2 Diversification of Large, Medium and Small Scale Industries and Determinants of Growth

There are about 1.52 Lakhs registered industrial units in NCR employing about 10.73 Lakhs of workers. Total investment in these units is about Rs. 9,82,577 Lakhs (refer Table 4.2).

Table 4-2: Registered Industrial Units, Employment and Investment in the NCR (2010-11)

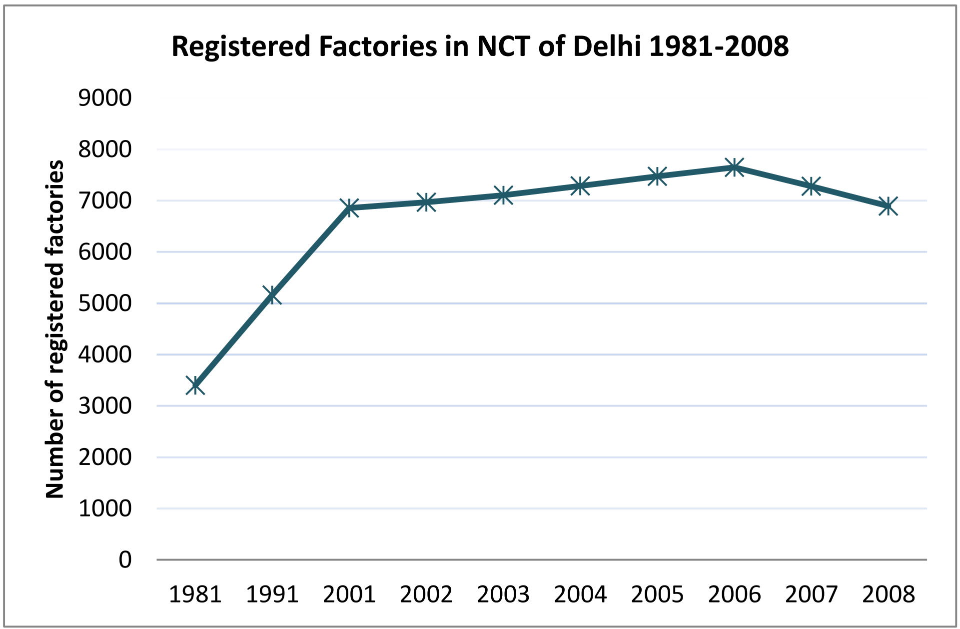
District / Sub-region	No. of Units (existing registered)	Employment	Investment (in Lakhs INR)
Meerut	8,197	51,605	66,856.49
Bagpat	2,613	12,665	9,386.09
Ghaziabad	45,282	2,26,824	3,26,676.13
Gautambuddha Nagar	9,880	1,41,295	1,47,215.53
Bulandshahr	4,629	23,566	2,465.1
Total of Uttar Pradesh Sub-region	**70,601**	**4,55,955**	**5,52,599.34**
Delhi	20,648	22,709	24,300
Total of NCT of Delhi	**20,648**	**22,709**	**24,300**
Alwar	551	NA	1,400
Total of Rajasthan Sub- region	**551**	**0**	**1,400**
Faridabad	17,291	1,04,452	1,89,517
Palwal	59	1,960	9,621.08
Gurgaon	22,491	3,29,340	67,126
Jhajjar	1,849	17,882	29,307
Panipat	4,068	41,456	8,26,87.45
Rewari	1,370	30,313	11,200
Rohtak	4,761	8,201	10,592.96
Sonipat	8,743	59,707	1,033.18
Mewat	42	1,156	3,193.28
Total of Haryana Sub-region	**60,674**	**5,94,467**	**4,04,277.95**
Grand Total/ NCR	**1,52,474**	**10,73,131**	**9,82,577.29**

Source: Industrial Profiles of respective districts, DC MSME, http://dcmsme.gov.in/dips

4.2.1 NCT Delhi sub-region

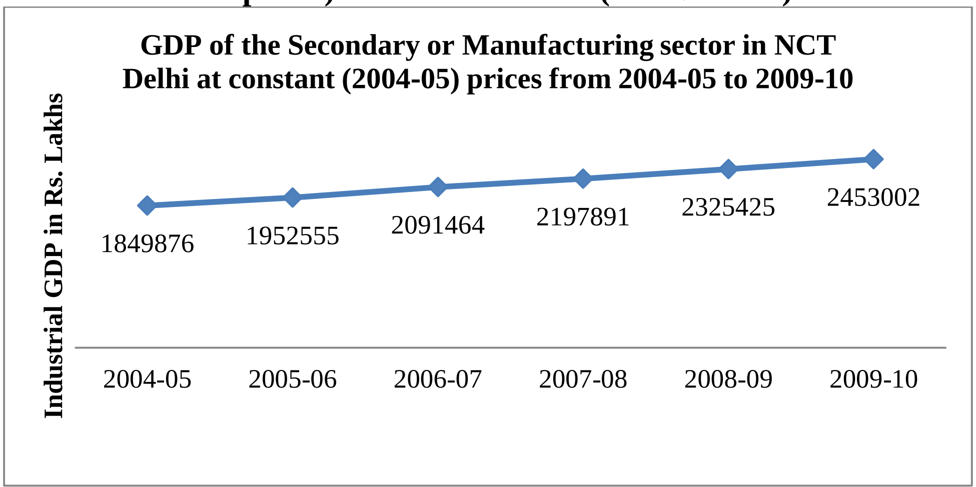
The manufacturing sector in NCT-Delhi contributes to around 10% of the GSDP. There has been a phenomenal growth of SSIs in NCT-Delhi in the last four decades, from 17,000 in 1961 to 1.29 Lakhs in 2000-01. The increase is primarily in the unorganized sector, as the planned industrial area in Delhi has only 25,000 to 30,000 plots/industrial units. Their total output in FY 2009-10 was Rs. 245300.2 million at constant (2004-05) prices. Analysis of trends of development in factories in NCT-Delhi indicates that the number of factories sharply increased in the period 1981-1991 after which there was gradual increase till 2005 and then a dip in trends (refer Figure 4.1). However, the industrial or manufacturing GDP of NCT-Delhi kept growing from 2004-05 to 2009-10 (refer Figure 4.2 below).

Figure 4.1: Registered Factories in NCT-Delhi sub-region during 1981-2008



Source: Govt. of NCT of Delhi, Economic Survey of Delhi, 2008-09

Figure 4.2: GDP of the Secondary or Manufacturing sector in NCT Delhi from (at constant 2004-05 prices)2004-05 to 2009-10 (in Rs. Lakhs)



Source: Directorate of Economics & Statistics, Delhi; Estimates of State Domestic Product of Delhi of 2012-13

Structure of Working Factories

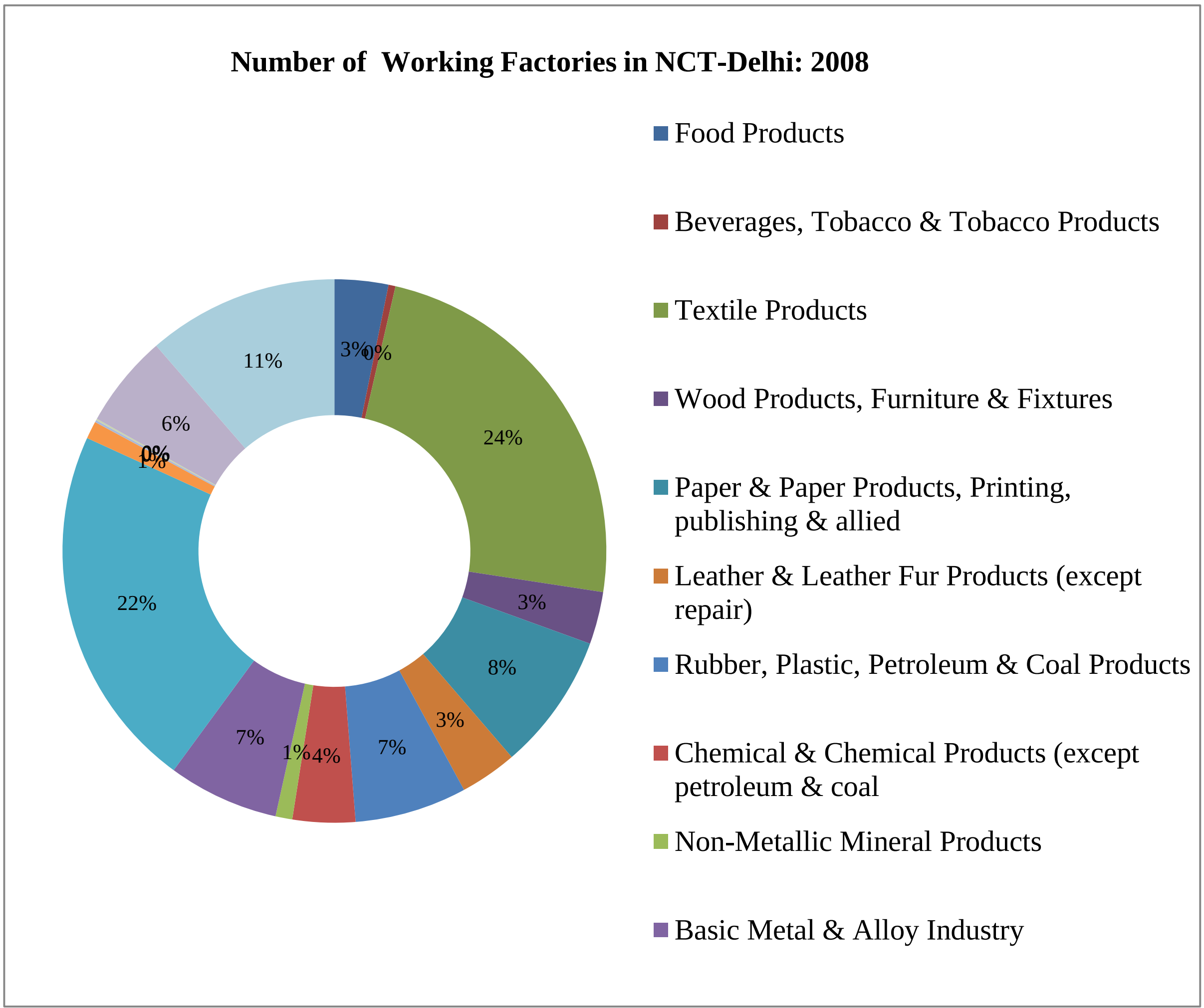
Analysis of number and composition of various types of factories in NCT-Delhi sub-region in 2008 indicates that the maximum numbers of working factories are in the area of textiles (24%), followed by metallic products and machinery parts (22%), while the minimum number of factories operated in non-metallic industry (refer Table 4.3 and Figure 4.3).

Table 4-3: Number of Working Factories in NCT-Delhi: 2008

Sl. No.	Type of Factory	Number of Factories
1	Food Products	253
2	Beverages, Tobacco & Tobacco Products	33
3	Textile Products	1886
4	Wood Products, Furniture & Fixtures	247
5	Paper & Paper Products, Printing, publishing & allied	646
6	Leather & Leather Fur Products (except repair)	269
7	Rubber, Plastic, Petroleum & Coal Products	528
8	Chemical & Chemical Products (except petroleum & coal	295
9	Non-Metallic Mineral Products	79
10	Basic Metal & Alloy Industry	522
11	Metal products, Machinery Parts & Transport Equipment-Machine tools including Electrical appliances	1723
12	Electricity, Gas, Stream Water & Supply	83
13	Wholesale Trade in Fuel, Chemicals, Perfumery, Ceramics	10
14	Public Administration & Defence Services	1
15	Sanitary Services	6
16	Repair of Capital Goods & Repair Services	439
17	Miscellaneous unspecified Group	901
18	**Total**	**7921**

Source: Economic Survey of Delhi, 2008-09

Figure 4.3: Number of Working Factories in NCT-Delhi: 2008



Source: Economic Survey of Delhi, 2008-09

Industrial Employment: NCT-Delhi

In 2008, the largest share (36%) of the industrial labourers were employed in the textile products category, followed by metal products, machinery parts & transport equipment (refer Figure 4.4 and Table 4.4).

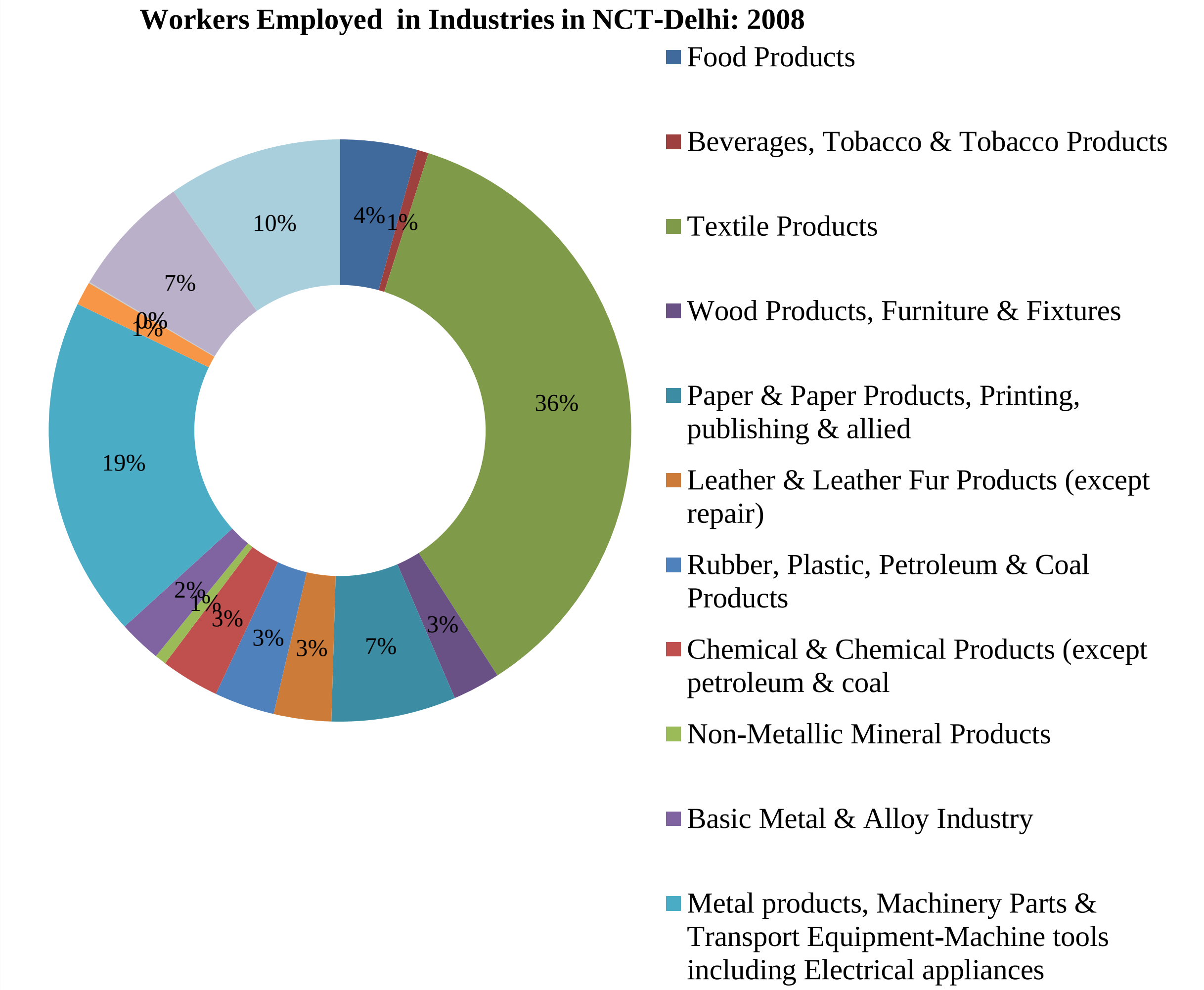
The manufacturing units in NCT-Delhi were substantially impacted by the Supreme Court order in 2005, requiring closure/relocation of polluting industries. Historically, NCT-Delhi has 33 industrial and flatted factory complexes (refer Annexure-4.2), out of which, only 20-25% is located in the planned industrial areas. A new relocation policy was devised (2006) to shift more than 27,000 units operating from residential areas (mainly non conforming areas) to new locations such as Bawana, Narela, Badli, Mangolpuri, Okhla, Patparganj and Shahadra.

Table 4-4: Workers Employed in Factories in NCT-Delhi: 2008

Sl. No.	Type of Factory	Workers
1	Food Products	15,576
2	Beverages, Tobacco & Tobacco Products	2,308
3	Textile Products	1,31,050
4	Wood Products, Furniture & Fixtures	9,619
5	Paper & Paper Products, Printing, publishing & allied	25,180
6	Leather & Leather Fur Products (except repair)	11,620
7	Rubber, Plastic, Petroleum & Coal Products	12,182
8	Chemical & Chemical Products (except petroleum & coal	11,796
9	Non-Metallic Mineral Products	2,337
10	Basic Metal & Alloy Industry	8,567
11	Metal products, Machinery Parts & Transport Equipment-Machine tools including Electrical appliances	68,839
12	Electricity, Gas, Stream Water & Supply	4,738
13	Wholesale Trade in Fuel, Chemicals, Perfumery, Ceramics	90
14	Public Administration & Defence Services	45
15	Sanitary Services	86
16	Repair of Capital Goods & Repair Services	24,798
17	Miscellaneous unspecified Group	35,222
18	**Total**	**3,64,053**

Source: Economic Survey of Delhi, 2008-09

Figure 4.4: Workers Employed in Factories in NCT-Delhi: 2008



Source: Economic Survey of Delhi, 2008-09

Industrial areas in NCT-Delhi were mainly developed in the 1970s and over the years have deteriorated considerably in terms of physical infrastructure. The industrial estates in the city are mainly owned by three agencies - Delhi State Industrial Development Corporation (DSIDC), Delhi Government Industries Department (DGID), and Delhi Development Authority (DDA). The Master Plan for Delhi-2021 highlighted the need for development of new industrial areas and the environment/pollution control norms.

According to Planning Department of the Delhi Government, there are certain locations with 70% of industrial activity concentration viz. Jawahar Nagar, Karawal Nagar, Haiderpur, Shalimar Village, New Mandoli, Basai Darapur, Khyala, Rithala and Mundka.

4.2.2 Haryana sub-region

The districts of Gurgaon, Faridabad and Panipat have traditionally been strong performers in terms of industrial production. In the past, there has been a lot of emphasis on the industrial development activities to improve manufacturing base in the sub-region. As a result, the Haryana sub-region has evolved as a major manufacturing/export hub. A number of steps have been taken such as creation of Industrial Estates, Model Industrial Townships, Special Economic Zones, Food Parks, Apparel Parks, Auto Clusters, Engineering Clusters, etc. The sectors which benefitted the most by these steps are automobile and auto components, food processing, wearing apparel, basic metals, light engineering, textiles, machinery, construction material and scientific instruments.

District-wise Industrial Units

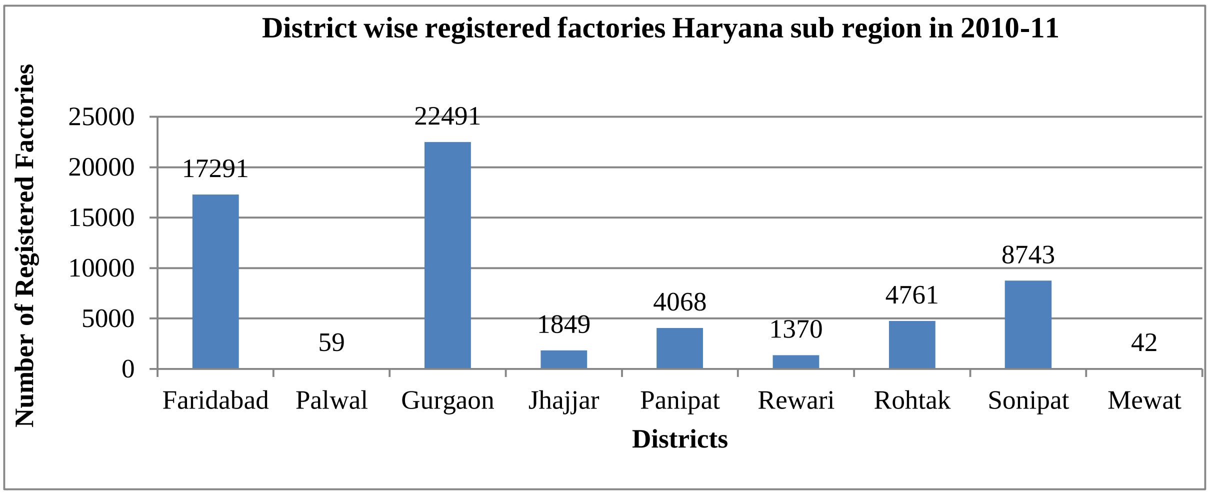
In this sub-region, Gurgaon district has the maximum number (22,491) of registered units, followed by one of the oldest industrial towns, Faridabad, Sonipat, Rohtak, Panipat, Jhajjar and Rewari districts. Most of the growth of such factories in the last 5-7 years has been concentrated in Gurgaon district. At the same time, Palwal (59) and Mewat (42), the newly created districts, have the least number of registered factories (refer Table 4.5 and Figure 4.5).

Table 4-5: District wise Registered Factories Haryana Sub-Region in 2010-11

District	Registered Factories in 2010-11
Faridabad	17,291
Palwal	59
Gurgaon	22,491
Jhajjar	1,849
Panipat	4,068
Rewari	1,370
Rohtak	4,761
Sonipat	8,743
Mewat	42
Total	**60,674**

Source: District wise Industrial Profile, DC MSME

Figure 4.5: District wise registered factories Haryana sub-region in 2010-11



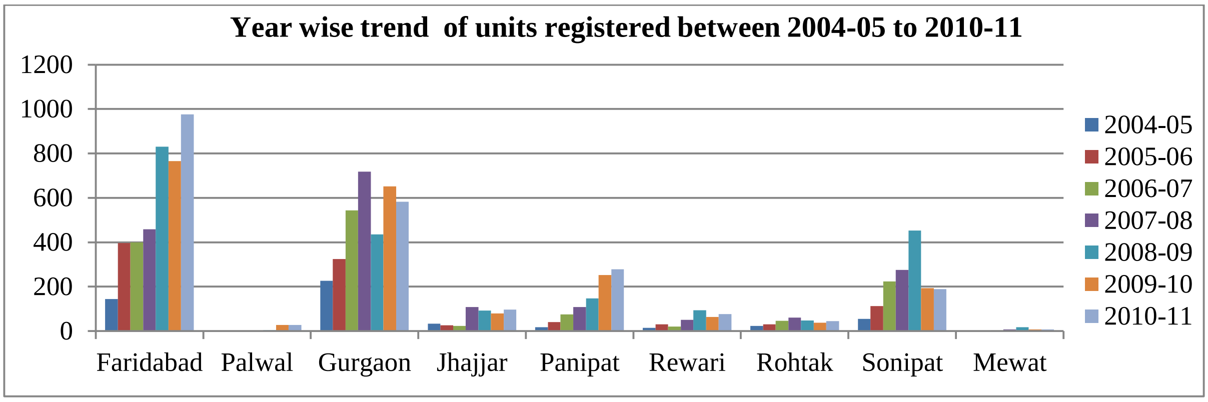
Analysis of growth of registered industrial units between 2004-05 to 2010-11 in Haryana sub-region indicates that Faridabad has the highest growth in number of registered industrial units in 2010-11, followed by Gurgaon and Panipat for the same period. The growth in Panipat has been steady throughout, whereas Jhajjar, Rewari, Rohtak and Mewat have experienced negligible growth. Gurgaon, on the other hand, demonstrates substantial growth during 2005-06 (refer Table 4.6 and Figure 4.6).

Table 4-6: Growth of Registered Industrial Units between 2004-05 to 2010-11 in Haryana sub-region

Districts	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Faridabad	144	396	400	459	831	765	976
Palwal					4	28	27
Gurgaon	227	324	544	718	436	651	582
Jhajjar	34	26	24	108	92	79	97
Panipat	18	40	75	108	147	252	278
Rewari	14	31	20	50	94	64	76
Rohtak	23	31	47	61	48	37	45
Sonipat	55	113	224	276	453	194	189
Mewat			3	7	17	8	7

Source: District wise Industrial Profile, DC MSME

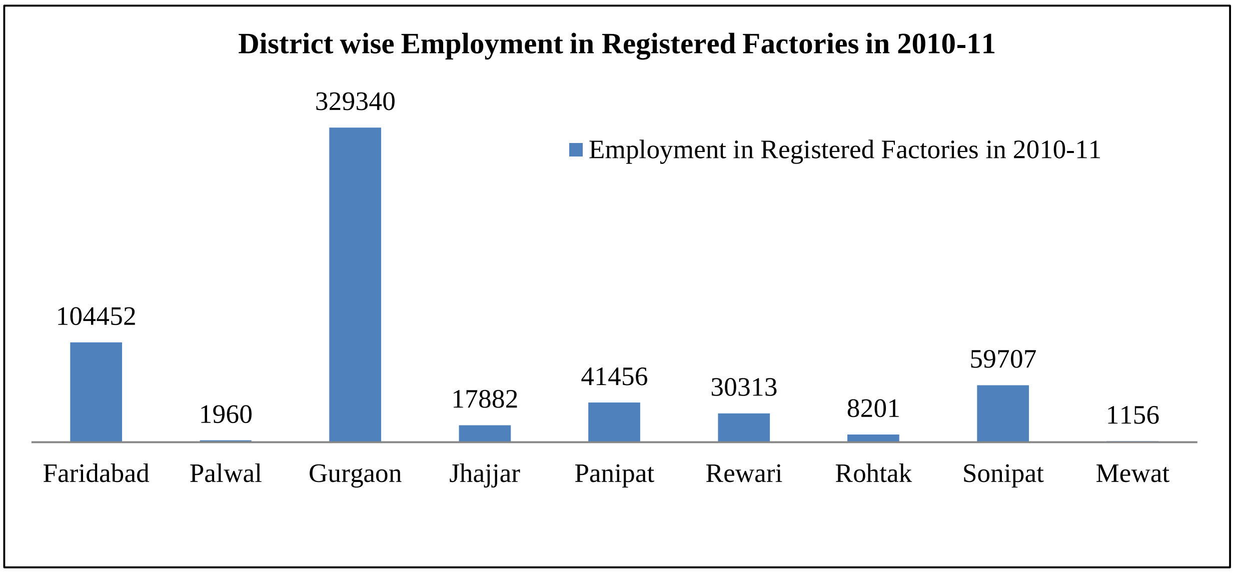
Figure 4.6: Growth of Registered Industrial Units between 2004-05 to 2010-11 in Haryana sub-region



District wise Workers Employed in Factories

In terms of factory employment in 2010-11, Gurgaon district has recorded the highest number (3,29,340) of employment in registered factories, followed by Faridabad (1,04,452) and Sonipat (59,707). The higher number of workers in Gurgaon district may be attributed to the high concentration of industries in Gurgaon that have higher employment density, such as IT/ITES. The spurt in employment in Gurgaon district since 2005-06 is visible (refer Figure 4.7)

Figure 4.7: District wise Employment in Registered Factories in 2010-11 in Haryana Sub-Region



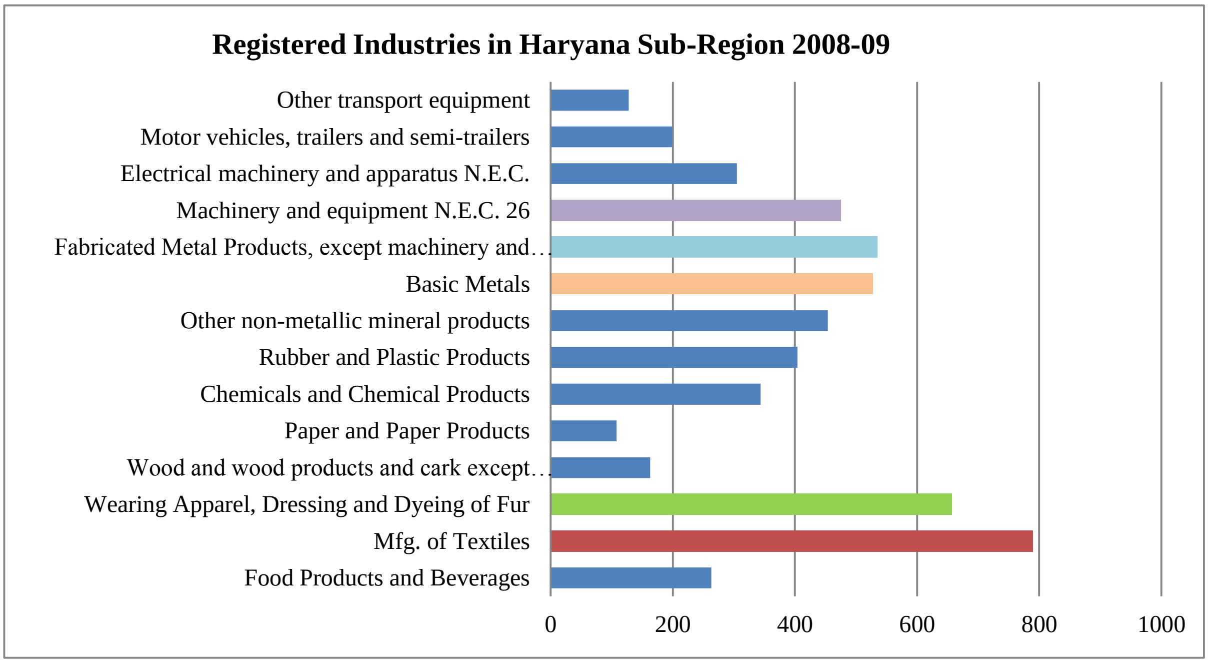
Major Industrial Sectors

Analysis of number of units of industrial groups in 2008-09 in Haryana sub-region. indicates that textiles and allied products manufacturing units are on the top of the list of factories in Haryana, followed by machinery and basic metal products manufacturing units (mainly engineering and auto-components items). In terms of growth also, textile and allied products outpaces other categories, while growth rate for food items industries is the second highest (refer Table 4.7 and Figure 4.8).

Table 4-7: Registered Industries in Haryana Sub-Region 2008-09

Sl. No.	Type of Registered Industrial Units	Number of Industrial Units
1	Food Products and Beverages	263
2	Mfg. of Textiles	790
3	Wearing Apparel, Dressing and Dyeing of Fur	657
4	Wood and wood products and cark except furniture, Mfg. of articles of straw and plaiting Materials	163
5	Paper and Paper Products	108
6	Chemicals and Chemical Products	344
7	Rubber and Plastic Products	404
8	Other non-metallic mineral products	454
9	Basic Metals	528
10	Fabricated Metal Products, except machinery and equipment	535
11	Machinery and equipment N.E.C. 26	475
12	Electrical machinery and apparatus N.E.C.	305
13	Motor vehicles, trailers and semi-trailers	199
14	Other transport equipment	128

Figure 4.8: Registered Industries in Haryana Sub-Region 2008-09



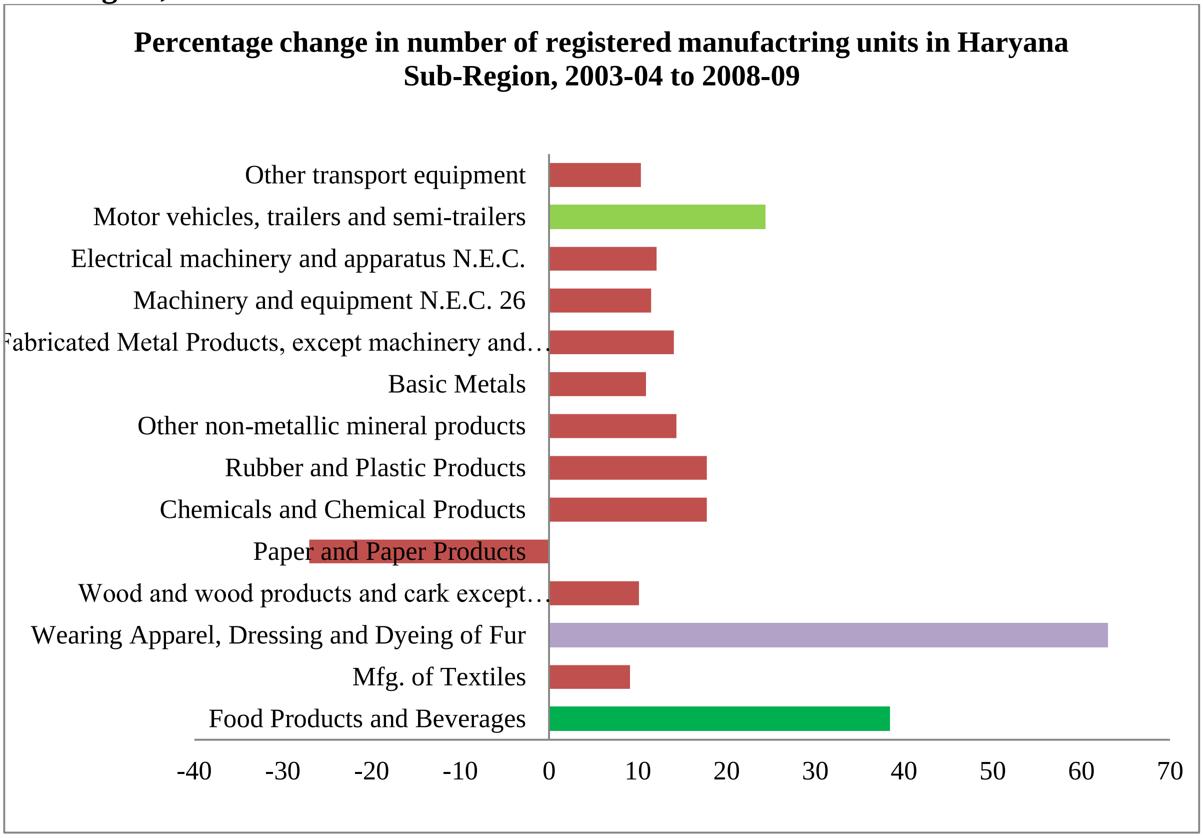
Source: Govt. of Haryana, Statistical Abstract of Haryana, 2008-09

Analysis of percentage change in number of registered manufacturing units during 2003-04 to 2008-09 indicates that the wearing apparel, dressing and dyeing of the fur industry has grown at the fastest rate, followed by food products & beverages and motor vehicles, trailers and semi–trailers. Another prominent feature is visible in the paper and paper products industry, where there has been negative growth during this period (refer Table 4.8 and Figure 4.9).

Table 4-8: Percentage change in number of registered manufacturing units in Haryana Sub-Region, 2003-04 to 2008-09

Sl. No.	Type of Registered Industrial Units	% Change
1	Food Products and Beverages	38.42
2	Mfg. of Textiles	9.12
3	Wearing Apparel, Dressing and Dyeing of Fur	63.03
4	Wood and wood products and cark except furniture, Mfg. of articles of straw and plaiting Materials	10.13
5	Paper and Paper Products	-27.03
6	Chemicals and Chemical Products	17.81
7	Rubber and Plastic Products	17.78
8	Other non-metallic mineral products	14.36
9	Basic Metals	10.92
10	Fabricated Metal Products, except machinery and equipment	14.07
11	Machinery and equipment N.E.C. 26	11.50
12	Electrical machinery and apparatus N.E.C.	12.13
13	Motor vehicles, trailers and semi-trailers	24.37
14	Other transport equipment	10.34

Figure 4.9: Percentage change in number of registered manufacturing units in Haryana Sub-Region, 2003-04 to 2008-09



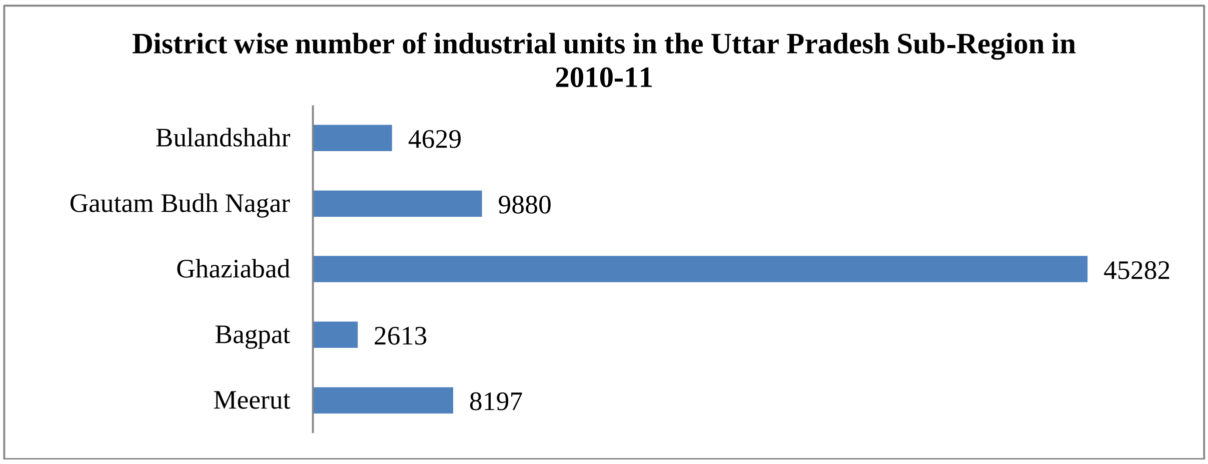
Source: Govt. of Haryana, Statistical Abstract of Haryana, 2008-09

4.2.3 Uttar Pradesh Sub-Region

District wise Industrial Units

During 2010-11, Ghaziabad (including Hapur) district (45,282) has recorded the maximum number of industries, followed by Gautambuddha Nagar district (9,880), Meerut district (8,197), Bulandshahr district (4,629) and the least number of industries recorded in Bagpat district (2,613) (refer Figure 4.10).

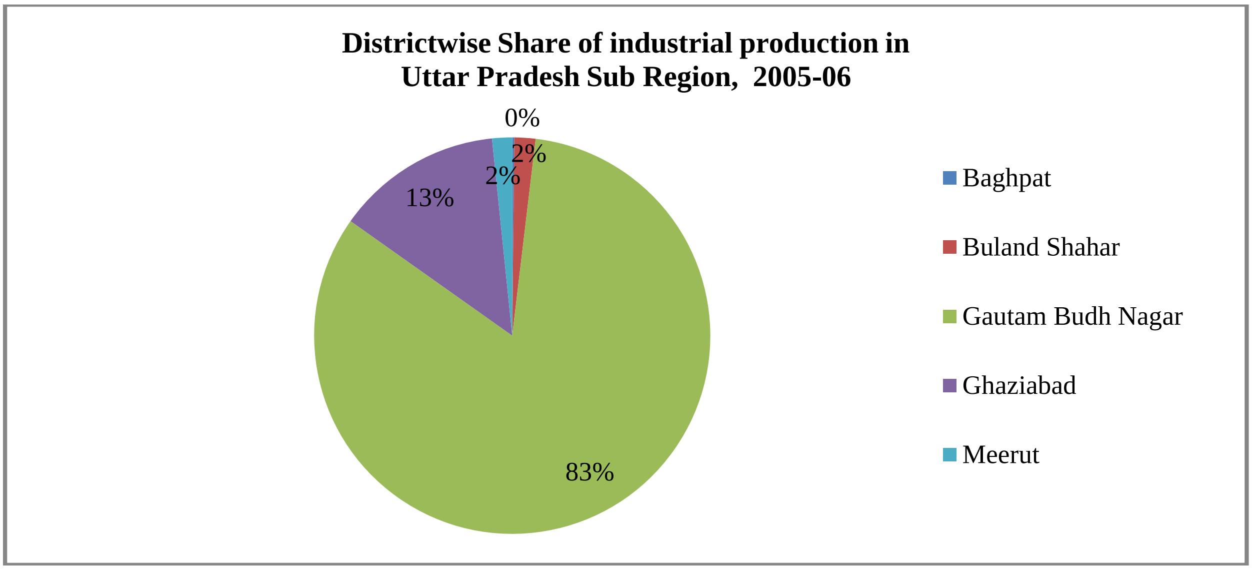
Figure 4.10: District wise Number of Industrial Units in the Uttar Pradesh sub-region in 2010-11



Source: District wise Industrial Profile, DC MSME

Analysis of data on industrial production in 2005-06 indicates that share of industrial production is the highest in Gautambuddha Nagar (83%), followed by Ghaziabad (including Hapur) (13%), Meerut (2%) and Bulandshahr districts (2%), signifying that industrial production in other areas of the sub-region has increased significantly (refer Figure 4.11).

Figure 4.11: District wise Share of Industrial Production in 2005-06



Source: Annual Survey of Industries, Uttar Pradesh 2005-06

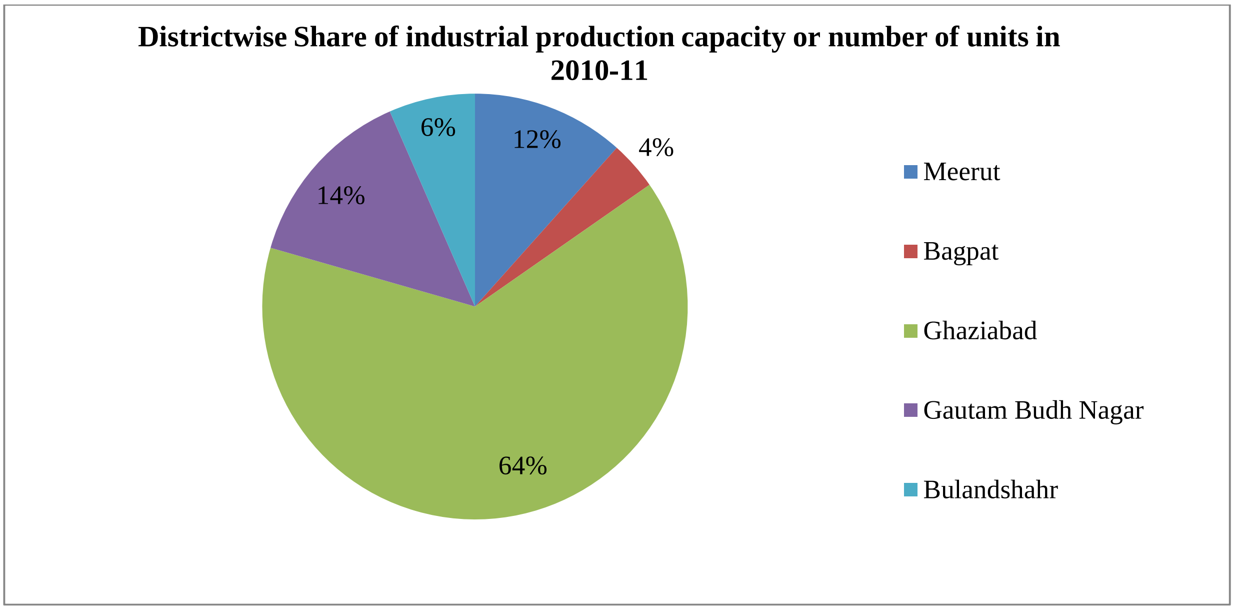
However, during 2010-11, it is obsesrved that share of Gautambuddha Nagar district in industrial production of the sub-region has declined to 64%, whereas share of Meerut (12%), Bulandshahr (6%) and Baghpat districts (4%) have increased. This may be attributed to the fact that a number of small and medium scale industries have been set up during 2005-06 to 2010-11 in the districts of Meerut, Bulandshahr etc. This can also be a reason for the decline in the share of Gautambuddha Nagar district in industrial capacity in the sub region, despite new industries being set up in the district (refer Table 4.9 and Figure 4.12).

Table 4-9: District wise Share of industrial production capacity or number of units and employment in 2010-11

District	No. of Units (existing registered)	Employment in 2010-11	Investment (in Lakhs INR)
Meerut	8,197	51,605	6,6856.49
Bagpat	2,613	12,665	9,386.09
Ghaziabad	45,282	2,26,824	3,26,676.13
Gautambuddha Nagar	9,880	1,41,295	1,47,215.53
Bulandshahr	4,629	23566	2,465.1
Uttar Pradesh sub-region	**70,601**	**4,55,955**	**5,52,599.34**

Source: District wise Industrial Profile, DC MSME

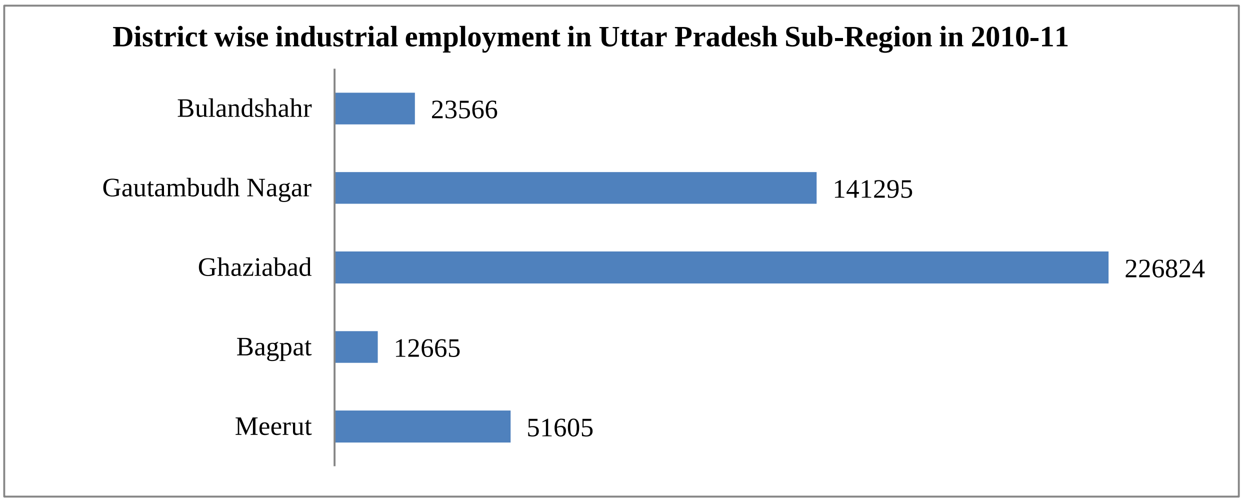
Figure 4.12: District wise Share of industrial production capacity or number of units in 2010-11



District-wise Workers in Industries in 2010-11

In terms of the number of industrial workers employed in 2010-11, Ghaziabad (including Hapur) outnumbers other districts with a significant margin during 2010-11 (refer Figure 4.13). During this period, Ghaziabad had 2,26,824 industrial workers which accounts for nearly half of the industrial workers with registered units in the sub region. Gautambuddha nagar is second in the series with second largest workforce in the sub-region (141,295) followed by Meerut (51,605), Bulandshahr districts (23,566) and least with Bagpat district (12,665) (refer Figure 4.13).

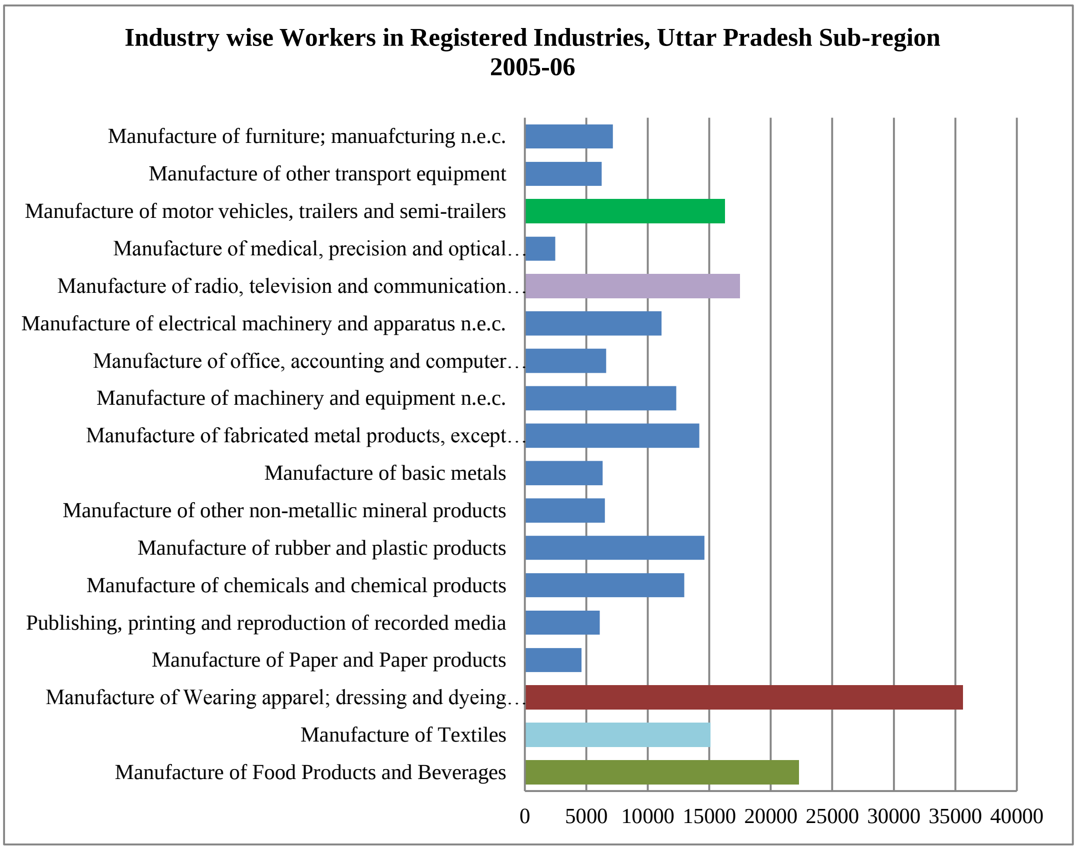
Figure 4.13: District wise industrial employment in Uttar Pradesh Sub-Region in 2010-11



Source: District wise Industrial Profile, DC MSME

Analysis of category-wise number of units in 2005-06 in Uttar Pradesh indicates that wearing apparel, dressing and dyeing of fur units account for the largest chunk (refer Figure 4.14). The lowest numbers are recorded in industries such as manufacturing medical, precision and optical instruments, watches and clocks.

Figure 4.14: Industry wise Workers in Registered Industries, Uttar Pradesh Sub-Region 2005-06



4.2.4 Rajasthan Sub-Region

Traditionally, agriculture has been the major economic activity in Alwar district. With the decision of State Government in 1970s to develop Bhiwadi as its preferred industrial center, the diversification of the economy gradually magnified. RIICO has been instrumental in initiating industrialization in Bhiwadi. Hence, over the years, employment in agricultural activities is declining and increasingly shifting towards industrial and service sector activities. At present, there are over twenty two industrial areas developed by RIICO in Alwar district (refer Table 4.10).

Few important industrial locations in the district are Alwar, Bhiwadi, khushkhera and Chaupanki. The Matsya Industrial Area (MIA), Alwar was established more recently by RIICO with around 213 operating industries, which are mostly mineral-based (88 units) and chemical (61). Of these, 28 operations are of large or medium scale and the remainders are SSIs. The Bhiwadi Manufacturers Association reports presence of 1079 SSIs, 225 medium scale units and 58 large-scale units. There are eight industrial areas in Bhiwadi-Tapookara-Khushkhera Complex (refer Table 4.11).

Table 4-10: Industrial Areas Developed by RIICO in Alwar District-2010

Sl. No.	Location	Total Areas in Acres
1	M.I.A.	1,804.32
2	M.I.A. Ext., Alwar	201.15
3	Agro Food Park, M.I.A. Ext. Alwar	185.94
4	MIA (South & East), Alwar	51.75
5	Kherli	8.41
6	Rajgarh	40.59
7	Khairthal	69.93
8	Thanagazi	33.12
9	Old Ind. Area Alwar	179.76
10	Behror	280.5
11	Sotanala	151.91
12	Bhiwadi Phase I to IV	2,138
13	Khuskhera	825.83
14	IID, Centre Khushkhera	151.77
15	Patheri	538.1
16	Chopanki	802
17	Tapukra	781.44
18	Shanjahanpur	203.09
19	Neemrana (Phase I to III)	2,125.96
20	EPIP Neemrana	210.51
21	SareKhurd	94.55
22	Manjara Path (Japanese Zone)	1,166.33
	Total	**12,045**

Source: Alwar District Administration, alwar.nic.in

Table 4-11: Category wise number of units in Bhiwadi, Kushkhera and Chaupanki in Rajasthan sub-region

Sl. No.	Type of Product	Bhiwadi (Nos)	Khushkhera (Nos)	Chaupanki (Nos)
1	Auto Parts, Cycle components, Service Station & allied items	63	2	6
2	Casting and Forging	22		
3	Ceramic, Crockery Molding Powder, Cement Product, Marble Product & Allied items	46	6	5
4	Chemicals, Cosmetics & Allied items	55	9	5
5	Drugs, Pharmaceuticals, Surgical, Medical Instruments, Insecticide, Fertilizers etc.	28		3
6	Electrical & electronic components cables, battery & allied item	75	3	8
7	Food products, Poultry & Cattle feeds, Mineral water, Soft drinks etc.	38	9	3
8	General Engineering, bearing, dye, Fabrication etc	16	6	13
9	Glass, Wood paper & Allied item	11		
10	Iron & Steel	74	9	10
11	Non Ferrous Metal, Aluminum, Bathroom Fitting	32		3
12	Packaging	51		6
13	Paints & Printing Ink	18	4	3
14	Plastic	87	4	8
15	Printing Press, Stationary item	8		1
16	Rubber, leather & Foam product	45	3	5
16	Textile, Yarn, Readymade Garments etc	34	4	2
17	Miscellaneous	75	4	5
18	Unclassified	567	24	100
	Total	**1,455**	**87**	**183**

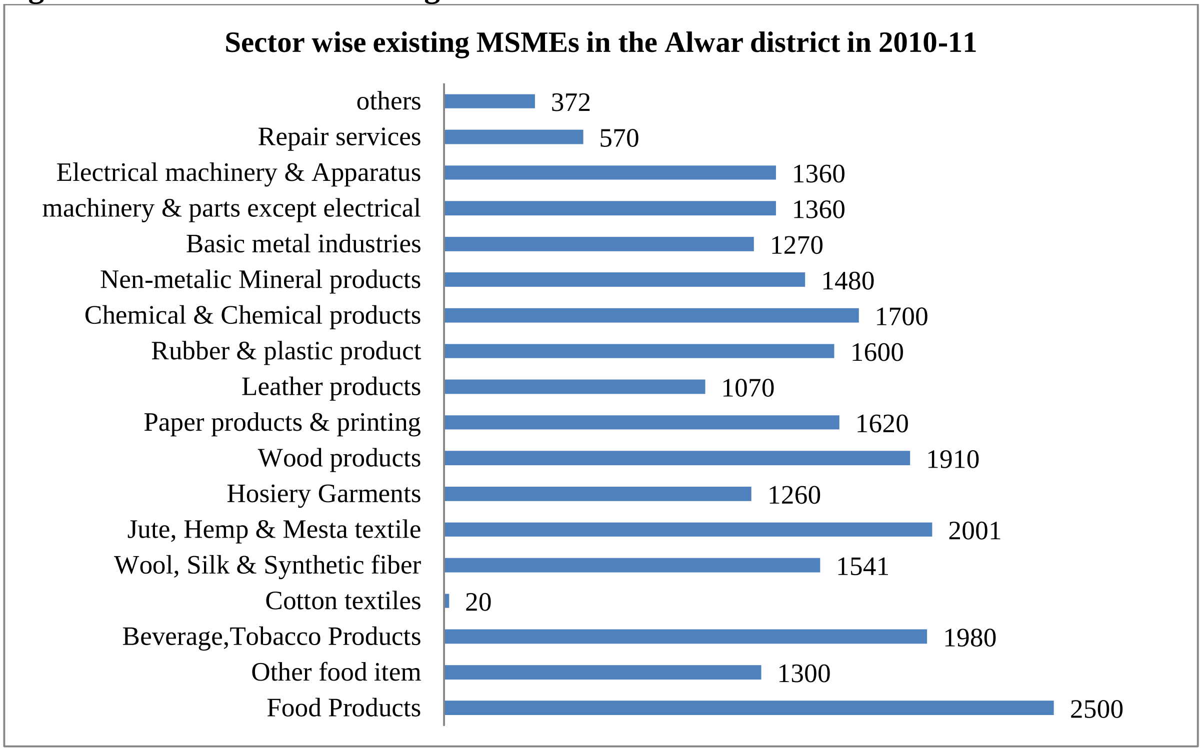
Source: Bhiwadi Manufacturers' Association

Analysis of category-wise number of MSME units in 2010-11 in Rajasthan sub-region indicates that in terms of number of units, Food Products recorded the highest (2,500), followed by Jute, Hemp & Mesta textile (2,001) and Beverage, Tobacco Products (1,980). However, in terms of number of workers employed, Paper products & printing has recorded the highest (9800), followed by Leather products (9,300) and Jute, Hemp & Mesta textile (8,000) and Wool, Silk & Systhetic Fiber (8,000) (refer Table 4.12 and Figure 4.15 & 4.16).

Table 4-12: Type-wise number of Industrial Units, Investment and Employment in MSMEs in 2010-11 in Alwar District

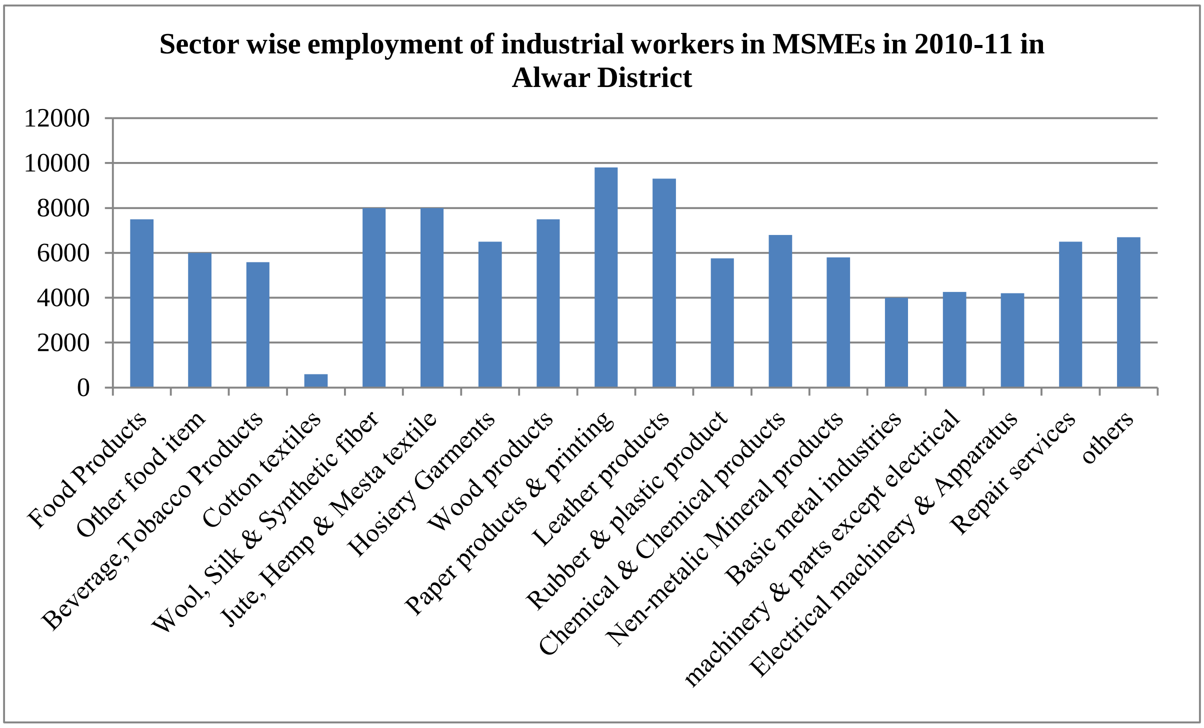
Type of Industrail Unit	Number of units	Investment (in Lakh)	Employment
Food Products	2,500	13,011	7,500
Other food item	1,300	15,015.25	6,000
Beverage,Tobacco Products	1,980	10,015	5,580
Cotton textiles	20	9,015	600
Wool, Silk & Synthetic fiber	1,541	20,001	8,000
Jute, Hemp & Mesta textile	2,001	18,338	8,000
Hosiery Garments	1,260	7,338	6,500
Wood products	1,910	11,538	7,500
Paper products & printing	1,620	9,538	9,800
Leather products	1,070	8,500	9,300
Rubber & plastic product	1,600	7,500	5,750
Chemical & Chemical products	1,700	11,300	6,800
Nen-metalic Mineral products	1,480	12,600	5,800
Basic metal industries	1,270	14,800	4,000
machinery & parts except electrical	1,360	13,200	4,256
Electrical machinery & Apparatus	1,360	10,200	4,200
Repair services	570	14,200	6,500
others	372	12,300	6,700
Total	**24,914**	**2,18,409.25**	**1,12,786**

Figure 4.15: Sector wise existing MSMEs in the Alwar district in 2010-11



Source: District Industrial Profile, Alwar District, DC MSME

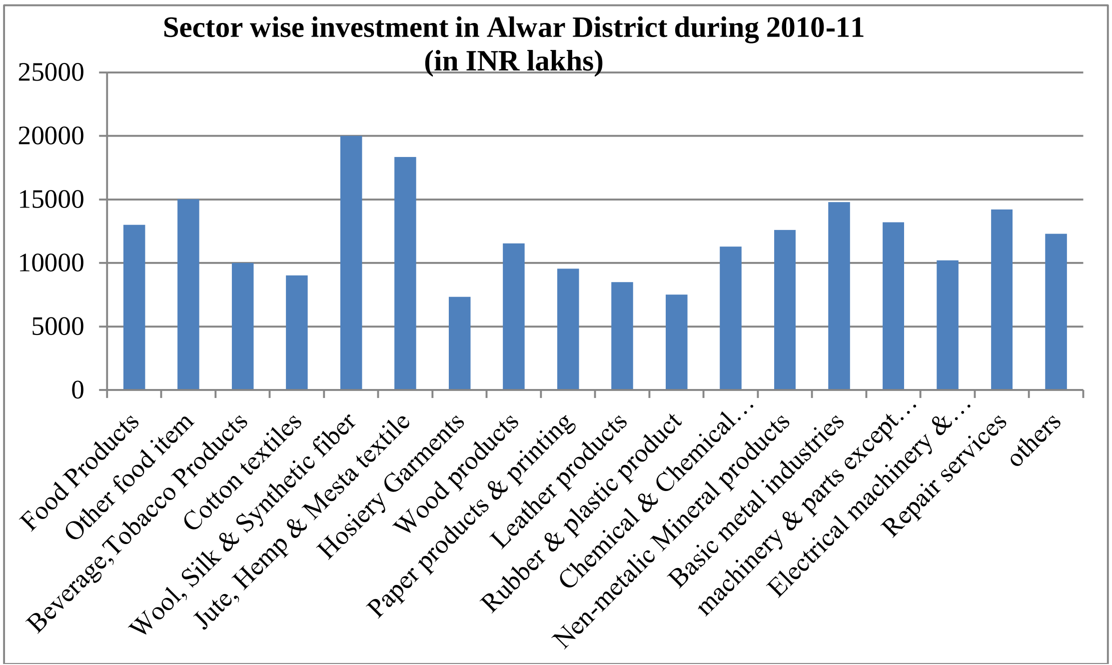
Figure 4.16: Sector wise Employment of Industrial Workers in MSMEs in 2010-11 in Alwar District



Source: District Industrial Profile, Alwar District, DC MSME

In terms of investment in industrial units in Rajasthan sub-region, the Wool, Silk and Synthetic units record the maximum investment, followed by Jute, Hemp & Mesta textile and the least by Hosiery garment units (refer Table 4.12 and Figure 4.17).

Figure 4.17: Sector wise Investment in Alwar District during 2010-11



Source: District Industrial Profile, Alwar District, DC MSME

4.3 Industrial Clusters

4.3.1 Background

Industry clusters have become one of the most popular concepts in the local and regional development research and practice. Industry clusters have their origins rooted deep within Michael Porter's "The Competitive Advantage of Nations", published in 1990. From mid-nineties there is a gradual shift in the policy from the sectoral approach to Cluster Based Approach (CBA). CBA adopted by governments and business focuses on ways to improve competitive advantage in cities and regions. This has led to growing interest showed by the government and businesses in different ways to foster development of industry clusters to enhance the competitiveness of local economies.

Clustering involves rival firms and suppliers co-locating and collaborating on ways to reduce external transaction costs, innovate and develop new business opportunities and markets to support the development of business and investment in local economies. The development and improvement of infrastructure often require large-scale investment and planning. In a resource-constrained set-up, a cluster strategy helps to set priorities for these significant investments and ensures that the infrastructure is appropriately developed to get the greatest efficiency and effectiveness of production process.

A cluster is defined as a geographically bounded concentration of similar, related or complementary businesses with shared infrastructure, markets and services and faced with common opportunities and threats. According to United Nations Industrial Development

Organization (UNIDO), an industrial cluster houses more than 100 units in related and complementary business in the radius of 60 km. The definition is only indicative and it depends largely on the nature of the relationship among firms. Cluster by origin may be natural or induced/artificial. Natural cluster is historically evolved whereas; induced cluster is an outcome of the government policy.

According to UNIDO, in 2004 there were 388 industrial clusters in India. The estimated number of firms in these clusters is 4.9 Lakhs with the total employment of 7.5 million and total output of Rs. 1570 billion. Clusters can be classified based on its evolution like natural or induced or nature of the product manufactured.

Box 4.1: Cluster Based Development Approach

Cluster strategy is first and foremost, an economic development strategy. It provides a coordinated and efficient way to promote economic growth. By making a cluster approach a key part of local economic development strategy, development agencies are more likely to coordinate their efforts, avoid duplication of services, and develop a more comprehensive approach to economic development. A cluster approach and the coordination also help set priorities and establish a constructive relationship with government. In effect, the cluster approach can create a more positive business climate for cluster. This climate helps existing firms grow and attracts new businesses to the area.

Benefits to the Cluster

A cluster strategy allows public agencies to direct resources more effectively and efficiently. Instead of creating myriad programs that meet the needs of individual firms, public efforts can be focused on meeting the needs of many firms with similar issues. The industry cluster approach allows public agencies the opportunity to work directly with industries and develop strategies for building a sustainable economy.

Benefits to established and emerging Industries

A cluster strategy places increasing importance on the needs of a given industry or cluster and focuses its public and private resources in meeting those needs. The industry cluster identifies their primary needs and work with public and private entities to address them. These needs might include industry-focused training programs at colleges and universities Industries and firms, also benefit from forums and meetings convened to address issues and concerns. This saves the time and effort associated with identifying and working with all of the appropriate agencies. If a cluster strategy is part of a statewide policy, the clusters have a powerful voice in setting the statewide agenda for economic development.

4.3.2 Clusters in NCR

The important industrial locations in NCR are Meerut, Ghaziabad, Guatambuddha Nagar, Bulandshahr, Delhi, Gurgaon, Faridabad and Panipat. There are 53 industrial clusters in the areas of auto component, textiles, general engineering, power looms, carpet etc. The estimated total number of persons employed is over 15 Lakhs with a total turnover of over Rs. 1000 billion. The autocomponent industry has the largest number of units (25,900) and provided the largest employment.

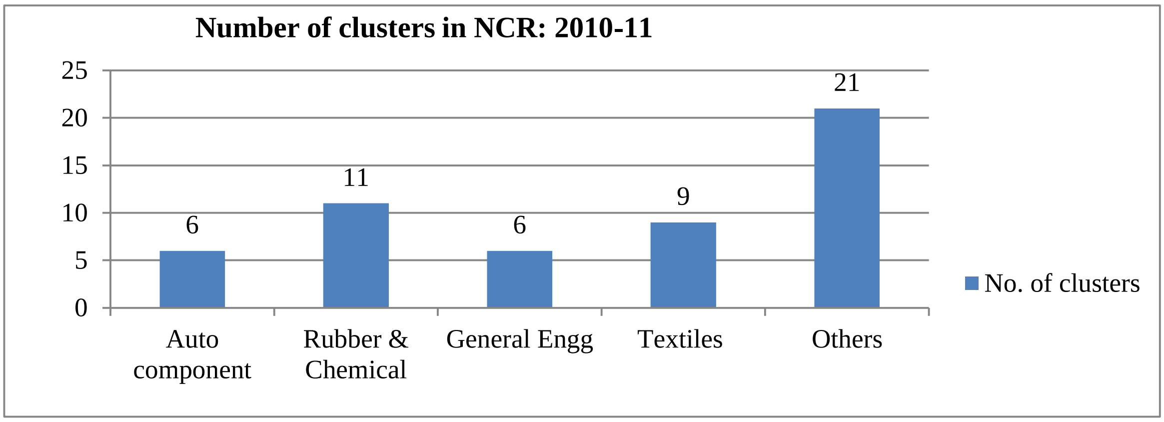
Among the existing number of clusters, textile clusters (9 clusters) has the agregate turnover of Rs. 21,561.32 crore. In terms of employment, Auto component sector (6 clusters) employ 5,65,500 workers. Its worth noting that Rubber and Chemicals sector has maximum solo clusters (11 clusters) with least number of units in NCR with a turnover of over Rs. 3,300 crore. It implies that the industry units are scattered, compared to other industries, which have sizable number of units but with lesser number of clusters (refer Table 4.13, Figure 4.18 & 4.19).

The district wise list of industrial clusters in NCR is given in Annexure-4.3.

Table 4-13: Industrial Clusters in NCR

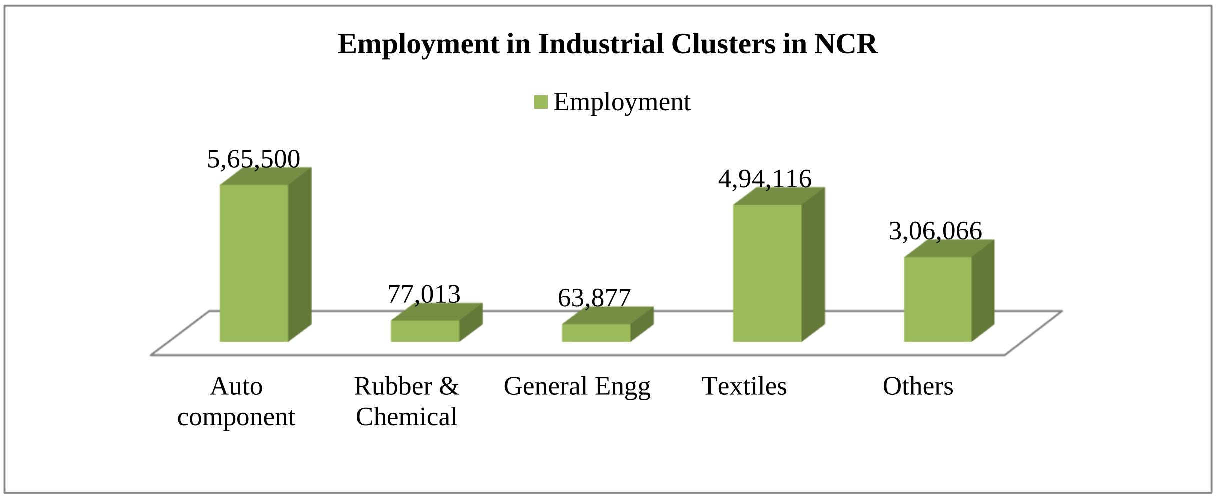
Cluster/ product	No. of clusters	No. of Units	Employment	Turnover (Rs.Crore)
Auto component	6	25,900	5,65,500	63,897.2
Rubber & Chemical	11	3,095	77,013	3,300.91
General Engineering	6	3,841	63,877	4,042.4
Textiles	9	15,965	4,94,116	21,561.32
Others	21	10,578	30,6,066	7,408.13
Total	**53**	**59,379**	**15,06,572**	**10,0210**

Figure 4.18: Number of Clusters in NCR: 2010-11



Source: DC MSME.

Figure 4.19: Employment in Industrial Clusters in NCR



Source: Industrial Estimates, DC MSME; Cluster Observatory

4.4 Important Clusters Profiles

4.4.1 Manufacturing Clusters Profile

a) Okhla Readymade Garment Cluster, NCT-Delhi sub-region

Post independence, the primary role of Delhi’s garment industry was to cater to the needs of the armed forces and other local markets. Okhla Industrial Area situated in Delhi was developed subsequently for setting up of various industries including readymade garments. During 1970 to 1990, the industry expanded to adjoining areas such as Govindpuri, Kalkaji, and Tughlakabad Extension. However, mainly small fabricating units are providing support to the SME units situated in Okhla Industrial Area.

As NOIDA came into existence, a large number of the electrical and electronic firms shifted from Okhla to NOIDA. The owners of these electronics firms sold their factories to garment manufacturers at Okhla. As a result of which, Okhla became one of the major clusters of garment manufacturing in India. India’s 40% of the readymade garment exports are carried out by NCR, out of which, 40% is being manufactured in the Okhla Industrial Area.

At the time of its inception, the garment products were made using ordinary sewing machines with treadle-operated system. Post-modernization, most units switched to power-operated machines. These were replaced with the sophisticated, high-speed imported machines over the course of time. The fabric-cutting has also shifted from manual mode to power operated machines.

Most embroidery work is still being carried out manually by women in the adjoining areas through contractors. Machine embroidery work is gradually becoming the norm, particularly in the organized sector, which is carried out through computerized, automatic and other sophisticated machines. The raw material is procured in the form of grey cloth from the Chandni Chowk Area of Delhi, which is processed by bleaching or dyeing or printing by cloth finishing and processing units. Due to intervention of the Honorable Supreme Court and Pollution Control Cell of Government of NCT-Delhi, many bleaching, dyeing and finishing units have shifted to adjoining states like Uttar Pradesh and Haryana. This has led to increased transportation cost which in turn has escalated the cost and time of production.

One of the essential factors responsible for the growth of cluster is the easy access to cheap labor in and around the clusters due to availability of migrant population from Uttar Pradesh and Bihar. The Okhla Readymade Garments cluster has a prosperous export market. It is one of the largest hubs for sourcing readymade garments in the world markets on account of their quality, attractive designs as well as other value additions. The primary export destination countries are USA, Germany, France, Italy, Benelux, Denmark, United Kingdom, Ireland, Greece, Spain, Portugal, Sweden, Finland, Austria, EU Countries, and Canada etc.

b) NOIDA Readymade Garment Cluster, U.P. sub-region

Textiles and ready-made garments were among the areas of particular focus for NOIDA development policy. The setting-up of NOIDA was an experiment in developing a modern township under the Uttar Pradesh Industrial Area Development Act. Phase-2 of NOIDA includes an export processing zone and a hosiery complex. There are over 6,000 garment units with a turnover of INR 3,600 Crore in the cluster.

c) NOIDA General Engineering and Auto Cluster, U.P. sub-region

General Engineering cluster is one of the largest employers in Gautambuddha Nagar District. NOIDA’s general engineering sector is not a major exporter and mainly caters to the needs of the domestic market. In general, engineering sector automobile component manufacturing firms have established their roots in recent years. Most automobile parts manufacturing firms in NOIDA cater to the domestic market. Only a few firms like Minda Huf Pvt. Ltd. and Motherson Sumi Systems are exporting. There is also an Export Promotion Council for Handicrafts (EPCH) SEZ coming up at NOIDA that will cater to the handicrafts segment.

d) Panipat Textiles Cluster, Haryana sub-region

Panipat is the largest centre in the world producing shoddy yarn and is also considered to be the biggest center in the country for producing low-priced blankets, as well as for export of handloom cotton durries, bed covers, cushion covers, throws, mats, etc.

The industry of Panipat meets 75% demand of Barrack Blankets for Indian Military. The Panipat textiles industry comprises of eight segments, namely, handloom, power loom, carpet, woolen and shoddy yarn spinning, cotton yarn spinning, woolen blanket, cotton wet processing, and woolen wet processing.

The cluster has nearly 2000 units, providing employment to more than 70,000 workers directly or indirectly. According to the DC MSME estimates, there are about 1800 units working on handlooms and over 700 units working with powerloom.

Panipat Carpet Industry has about 400 small and medium units that are situated in and around Panipat employing about 60,000 workers. The raw material for this industry comes from Bikaner, Jodhpur and from the local suppliers. About 2-3% of the raw material is imported for this industry. More than 90% of the carpets manufactured are meant for export and about 10%

of the production is for the domestic markets. The total turnover of the industry is estimated to be more than Rs. 1500 million.

There are about 350 woolen and shoddy yarn spinning units in Panipat providing employment to about 30,000 workers. The raw material for this industry is in the form of imported rags from European countries at comparatively cheaper rates, which are garneted and spun into shoddy yarn. However, owing to less demand in the blanket industry, this sector is presently under stress.

There are about 45 open-end cotton spinning units and five-ring frame cotton spinning mills, generating an employment to about 25,000 workers. The raw material for open-end units constitutes 85% waste cotton from the ring frame units and is sourced from South India.

Cotton-wet processing industry has about 350 dyeing houses, 75 printing units catering its services to the Panipat textile industry under different kinds of dyeing processes.

e) Faridabad General Engineering and Auto Component Cluster, Haryana sub-region

The industrial base of Faridabad is an important constituent part of the overall economy of the NCR. This industrial estate of Faridabad is spread over an approximate area of 6,948 hectares and has a variety of engineering products ranging from forgings to tractors, clutch assembly to leaf springs. The major industrial production in this district, mainly represented by Faridabad city itself, is of tractors, steel re-rolling, scientific instruments, power looms, agriculture implements, JCB cranes, etc. Faridabad has over 6,000 light engineering companies (mostly in the auto components business), home appliance makers and machine tools.

The industry in Faridabad began when Eicher Tractors and Escorts set up shop in the city in the 1960s. Most of the units came up as ancillaries to these two. The industrial base of Faridabad according to estimates is wide with more than 15 large multinational companies (MNC), 1000 ISO certified industries and 300 medium and large-scale industries. Along with this, there are also a large number of other smaller industrial units, functioning from various locations including residential areas in the city.

The total number of small, medium and large industries in the Faridabad-Ballabgarh Complex stands at about 15,000. The Complex provides direct and indirect employment to nearly 500,000 workers and ranks as the 9th largest industrial estate in Asia. Its combined turnover is estimated to be about Rs. 2,000 billion.

f) Gurgaon Auto Component Cluster, Haryana sub-region

Gurgaon was a small town up to early 1980 but has grown extensively during the last decade due to proximity to Delhi. Gurgaon is one of the three key manufacturing hubs of the $7 billion auto component industry. Maruti Udyog Ltd has largely driven the industrial growth in Gurgaon. Maruti Udyog Ltd. started in 1982 as a joint venture firm of the Government of India and a Japanese automaker, Suzuki Motor Corporation. Gurgaon cluster is an induced cluster started with Maruti in 1980s.

g) Meerut Auto Parts Cluster, U.P. sub-region

Auto parts industry of Meerut produces both electrical and mechanical parts. This cluster has about 5000 units, of which almost 95% are related to mechanical parts. Apart from manufacturing, significant number of units is also into repairing. Approximately 26,000 workers are employed in this cluster. The cluster has an annual turnover of Rs 1,000 million and 80% of this turnover comes from mechanical parts units. The major products are auto rubber parts, auto brakes, auto engine spare parts, nuts and bolts, spring pills, etc. All the units are either small or micro in nature, and are spread throughout Meerut city. The cluster is growing at a rate of 5 % annually for the last 5 years. This growth rate is far lesser than the national growth rate (10% annual growth rate reported). The cluster is highly fragmented and hence cannot produce any single item in large volumes, affecting both manufacturing costs and quality.

The workforce is mainly unskilled and quality culture is by and large absent. There is a strong requirement for technological up-gradation. In most of the units, simple cutting and drilling machines are being used. There is a need for introducing advanced equipment, to improve shop floor practices, induce quality systems and to promote standardization.

h) Meerut Power loom Cluster, U.P. sub-region

The cluster has 3,000 power loom units employing over 30,000-35,000 workers. Most units (almost 95%) are micro-scale units. There are around 35,000-40,000 power looms installed in the cluster, out of which only around 65-70 % are being operated. Main products are grey fabric and fabric for home furnishing, which are supplied to traders located at Delhi, Ghaziabad and Panipat. The cluster annually produces goods worth Rs. 400 million. Like most other power loom clusters, the traders or master weavers control the market. Female members of the family mostly indulge in embroidery work on job work basis. Embroidery is considered an ancillary to the power looms cluster. The power loom sector has seen a decline in the last few years and similar scenario can be noticed in Meerut. Meerut has very few units that have modern looms and are relatively inefficient when compared to the power loom cluster of Panipat. This cluster faces a number of challenges, including the fact that the weavers have limited market linkages and hence are heavily dependent on the traders. The turnover is very low, and the cluster needs sustained support to make it more productive.

i) Meerut Sports Goods Cluster, U.P. sub-region

The sports goods cluster has 3,500 units, employing nearly 70,000 workers and producing goods worth Rs. 2,000 million annually. The major products are items related to cricket, boxing gloves, football, badminton, and lawn tennis. The cluster comprises of both SMEs and household units. The SMEs are largely located in the sports goods complex, while the sub contracting units are spread all over the city and in the nearby villages. The major items that are exported from the cluster are inflatable balls, hockey sticks and balls, cricket bats and balls, boxing equipment, fishing equipment, and different kinds of protective equipment.

The cluster is growing at an average annual growth rate of 8% for the last few years. Some units like those producing boxing gloves have been growing at a comparatively faster rate. Meerut sports goods industry contributes to roughly around 25% of India's sports goods export.

The cluster draws technical support from the Process and Product Development Centre (PPDC), a central government organization for sports goods.

The cluster firms mostly use manual manufacturing processes. However, globally most of the sports items are manufactured mechanically. The cluster produces items only for few sports, leaving a large chunk of the segment out of its domain.

There are negligible number of large factories, due to which international buyers never give large orders to the cluster. The cluster is facing immense competition from mechanized units manufacturing similar products. The technology is changing rapidly and the cluster firms are too small to make the required investments. The cluster has immense scope for technical up gradation within the existing set of manufactured items. There is ample scope for diversification to other sports good segments. Several attempts have already been undertaken for the development of the cluster.

4.4.2 Service Cluster Profile

a) IT& ITES in NCT-Delhi

NCR has witnessed a remarkable growth of the software companies in the field of software development, web development, networking, Enterprise Resource Planning (ERP), document management System, Customer Relationship Management (CRM), online office automation, etc. NCT-Delhi has become a cluster of software production, which is almost as significant as Bangalore and Mumbai. After a slow start, Delhi in the past few years has been catching up with the software industry and presently it houses almost the same number of the software company headquarters as other software hubs. Projections by National Association of Software and Service Companies (NASSCOM) indicate that a coordinated action plan by the government and industry can assist the software industry in Delhi to grow at an accelerated pace to achieve an annual turnover of Rs. 450 billion.

NCT-Delhi has an inherent advantage of saleable high-quality infrastructure, technically qualified and talented pool of professionals, strong leadership oriented companies, regulatory support, various incubation facilities for upcoming IT entrepreneurs, growing domestic and global market demand. All these factors have been instrumental in driving the growth of Delhi IT SME segment. However, to take this forward exponentially, it is pertinent for the firms to initiate business, knowledge and technological innovation, as the traditional growth drivers like BPOs and Application management are likely to face price and competitiveness pressures. The Government of NCT-Delhi has taken several measures in this regard, including setting up of the first Information Technology Park in Delhi at Shastri Park with the most modern state-of-art infrastructure. The Government has also framed an IT policy with the aim of creating a conducive environment for investment in the sector and consequent growth of IT Industry and IT Infrastructure. Other NCR participating State Governmwents are also taking initiatives in facilitating development of the IT/ITES sector.

E-commerce is the latest business platform for Delhi-based units offering services in the area of domain name registrations and related security issues, marketing and publicity on the Internet, electronic signatures and certification agencies, tele-billing, and web hosting. IT enabled services like Medical Transcription, Call Centers, Data Processing, Back-Office Operations, Geographic Information System (GIS), and Revenue Accounting etc. which are considered as niche areas for the city. Delhi's new millennium industrial policy emphasizes setting up of high-tech and sophisticated units in electronics, telecommunications, software development and IT-enabled services.

4.5 SWOT Analysis of Clusters

4.5.1 Auto and Engineering Clusters

Strengths

- Demand driven industry;
- Strong presence in the local market;
- Availability of cheap labor; and
- Geographically situated at ideal location (near end users).

Weaknesses

- Non-adoption of technology machinery and equipment;
- Availability of raw material and inconsistent raw material prices;
- Poor availability skilled labor; and
- Absence of research and development culture.

Opportunities

- Big and new auto and engineering companies are starting their operation in NCR; and
- Up- coming R&D infrastructure in NCR.

Threats

- Competition from countries like China, which has more advanced engineering technological base; and
- Price based competition for other countries.

4.5.2 Textiles Clusters

Strengths

- Strong presence in the export market;
- Domestic market is also rising;
- Raw material and allied items available in sufficient quantity; and
- Availability of skilled workforce.

Weakness

- High production cost;
- Traditional method of production;
- Low level of technological development;
- High level manufacturing defects and rejection; and
- Problems with quality and productivity.

Opportunities

- Tariff and non-tariff barriers are depleting;
- New technology adoption becoming easier;
- Govt. Schemes and incentives; and
- Increase government support in Infrastructure.

Threats

- Global business environment; and
- Price competition with other countries.

4.6 Micro Small and Medium Enterprises in NCR

The Micro, Small and Medium Enterprises Development Act, 2006 has defined the Micro, Small and Medium Enterprises engaged in manufacture or production of goods or rendering of services based on investment in plant & machinery, details of which are given in Table 4.14.

Table 4-14: Classification of Micro, Small and Medium Enterprises

Type of enterprise	**Engaged in manufacture or production of goods**	**Engaged in providing or rendering of services**
	Investment in plant and machinery	**Investment in equipment**
Micro enterprise	Does not exceed Rs. 25 lakh	Does not exceed Rs. 10 lakh
Small enterprise	More than Rs. 25 lakh but does not exceed Rs. 5 crore	More than Rs. 10 lakh but does not exceed Rs. 2 Crore
Medium enterprise	More than Rs. 5 Crore but does not exceed Rs. 10 Crore	More than Rs. 2 Crore but does not exceed Rs. 5 Crores

Source: Micro, Small and Medium Enterprises Development Act, 2006

With increasing entry of multinationals, immense opportunities have been created for outsourcing, sub-contracting and ancillarisation of the products manufactured by corporate particularly in non-core sectors like automobiles, engineering and consumer electronics in NCR. A vibrant SME sector can derive maximum benefit of these developments.

There are an over 1.0 Lakh SSIs and over 15,000 medium and large-scale units in the NCR (refer Table 4.15). In Haryana sub-region, the maximum number of SSI units is in Gurgaon district followed by Faridabad district. A similar trend has been observed in the number of Large and Medium enterprises. In Uttar Pradesh sub-region, the maximum number of SSIs and Large and Medium units are concentrated in Ghaziabad district as it has the maximum number of registered industries in the Uttar Pradesh sub-region; however the number of industries is not disaggregated into SSIs and Large and Medium units. In Rajasthan sub-region, the number of SSI units was 464, and the number of large and medium enterprises was 87. NCT-Delhi has over 20,000 units in 2010-11 as per DCMSME Industrial profile of NCT of Delhi.

Table 4-15: Number of SSI and Large & Medium units in NCR: March 2011

District / Sub-region	SSI Units	Estimated Avg. No. Of Daily Worker Employed in SSI	Large and Medium	Employment In Large And Medium Industries
Meerut	8,184	48,280	13	3,325
Bagpat	2,608	8,765	5	3,900
Ghaziabad	NA	17,221	NA	72,749
Gautambuddha Nagar	9,521	77,260	359	1,87,572
Bulandshahr	4,624	80,000	5	87
Total of Uttar Pradesh Sub-region	**24,937**	**2,31,526**	**382**	**2,67,633**
Delhi	20,648#	9,75,194	NA	NA
Total of NCT of Delhi	**20,648**	**9,75,194**	**NA**	**NA**
Alwar	464	1,12,554*	87	8,100
Total of Rajasthan Sub- region	**464**	**1,12,554***	**87**	**8,100**
Faridabad	17,111	4,500	180	1,600
Palwal	19	7,200	40	8,000
Gurgaon	22,055	1,86,040	436	1,43,300
Jhajjar	NA	16,082	NA	1,000
Panipat	4,025	80,667	43	14,192
Rewari	1,229	9,313	141	21,000
Rohtak	4,746	NA	15	2,820
Sonipat	8,737	59,707	6	17,031
Mewat	26	800	16	1,200
Total of Haryana Sub-region	**57,948**	**3,64,309**	**877**	**2,10,143**
Grand Total/ NCR	**1,03,997****	**15,71,029**	**1346****	**4,85,876**
*Employment generated in MSMEs				
**Since, in some of the district's the figures are not available, the total appears less in the table. However the actual number of registered units (both SSI & L&M) would be higer.				
# MSMEs				

Source: District wise Industrial Profiles of respective Districts, DC MSME, http://dcmsme.gov.in/

5. RURAL ECONOMY

5.1 Background

Rural Population of India constitutes 72% of the total population and 77% percent of the total workforce. The components of rural development seem to have evolved significantly over time. Until the 1970s, rural development was synonymous with agricultural development and, hence, focused on increasing agricultural production. This focus seems to have been driven primarily by the interests of industrialists to extract surpluses from the agriculture sector in order to reinforce industrialization. Over time, this small holder agriculture-centric concept of rural development underwent drastic changes. By the early 1980s, the World Bank defined it as *"…a strategy designed to improve the economic and social life of a specific group of people—the rural poor."* Four major factors appear to have influenced this change: increased concerns regarding the persistent depth of rural poverty. Evolving views on the interpretation of the concept of development itself has led to the emergence of a more diversified rural economy in which rural non-farm enterprises play an increasingly important role. For this reason, the strategy, to tackle rural development, concentrated significantly on strengthening the non-farm economy. Given the multi-dimensional nature of rural development in India, it is imperative that the programmes, to address rural development, rely on a multi-pronged approach. It also may be noted that there are identifiable occupational features of rural development, primarily concentrated in agricultural labour and artisanal households in rural areas.

The different sub-regions of the NCR show varying growth trends of the rural economy. NCT-Delhi demonstrates a drop in rural economic development due to its limited geographical area and increasing urbanization. Consequently, there has been a decrease in the rural population and a slight increase in the rural workforce. In addition, there has also been a substantial change in the type of occupation undertaken by the rural workforce which shows a trend change from agricultural to the service oriented occupations. The proportionate contribution of the rural workforce to the total workforce also has, for this reason, declined significantly. On the other hand, there has been an increase in the service sector industries due to the emergence of IT, outsourcing and MNCs in the sub-region. The Master Plan for Delhi-2021 proposed for urbanization of the entire NCT-Delhi except for a green belt of one revenue village width.

The Haryana sub-region shows a mix trend in growth of rural economy as agricultural and non-agricultural establishment have shown similar growth trends, apart from a number of districts where non-agriculture establishments have taken over indicating a trend towards urbanization (Gurgaon and Faridabad largely). There has been a decrease in the agricultural land in these two districts, and agriculture production has decreased significantly, especially in Gurgaon. Other districts have shown a constant increase in agricultural production indicating an agrarian trend inclining towards the rural economic growth. One of the main reasons is the enhancement of irrigation facilities in Panipat and Rohtak districts. Besides agriculture, milk and milk product, has also been an important part of the rural economy.

Utter Pradesh sub-region is predominantly an agrarian economy. This sub-region has also experienced comparative increase in agricultural and non-agricultural establishments, although the latter is pacing ahead as a result of increasing urbanization in the sub-region.

Agriculture is the primary occupation of workers in Rajasthan sub-region. There has been a consistent increase in the total cropped areas in successive years with an increase in the total production in recent years primarily due to enhancement of irrigation facilities leading to better production. Rajasthan Sub-region, thus, has its rural economy predominantly based on agriculture.

5.2 Rural Workforce and Occupation in NCR

As per Census of India 2011, rural population constitutes 37.41% of total population in NCR. Rural workers constitute 36.13% of total rural population, out of which 58.41% of total rural workers are engaged as cultivators (39.87%) and agricultural labors (18.54%) (refer Table 5.2). Rajasthan sub-region has the highest proportion of the rural population (82.19%). In Haryana and Uttar Pradesh sub-regions also, considerable population live in rural areas (56.73% and 51.71% respectively), while NCT-Delhi has negligible share of population living in rural areas (2.50%) (refer table 5.1).

In terms of workforce distribution, proportion of rural workforce is the highest in Rajasthan sub-region (87.09%), followed by Haryana (57.10%), Uttar Pradesh (52.96%) and NCT-Delhi (2.33%) sub-regions (refer Table 5.1 and Figure 5.1).

Table 5-1: Rural Population and Workforce in 2011

Districts	Total Population	Rural Population	% of rural population	Total work force	Rural work force	% of rural workforce
North West	36,56,539	2,13,950	5.85	1,188,545	67,492	5.68
North	8,87,978	17,746	2.00	296,446	5,278	1.78
North East	2,241,624	21,527	0.96	661,386	5,988	0.91
East	17,09,346	3,530	0.21	579,692	1,348	0.23
New Delhi	1,42,004	0	0.00	59,541	NA	0.00
Central	5,82,320	0	0.00	2,07,374	NA	0.00
West	25,43,243	6,420	0.25	8,74,320	1846	0.21
South West	22,92,958	1,43,676	6.27	7,95,352	44,049	5.54
South	27,31,929	12,193	0.45	9,24,393	4,226	0.46
NCT-Delhi sub-region	**1,67,87,941**	**4,19,042**	**2.50**	**5,587,049**	**1,30,227**	**2.33**
Faridabad	18,09,733	3,70,878	20.49	579,229	1,06,758	18.43
Gurgaon	15,14,432	4,72,179	31.18	5,44,716	1,58,462	29.09
Rewari	90,03,32	6,66,902	74.07	3,37,727	2,64,375	78.28
Rohtak	10,61,204	6,15,040	57.96	3,45,967	2,12,681	61.47
Sonipat	14,50,001	9,96,637	68.73	5,23,179	3,76,188	71.90
Panipat	12,05,437	6,50,352	53.95	4,12,318	2,21,931	53.83
Jhajjar	9,58,405	7,15,066	74.61	3,26,534	2,53,833	77.74
Mewat	10,89,263	9,65,157	88.61	2,89,964	2,58,721	89.23
Palwal	10,42,708	8,06,164	77.31	3,09,563	2,42,228	78.25
Haryana sub-region	**1,10,31,515**	**62,58,375**	**56.73**	**3,669,197**	**20,95,177**	**57.10**
	36,74,179	30,19,728	82.19	1,708,542	14,87,935	87.09
Rajasthan sub-region	**36,74,179**	**30,197,28**	**82.19**	**1,708,542**	**14,87,935**	**87.09**
Baghpat	13,03,048	10,28,023	78.89	416,695	3,37,563	81.01

Districts	Total Population	Rural Population	% of rural population	Total work force	Rural work force	% of rural workforce
Bulandshahr	34,99,171	26,31,742	75.21	1,173,260	9,19,473	78.37
Gautambudh Nagar	16,48,115	67,38,06	40.88	569,109	2,16,673	38.07
Ghaziabad + Hapur	46,81,645	15,19,098	32.45	1,520,538	4,96,077	32.63
Meerut	34,43,689	16,84,507	48.92	1,090,539	5,43,366	49.83
Uttar Pradesh sub-region	**1,45,75,668**	**75,37,176**	**51.71**	**4,770,141**	**25,13,152**	**52.69**
NCR	**4,60,69,303**	**1,72,34,321**	**37.41**	**15,734,929**	**62,26,491**	**39.57**

Source: Census of India 2011, Primary Census Abstract 2011

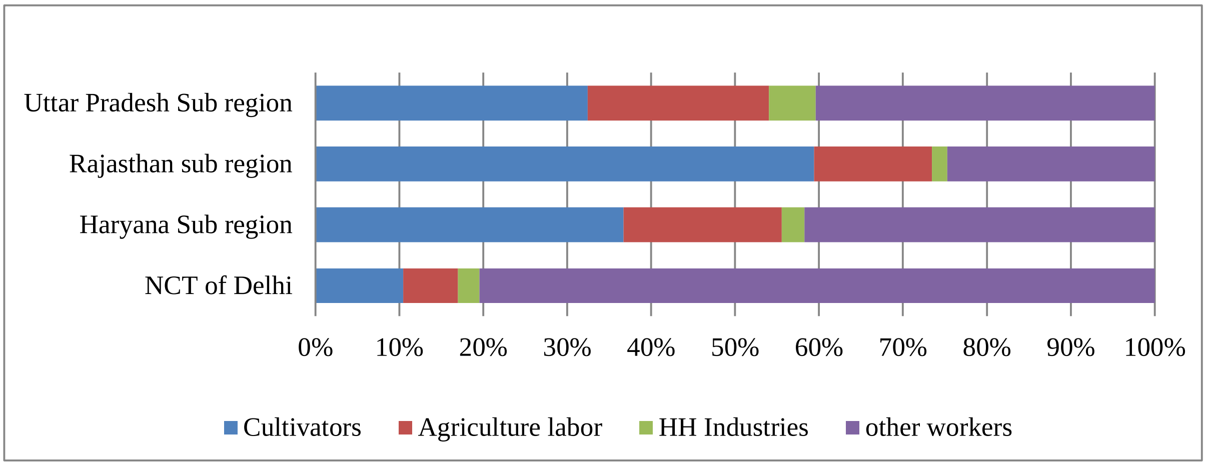
Distribution of rural workforce in NCR sub-regions in 2011 indicates that overall workforce participation rate (WPR) in NCR is 36%, while Rajasthan sub-region has recorded the highest WPR among the four sub-regions, followed by Haryana sub-region (33.48%), Uttar Pradesh sub-region (33.34%) and NCT-Delhi sub-region (31.08%). The high WPR in Rajasthan sub-region may be attributed to the high concentration of rural population (refer Table 5.2 and Figure 5.1).

Table 5-2: Distribution of Rural Workforce in NCR Sub-Regions

	Cultivators	% of Cultivators	Agriculture labor	% of Agriculture labor	HH Industries	% of HH Industries	Other workers	% of other workers	Total work force	Rural WPR
NCT-Delhi sub-region	13,614	10.45	8,528	6.55	3,284	2.52	1,04,801	80.48	130,227	31.08
Haryana sub-region	7,69,412	36.72	3,94,428	18.83	57,078	2.72	8,74,259	41.73	20,95,177	33.48
Rajasthan sub-region	8,84,054	59.41	2,09,057	14.05	27,004	1.81	3,67,820	24.72	14,87,935	49.27
Uttar Pradesh sub-region	8,15,313	32.44	5,42,382	21.58	1,40,501	5.59	10,14,956	40.39	25,13,152	33.34
NCR	**24,82,393**	**39.87**	**11,54,395**	**18.54**	**2,27,867**	**3.66**	**23,61,836**	**37.93**	**62,26,491**	**36.13**

Source: Census of India 2011, Primary Census Abstract 2011

Figure 5.1: Rural Workforce Distribution in NCR in 2011



Source: Primary Census Abstract, 2011, Census of India, 2011, Govt. of India

Analysis of sector-wise growth in rural workforce indicates that during the period 1971 to 2001, proportion of workers engaged in primary sector declined from 44.3% to 37.29%, while proportion of workers in secondary sector increased from 18.98% to 34.35%. The proportion of workers engaged in the tertiary sector reduced from 36.72% to 28.37% over the same period (refer Table 5.3).

Table 5-3: Distribution of Rural Workforce in NCR (1971, 1991 and 2001)

Year/	1971		1991		2001	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers**	**Percentage**
Cultivators and Agricultural Laborers	16,72,667	42.99	26,11,535	33.78	36,13,413	33.76
Livestock, Forestry etc.	44,485	1.14	58,378	0.76	3,39,775	3.17
Mining and Quarrying	6,457	0.17	13,884	0.18	38,098	0.36
Sub-total Primary Sector	**17,23,609**	**44.3**	**26,83,797**	**34.71**	**39,91,286**	**37.29**
a) Household Industries	1,66,572	4.28	1,28,661	1.66	7,73,216	7.22
b) Other than household Industries	4,64,125	11.93	12,81,140	16.57	11,68,879	10.92
Construction	1,07,937	2.77	3,54,049	4.58	17,34,125	16.20
Sub-total Secondary Sector	**7,38,634**	**18.98**	**17,63,850**	**22.81**	**36,76,220**	**34.35**
Trade and Commerce	4,14,000	10.64	11,37,207	14.71	7,94,641	7.42

Year/	1971		1991		2001	
Category of workers	**Workers**	**Percentage**	**Workers**	**Percentage**	**Workers**	**Percentage**
Transport, Storage and Communications	1,84,839	4.75	4,11,842	5.33	12,48,730	11.67
Other Services	8,29,850	21.33	17,34,993	22.44	9,92,787	9.28
Sub-total Tertiary Sector	**14,28,689**	**36.72**	**32,84,042**	**42.48**	**30,36,158**	**28.37**
Total Main Workers	**38,90,932**	**100**	**77,31,689**	**100**	**1,07,03,664**	**100.00**
Participation Ratio	**27.4**		**29**		**34.97**	

Source: Census of India 1971, 1991 and 2001

According to Economic Census 2005 there are more than 1.5 million workers engaged in non-farm activities in rural areas. Haryana Sub-region has maximum non-farm employment with 3.34 lakhs workers (refer Table 5.4).

Table 5-4: Non-Farm Employment in Rural NCR: 2005

Districts / Sub regions	Agricultural*			Non-agricultural			All		
	OAE	**EST.**	**Total**	**OAE**	**EST.**	**Total**	**OAE**	**EST.**	**Total**
Meerut	39,150	11,602	50,752	30,750	28,720	59,470	69,900	40,322	1,10,222
Baghpat	12,901	3,224	16,125	16,997	20,371	37,368	29,898	23,595	53,493
Ghaziabad	1,774	1,177	2,951	24,002	24,433	48,435	25,776	25,610	51,386
Gautam Buddh Nagar	6,735	369	7,104	14,487	33,471	47,958	21,222	33,840	55,062
Bulandshahr	11,061	4,530	15,591	28,885	20,062	48,947	39,946	24,592	64,538
Uttar Pradesh Sub Region	**71,621**	**20,902**	**92,523**	**115,121**	**127,057**	**242,178**	**186,742**	**147,959**	**224,479**
Panipat	931	1,188	2,119	16,368	38,809	55,177	17,299	39,997	57,296
Sonipat	2,094	1,460	3,554	16,373	61,144	77,517	18,467	62,604	81,071
Rohtak	4,255	641	4,896	12,179	15,491	27,670	16,434	16,132	32,566
Jhajjar	1,510	625	2,135	11,473	39417	50,890	12,983	40,042	53,025
Rewari	2,448	602	3,050	13,351	34858	48,209	15,799	35,460	51,259
Gurgaon	6,875	1,721	8,596	26,076	115,790	1,41,866	32,951	1,17,511	1,50,462
Faridabad	2,678	2,225	4,903	12,368	41,140	53,508	15,046	43,365	58,411
Haryana Sub Region	**20,791**	**8,462**	**29,253**	**108,188**	**346,649**	**312,971**	**128,979**	**237,600**	**333,628**
NCT-Delhi sub-region	**800**	**839**	**1,639**	**17,692**	**50,732**	**68,424**	**18,492**	**51,571**	**70,063**
Rajasthan sub-region	**11,489**	**2,812**	**14,301**	**38,998**	**86,979**	**1,25,977**	**50,487**	**89,791**	**1,40,278**
NCR	**104,701**	**33,015**	**137,716**	**279,999**	**611,417**	**623,573**	**384,700**	**526,921**	**628,170**

*Farming of animals, Agricultural services, forestry, hunting etc.
Source: Economic Census, 2005

In order to understand the concentration of non-farm workers across different sub-regions in agriculture and non-agriculture sector in rural areas, analysis on Location Quotient (LQ) was carried out (refer Table 5.5). It is observed that the non-farm sector employment was highly concentrated in the districts of Meerut, Baghpat, Bulandshahr, Panipat, Sonipat, Jhajjar, Rewari and Gurgaon and Alwar.

Moreover, districts namely Baghpat, Sonepat, Jhajjar, Rewari, Gurgaon and Alwar have a higher concentration of rural employment, more than three times higher than that of the NCR (1.00). NCT-Delhi has recorded a low LQ of 0.11 indicating very low concentrations of rural employment.

Faridabad, Ghaziabad and Gautambudh Nagar have an LQ almost equal to 1.00 depicting that the concentration of rural employment is almost equal to that of NCR taken as a whole, while Meerut and Bhagpat districts of Uttar Pradesh sub-region have a high employment concentration in agriculture sector (both OAE and establishment), while Baghpat and Bulandshar reported higher rural employment in the non-agriculture sector. Across various sub-regions, Rajasthan sub-region reported highest concentration of rural employment (combined OAE and establishments) followed by Haryana, Uttar Pradesh and NCT of Delhi sub-regions.

Table 5-5: L.Q. of Persons by Type of Enterprises in NCR Rural Areas-2005

District	Location Quotient								
	Agricultural			Non-Agricultural			All		
	OAE	Establishments	Total	OAE	Establishments	Total	OAE	Establishments	Total
Meerut	8.52	8.00	8.39	2.50	1.07	1.52	4.14	1.42	2.44
Baghpat	8.49	6.73	8.07	4.18	2.30	2.89	5.36	2.52	3.58
Ghaziabad	0.39	0.81	0.49	1.95	0.91	1.24	1.53	0.90	1.14
Gautam Buddha Nagar	1.23	0.21	0.99	0.99	1.05	1.03	1.06	1.01	1.03
Bulandshahr	4.73	6.14	5.07	4.62	1.47	2.46	4.65	1.71	2.81
Uttar Pradesh sub-region	**3.87**	**3.58**	**3.80**	**2.32**	**1.17**	**1.54**	**2.74**	**1.30**	**1.84**
Panipat	0.39	1.57	0.67	2.56	2.78	2.71	1.97	2.71	2.44
Sonipat	0.89	1.98	1.15	2.61	4.47	3.88	2.14	4.34	3.52
Rohtak	2.57	1.23	2.25	2.75	1.60	1.96	2.70	1.58	2.00
Jhajjar	0.91	1.20	0.98	2.59	4.07	3.61	2.13	3.93	3.26
Rewari	1.76	1.37	1.66	3.58	4.28	4.06	3.09	4.14	3.74
Gurgaon	1.50	1.19	1.43	2.13	4.32	3.63	1.96	4.16	3.34
Faridabad	0.54	1.43	0.76	0.94	1.43	1.28	0.83	1.43	1.21
Haryana sub-region	**1.10**	**1.42**	**1.17**	**2.13**	**3.13**	**2.82**	**1.85**	**3.04**	**2.60**
NCT of Delhi	**0.01**	**0.04**	**0.02**	**0.10**	**0.14**	**0.13**	**0.08**	**0.13**	**0.11**
Rajasthan sub-region	**2.99**	**2.32**	**2.83**	**3.79**	**3.87**	**3.85**	**3.57**	**3.79**	**3.71**
NCR	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

5.3 Mandi and Marketing Infrastructure in Rural NCR

The private trade has continued to dominate the agricultural produce markets in India. With the large quantities required to be dealt with, the private trade, the size and structure of markets over time have considerably expanded in order to meet the increasing demand. Agricultural commodities move within the marketing chain through varied channels. The marketing channels are distinguished from each other on the basis of market functionaries involved in delivering the produce from the farmers to the ultimate consumers. The length of the marketing channel depends on the size of market, nature of the commodity and the pattern of demand at the consumer level.

Government intervention in purchase of agricultural commodities under minimum support price program, procurement of food grains, market intervention scheme (MIS), monopoly purchase, open market purchases of commodities have guided the agrarian economy for decades. The quantity of commodities purchased by public agencies has traditionally depended on the objectives of the intervention. The entry of public and cooperative agencies altered the existing marketing channels and also their importance in terms of quantity marketed through them.

There are 65 regulated markets and 74 sub-yards and 282 cold storages in the NCR with the highest number of regulated markets and yards in Haryana sub-region and the highest number of cold storage in Uttar Pradesh sub-region. Meerut has the maximum number of cold storages among all districts of NCR while Alwar district has the highest number of sub-yards (refer Table 5.6)

Table 5-6: District wise Major Rural Markets, Sub-Yards and Cold Storages in NCR-2010

Sub-regions/ Districts	Regulated	Sub-yards	Cold Storages
Faridabad	6	4	3
Gurgaon	8	7	3
Jhajjar	2	3	-
Mewat	-	-	-
Panipat	5	4	5
Rewari	2	6	-
Rohtak	3	4	4
Sonipat	3	9	49
Haryana sub-region	**29**	**37**	**64**
Alwar/ Rajasthan sub-region	**3**	**16**	**3**
Baghpat	2	5	8
Bulandshahr	9	6	34
Gautambudh Nagar	4	1	22
Ghaziabad	4	4	22
Meerut	4	3	38
Uttar Pradesh Sub-region	**23**	**19**	**124**
NCT of Delhi	**10**	**2**	**91**
NCR	**65**	**74**	**282**

Source: http://rsamb.rajasthan.gov.in, http://agmarknet.nic.in

The State Warehousing Corporation (SWC), Central Warehousing Corporation (CWC) and Food Corporation of India (FCI) are responsible for building large-scale storage capacity in NCR constituent states.

Agricultural commodity markets in the NCR are limited geographically and have not seen much change in structure over time. In all, there are 23 fruits and vegetable markets in the NCR, 49 grain markets with maximum number being located in Bulandshahr district, while the fodder market is limited to Haryana sub-region of NCR and NCT of Delhi (refer Table 5.7).

Table 5-7: District Wise/Sub-Region Wise Mandis in NCR: 2010

Sl. No.	Sub-region	Fruit and vegetable	Fodder market	Fish market	Grain market	Cotton market	Wool market	Dairy	Flowers
Haryana Sub-region									
1	Faridabad	2	2	1	4				
2	Gurgaon	1	1		6				
3	Jhajjar	2			2				
4	Mewat				1				
5	Panipat	1		1	5		1		
6	Rewari	1	1		2				
7	Rohtak	1	1		3	1			
8	Sonipat	2	1		3				
Rajasthan Sub-region									
1	Alwar	0							
Uttar Pradesh Sub-region									
1	Baghpat				2				
2	Bulandshahr	7			9				
3	Gautambudh Nagar	1			4				
4	Ghaziabad	1			4				
5	Meerut	1			4				
Delhi Sub-region									
1	Delhi	3		1				2	1
NCR		**23**	**6**	**3**	**49**	**1**	**1**	**2**	**1**

Source: Sub-Regions wise respective (NCR) Websites and Statistical Handbooks

Most districts in Haryana sub-region follow an Apni Mandi (our market) concept established in the mid-90s to directly link vegetable producers and consumers. Farmer-producers facilitate the produce directly to the buyers or consumers. The Agricultural Produce Market Committee, where Apni Mandi is located, provides all necessary facilities like space, water, shed, counters and weighing balances.

In NCT-Delhi, Azadpur fruit and vegetable market is the biggest fruit and vegetable market in Asia. Other important vegetable markets in this sub-region are Okhla and Tilak Nagar. It has evolved into the national distribution centre for important fruits and vegetables. Constructed by the Delhi Development Authority (DDA) in 1977, there are about 3664 commission agents/wholesalers in the regulated market and the purpose of regulation is to ensure orderly marketing to safeguard the interests of both producers/sellers and consumers. The aim is to ensure economic legal and infrastructural conditions conducive to competitive marketing.

5.4 Agro-Processing Industry in NCR

5.4.1 Present Status in NCR

Agro-processing industries are the main component and is a subset of rural industries. There is no uniformly accepted definition of rural industries. However, rural industries are firms, which set up in rural areas using rural technology and raw material produced in the rural areas. District wise distribution of agro-processing units is given at Table 5.8.

Table 5-8: District wise Prominent Areas of Agro Processing

Districts	**Type of Agro Processing Unit**
Delhi	Wheat Processing, Rice Processing
Baghpat	Wheat, Rice
Bulandshahr	Rice Processing, Sugarcane processing
Gautam Budh Nagar	Wheat, Sugarcane and vegetable processing
Ghaziabad	Rice Processing, Sugarcane
Meerut	Rice Processing, Sugarcane
Faridabad	wheat processing
Gurgaon	Wheat processing
Jhajjar	Mustard Oil Extraction, Spices
Mewat	Gram, Barley, Mustard Oil extraction
Panipat	Rice Processing, Pickles, Sugarcane processing, Fruit and vegetable dehydration
Rewari	Mustard Oil Extraction, Spices
Rohtak	Wheat processing, cattle feed, Sugarcane
Sonipat	Rice Processing, Fruit and Vegetable processing, Mushroom
Alwar	Wheat, Groundnut, Soyabean, edible oil extraction

Source: Study of Economic Profile of NCR, 2015

India, due to variable climate and soil, produces a wide range of horticultural crops including fruits and vegetables, and is the world's second largest producer of horticulture crops. The Food Processing Industry sector in India is one of the largest in terms of production, consumption, export and growth prospects. The government maintained a high priority status for the food processing industry, with a number of fiscal reliefs and incentives in order to encourage commercialization. The value addition to agricultural produce aims at minimizing pre-harvest or post-harvest wastage, employment generation and export growth.

The NCR is very rich in the production of agri-products like sugarcane, rice and horticulture products. Rice milling is one of the major industries in Panipat and Sonipat districts in Haryana sub-region and Meerut, Bulandshahr and Ghaziabad districts in Uttar Pradesh sub-region. There is also abundant production of long grain aromatic rice in NCR and adjoining areas. For this reason, there are ample opportunities for the processed agro products. There are a number of such processing units in NCR, especially around Panipat. In addition, there is an abundant investment opportunities for the expansion of the export market in the NCR. The Agro-processed product market demand will be met by the increasing acceptance of the new products coupled with market development efforts necessitated by the strong international demand for certain fruits and vegetable products.

a) Haryana sub-region

The Haryana sub-region has the advantage of being an agrarian region with abundant fertile land. It is a major contributor to the nation's base for production of fruits and vegetables (perishable commodities). It enjoys the geographical advantage of its proximity to one of the largest consumer markets of Delhi and the adjoining urban agglomerations. As such, the state offers a huge potential for the establishment of Agro-based and Food Processing industry. The Food Processing industry includes the manufacturing of value added products but also the associated service industry which provides the required Business Development Services (BDS) such as cold chain, storage, grading and sorting, segregation and packaging of the fruits and vegetable products. The State has initiated development of a food park in Haryana sub-region near Rai (Kundli, Sonepat district); along with this, the Ministry of Food Processing, Government of India has set up a National Institute of Food Technology Entrepreneurship and Management (NIFTEM) at Kundli to serve as a knowledge centre for food processing.

b) Uttar Pradesh sub-region

The State has provided a number of incentives like electricity and interest-free loans for Agro-based and Food Processing industries. Uttar Pradesh sub-region has a substantial base of Horticulture based industries. There is a tremendous scope for development of floriculture and homogeneous industries in the NCR. Meerut and Ghaziabad districts have a potential of becoming a strong and competitive base for the processing of Mango, Litchi, Chillies, Damask Rose, Gladioli, Potato and other vegetables.

The inter-dependency between Agriculture and Agro-industry was found to be well established in terms of aggregate output and value added. For this reason, sub-regions of Haryana and Uttar Pradesh have potential for the development of the Agro-based industries.

c) Rajasthan sub-region

There is scope for development of food processing industries in the Rajasthan sub-region. Rajasthan ranks first in production of mustard, bajra and guar fenugreek, and coriander and cumin. Other important products are isabgol and henna (mehndi), products like barley, soyabean, gram, total oil seeds, castor and rabi pulses. Rajasthan also has a prominent place in the production of some of the herbs like guggal, ashwagandha, aloe-vera, etc. It also produces onion, tomato, chilly, garlic, ker and sangri in Alwar district and nearby areas.

5.4.2 Major Challenges for the Growth of Food Processing Industry in NCR

Major challenges for the growth of food-processing industry in NCR are:

a) Size of production unit due to urbanization pressure and increasing cost of land;
b) Availability of adequate water supply due to limited irrigation facilities and ground water availability;
c) The price of fruit and vegetable often fluctuate specially in the areas near to NCT;

d) Horticulture practices in NCR are not standardized; and
e) Difficulties in getting financial support from Banks/Financial Institutions for perishable goods.

5.5 Government Programmes in Rural NCR

Several Rural development and employment generation programmes are being implemented in NCR. The flagship programmes of Government of India are given in the Table 5.9.

Table 5-9: Major Flagship Programmes of Government of India relating to Economic & Infrastructure Developmentand in Rural Areas

S. No	Name of the Programme
A	**Rural Employment/Livelihood**
1	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
2	Swarnjayanti Gram Swarojgar Yojana (now called National Rural Livelihood Mission)
3	National Social Assistance Programme (NSAP)
4	Natinal Social Assistance Programme (NSAP)
B	**Rural Connectivity/Infrastructure/Housing**
5	Pradhan Mantri Gram Sadak Yojana (PMGSY)
6	Indira Awaas Yojana (IAY)
7	Integrated Watershed Management Programme (IWMP)
8	National Rural Water Supply Programme (NRWSP)
9	Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Bulandshahar district in U.P. sub-region has made maximum expenditure under MGNREGA of Rs. 30.42 crores during the financial year 2011-12 followed by Mewat district in Haryana sub-region with the total expenditure of 13.78 crores during the same period. All other districts in NCR have an expenditure figure less than Rs. 10 crores.

Under PMGSY, during 2011-12 maximum expenditure has been incurred in Alwar district of Rajasthan sub-region (about Rs. 300 crores) among the four sub-regions, followed by Ghaziabad, Bulandshahr, Meerut and Bhagpat districts of U.P. sub-region of NCR (refer Table 5.10)

Table 5-10: Status of expenditure made during 2011-12 in various programmes in districts of NCR (Rs. in Crores)

Sl. No.	District/Sub-region	PMGSY	RGGVY	MGNREGA	TSC#
A	**Haryana sub-region**				
1	Faridabad	68.03	0	0.53	4.94
2	Gurgaon	80.84	*	0.45	4.57
3	Jhajjar	117.76	6.23	2.87	6.35
4	Panipat	87.64	9.51	4.11	7.64
5	Rewari	83.97	11.09	2.16	6.67
6	Rohtak	99.14	5.54	2.76	4.52

7	Mewat	*	16.09	13.78	0.8
8	Palwal	*	*	3.32	*
9	Sonepat	82.08	16.88	4.18	5.01
B	**U.P. sub-region**				
1	Meerut	112.43	0	4.88	13.35
2	Baghpat	106.29	0	6.38	11.87
3	Ghaziabad	136.77	5.85	6.16	8.25
4	Gautambudh Nagar	70.51	0	1.42	6.25
5	Bulandshaher	116.64	17.49	30.42	17.29
C	**Rajasthan sub-region**				
1	Alwar	298.26	51.14	0	9.68
D	**NCT-Delhi sub-region**				
1	NCT of Delhi	*	*	*	*

* Marked entries denote that either the programme is not running in corresponding NCR districts or the data is not available.

PMGSY-Pradhan Mantri Gram Sadak Yojana, RGGVY-Rajiv Gandhi Gramin Vidyutikaran Yojana, MGNREGA-Mahatma Gandhi National Rural Employment Guarantee Act; TSC-Total Sanitation Campaign also Sampoorn Swachchhata Abhiyan (now Swachh Bharat Abhiyaan)

5.6 NCR Rural Economy: Major Issues

Despite the peculiarities of rural areas in the NCR, a separate identity for rural industries has not yet been institutionalized. It is abundantly clear that this sector offers opportunities to absorb millions of workers and also acts as a catalyst for poverty reduction if given its due share. It will pave the way for village industrialization in remote/backward areas by making full and judicious use of available resources through induction of appropriate technologies and support services. For example, the Khadi and village industries activities, if developed properly, can contribute to arresting the exodus of population from rural areas to urban areas to a large extent and thus reduce social costs of urbanization. It has been established that the NCR from a rural development perspective, is not a homogeneous entity and that the four sub-regions have their unique rural development issues.

The NCT-Delhi has very limited rural land. In the absence of agriculture activities, a number of informal sector activities have sprouted. As a result, most of the working population, earlier engaged in agriculture related activities, is engaged in the informal sector.

It is also felt that the non-farm sector in the NCR can play an important role in the revival of the NCR rural economy. Haryana and Uttar Pradesh sub-regions have undergone substantial changes in their rural economic structure over the last decade due to increasing urbanization and modernization of rural sectors in these sub-regions.

On one hand, NCT-Delhi has witnessed a decrease in rural population (and workforce) as well as agricultural and related establishments over the last few decades, on the other hand Haryana and Uttar Pradesh sub-regions report an increase in the rural population (and workforce) as well as establishments of industries in the rural areas. Gurgaon and Ghaziabad districts, in particular, have witnessed a rapid increase in non-agricultural establishments.

In terms of sector growth, in spite of a rich horticulture background the processing of horticulture products is still very low. Rural infrastructure especially in terms of cold storage and other facilities still warrants attention for development, both in terms of produce targeted (presently targeting potato) and size of cold storage units (smaller units near production areas to be emphasized rather than promoting only large centralized units). Development of this sector is critical as post-harvest loss of horticulture produce varies between 5%-39% of the total production. Another major obstacle to the proper functioning and development of cold storages and food processing industries is the non-availability of regular power supply in the outskirts of the NCR.

6. INFORMAL SECTOR

6.1 Background

In India, wage employment constitutes a small fraction of total employment. As per estimates of the National Sample Survey Organization (NSSO), there were about 90 lakh people unemployed in 1999-2000, out of which about 55 lakh individuals has attained secondary or higher education levels. An equally serious concern is the large number of employed persons working with low levels of productivity and income.

The unorganized sector covers a vast range of economic activities, which have a major contribution in terms of employment. This sector has become an inevitable part of the national economy. In past years, the importance and the role of the unorganized sector have increased so much that its contribution is also accounted for in the national Gross Domestic Product.

The informal sector units in the NCR can be differentiated as three types. The first type consists of micro and small units, and is found in the vicinity of organized large industries. Their primary role is to serve large industries as sub-contractors. For example, Govindpuri in South–East Delhi mainly provides sub-contracting services to the garment units in Okhla and NOIDA. Similarly, other sub-contractors such as NGOs, Self Help Groups, and other informal networks also exist in the NCT-Delhi sub-region. The second type consists of units producing specialized products. For example; Khurja for pottery and ceramics, Tri Nagar for PVC and plastics, Vishwas Nagar for cables, plastics and utensils, Alwar for fabrication and metal products and Sonipat for light engineering and metal products. The third type consists of the service sector for example; construction workers, petty traders, street vendors, other home-based service providers facilitating laundry, transport and domestic help, etc. Details of share of informal, organized and unorganized sectors in the national economy are given in Table 6.1.

Table 6-1: Estimates of Employment in Informal Sector

Share of Informal sector in Net Domestic Product: 2001-02						
Sl. No.	**Industry Group**	**Informal**	**Others**	**Unorganized**	**Organized**	**Total**
1	Agriculture, forestry and fishing	25.5		25.5	0.9	26.4
2	Mining and quarrying	0.2		0.2	1.8	2.0
3	Manufacturing	1.6	3.4	5.0	8.4	13.4
4	Electricity, gas and water supply	0.1		0.1	1.0	1.0
5	Construction	3.9		3.9	2.5	6.4
6	Trade, Hotels, restaurants	9.3	2.5	11.9	3.8	15.6
7	Transport and communication	3.3	0.6	3.9	2.8	6.7
8	Real estate, financial services and ownership of dwellings	2.6	2.9	5.4	7.6	13.0
9	Community, social and personal Services	1.3	1.3	2.6	12.8	15.4
	Total	**47.7**	**10.7**	**58.5**	**41.5**	**100.0**

Source: National Commission on Enterprises in the Unorganized/Informal Sector, India

6.2 Definition of Informal Sector

The informal sector or informal economy or grey economy is a part of an economy that is not taxed, nor monitored by any form of government. In the manufacturing sector, the definition of the informal sector is based on the legal status of the enterprise. The legal status is achieved through registration. The Task Force on Definitional and Statistical issues relating to the Unorganized Sector defined the term ‘unorganised sector’ as under:

> *"The unorganized sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers".*

The National Commission on Enterprises in the Unorganized/Informal Sector (NCEUS) also defines the informal sector employment as under:

> *“Unorganized workers are those who work in the unorganized sector or households. However, workers employed in the unorganized sector, workers with social security benefits are an exception to the rule. In the formal sector, the unemployed workers without the social security benefits are part of the informal sector.”*

The definitions mentioned above on the formal and informal sector is used as a standard definition. The NCEUS does not distinguish the unorganized from the informal, and these terms are used interchangeably.

The informal, formal and household sectors often have varied employment statuses or work arrangements. The employment status is the primary indicator of the degree of security and vulnerability. The unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services that operate on a proprietary or partnership basis with less than ten workers are also a part of the informal sector.

The First Indian National Commission on Labour (1966-69) defined unorganized sector as under:

> *“Those workers who have not been able to organize themselves in pursuit of their common interest due to certain constraints like casual nature of employment, ignorance and illiteracy, small and scattered size of establishments”.*

The most common parameter used to define the informal sector is the number of workers. Some of the other factors that define informal activity are investment, turnover, and market type. Informal sector, which may be linked to organized sector, is still not fully integrated into the definition of the economic activity in its true sense.

6.3 Data on Informal Sector

The NSSO, which conducts surveys of unorganized enterprises at periodical intervals, has the following criteria for the identification of unorganized sector:

In the case of manufacturing sector, the enterprises not covered by the Annual Survey of Industries (ASI) are taken to be a part of the unorganized sector.

In the case of service sector, all enterprises, except those run by the Government (Central, State and Local bodies) and corporate sector, are regarded as un-organized.

The NSSO also conducted an informal sector survey in 1999-2000. All non-agricultural enterprises with criteria as ownership of either proprietary or partnership excluding those covered by the ASI were treated as informal non-agricultural enterprises for the purpose of the survey.

Under National Accounts compilation, the term un-organized sector is used to represent the residual enterprises, which are not included in the organized sector. The coverage of organized sector, however, differed across different segments of the economy based on availability of data and accessibility of various administrative sources.

The Directorate General of Employment and Training (DGET) considers all establishments employing ten workers or more as an organized sector. The Employment Exchange (Compulsory Notification of Vacancies) Act, 1959, makes it mandatory to submit employment returns only for those units ordinarily employing 25 or more persons.

The informal sector enterprises are divided into the three basic types of enterprises: Own Account Manufacturing enterprises (OAMEs), Non-Directory Manufacturing Enterprises (NDMEs) and Directory Manufacturing Enterprises (DMEs). The enterprises divided on the basis of sectors are Rural and Urban.

The size of registered and organized sectors in India is often small; rest of the economic activities fall under the unorganized or informal sector category. In the case of manufacturing sector, the definition of organized or formal is clear. All enterprises that are registrated under Factory Act 1948 are considered organized or formal.

The approximation of informal sector activities was carried out by undertaking the data available in the Economic Census.

As the NSS data for these sub-regions are not available, the Functional Plan estimate relies on two sources: (i) NSS data for informal sector in NCT-Delhi and (ii) Economic Census data for Uttar Pradesh, Haryana and Rajasthan sub-regions. Economic Census as the residual approach is used to analyse the informal sector.

6.4 Unorganised Manufacturing and Informal Service Sector in NCT-Delhi sub-region

6.4.1 Background

Manufacturing sector in NCT-Delhi sub-region contributes to about 9.38% of the Gross State Domestic Product (GSDP) (2005-06), out of which 7% is contributed by the unorganized sector and 2.38% comes from the organized manufacturing sector. As per the NSS survey (62nd Round) in 2006-2007 the total number of unorganized manufacturing enterprises was at 1,00,740 units. Out of the total enterprises, 20.30% were located in rural areas, and 79.70% were operating in urban areas of NCT-Delhi.

6.4.2 Unorganised Manufacturing Sector in NCT-Delhi sub-region

The manufacture of wearing apparels, dressing and dyeing (NIC 18) contributes to 28.29% of total number of unorganized manufacturing enterprises, followed by manufacture of fabricated metal products (NIC 28) at 22.00% and manufacture of furniture (NIC 36) at 7.25%. Other major sectors contributing are food products and beverages (5.86%), motor vehicle, etc. (5.31%) and machinery and equipments (4.88%) (refer Table 6.2).

According to NSS data (2005-06), total employment generated by the unorganized manufacturing enterprises was about 4.82 lakhs.

Table 6-2: Unorganised Manufacturing Enterprises in NCT-Delhi

Sl. No.	Industry Code	Description	Enterprise	Percentage	Rank
1	18	Manufacture of Wearing Apparels; Dressing & Dyeing of Fur	28,495	28.29	1
2	28	Manufacture of Fabricated Metal Products, Except Machinery & Equipment	22,165	22	2
3	36	Manufacture of Furniture; Mfg. NEC	7,300	7.25	3
4	15	Manufacture of Food Products & Beverages	5,907	5.86	4
5	34	Manufacture of Motor Vehicles, Trailers & Semi- Trailers	5,354	5.31	5
6	29	Manufacture of Machinery & Equipment	4,916	4.88	6
7	22	Publishing, Printing & Reproduction of Recorded Media	4,256	4.22	7
8	17	Manufacture of Textiles	3,941	3.91	8
9	31	Manufacture of Electrical Machinery & Apparatus	3,480	3.45	9
10	19	Tanning & Dressing of Leather: Mfg of Luggage, Handbags, Footwear, etc.	3,467	3.44	10
11	21	Manufacture of Paper & Paper Products	2,380	2.36	11
12	32	Manufacture of Radio, Television & Communication Equipment & apparatus	2,179	2.16	12
13	25	Manufacture of Rubber & plastic Products	1,862	1.85	13
14	35	Manufacture of Other Transport Equipment	1,676	1.66	14
15	20	Manufacture of Wood Products	1,239	1.23	15
16	26	Manufacture of Other Non-Metallic Mineral Products	683	0.68	16
17	33	Manufacture of Medical, Precision & Optical Instruments, Watches & Clocks	672	0.67	17

Sl. No.	Industry Code	Description	Enterprise	Percentage	Rank
18	27	Manufacture of Basic Metals	603	0.6	18
19	24	Manufacture of Chemicals & Chemicals Products	164	0.16	19
20	30	Manufacture of Office, Accounting & Apparatus	1	0	20
		Total	**1,00,740**	**100**	

Source: Unorganized Manufacturing Enterprises in Delhi, NSS 62nd Round, July 2005 - June 2006

6.4.3 Informal Service Sector in NCT-Delhi sub-region

The service sector has been one of the paramount contributors towards the country's GDP, both at the state and national level. In NCT-Delhi, the service sector contributes to about 79% to the GSDP, employing over 35% of the population (refer Table 6.3). The Economic Census (2005) stated that around 40% enterprises were a part of the service sector itself. In Net State Domestic Product (NSDP) at constant prices, there has been a 13% increase from 1980s to 2008-09; however, these estimates include both organized and unorganized sectors of the service sector.

Out of the total enterprises, about 89.04% operate in the urban areas and 10.96% in the rural areas. The Enterprises have been classified into 'Own Account Enterprises (OAE)' and 'Establishments' in terms of service sector. Out of the total enterprises in service sector, the own account enterprises accounts for 61.51%, while establishments contributing 38.49% (refer Table 6.3).

Table 6-3: Informal Service sector in Delhi

Sector	Own Account Enterprises	Establishments	All	% to Total
Rural	18,184	8,060	26,244	10.96
Urban	1,29,097	84,106	2,13,203	89.04
Delhi	1,47,281	92,166	2,39,447	100
% to Total	**61.51**	**38.49**	**100**	

Source: Report on Service Sector Enterprises in Delhi, NSS 63rd Round, July 2006 - June 2007

The largest proportion of informal service sector enterprises is in the field of Communication (18.4%), followed by Real Estate, Renting and Business Activities (17.23%) and the least share is observed in Non-Banking Financial Institutions (0.43%) (refer Table 6.4).

Table 6-4: Category wise Distribution of Enterprises in Service Sector

Tabulation Category	Description	Number of Enterprises	Share % in total
H1	Hotels	1,757	0.73%
H2	Restaurants	28,498	11.9%
I1	Storage and Warehousing	0	0
I2	Mechanized road transport	21,519	8.99%

Tabulation Category	Description	Number of Enterprises	Share % in total
I3	Non-mechanized transport, water transport and other related activities	26,065	10.89%
I4	Communication	44,054	18.4%
J1	Non-Banking financial institutions except Insurance and Pension funding	1,035	0.43%
J2	Insurance and Pension funding and Auxiliary activities	1,923	0.8%
K	Real estate, Renting and Business activities	2,958	17.23%
M	Education	41,246	5.69%
N	Health and Social work	20,035	8.37%
O	Other community, Social and Personal service activities	39,696	16.57%

Source: Report on Service Sector Enterprises in Delhi, NSS 63rd Round, July 2006 – June 2007

6.5 Enterprises and Employment in Informal Sector

6.5.1 Informal Sector Enterprises

At NCR level, there are 15.64 Lakhs of enterprises in 2005. There are total 8.30 Lakhs of Own Account Enterprises (OAE), out of which 0.58 Lakhs are in agriculral sector and remaining 7.72 Lakhs are in non-agricultural sectors.

At sub-region level, NCT-Delhi has the highest concentration of informal sector enterprises (7.58 Lakhs), followed by Uttar Pradesh (3.96 Lakhs), Haryana (3.21 Lakhs) and Rajasthan (0.89 Lakhs) sub-regions. Sector level analysis indicates that in NCT-Delhi sub-region, about 99.47% (7,54,453) of total enterprises are in non-agriculral activities, whereas this proportion is 88.43% (3,50,200), 94.87% (3,04,660) and 90.42% (80,952) in Uttar Pradesh, Haryana and Rajasthan sub-regions respectively.

At district level, after NCT-Delhi, Meerut district has maximum (1.19 Lakhs) number of enterprises, followed by Ghaziabad district (1.18 Lakhs). Jhajjar district of Haryana sub-region has least number of enterprises (24,469). Gautambuddhaa Nagar district also has the highest number of OAE in the agriculture sector (refer Table 6.5).

Details of number of enterprises in 2005 by type in NCR in Urban and Rural Areas are given at Annexure-6.1 and Annexure-6.2 respectively.

Table 6-5: Number of Enterprises by Type in NCR-2005

	Agricultural			Non-agricultural			All		
Districts	**OAE***	**Est.***	**Total**	**OAE**	**Est.**	**Total**	**OAE**	**Est.**	**Total**
Meerut	19,080	4,562	23,642	62,171	33,576	95,747	81,251	38,138	1,1,9389
Baghpat	7,535	1,410	8,945	23,748	7,841	31,589	31,283	9,251	40,534
Ghaziabad	2,138	888	3,026	72,819	42,369	1,15,188	74,957	43,257	1,18,214

	Agricultural			Non-agricultural			All		
Districts	**OAE***	**Est.***	**Total**	**OAE**	**Est.**	**Total**	**OAE**	**Est.**	**Total**
Gautam Buddh Nagar	4,035	267	4,302	27,572	15,590	43,162	31,607	15,857	47,464
Bulandshahe r	4,404	1,507	5,911	48,920	15,594	64,514	53,324	17,101	70,425
UP Sub-Region	**37,192**	**8,634**	**45,826**	**2,35,230**	**1,14,970**	**3,50,200**	**2,72,422**	**1,23,604**	**3,96,026**
Panipat	699	378	1,077	26,393	15,280	41,673	27,092	15,658	42,750
Sonepat	1,311	527	1,838	24,729	12,263	36,992	26,040	12,790	38,830
Rohtak	3,120	569	3,689	26,037	10,209	36,246	29,157	10,778	39,935
Jhajjar	643	188	831	16,519	7,119	23,638	17,162	7,307	24,469
Rewari	1,371	257	1,628	16,383	10,774	27,157	17,754	11,031	28,785
Gurgaon	3,583	597	4,180	35,853	26,079	61,932	39,436	26,676	66,112
Faridabad	1,606	1,608	3,214	34,512	42,510	77,022	36,118	44,118	80,236
Haryana Sub-Region	**12,333**	**4,124**	**16,457**	**1,80,426**	**1,24,234**	**3,04,660**	**1,92,759**	**1,28,358**	**3,21,117**
NCT-Delhi Sub-Region	**1,187**	**2,103**	**3,290**	**3,12,479**	**4,41,974**	**7,54,453**	**3,13,666**	**4,44,077**	**7,57,743**
Rajasthan Sub-Region	**7,029**	**1,545**	**8,574**	**44,455**	**36,497**	**80,952**	**51,484**	**38,042**	**89,526**
NCR	**57,741**	**16,406**	**74,147**	**7,72,590**	**7,17,675**	**14,90,265**	**8,30,331**	**7,34,08 1**	**15,64,41 2**

Source: Economic Census 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

*Own Account Manufacturing enterprises (OAMEs): An enterprise, which is run without any hired worker employed on a fairly regular basis, is termed as an own account enterprise. If such an enterprise is engaged in manufacturing and/or repairing activities, it is termed as Own Account Manufacturing Enterprise (OAME).

Establishment: An enterprise can be termed as Establishment as and when at least one worker is hired worker on a fairly regular basis. Paid household member/servant/resident worker in an enterprise are considered hired workers. Establishments have further been categorized into two types: non-directory and directory.

6.5.2 Informal Sector Employment

At NCR level, there are 58.75 Lakhs workers engaged in informal activities. There are total 10.70 Lakhs of workers engaged in household units (Own Account Enterprises), out of which 1.20 Lakhs are in agriculral sector and remaining 9.50 Lakhs are in non-agricultural sectors.

At sub-region level, NCT-Delhi has the highest concentration of workers (35.56 Lakhs), followed by Haryana (10.63 Lakhs), Uttar Pradesh (10.39 Lakhs) and Rajasthan (2.16 Lakhs) sub-regions. Sector level analysis indicates that in NCT-Delhi sub-region, about 99.66% (35,44,125) workers are engaged in non-agriculral activities, whereas this proportion is 96.61% (10,27,044), 89.53% (9,30,442) and 92.79% (2,00296) in Haryana, Uttar Pradesh and Rajasthan sub-regions respectively.

At district level, after NCT-Delhi, Gautambuddha Nagar district has maximum (more than 3 Lakhs) number of workers, followed by Faridabad district (2.76 Lakhs) and Ghaziabad district (2.58 Lakhs). Rewari district of Haryana sub-region has least number of workers at 78,166. Gautambuddhaa Nagar district also has the highest number of OAE in the agriculture sector.

NCT-Delhi has the least number of workers (2551) in OAE in the agriculture sector. NCT-Delhi has maximum a number of hired persons in their enterprises (refer Table 6.6).

Details of number of persons by type of Enterprises in NCR in Urban and Rural Areas in 2005 are given at Annexure-6.3 and Annexure-6.4 respectively and details of share of persons usually working in various types of enterprises is given at Annexure-6.5.

Table 6-6: Employment in Agriculture and non Agriculture activities

District/sub-region	No. of persons usually working								
	Agricultural			Non-agricultural			All		
	OAE	Est.	Total	OAE	Est.	Total	OAE	Est.	Total
Meerut	43,046	14,152	57,198	80,947	1,19,815	2,00,762	1,23,993	1,33,967	2,57,960
Baghpat	13,886	3,778	17,664	31,026	36,571	67,597	44,912	40,349	85,261
Ghaziabad	3,084	2,431	5,515	87,309	1,65,277	2,52,586	90,393	1,67,708	2,58,101
Gautam Buddh Nagar	10,958	1,140	12,098	35,889	2,58,591	2,94,480	46,847	2,59,731	3,06,578
Bulandshahr	11,444	4,790	16,234	69,507	45,510	1,15,017	80,951	50,300	1,31,251
Uttar Pradesh Total	**82,418**	**26,291**	**1,08,709**	**3,04,678**	**6,25,764**	**9,30,442**	**3,87,096**	**6,52,055**	**1,03,9151**
Panipat	1,127	1,743	2,870	30,807	1,00,632	1,31,439	31,934	1,02,375	1,34,309
Sonipat	2,431	2,175	4,606	28,797	98,125	1,26,922	31,228	1,00,300	1,31,528
Rohtak	4,964	1,713	6,677	30,280	55,981	86,261	35,244	57,694	92,938
Jhajjar	1,608	771	2,379	19,187	71,403	90,590	20,795	72,174	92,969
Rewari	2,544	954	3,498	18,853	55,815	74,668	21,397	56,769	78,166
Gurgaon	7,007	2,184	9,191	43,441	2,04,672	2,48,113	50,448	2,06,856	2,57,304
Faridabad	3,204	3,982	7,186	40,217	2,28,834	2,69,051	43,421	2,32,816	2,76,237
Haryana	**22,885**	**13,522**	**36,407**	**2,11,582**	**8,15,462**	**10,27,044**	**2,34,467**	**8,28,984**	**10,63,451**
Delhi NCT	**2,551**	**9,711**	**12,262**	**3,79,259**	**31,64,866**	**35,44,125**	**3,81,810**	**31,74,577**	**35,56,387**
Rajasthan	**12,292**	**3,267**	**15,559**	**54,848**	**1,45,448**	**2,00,296**	**67,140**	**1,48,715**	**2,15,855**
NCR	**1,20,146**	**52,791**	**1,72,937**	**9,50,363**	**47,51,540**	**57,01,907**	**10,70,513**	**48,04,331**	**58,74,844**

Source: Economic Census 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

There, a is a sizeable presence of informal activities and enterprise in various towns in the NCR, which produce comparatively inexpensive wage goods and services while providing abundant opportunities for self-employment to the thousand of migrants.

Meerut, Ghaziabad, Bulandshahr and Delhi have the highest number of artisanal works. Leather footwear-products, devices and rugs by hand, zari work, textile hand printed, and lead-based articles are few of the common artisanal works prevalently in these areas. Meerut and Ghaziabad both have 10 artisanal clusters and Delhi and Bulandshahr have 9 artisanal clusters.

Jhajjar has only one such cluster that is of grass, reed and fiber. Whereas, just ahead of Jhajjar stand Palwal and Faridabad with two clusters of grass, leaf and reed, stone inlay and wood inlay and metal work respectively.

Rohtak and Rewari have four artisanal clusters each. In Rohtak, there is metal-ware, earthenware; stone inlay and wood inlay works are prevalent. This may be attributed to the already existing activities of textile, hand embroidery, jewelry, leather footwear and wood inlay works in Rewari.

There are few works, which exist only in few places such as, metal jewelry cluster exists only in Meerut, carpet cluster is running only in Panipat, imitation jewelry in Delhi and printing of cloth by hand in Ghaziabad.

6.6 Conclusions

Workers in the informal sector earn an unstable and comparatively low income, and do not have access to basic protections and services. Informal businesses also lack the potential for growth, trapping employees in menial jobs for an indefinite period. On the other hand, the informal sector provides employment to a large proportion of the population and save them from extreme poverty. Appropriate policy is required to be formulated & implemented in order to extend necessary support and infrastructure to the informal sector and bring them to the mainstream.

7. POLICY FRAMEWORK

7.1 Background

There is a need to recognize the changing dynamics of economic activity in NCR, after due consideration of the physical and financial challenges. A major shift has come in the form of regulation and administration of economic activities to facilitate investment and technology flows and monitoring industrial development in NCR. The constitutent State Governments have worked with different intensity with the basic objective of:

(i) Formulation and implementation of industrial policy and strategies for industrial development in conformity with the development needs and states and regional objectives
(ii) Monitoring the industrial growth
(iii) Formulation of Foreign Direct Investment (FDI) Policy and promotion
(iv) Encouragement to foreign technology collaborations at enterprise level and formulating policy parameters for the same
(v) Promoting industrial development for balanced development
(vi) Promotion of productivity, quality and technical cooperation

7.2 Flagship Programmes of Government of India

7.2.1 Make in India

Make in India is a new industrial economic development campaign launched by Government of India in 2014 to facilitate investment; foster innovation, enhance skill development, protection of intellectual property, bring in more private investment and creating manufacturing infrastructure of international standards. The campaign strives to work with a broad perspective of *zero defect zero effect* which implies the products developed and manufactured in India is free of defects and does not affect the environment and ecology adversely. The initiative focus on 25 core sectors of the economy; some of these sectors include automobiles, electronics, electrical, bio-technology, IT, pharmaceuticals, chemical, renewable energy, space, aviation, defense etc.

Major highlights of the Programme are as under:

(i) New de-licensing and deregulation measures to reduce complexity and to significantly increase speed and transparency to ensure ease of doing business in India.

(ii) Growth in manufacturing, infrastructure and capacity for innovation by setting up of new smart cities and industrial clusters, being developed in identified industrial corridors having connectivity, new youth-focused programs and institutions dedicated to developing specialized skills.

(iii) Easing of investment caps and controls such as allowing FDI upto 49% for global participation in high-value industrial sectors – defense, construction and railways.

(iv) Easing of FDI norms in 15 sectors, allowing 100% FDI under the auto route in sectors, other than defense, plantations, banking, pharma etc.

(v) Investment allowance (additional depreciation) at the rate of 15 percent to manufacturing companies that invest more than Rs. 1 billion in plant and machinery.

(vi) Incentives to units in Special Economic Zones (SEZs), National Investment & Manufacturing Zones (NIMZs), Export Oriented Units (EOUs), etc. in the form of duty drawback, duty exemption/remission schemes, focus products & market schemes etc.

(vii) Various other Central Government incentives.

(viii) State Government incentives such as stamp duty exemption for land acquisition, refund or exemption of value added tax, exemption from payment of electricity duty etc.

Projects

(i) Five industrial corridor projects have been identified, planned and launched by the Government of India in the Union Budget of 2014-2015, to provide an impetus to industrialisation and planned urbanisation. In each of these corridors, manufacturing will be a key economic driver and these projects are seen as critical in raising the share of manufacturing in India's Gross Domestic Product from the current levels of 15% to 16% to 25% by 2022.

(ii) Along these corridors, the development of 100 Smart Cities has also been envisaged in the Union Budget of 2014-2015. These cities are being developed to integrate the new workforce that will power manufacturing along the industrial corridors and to decongest India's urban housing scenario.

(iii) A National Industrial Corridor Development Authority (NICDA) is being established to converge and integrate the development of all industrial corridors.

7.2.2 Skill India

Skill India is a Government of India initiative launched in 2015 with the objective to train over 40 crore people in different skills by 2022. The initiatives include National Skill Development Mission, National Policy for Skill Development and Entrepreneurship 2015, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme and the Skill Loan scheme. Under the programme, 31 potential sectors are chosen, in which persons would be trained in 1507 Qualification Packs (QPs) in Level 1 to 8 category. To achieve the target, sector specific skill councils are formed, and skill development activities are conducted in pan India basis by empanelling hundreds of training providers.

(a) National Skill Development Mission

The National Skill Development Mission will provide a strong institutional framework at the Centre and States for implementation of skilling activities in the country.

The Mission has a three-tiered, high powered decision making structure. At its apex, the Mission's Governing Council, chaired by the Prime Minister, will provide overall guidance and policy direction. The Steering Committee, chaired by Minister in Charge of Skill Development, will review the Mission's activities in line with the direction set by the Governing Council. The Mission Directorate, with Secretary, Skill Development as Mission Director, will ensure implementation, coordination and convergence of skilling activities across Central Ministries/Departments and State Governments. The Mission will also run select sub-missions in high priority areas. Further, the National Skill Development Agency (NSDA), the National Skill Development Corporation (NSDC) and the Directorate of Training will function under the overall guidance of the Mission. The Ministry of Skill Development and

Entrepreneurship (MSDE) is the nodal Ministry for the Mission, which coordinates with all three decisions making levels and facilitating linkages to all Central Ministries/Departments and State Governments.

(b) National Policy for Skill Development and Entrepreneurship 2015

The policy aim is to provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link the skilling with demand centres. In addition to laying down the objectives and expected outcomes, the effort is taken to identify various institutional frameworks which can act as the vehicle to reach the expected outcomes. The national policy also provides clarity and coherence on how skill development efforts across the country can be aligned within the existing institutional arrangements. This policy will link skills development to improved employability and productivity.

(c) Prime Minister Kaushal Vikas Yojana (PMKVY)

The objective of this Scheme is to encourage skill development for youth by providing monetary rewards for successful completion of approved training programs. Target for skill training would be aligned to the demand from the Central Government's flagship programmes, such as - 'Swachh Bharat', 'Make in India', 'Digital India', 'National Solar Mission' etc. Training will be done against standards (National Occupational Standards - NOS and Qualification Packs - QPs for specific job roles) formulated by industry-driven bodies, namely the Sector Skills Councils (SSCs). The scheme targets to benefit 24 lakh youth at an approximate total cost of Rs. 1,500 Crores.

7.2.3 Digital India

Digital India is an initiative of Government of India to transform India into digital empowered society and knowledge economy. This programme has been envisaged by Department of Electronics and Information Technology (DeitY) and would be implemented in phases till 2019. It is an initiative to integrate the government departments and the people of India. It aims at ensuring the government services are made available to citizens electronically by reducing paperwork. The initiative also includes plan to connect rural areas with high-speed internet networks. Digital India has three core components. These include:

(i) Creation of digital infrastructure
(ii) Delivering services digitally
(iii) Digital literacy.

7.3 Policy Framework of the Regional Plan-2021 for NCR and Sub-Regional Plans

Regional Plan-2021 for NCR is a policy document of interrelated sectors of economic scenario, transport, telecommunication, power, water, sewerage, solid waste management, drainage, heritage & tourism, environment, rural development, regional landuse, etc. Economic Development is one of the most important aspects which governs/channelize the growth of a settlement.

NCR participating State Governments are required to prepare Sub-Regional Plans for their respective sub-regions, within the broad policy framework of the Regional Plan. After the notification of the Regional Plan-201 for NCR in 2005, the participating State Givernments have prepared/finalized their respective Sub-Regional Plans. In case of NCT-Delhi, Board decided that the Master Plan for Delhi-2021 be treated as Sub-Regional Plan.

Details of the policies and proposals of the Regional Plan and Sub-Regional Plans are given in the subsequent section.

7.3.1 Regional Plan-2021 for NCR

The Regional Plan-2021 proposes "to harness the spread of the developmental impulse and agglomeration economies generated by Delhi for harmonized, balanced and environmentally sustainable spatio-economic development of the NCR with effective cooperation of the participating States".

(a) Objectives of the Regional Plan-2021

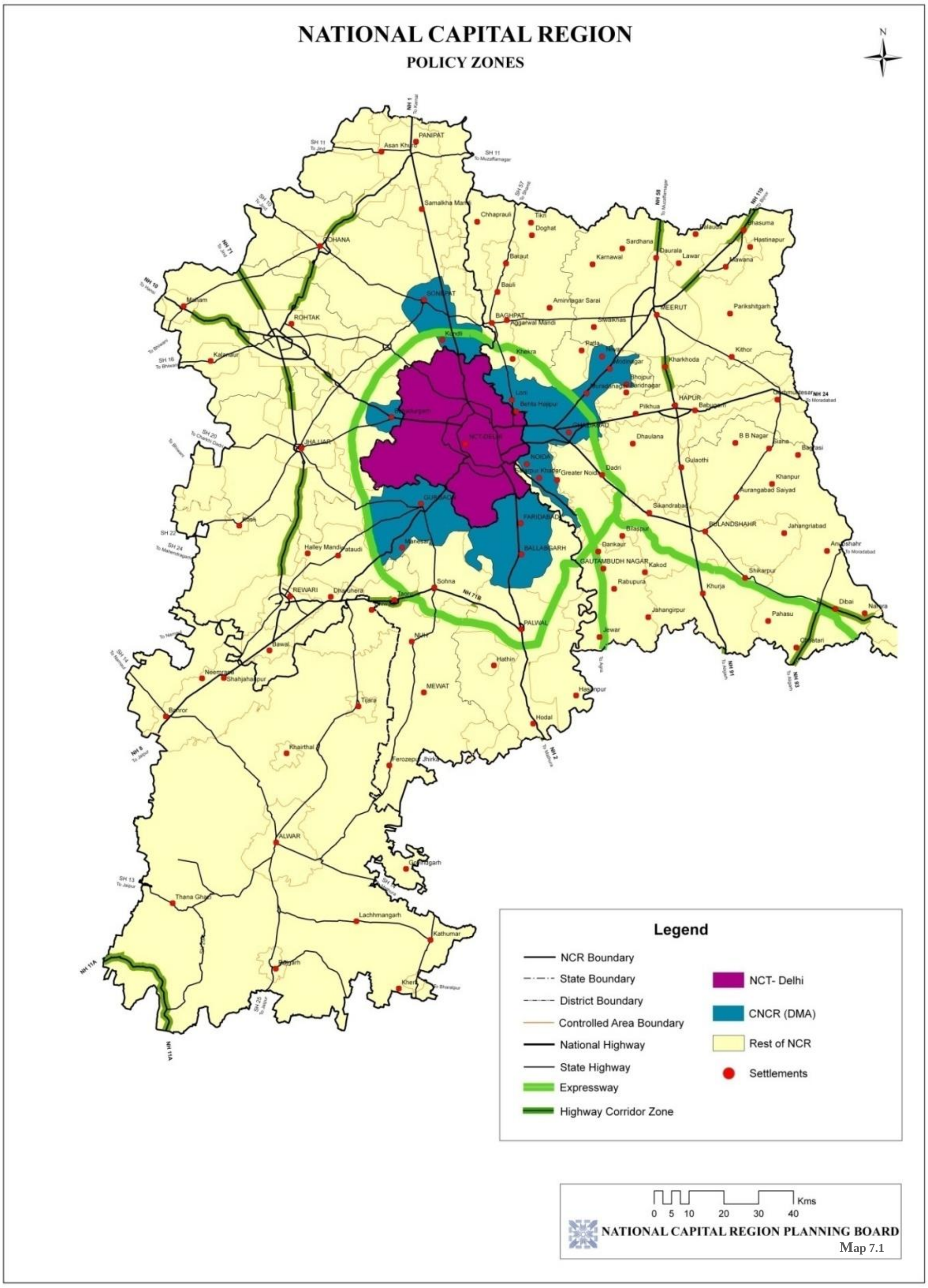
The Regional Plan-2021 aims "to promote growth and balanced development of the National Capital Region" through:

(i) Providing suitable economic base for future growth by identification and development of regional settlements capable of absorbing the economic development impulse of NCT-Delhi.
(ii) Providing efficient and economic rail and road based transportation networks (including mass transport systems) well integrated with the land use patterns, to support balanced regional development in such identified settlements.
(iii) Minimizing the adverse environmental impact that may occur in the process of development of the National Capital Region.
(iv) Developing selected urban settlements with urban infrastructural facilities such as transport, power, communication, drinking water, sewerage, drainage etc. comparable with NCT-Delhi.
(v) Providing a rational land use pattern in order to protect and preserve good agricultural land and utilize unproductive land for urban uses.
(vi) Promoting sustainable development in the region to improve quality of life.
(vii) Improving the efficiency of existing methods of resource mobilization and adopt innovative methods of resource mobilization and facilitate, attract and guide private investment in desired direction.

(b) Policy Zones for Future Development

Keeping the above objectives in view, the Regional Plan-2021 has proposed four policy zones, namely- (i) NCT-Delhi, (ii) Central National Capital Region (CNCR), (iii) Highway Corridor Zone and (iv) Rest of NCR for which the following development policies have been envisaged (refer Map 7.1).

Map 7.1: National Capital Region Policy Zones



Source: The Regional Plan-2021 for NCR

(i) NCT of Delhi

The basic policy for NCT-Delhi is to achieve environmentally sustainable development/re-development, taking into account the limitation of developable land and water. No new major economic activities i.e., industries, wholesale trade and commerce, which may result in a large scale job creation, both in formal as well as informal sectors, should be located in this zone. Only activities necessary to sustain the local population of NCT-Delhi should be permitted.

(ii) Central National Capital Region (CNCR) Excluding NCT of Delhi

The Central NCR comprises of the notified controlled/development/regulated areas of contiguous towns of Ghaziabad-Loni, NOIDA, Gurgaon-Manesar, Faridabad-Ballabgarh, Bahadurgarh and Sonepat-Kundli and the extension of the Ridge in Haryana.

The opportunities presented by CNCR need to be maximized to enable it to compete effectively with NCT-Delhi offering jobs, economic activities, comprehensive transport system, housing, social infrastructure and quality of environment, if not better at least at par with NCT-Delhi. All new major economic and non-polluting activities intended to be located in NCT-Delhi should be located in the urbanisable areas planned in this zone and where appropriate and necessary, in the rest of NCR.

(iii) Highway Corridor Zone

A Highway Corridor Zone is proposed with a minimum width of 500 meters inclusive of green buffer on either side of the Right-of-Way (ROW) along the National Highway (NH) 1, 2, 8, 10, 24, 58 and 91 converging at Delhi to enable the planned and regulated development along these highways outside the existing controlled/development/regulated areas. In addition to the above, the Highway Corridor Zones along the NH 71, 71A, 71B, 119, 93, 235, 11A and Expressways have been proposed.

The Highway Corridor Zone will be delineated and notified by the respective State Governments. However, utmost care will have to be taken while planning these zones to ensure that the activities being permitted in this zone are segregated from highway traffic through proper green belts, service roads and controlled access to the highways.

(iv) Rest of NCR

In the Rest of NCR, the basic policy is to facilitate accelerated development of both urban and rural areas. Infrastructure has to be substantially upgraded at local and regional level (both by State and Central Governments) in order to induce the growth in these areas, specifically in the identified settlements i.e., Metro Centres and Regional Centres. This will make them more attractive for locating economic and allied activities and for attracting private sector investment.

Sub-region wise industrial policies for development of industrial infrastructure are discussed below;

(c) Policies & Proposals of the Regional Plan-2021 for NCR

The RP-2021 for NCR has proposed the following policies and proposals to channelize the future directions of growth in an economically, socially & environmentally sustainable manner.

(i) It is observed that Mewat's contribution to NCR's GDP is the lowest and hence physical and social infrastructure needs a boost in this district.

(ii) Employment in the secondary and tertiary sectors in NCR is constrained by the issues of skill development of the workforce. Therefore, there is a need for new projects with focus on skill development and vocational training. In view of this NCR participating

States are required to take initiatives to open institution for skill development and vocational training in all the districts in NCR.

(iii) The analysis of banking facilities in NCR clearly brings out that districts with low per capita income are also the districts where there is lack of banking facilities. Mewat in Haryana sub region and Bulandshahr in Uttar Pradesh sub region are two districts as a case in point, where greater financial inclusion can bring out huge difference. Provision of banking services, such as soft loans and micro financing can help in further improving the economic base in NCR, provided the potential beneficiaries are aware of these services. Therefore, it is recommended that banks may create awareness regarding the spectrum of services available in each district.

(iv) Considering the economical potential of the region it is recommended that the manufacturing sector need to be promoted in NCR. The investment regions proposed under DMIC project in NCR namely Manesar-Bawal Investment Region (MBIR), Khushkhera-Bhiwadi-Neemrana Investment Region (KBNIR) and Dadri-Noida-Ghaziabad Investment Region (DNGIR) and the DFC project will boost the manufacturing sector both in terms of output and employment. These projects emphasize on expanding the manufacturing and service base and develop the corridor stretches as "Global Manufacturing and Trading Hubs" and need to be implemented on priority in continuation to or in line with "Make in India" initiative.

(v) Connectivity within NCR has been the driving force for the change in both the size and nature of economic activities in NCR. Regional Rapid Transit System (RRTS) project has the potential to improve the growth prospects and income in the entire region, especially in the towns outside CNCR. Therefore, it is proposed to expedite the implementation of regional infrastructures such as RRTS, Kundli-Manesar-Palwal Expressway, etc., which is crucial to development of economic hubs across the NCR.

(vi) It is observed that Uttar Pradesh and Rajasthan sub-regions are dominated by agriculture, therefore, there a need to strengthen rural infrastructure to promote agro based industries. On the other hand, Haryana sub-region has a mix of industries and service sector. Gurgaon District in Haryana sub-region has shown a remarkable growth in terms of per capita income due to fast growth of IT and ITES. Panipat district in Haryana sub-region is also rapidly emerging as an important trade center. Therefore, it is recommended that necessary industrial infrastructure and support facilities should be developed in such districts or areas to promote and facilitate the industrial development.

(vii) There are significant numbers of MSME clusters in the NCR. An integrated Cluster Development Approach need to be followed by the NCR participating States in order to foster efficient growth and development of these clusters especially in Textiles, Auto component, general engineering, sports goods etc. Also, Common Facility Centers (CFC) should have access for informal workforce in all the MSME clusters.

(viii) It is observed that sectors like Biotechnology, Nano technology and Optical technology will have a definite bearing on the business environment of the NCR. It is recommended that commensurate infrastructure be created for highly skilled workforce especially to leverage NANO technology as part of integrated policy. There will be a further increase in demand for technology and research for product innovations. In view of this, it is recommended that a strong research and development (R&D) support be provided keeping pace with the short span of product innovations cycles by the NCR participating States.

(ix) NCR participating States are required to ensure availability of uninterrupted and quality power supply in their respective sub-regions to boost the economy. Solar energy should be as an alternative source of power in all types of industries wherever possible.

(x) There is a need to address to air, water and land related pollution issues by the NCR participating States in their respective industrial areas to abate the pollution.

(xi) In order to promote traditional craft, NCR participating States may create the required infrastructure and environment in the traditional craft clusters in their respective sub-region.

(xii) In order to carry out district level as well as NCR level analysis of parameters such as GDP and PCI, it is important that NCR participating States may publish State and district level GDP and PCI data every year on the basis of the guidelines issued by CSO (National Account Statistics). Analysis of this data will help in measuring the level of economic growth and performance of NCR and its sub-regions on year to year basis.

7.3.2 Sub-Regional Plans

(a) Policies and Proposals of the Sub-Regional Plan for Haryana Sub-Region-2021:

Special initiatives to be put in place before the development is initiated for aspects such as recycling of waste water, establishing buffer zones around industrial areas, providing warehousing & logistics facilities at suitable locations and service housing for industrial areas.

(i) There will be a focus on augmenting the production of agricultural/dairy products like grain, milk, vegetables, fruits etc to meet the demand within as well as outside the sub-region.

(ii) Efforts shall be made for organic high value agriculture to meet the growing demand of the National Capital towards such products.

(iii) Floriculture shall be encouraged as the sub-region is in close proximity to the International Airport and the proposed Cargo Airport at Rohtak.

(iv) It is apparent from the industrial estate location analysis that all the existing and proposed Industrial development by HSIIDC is mainly along the NH-44, NH-48 and proposed KMP Expressway. For a balanced regional development, industrial development is to be emphasized in the western part of Rohtak & Jhajjar, Mewat and Palwal districts. The availability of large pockets of land suitable for industrial development in these districts in comparison with the other districts of is also a positive factor.

(v) In order to create a regional balance, the potentiality of industrial development in Panipat should be channelized to Rohtak, as this district has good connectivity with Panipat and has suitable industrial land. The industrial infrastructure should be put in Rohtak to cater to the additional industrial demand.

(vi) Industrial development should be facilitated in the districts of Rewari and Mewat.

(vii) Employment in the secondary and tertiary sectors is constrained by the issues of skill with the introduction of the Delhi Mumbai Industrial Corridor, industrial development is being induced in Rewari district through the MBIR proposals. Development of Jhajjar district considering the emerging industrial potential created by MBIR may be considered for a balanced regional development.

(viii) There is need for new projects with focus on skill development and vocational training for development of workforce.

(ix) Connectivity within the Haryana sub-region and the NCR has been the driving force for the change in both the size and nature of economic activities. RRTS and MRTS projects proposed within the sub-region and the NCR have a potential to improve the growth prospects and income in the entire sub-region especially of the towns which are not a part of the CNCR.

(x) The analysis of banking facilities in the sub-region clearly bring out that districts with low per capita income are also the districts where the banking facilities are either not available or not availed. Provision of banking services such as soft loans and micro financing can help in improving the economic base of this region. The banking sector therefore, should not only focus on expanding its network but also emphasise on creating awareness in the District of Mewat.

(xi) Physical and Social infrastructure shall be boosted in the district of Mewat.

(xii) One of the three investment regions under the proposed DMIC project in NCR is in the Haryana sub-region namely Manesar-Bawal Investment Region (MBIR). As per the RP-2021, this combined with the DFC project has the potential to boost the manufacturing sector both in terms of output and employment. MBIR will thus generate direct/indirect employment to the extent of 2.5 lacs by 2021 AD.

(xiii) Provision for at least the recommended physical and social amenities is essential in all urban centres and rural areas.

(xiv) There is a definite need to make people aware of total sanitation and means of achieving it.

(xv) Specific attention needs to be paid for improvement of telecommunication facility in the sub-region and development of smart cities. Planning and development of cities that are efficient in function and conserve energy and other resources is to be encouraged. The proposed development in general should be high density and along transit corridors.

(xvi) Organization setup to be improved in terms of staffing in the Planning departments in all levels of the State and Sub-region.

(xvii) Frequency of making plans / revisions/ review of plans to be increased to commensurate with the 5 year plans.

(xviii) The making of Development policy for the least developed area, integrated with the developed areas of the sub-region is to be prioritized in order to give benefit to less developed areas.

(xix) The under developed area with low Human Development Index (HDI) such as Mewat and Palwal in the sub-region have to be judiciously planned and interlinked with the existing and proposed growth centers and economic Hubs. Regional Linkages which are inter and intra in the form of RRTS, DFC, etc., will need to be provided for these two districts.

(xx) Some of the investment targeted in the Districts of Gurgaon and Faridabad need to be diverted to less favourable regions e.g. Jhajjar and Mewat.

(b) Policies and Proposals of the Sub-Regional Plan for Uttar Pradesh Sub-Region-2021

Industrial development plays an important role of catalyst in determining the economic character of a region. Industrial development generates diversified economy and job creation.

(i) In UP Sub-region, three industrial development authorities (namely NOIDA, Greater NOIDA and Yamuna Expressway) and UPSIDC are solely responsible to strengthen the industrial growth. Hense these authorities should fulfil this mandate. In order to fulfill this mandate these authorities should work out competitive incentive packages to attract industries in the sub-region.

(ii) Government of India's policies & programmes and funds with respect to horticulture skill development etc. should be fully utilized.

(iii) In order to encourage industries, policies conducive to labour harmonious relations and facilities such as low cost worker housing, health insurance and welfare would need to be coupled with balanced policies for entry and exit of industries.

(iv) Fincancial inclusion would be given a thrust to encourage capital formation in the Sub-region. A strategy for reducing the number of persons below the poverty line would be undertaken through direct cash transfer scheme when they fructify.

(c) Policies and Proposals of the Master Plan for Delhi-2021

Industrial Development:

(i) Promote hi-tech and low volume-high value added industries, which are not labour intensive.

(ii) Encourage modernization and technological up-gradation of existing industries required for day-to-day needs of the people of the city.

(iii) Take corrective measures with regard to industries in non-conforming industrial areas in terms of environmental and other norms as may be prescribed.

(iv) Provide suitable incentives and disincentives, and other measures, for shifting and relocation of industrial units not conforming to the land use norms.

(v) Review, and possibly widen, the scope of permissibility of household industrial units subject to adherence to pollution control norms and environmental consideration, fire safety regulations and other relevant factors, particularly the aspect of infrastructure services.

New Industrial Areas:

Development of new industrial areas in Greenfield areas of NCT-Delhi should be largely planned for the purpose of relocation of existing industries and for the development of a limited type of new industries for the following purposes:

(i) Relocation of permissible industries from the non-conforming clusters that are not eligible for regularization/development; and

(ii) Green field sites for Hi-tech industries.

New industrial activity in the NCT of Delhi should be restricted to hi-tech areas as given below:

i) Computer hardware and software industry and industries doing system integration using computer hardware and software.

ii) Packaging

iii) Industries integrating and manipulating the interfaces of the computers and telecom facilities.

iv) Industries catering to the information needs of uses by providing databases or access to databases spread throughout the globe.

v) Industries providing the facilities for sophisticated testing of different or all components of the information technology.
vi) Electronic goods.
vii) Service and repair of TV and other electronic items.
viii) Photo composing and desktop publication.
ix) TV and video programme production.
x) Textile designing and fabric testing, etc.
xi) Biotechnology.
xii) Telecommunications and enabling services.
xiii) Gems and jewellery.

(d) Policies and Proposals of the Sub-Regional Plan for Rajasthan Sub-Region-2021:

(i) Rajasthan sub-region possesses huge potentials in all the sectors of the economy. The diversification and modernization of the economy further depends upon a host of factors. In the context of strengthening of the State's economy, the sub-region will also be one of the major employment and wealth generating sub-regions in the NCR. It is important that the potential employment generating activities are rationally distributed over the sub-region to achieve a balanced and harmonious development. The major policies and proposals recommended are as under:

(ii) The sub region is rich in agro products and mineral resources which provide good scope for development of agrobased industries, livestock, mineral based industries, demand based and engineering industries.

(iii) There is a shift in occupational structure in the sub-region. This shifting is from their traditional agricultural activities to other activities like industries, trade and commerce, construction, etc. This trend may be attributed to the fact of gradually gaining momentum of the industrial activities. Industrialisation has already taken over and there are number of industrial areas in the sub-region which are leading the economic development. RIICO has been also acquiring land for further development of the industries in future. Thus, industrial activities will play an important role in the economic growth of the sub-region. Secondary sector holds a key role in employment generation in the sub-region.

(iv) The employment in the secondary and tertiary sectors is constrained by the issues of skill development of the workforce. Therefore, there is a need for new projects with focus on skill development and vocational training.

(v) Connectivity has been the driving force for the change in both the size and nature of economic activities. RRTS project has the potential to improve growth, income and employment in the sub-region.

(vi) Provision of banking services such as soft loans and micro financing help in improving the economic base of the area provided that the potential beneficiaries are aware of these services. The banking sector therefore, should not only focus on expanding its network but also emphasize on creating awareness, regarding the spectrum of services available.

(vii) Projects of DFC, DMICDC, CONCOR and RRTS will have also a great influence on the economic development of the sub-region. The investment region under the proposed DMIC namely Khushkhera – Bhiwadi - Neemrana Investment Region (KBNIR) and the DFC project has the potential to boost the manufacturing sector in terms of income and employment. These projects emphasize on expanding the manufacturing and services base and develop the corridor stretches as "Global Manufacturing and Trading Hubs".

(viii) The various settlements in the sub-region will be developed as per the facilities envisaged in the proposed settlement hierarchy for a balanced economic development of the region.

(ix) The sub-region is endowed with natural and manmade heritage such as Sariska National Park, Ajabgarh-Bhangarh, Siliserh Lake, Pandupole, Balakila, etc. Therefore, it has a great potential for development as a tourist destination providing adequate employment opportunities.

7.4 Policies of the NCR Participating State Governments for Economic Development and major projects in the sub-regions

7.4.1 NCT-Delhi

(a) Delhi Industrial Policy 2010

The main objective of Delhi's Industrial policy is to make Delhi a hub of clean, high-technology and skilled economic activities by 2021 by adhering to the following principles of Infrastructure Development, Decongestion, Promoting `Walk to Work', Simplifying Business, Industry Consultation in Decision Making and Sustainability. The salient features are as under:

(i) Policy Shift essential to change industrial profile from low-skilled to high tech and high-skilled. The Policy asserts Six-Pronged strategy:
- Infrastructure Development through better O&M of industrial assets.
- Facilitating business by simplification & e-enabling measures.
- Support skill development & other promotional measures like allowing Knowledge-Based Industries in industrial area among others.
- Decongesting industrial areas through redevelopment schemes.
- Promoting cluster development of high-technology and skilled industries in new industrial areas through public-private partnerships.
- Discourage polluting industries through higher infrastructure development fee.

(ii) Government's role will be to provide good infrastructure, investor friendly environment with a responsive feedback and consultation mechanism.

(iii) Promotion of sophisticated industries which could achieve optimum level of production with less, space, power, water etc.

(iv) Generate employment avenues in non-polluting industries.

(v) Emphasis on encouraging non-polluting industries.

(vi) Emphasis on promotion of Computer Software, I.T., I.T. Enabling Service, Electronics and High-Tech Industries irrespective of investment limits.

(vii) No new industrial unit shall be permitted in residential areas except household industries.

(viii) A single unified agency for development and maintenance of industrial areas in Delhi. The involvement of industrial association of the area in the maintenance of industrial areas shall be encouraged.

(ix) Low-Tech industries to be encouraged to recycle into Hi-tech industries in industrial areas. Hazardous/obnoxious industries as well as large/heavy industries shall not be permitted in Delhi.

(x) Small scale industries graduating to the medium sector as a result of modernization technical up-gradation shall be permitted provided there is no substantial expansion and where growth is in the same line or allied line, and where industry is operating in an approved industrial area.

(b) Information Technology Policy 2000

The Government of NCT Delhi recognizing the enormous potential of the Information Technology sector put forth the IT policy in 2000. The policy aims to explore new avenues of employment, productivity, efficiency and enhanced factors of economic growth. The government envisioned that Delhi will emerge as a premier cyber state in the country and its citizens would be e-citizens. The following 6 E's govern the aspirations of the IT policy:

(i) E-Governance: Tool of e-governance to aid the government to deliver proactive and efficient services to its citizens.
(ii) Equality: Achieve the objectives of poverty eradication, improving healthcare, empowering women and economically weaker sections of the society through the medium of information technology.
(iii) Education: Encourage the use of IT in schools, colleges and educational institutions thus enabling skill upgradation, knowledge and job prospects in the industry.
(iv) Employment: Generate additional employment for the new digital economy.
(v) Entrepreneurship: Unleash the incubation engine, promote entrepreneurship, earn foreign exchange and increase its contribution to the economic growth of the state.
(vi) Economy: To encourage and accelerate investments and growth in IT hardware, software, Internet, training, IT enabled services, telecom, e-commerce and related sectors in the state.

(c) Industrial Location Scheme 2006

Government of NCT-Delhi framed an industrial relocation scheme in October 2006, where 27,905 units were declared eligible for allotment of industrial plots or flats in Bawana, Jhilmil, Narela, Badli, Parparganj and various flatted factories. By July 2009, nearly 17,801 units made full payment and completed all the legal formalities, and 16,667 have taken physical possession. However, only about 5,000 of the units have started actual construction work on the site.

Further, the Master Plan for Delhi-2021 notified 20 non-conforming clusters with industrial concentration of more than 70% for regularization, subject to redevelopment. The household industries can continue to operate in residential areas.

(c) Craft Sector Promotion Policy

Handlooms: Provision of technical guidance to weavers, loans and grants to weaver’s cooperative societies, Thrift-fund-cum saving security scheme and group insurance scheme.

Handicrafts: Training to artisans in different crafts through apprenticeship scheme, Carpet weaving and Training centre, Provision of Marketing support, state awards to master crafts person, promote the sale of handlooms and handicrafts goods at Handlooms and Handicrafts at bazaars.

7.4.2 Haryana

(a) Industrial Policy 2005

Objectives:

(i) Re-establish industry as a key driver of economic growth.
(ii) To create wealth for the residents of the state and improve the quality of their life.
(iii) Generate employment and entrepreneurial opportunities across all sectors of the economy.
(iv) Facilitate spatial dispersal of economic activities particularly in economically and socially backward regions of the state.
(v) To ensure sustainable development through investments in key sectors of economy

Strategy:

The State Government intends to realize the objectives of the policy by emphasizing a coordinated development strategy in mission mode approach. The strategy proposed is as under:

(i) Develop economic hubs through infrastructural initiatives.
(ii) Encourage public-private partnership in infrastructure projects.
(iii) Focus on economic activities enjoying a comparative advantage in the state in general and develop the food processing, Information and Communication Technology (ICT) and frontier technologies in particular.
(iv) Promote mega projects with economic spin-off potential, particularly in backward regions.
(v) Adopt sector-specific approach, providing incentives and infrastructural support, for the synergetic growth of key enterprises.
(vi) Develop services sector especially tourism, transport, education, healthcare and financial services.
(vii) Focus on development and support to the small and medium enterprises. Enhance export-competitiveness and enable Compounded Annual Growth Rate of 20 per cent.
(viii) Create investor-focused approach in administrative process and bring about efficiency, transparency and accountability using modern technological and management solutions.
(ix) Human resource development by establishing strategic linkages between the industry and technical institutions to meet future manpower requirements.

(b) Industrial Policy 2010

The new industrial policy 2010, taking into account the current economic scenario and prospective developments, lays particular emphasis on further strengthening the base of the manufacturing sector besides knowledge based and high tech industries, efficient use of energy, conservation of resources and pragmatic environmental policies for sustainable development. The scope and potential for investment and value addition in the primary products has been brought out clearly through these policy measures. Development of well planned infrastructure holds the key to overall future economic growth and this continues to be focus of the

Government. The State recognizes the increased role of Public-Private- Partnerships and accordingly, the policy lays down a well-defined roadmap in this direction. Adoption of Information and Communication Technology brings efficiency and transparency in the delivery of services, eliminates procedural delays and minimize the transaction costs. The policy lays down a time-frame for a complete switch-over to IT enabled regime of approvals and clearances.

Objectives:

Higher, sustainable and inclusive economic growth by attracting investments in a focused and structured manner in potential areas;

(i) Promote private sector investment through Public Private Partnerships;
(ii) Employment generation and enhanced employability through skill development;
(iii) Continued thrust on manufacturing sector as a key driver of economic growth;
(iv) Generation of entrepreneurial opportunities across all sectors of the economy;
(v) Facilitation of spatial dispersal of economic activities particularly in industrially lesser developed regions of the State;
(vi) Sustainable development by adopting environment friendly technologies.

Strategy:

(i) Adoption of a coordinated approach to the development of all sectors of economy through quality infrastructure & addressing issues of infrastructure gaps, creation of sufficient land bank by the developing agencies to meet future requirements of entrepreneurs and addressing the concerns of the land owners whose land is acquired, by way of rehabilitation & resettlement initiatives and developing necessary skill-sets amongst such affected persons;
(ii) Encouraging private sector participation in infrastructure projects under Public Private Partnership (PPP) especially in industrial infrastructure, power, roads & bridges, health, tourism, education sectors, simplification of rules & procedures, self-certification and use of Information & Communication Technology (ICT) for hassle-free, timely delivery of services and further liberalization of Estate Management Procedures;
(iii) Strengthening of institutional support mechanism through a Grievance Redressal Mechanism for industry and joint consultative framework;
(iv) Promoting quality competitiveness, research & development and technology upgrade & modernization, strengthening of Small & Medium Enterprises (SMEs)
(v) One of the key objectives of the policy is employment generation and enhanced employability through skill development. The growth of small industries in the State has also been phenomenal. Their number has increased from 4500 in 1966 to 80,000 in 2010. They are producing goods worth Rs.4500 Crores per annum while generating employment for 8.7 lakh persons.

The state would continue to encourage investments in the following sectors:

(i) Agro-based, Food Processing and Allied Industry
(ii) Automobile & Automotive Components
(iii) Education & Skill Development
(iv) Electronics, Information & Communication Technology

(v) Footwear and Accessories
(vi) Handloom, Hosiery, Textile and Garments Manufacturing
(vii) Health and Healthcare
(viii) Pharmaceutical Industry
(ix) Research & Development and Frontier Technologies
(x) Transport Network and Services
(xi) Waste Processing and re-cycling Industry

(c) Agro Based and Food Processing Industries

A number of incentives have been introduced for the development of agro-based and food processing industry keeping in view that Haryana is predominantly an agrarian State. The establishment of food processing industry would provide the necessary linkages and become instrumental in increasing the area under vegetable farming.

(d) MSMEs and Cluster Development Approach

Keeping in view that the Micro Small Medium Enterprises (MSMEs) constitute the backbone of the manufacturing sector, the Government proposes to put into place an institutional support mechanism to facilitate growth and competitiveness of this sector. Haryana is one of the few States that has focused on 'cluster development' as one of the strategies for industrial development. It is proposed to set-up Common Facility Centres (CFCs) in partnership with the industry. These centers would address the common needs of the MSMEs in the areas of research and development; provide technology upgradation support, standardization of products, quality testing and marking facilities, marketing initiatives with promotion of branding of products etc.

(e) Information Technology Policy, 2000

The State Government has identified IT, ICT and ITES as the thrust areas in recognition of its potential for exports, employment and wealth generation. The IT Policy 2000 had aimed to replace the traditional delivery system of public services with IT driven systems of governance. This policy further intended to facilitate private domain initiative in e-transition of Haryana by providing critical infrastructure, systems framework and enabling environment. In order to encourage investment in the IT and ITES sector, the government has encouraged Public Private Partnerships (PPPs) in setting up technology parks and other supportive infrastructure and services.

(f) SEZ Policy 2005

Haryana has formulated this policy to facilitate acquisition of land for private deployment and in public-private partnership for setting up of Special Economic Zones, Technology Cities, Industrial Parks and Industrial Model Townships etc. The Haryana SEZ Act 2005 aims to promote and establish large self-contained industrial townships, with world-class infrastructure. It has also promoted both public and private sector participation in an internationally-competitive and hassle-free environment for export promotion.

(g) Labour Policy 2006

The Labour Policy has been devised in order to ensure the implementation of labour laws and create an enabling environment for enhancing productivity, competitiveness and labour welfare. The Labour Policy 2006 of Haryana is focused on strengthening the conciliation measures for prevention and early resolution of industrial disputes. According to the policy, the Labour Department aims to intervene proactively to avoid industrial mishaps, lay-offs, retrenchments and strikes. The policy also aims to work towards creating an environment wherein both workers and management perform their legally laid down roles, which will, in turn, contribute to the economic growth of the state.

(h) Investment Incentives

The state is providing multitude of incentives and concessions in order to attract Investment- both domestic and foreign direct investment:

(i) Incentives for mega projects in backward areas
(ii) Exemption from Local Area Development Tax (LADT) for a period of 5 years.
(iii) Incentives for SSI in Backward Areas
(iv) Incentives for Exporting Units
(v) Incentives for Food Processing Industries

(i) Theme Parks

In the Industrial Policy of Haryana Government, in order to meet the requirement of specific industries particularly of thrust sectors, specialized industrial estates would be developed at strategic locations. These include

(i) Food Parks
(ii) Gems and Jewelry Park
(iii) Apparel Park
(iv) Free Enterprise Zones

(j) Major Infrasructure Development Projects

(i) Delhi-Mumbai Industrial Corridor (DMIC) and Dedicated Freight Corridor (DFC)

Development of DMIC and DFC will provide huge infrastructure in the state and will become a catalysts to enhance industrial/manufacturing activity.

The proposed Faridabad-Palwal Industrial Area would be located in close proximity of the western Dedicated Freight Corridor at Dadri. Faridabad is one of the major industrial towns of the state, especially with a large concentration of light engineering, electrical appliances and auto component industries. Faridabad-Palwal area has advantages of good connectivity by road and rail. With excellent connectivity to various hinterland locations across the country and proximity to Delhi, Faridabad has good potential for investments in setting up export-oriented industrial units. Typical industries expected in this area include Light Engineering, Casting and Forging, Electrical Appliances, Textile and Apparel. This area would have an Integrated

Logistic, which constitutes an Inland Container Depot and a truck terminal with warehousing facility. Faridabad-Palwal would also be developed as an integrated township with residential, institutional, commercial and leisure/recreation infrastructure which could be dovetailed to the requirements of specific investor groups/ countries.

Development of Regional linkages connecting the identified industrial area with NHDP corridors, DFC and Hinterland:

Road links:

- Linkage with NH-2, the Golden Quadrilateral NHDP Corridor.
- Linkage with proposed Western (Kundli-Manesar-Palwal) and Eastern (Kundli-Ghaziabad-Palwal) Peripheral expressways of the NCR.
- Augmentation of state highway links to Hinterland viz. Gurgaon/Rewari-Sohna-Palwal Link and Sohna-Alwar-Bharatpur link
- Development of requisite grade separators/flyovers/interchanges and underpasses along the National Highways/ State Highways and access roads for uninterrupted freight and passenger movement to the region would also be included in the development of feeder links.

Rail links:

Feeder Rail Links proposed include linking with Delhi-Agra Main Broad Gauge Railway line and Western DFC. The region is proposed to be served by DFC terminals at Tughlakabad and Dadri. There is a potential to connect this region with DFC at Pirthala Junction. Development of Feeder Rail links also includes construction of over bridges/ underpasses wherever required so as to avoid level crossings. Developing MRTS connectivity between Faridabad and Gurgaon, Faridabad-Palwal will also have significant impact.

Air Links:

Proposed International airport at Jewar near Greater Noida is also an important project to address air connectivity issue.

Another area likely to be impacted is Kundli-Sonipat Investment Region, in the north-western Haryana. This area would be located within 50-100km distance from the alignment of Dedicated Freight Corridor at Dadri. The nearest major urban centers are Delhi and Panipat, the base of Indian Oil Corporation (IOC) Refinery in the state. It has the advantage of availability of good connectivity by road, rail and air, besides quality urban infrastructure.

The proposed Investment Region has the advantage of availability of good connectivity by road, rail and air besides quality urban infrastructure along with close proximity to Delhi. The proposed Investment Region will also be served by Kundli-Manesar-Palwal Expressway. The Master Plan for Kundli-Manesar-Palwal Expressway envisages development of world-class infrastructure as World-Trade City, Bio-Science City, Medi City, Leisure City, Cyber City, Leather City and Fashion City etc.

Important components proposed are:

- Export-oriented Industrial Units/ SEZ:

  North Haryana is proficient at manufacturing of leather, textile/handloom and carpets. A large industrial park would give a substantive boost to export of these items.

- Agro/Food Processing Zone:

  Considering the large agricultural output from the state and to cater to the northern region of the country, a mega agro/food processing zone is proposed in the investment region. It would primarily cater to the food grains and horticulture market and would be provided with wholesale market terminals, auction areas and other infrastructure.

- Knowledge Hub/Skill Development Centre:

  To support the agro-processing, leather technology, carpet and textile industry as well as the other industries in the investment region, a Knowledge Hub/skill up gradation centre would be imperative. It is advisable to set it up in this area, being very close to the National Capital, thus having a substantial "trainable" population.

- Truck Terminal with Warehouse:

  To cater to the transportation, packaging and warehouse/storage requirements for the investment region, a truck terminal with servicing/repairing, truck parking, inventory management system and third party logistics support is envisaged.

- Integrated Township:

  This region would be provided with an integrated township with residential, institutional, commercial and leisure/recreation infrastructure which could be dovetailed to requirements of specific investor groups/ countries.

- Feeder Road Links:

  Development of feeder road linkages connecting the identified investment region with NHDP, DFC corridors and Hinterland, inter alia, includes following proposals:

  - Connectivity to Kundli-Manesar-Palwal Expressway (Western Peripheral Expressway) and NH-1.
  - Widening and strengthening of Sonepat-Bahadurgarh-Jhajjar to four-lane dual carriageway.
  - Augmentation of NH-72A (Rohtak-Panipat) to four-lane dual carriageway.
  - Development of requisite grade separators/flyovers/interchanges and underpasses along the National Highways/ State Highways and access roads for uninterrupted freight and passenger movement to the region would also be included in the development of feeder links.

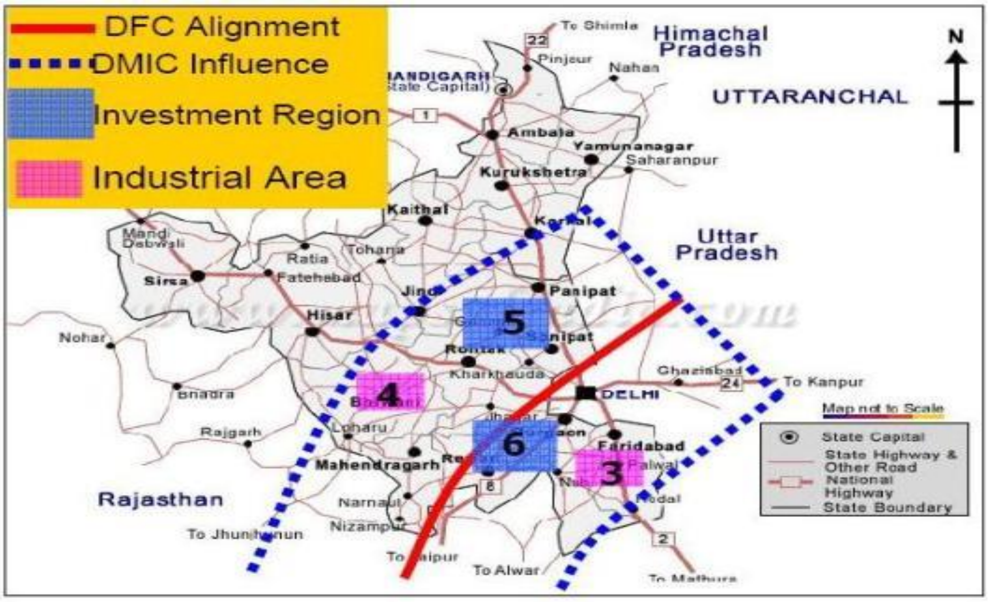
- Feeder Rail Links:
  - Linkage to/from Delhi-Ambala Main Broad Gauge Railway Line
  - Development of Feeder Rail links also includes construction of underpasses wherever required so as to avoid level crossings.

Rewari-Hissar Industrial Area would be strategically located along the proposed feeder rail linkage for the Dedicated Freight Corridor between Rewari, Bhatinda and Ludhiana (Punjab). It is ideal for developing suitable logistics infrastructure. Delhi International Airport would cater to the air connectivity requirements of the node. Manesar-Bawal Investment Region and Kundli-Sonipat Investment Region are proposed to be developed in Haryana sub-region as part of the DMIC project (refer Map 7.2).

(ii) Manesar-Bawal Investment Region

Manesar-Bawal Investment Region (MBIR), in South-Western Haryana, would be located within 50km of the Rewari-Dadri alignment of Dedicated Freight Corridor. The nearest major urban centers are Delhi and Gurgaon, the IT/Automobile destination of the country. This region is proposed to be located in close proximity to the National Highway No.8, the Golden Quadrilateral Corridor between Delhi and Mumbai. Potential industry sectors at the investment region include automobiles, Electronics, Biotechnology, and IT/ITES. It is important to note that an 'Auto/ Automobile Investment Region' is also being planned at Rewari-Manesar-Bawal to promote investment in the Automobile and Auto Component Industries. Components of MBIR have already been mentioned earlier under DMIC.

Map 7.2: Location Map for Proposed Development Nodes in DMIC-Haryana



Source: http://delhimumbaiindustrialcorridor.com/dmic-uttar-pradesh.php

(iii) Kundli-Manesar-Palwal (KMP) Expressway

Haryana Government has finalized Development Plans for Kharkhoda and Sampla to harness the economic potential of the KMP Expressway. Kharkhoda will have an Industrial Model Township; Bio-sciences City, Cyber-City and Medi-City have been planned at Sampla. The

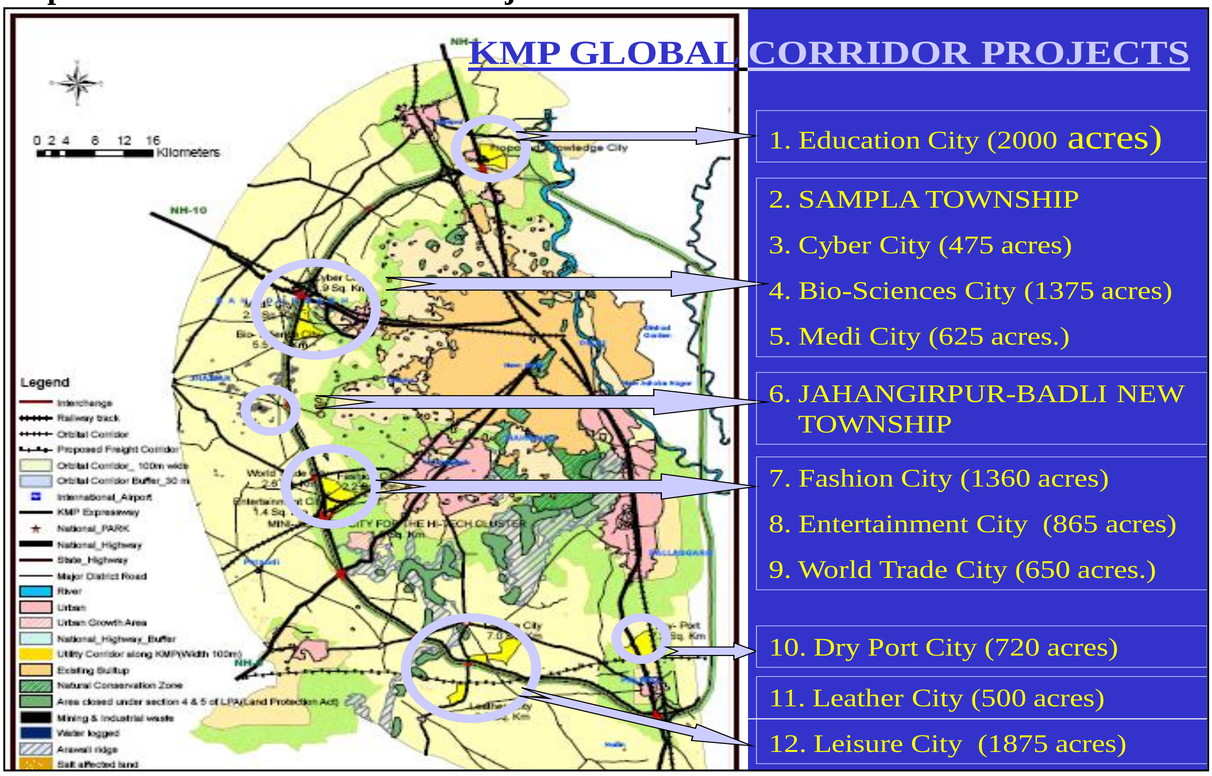
State Government has intensive plans to develop economic hubs all along the KMP Expressway and at other strategic locations all over the state (refer Map 7.3).

Impact of KMP Expressway:

The development of KMP Expressway has been undertaken by HSIIDC. This project holds unprecedented potential for development of economic hubs at strategic locations along the expressway. A Global Economic Corridor is planned along the KMP Expressway with provision for establishment of various theme cities like Knowledge City, Cyber City, Bio-sciences and Pharma-City, Medi-City, Fashion City, Entertainment City, World Trade City, Leisure City, Dry Port City, Eco City, Sports City etc.

These cities/hubs will cater to institutional, commercial, industrial, research, residential, logistics/freight activities and will be spread over area of more than 150 square kilometers. These cities are expected to generate huge employment opportunities and will be developed in public-private partnership mode.

Map 7.3: KMP Global Corridor Projects



Source: Government of Haryana

(iv) Industrial Model Townships (IMTs)

HSIIDC has developed an industrial model township in Manesar on modern lines. This has been a very successful venture and has been welcomed by user industry. It is proposed to replicate the development and put up two IMTs in the next five years. These townships are to draw upon the experience of IMT Manesar and include campuses for large industries, Information and Communication Technology (ICT) parks, industrial plots, flatted factories, residential colonies, labour housing, commercial and institutional areas, entertainment zones, educational and health care facilities etc. The development will be of international standard with power, water supply, roads, sewerage, effluent disposal, storm water disposal, and solid waste management to enable enterprises to function in a pleasant environment. IMTs are coming up at three locations in NCR namely; Rohtak, Kharkhauda and Faridabad.

(v) Model Townships

A Model Township at Manesar near Gurgaon is being developed over an area measuring about 5000 acre by HSIIDC. HSIIDC is also developing Industrial Growth Centre at Bawal over an area measuring 1200 acres. A multi functional complex is also being developed at Kundli popularly known as Rai-Kundli Multi-functional Complex where Export Promotion Industrial Park, Food Park, Cold Chain Complex have been developed by HSIIDC. HSIIDC has also developed Industrial Infrastructure Development Centre (IIDC) at Rai, Barhi near Gannaur. HSIIDC has also acquired land at Barhi (Ph-II) over an area measuring 330 acres in continuity of IIDC. The land will be available for allotment to the Hosiery and Textiles processing, knitting units etc. HSIIDC has also plans to develop state-of-the-art and high security zone for Gems and Jewelry Park at Gurgaon.

Haryana State Industrial and Infrastructure Development Corporation plans to develop two Industrial Model Townships (IMTs) at Rohtak and Faridabad. Haryana Government has already initiated acquisition of more than 15,000 acres of land for the development of industrial infrastructure at various locations including expansion of IMT Manesar, Kharkhoda, Jagadhari, Barhi and Bawal. On the pattern of modern townships, three new townships are planned at Sampla, Badli-Jahangirpur, and Ganaur-Samalkha with modern transport system in Haryana. This will not only help in decongesting the NCT but, also become growth engines for development of NCR.

(vi) Global Corridors in Haryana

Kundli-Manesar-Palwal (KMP) Western Expressway and development of the Global Corridor along KMP Global Corridor with top class infrastructure facilities that will be at par with international standards will be developed along Kundli-Manesar-Palwal (KMP) Western Expressway. There will be a number of specialized economic activities in this corridor, making it growth centric. The Expressway will enable strong linkages between the industrial units in the SEZ and other industrial concentrations within the Haryana sub-region of National Capital Region viz.

- Panipat-Sonipat-Kundli Industrial Corridor on National Highway No.1.
- Bahadurgarh-Rohtak Industrial Corridor on National Highway No.10.
- Gurgaon-Manesar-Bawal Industrial Corridor on National Highway No.8.
- Faridabad-Palwal Industrial Corridor on National Highway No.1-A.

(vii) Special Economic Zones (SEZS)

SEZs are being consistently encouraged by the State Government to provide a boost to the exports. FDI in SEZs is also to be encouraged. The state policy shall clearly spell out the obligations, procedure and clearances required by developers and will be in tandem with the policy of the central government. The state government aims at promoting public and private sector initiatives for establishing SEZs on Kundli-Manesar-Palwal (KMP) artery, NH 10, NH

8 and NH 2. Industry specific and sector specific SEZs are also to be encouraged where ever the potential exists. There are 63 approved SEZs in Haryana (as on 10th March 2015) it is observed that IT/ITES sector dominates the number of proposed SEZs in Haryana. Moreover, majority of projects are located in Gurgaon and Faridabad; some of the ongoing projects in the sub-region are Knowledge City, Cyber City, Medi City, Bio-Science City, World Trade City, Fashion City, Entertainment City, Leisure City, Cyber City, Leather City and Dry Port.

(viii) Power Plant at Jhajjar

A coal based Super Thermal Power Project has been set up at Jhajjar, known as Indira Gandhi Super Thermal Power Project. This power project is being executed by NTPC in joint venture with the Government of Delhi and Government of Haryana. This project has an installed capacity of 3 X 500 MW and costs around Rs 82000 Millions. Presently under Stage-I, power plant of 3 X 500MW capacity is constructed, whose all 3 units are commissioned. There is a future provision of 2x 660 MW under Stage-II.

(ix) Heavy Industry Chemical Plant at Panipat

A Mega Petro-Chemical Hub is being developed near Panipat oil refinery to catalyze investment of Rs 30,0000 millions. On one hand, the petrochemical hub will help utilize the feedstock from the refinery and on the other more downstream industries, like polymer industry, will be set up resulting in generation of large scale employment both directly and indirectly through ancillary units.

(x) Inland Container Depots

As per data from Ministry of Commerce & Industries, Govt. of India, there are total twelve Inland Container Depots (ICDs) [at Garhi Harsaru (Gurgaon), Gurgaon, Patli (Gurgaon), Piyala/Asaoti (Palwal), Bawal (Rewari), Ballabhgarh, Pali (Rewari), Rai (Sonepat), Panchi Gujaran (Sonepat), two in Samalkha (Panipat), Janoli and Bhangola (Palwal)] and three Container Freight Stations (CFS) [Faridabad, Rewari and Kundli (Sonepat)] which are under implementation or functional in Haryana sub-region. It is observed that the number of ICDs and CFSs in the sub-region has significantly increased, indicating the rapid growth of industrial production and trade related activities. CONCOR is setting up a cold chain complex at Panipat with an investment of US$ 44 million. This will facilitate marketing and exporting of fresh fruits and vegetables from the state and is expected to give a fillip to the agricultural sector in the state.

(k) Outcome

Haryana sub-region of NCR proved an excellent location for industrial and infrastructure investment. The sub-region has attracted sizable investment from multinational companies, large business houses, foreign investors, non-residents Indian and Small scale entrepreneurs. Haryana sub-region currently produces two-third of passenger cars, fifty percent of tractors, sixty percent of motor cycles and fifty percent of refrigerators manufactured in the country. One out of every four bicycles in the Country is manufactured in the sub-region. The State has already 857 projects with foreign technical collaboration e.g. Maruti Udyog Limited, Hero Honda, Modi Alcatel, Escorts, Sony India, VXL India, Whirlpool Industries, Wipro Ltd., Perfitti India, DCM, Benetton, TDT Copper Ltd., Asahi India Safety Glass Etc. Some Major

Units in the public sector are HMT Ltd., National Fertilizer Ltd., Indian Drugs & Pharmaceutical Ltd., Bharat Electronics Ltd., IBPL etc. The Latest addition to this group is the oil refinery set up by Indian Oil Corporation with an investment of Rs.4200 crore in Panipat district. In the last 6 years, 2962 Industrial Entrepreneur Memorandam have been filed with Government of India for setting up projects in Haryana sub-region which would catalyze an estimated investment of Rs. 250 billion and generate direct employment for more than 2 lakh persons.

The overall policy structure in Haryana aims to develop economic hubs through infrastructural initiatives and encourage public-private partnership in infrastructure projects. There is also focus on developing frontier technologies in the areas of ICT and food sector. The policy assumes that there will be sign-off effect of these policies in comparatively less developed places/ regions like Mewat. The service sector is the key for development in Haryana sub-region of NCR especially in the areas of tourism, transport, education, healthcare and financial services. There is also focus on development and support to the small and medium enterprises and increasing export-competitiveness. To induce investment there is investor-focused approach in administrative process and to bring about efficiency, transparency and accountability, using modern technological and management solutions. To support investment in the region, government committed to strengthen the grievance and remediation mechanism. To provide improvised skill, different policies envisage establishing strategic linkages between the industry and technical institutions, to meet future manpower requirements.

There are also plans to develop economic hubs all along the Kundli-Manesar-Palwal expressway and at strategic locations all over the State. HSIIDC is acquiring 20000 acres of land for development of new industrial estates/ parks and substantial expansion of existing industrial estates.

7.4.3 Uttar Pradesh

(a) Industrial and Service Sector Investment Policy 2004

Industrial and Service Sector Investment Policy 2004 aims at creating comprehensive reforms and restructuring of the economy and creating new opportunities and opening new avenues for investment in the state. Recognizing the fact that to achieve all-round development of the state there is a need to accelerate the pace of growth in the fields of not only industry but also trade, commerce and services, the State Government has formulated the Industrial and Service Sector Investment Policy 2004. This policy further aims at creating conditions for balanced, harmonious growth of all segments of the industrial sector such as heavy, medium, and small scale industry, besides strengthening traditional industries. It also aims at making the traditional industries competitive in terms of quality, technology, design, and packaging and marketing. Under this policy the State Government also endeavors to actively promote private sector participation in the industrial and economic growth of the state. Moreover, a facilitative atmosphere is also provided for promotion of exports and to enhance the competitiveness of exportable products. Under the policy, the state also strives to create a conducive environment to attract foreign direct investment and make the state a leading destination for foreign investments. Strengthening infrastructure, incentives to entrepreneurs and industrial units are likely to be given due priority. The policy provides special incentives on infrastructure in addition to exemption from various tax and duties to the investors.

The policy maintains a single window policy for speedy and hassle free procedures. A 100 percent exemption on stamp duties for IT, ITES, food processing sector and some of the service sector; rebate on stamp duty, land on priority, interest free loan under industrial investment promotion scheme, uninterrupted power supply and exemption from electricity duty, 50-100 percent exemption from stamp duty on purchase of land have helped to create ideal environment for investment. Also extra incentives are being given on case-to-case basis for investment more than Rs.5000 Million. The policy intends to increase in employment in Industrial and Allied Sector from the present level of 8% to 15%.

(b) Information Technology Policy 2004

Recognising the huge employment generating potential of the IT services industry, the State Government will actively promote establishment of units engaged in IT-services (hardware/software based etc.) and IT-enabled services (call centers, medical transcription, BPO, etc.) and is also keen on providing technical know-how, infrastructure, marketing support and financial assistance. The initiatives also includes a budget for IT activities, IT pool fund for e-governance, IT cities, IT parks, NIC infrastructure and promoting hardware industries.

(c) SEZ Policy (2007)

In order to develop SEZs and to promote industrial and economic development, the government introduced the SEZ policy in 2007. The policy aims to provide exemption of taxes, develop world-class infrastructure facilities and rationalize/exempt legal provisions related to labour, electricity and environment.

(d) Biotech Policy 2004

The state of Uttar Pradesh aspires to utilize the modern tools of biotechnology and attain prosperity for farmers, generate employment in rural areas, food for all, good health and clean environment. The mission of the policy is to develop knowledge-based economy, assure benefit of biotechnology to all section of the state and promote entrepreneurship in biotechnology-based industries.

(e) Policy for Food Processing Industry 2004

Uttar Pradesh is one of the largest producers of farm commodities in the country and the largest producer of vegetables, wheat, maize, sugarcane, potato and milk. Some of the most delicious varieties of fruits are grown in the state. Thus there is an immense potential in this sector. The state also has diverse agro climate conditions, which are conducive for a variety of crops round the year.

(f) Investment Incentives

The Government of Uttar Pradesh is committed to provide high standard, adequate infrastructure facilities, enabling conducives policy framework and an investor friendly environment for ensuring higher industrial growth in the state. The state recognizes its role in nurturing economic activity and entrepreneurship and places high priority on providing adequate infrastructure to the industry.

(g) Hi-Tech Policy

The main objective of of Hi-Tech Policy is the development of High-Tech Townships in Uttar Pradesh. The development of such high-tech townships will not only help in attracting private investment in the real estate development sector and provide state of the art infrastructure and attractive aesthetic environment for living, work and recreation but will also encourage further private investment in other sectors of the economy.

(h) Major Infrastructure Development Projects

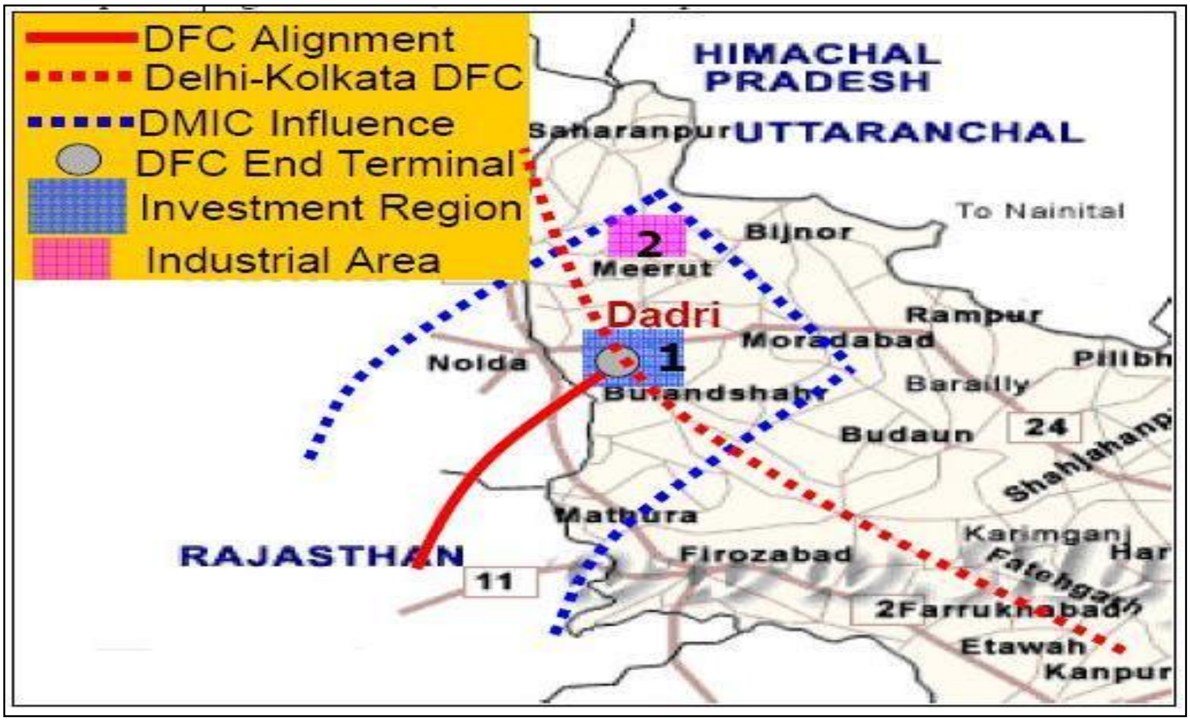
(i) Delhi-Mumbai Industrial Corridor (DMIC)

Important industries that are likely to be benefitted due to DMIC project in the sub-region include engineering, electronics, and leather and textile goods. The industrial activities will be further improved in Ghaziabad by creation of supporting infrastructure and facilitating further investments in the industrial sector to develop a mega industrial zone. It is proposed to augment two industrial estates in Ghaziabad.

Biotechnology is an upcoming industry sector that needs to be given thrust in the DMIC area near NOIDA and Greater NOIDA. To support the IT/ITES/Biotech Hubs as well as the other industries in the investment region, a Knowledge Hub/Skill up-gradation centre can help the industry to evolve on more sustainable basis.

Dadri-Noida-Ghaziabad Investment Region and Meerut-Muzaffarnagar Industrial Area proposed to be developed as part of the DMIC project (refer Map 7.4).

Map 7.4: Location Map for Proposed Development Node in DMIC - Uttar Pradesh



Source: http://delhimumbaiindustrialcorridor.com/dmic-uttar-pradesh.php

(ii) Dadri-Noida-Ghaziabad Investment Region

The proposed site of Dadri-Noida-Ghaziabad Investment Region is close to Delhi, the National Capital. This region has good connectivity by road and rail to rest of India as well. Besides, it comprises of Noida, which is part of the Central NCR with substantial IT/ITES and electronics industries; Ghaziabad, the hub of light engineering and electronics industries; and Greater Noida, the city with well developed road network, state of the art physical and social infrastructure with quality residential commercial, recreational and institutional areas. Moreover, a 3500 MW power plant is being developed close to Dadri through private sector participation.

This Investment region will have the advantage of being located close to Dadri Junction, where the alignments of the Eastern (Delhi-Kolkata) and Western (Delhi-Mumbai) Dedicated Freight Corridors meet besides the existing Delhi-Meerut-Lucknow Broad Gauge Connectivity.

Components of the proposed Investment Region

- Free Trade Warehousing Zone (FTWZ) at Greater Noida.
- 3500 MW Power Plant being implemented at Dadri through private sector participation
- Connectivity with two National Highways, NH-24 (Delhi-Lucknow), NH- 58 (Delhi-Haridwar-Mana Pass). Widening and strengthening to four-lane dual carriageway is being carried out for both National Highways under Phase-3A and 3B of NHDP.
- The region will also be served by proposed Eastern Peripheral Expressway (Ghaziabad-Noida-Palwal & Kundli-Ghaziabad) of the National Capital Region.

It is important to note that a 'General Manufacturing Investment Region', to be spread over 400 Sq. km., is also being planned at Dadri-Noida-Greater Noida-Ghaziabad to promote investment in the manufacturing sector (Engineering/Electrical Appliances etc.)

Other proposed components of the Investment Region

- Export-oriented Industrial Units/ SEZ
- Augmentation of Existing Industrial Estates
- Agro/Food Processing Zone
- IT/ITES/Biotech Hub
- Knowledge Hub/Skill Development Centre
- Integrated Logistics Hub
- Integrated Township
- Widening and strengthening of National Highways is being undertaken by the National Highways Authority of India (NHAI).
- Providing linkage to NH-24 and NH-58.
- Augmentation of State Highway connecting Ghaziabad-Aligarh-Agra.
- Connectivity to Greater Noida/Delhi and Faridabad/NH2 and to Faridabad-Noida-Ghaziabad and Kundli-Ghaziabad Expressways.
- Development of requisite grade separators/flyovers/interchanges and underpasses along the National Highways/ State Highways and access roads for uninterrupted freight and passenger movement to the region would also be included in the development of feeder links.

Proposed Feeder Rail Links

- Linkage to/from container terminal and with Western DFC at Dadri.
- Augmentation of Meerut-Dadri-Ghaziabad, Ghaziabad-Aligarh-Hathras route.
- Development of Feeder Rail links also includes construction of underpasses wherever required so as to avoid level crossings.

(iii) Meerut-Muzaffarnagar Industrial Area

The proposed Meerut-Muzaffarnagar Industrial Area would be located at a distance of 100 to 150 km from Delhi, the National Capital. This region has good connectivity by road (NH-58 and other State Highways) and rail (Delhi-Meerut-Lucknow/Saharanpur) to rest of the State and India.

The proposed Industrial Area has the advantage of availability of good connectivity by road and rail. Being located in the rich agricultural zones of the state, this region offers wide opportunities for agro-processing industries. This region caters to the rich agricultural produce (Mango, Basmati Rice, Potatoes and other vegetables) of Meerut and Muzaffarnagar as well as from surrounding districts as Bijnor, Jyothibaphule Nagar and Saharanpur of the state. Meerut is renowned for production of sports goods. Besides this, Meerut is the base for other medium and large scale industries in automobile, alcohol, paper, chemical, sugar, cotton yarn etc. and small scale industries in electrical/electronic equipment, food products and engineering items.

With over 1 million population, Meerut has been identified as one of the 63 major urban agglomerations of the country to receive Rs. 1,120 Crore for urban infrastructure improvement under the JNNURM scheme of Government of India. These investments are proposed to be implemented by 2012. Muzaffarnagar has about 24 Paper Mills, 6 Sugar Mills and 36 Steel Rolling Mills indicating the prospects of this region. Expressway connectivity between Delhi, Meerut and Muzaffarnagar is proposed which is expected to offer enhanced connectivity to the proposed industrial area. Major proposed components of DMIC in the Industrial Area are Export-oriented Industrial Units/SEZ, Augmentation of Existing Industrial Estates, Agro/Food Processing Zone, Truck Terminal with Warehousing Facility and integrated townships.

(iv) The Yamuna Expressway

The Yamuna Expressway connects two important destinations of National and International importance - National Capital Delhi and tourist center Agra. Both these places have high potential to generate traffic and economic development. Agra is already well connected by Kolkata, Mumbai, and Jaipur etc. by a network of National Highways and the proposed Expressway will provide high level connectivity to all these routes from Delhi especially when the proposed ring road around Agra town is implemented.

With the Expressway coming up along the proposed Taj Economic Zone and Taj International Hub Airport within easy reach of Delhi, Noida and Greater Noida, the Yamuna Expressway Project would accelerate overall development of the region.

The Yamuna Expressway lies in between the high density vital traffic corridors i.e. National Highway (NH-2) connecting Delhi & Agra and NH-91 connecting Kanpur-Aligarh-Khurja-

Bullandshahar-Ghaziabad and Delhi. The Expressway has a great economic potential of attracting investment by providing better transport and other infrastructural facilities.

The Yamuna Expressway has provided connectivity between the various satellite towns of NCR, i.e. Noida, Greater Noida, Ghaziabad, Meerut, Faridabad with Aligarh, Mathura and Agra. Mathura and Agra are well known international tourist destinations.

The Yamuna Expressway along with NH-2 and NH-91 and interconnectivity between all three of them has provided a good network of roads which in turn, has opened up a vast area to all-round development in the following areas:

- Upcoming huge urban conglomerates in NOIDA and Greater Noida with their own potential will have easy accessibility towards Aligarh, Mathura and Agra.
- The proposed Export Promotion zones including Taj Economic Zone along the Yamuna Expressway coupled with the Taj International Hub Airport will promote economic development of Uttar Pradesh sub-region.
- Safe, shorter travel time and the accessibility in the region will accelerate land development along the Yamuna Expressway in a planned manner for commercial, industrial, institutional amusement and residential purposes.

The Yamuna Expressway is actually an extension of 6-lane Expressway from Noida to Greater Noida thus opening up the vast hinterland area on the eastern bank of river Yamuna for the industrial and urban development and provide convergence to the tourism, entertainment, leisure and knowledge based industry in region. The total length of the Yamuna Expressway from Zero Point Greater Noida up to Agra is about 165 kilometers.

(v) Inland Container Depots

As per data from Ministry of Commerce & Industries, Govt. of India, there are total six Inland Container Depots (ICDs) [two in Loni (Ghaziabad), Surajpur and Dadri (Gautam Buddha Nagar), Buland Shahr and Modi Nagar (Ghaziabad)] and five Container Freight Stations (CFS) [all five at Dadri (Gautam Buddha Nagar)] which are under implementation or functional in Uttar Pradesh sub-region. The number of ICDs and CFSs in the sub-region has significantly increased, which is an indicator of growing industrial production and trade related activities. Concentration of ICDs is highest at Loni, Ghaziabad.

(i) Outcome

Uttar Pradesh sub-region is one of the major IT hubs of North India with the fourth largest software exports in the country. The IT focus is confined to Noida, Greater Noida and Ghaziabad. The region has also booming electronic industry as well. A recent addition is the upcoming Logix Techno Park in Noida. This is the largest Software Technology Park (STP) in North India, covering a total area of 0.6 million sq ft. The estimated cost of the park is $17.4 million. Blue-chip companies such as HCL, Mentor Graphics and Patni, have already moved in, occupying 75 percent of the site even before its completion. Software Technology Park of India, Noida, is the key contributor to NCR emerging as a major IT/ITES destination for global majors outsourcing IT services to India. It also acts as the nodal centre for other Software Technology Parks in north and central India. It is home to many big international and national companies such as Global Logic, EXL, Birlasoft, Impetus, STMicroelectronics, MtronPTI, Fiserv, Adobe Systems, TCS, CSC, HCL, ATC Labs, Interra, Agreeya Solutions and Xansa.

Noida has also emerged as a major centre for leather footwear and leather garments. Noida provides high-end infrastructure and has Footwear Design and Development Institute (FDDI). There are certain notified and functional Export Processign Zone in NOIDA (refer Table 7.1 and 7.2).

Table 7-1: Notified Export Processing Zones in NOIDA AND Greater NOIDA

Name of EPZ	Location	Details of Products/Services
AnsalIT City and Parks	Grater Noida	IT/ITES
OSE Infrastructure Limited	Noida	IT/ITES
NIIT Technologies	Greater Noida	IT/ITES
Unitech Infracon Limited	Greater Noida	IT/ITES
Aachvis Softech	Noida	IT/ITES
Perfect IT SEZ	Noida	IT/ITES
Unitech Hightech Projects Private Limited	Noida	IT/ITES
Gallant Infrastructure Private Limited	Greater Noida	IT/ITES
Jubilant Infracon Private Limited	Noida	IT/ITES
SarvMangal Realtech Private Limited	Noida	Electronic hardware and software
IVR Prime IT SEZ Private Limited	Noida	IT/ITES
Golden Tower Infratech Private Limited	Noida	IT/ITES

Table 7-2: Functional NEPZ in NOIDA and Gretaer NOIDA

Name of NEPZ	Location	Details of Products/Services
Noida Special Economic Zone	Noida	Multi-product
HCLTechnologies	Noida	IT/ITES
Moser Baer SEZ	Grater Noida	Non-conventional energy
Wipro Limited	Greater Noida	IT/ITES
Seaview Developers Limited	Greater Noida	IT/ITES

7.4.4 Rajasthan

(a) Industrial and Investment Promotion Policy-2010

The industry and Investment Policy is aimed at the following:

(i) Improving the Business Climate

- Simplification and rationalization of regulatory mechanisms.
- Setting up of Udyogik Salahkar Samiti.

(ii) Developing high quality infrastructure

- Encouraging Private Public Partnership for infrastructure development.
- Creating Fund for meeting critical infrastructure needs.
- Developing Logistic Parks.
- Leveraging Delhi Mumbai Industrial Corridor (DMIC).
- Developing special investment regions.
- Developing Investment townships and urban infrastructure.
- Ensuring pollution control and environmental protection mechanisms.
- Ensuring water availability for investment projects.
- Developing a Gas Grid.
- Making power supply available in abundance.

(iii) Enhancing skill levels and employability

- Upgrade industrial training institutes into centers of excellence.
- "Train to gain" scheme for On-the-Job training.
- Skill Mapping and survey.

(iv) Ensuring easy availability of land

- Easing procedures for land use change/conversion/approval of layouts/building plans.
- Simplifying land acquisition processes.
- Creating a land bank and formulating new policy guidelines to leverage land for investments.

(v) Focus on MSME growth

- Incentives to MSME under MSME policy launched in 2008 would continue and extensive Cluster Development.
- Scheme for Financial Assistance for Cluster Development in SPV Mode would be introduced.
- Leveraging Government of India schemes.
- Institutional Support for Quality Improvement

(vi) Promotion of thrust areas

- Knowledge sector including IT and ITES.
- Gems and Jewelry.
- Handicrafts and handlooms.

(b) IT and ITES Policy-2007

- ICT as tool for promoting good governance.
- E-Governance initiatives.
- Promoting economic development of the state through investments in IT and ITES sector
- Information Technology For Masses

(c) Policy for Agro-Processing Industries and Agri-Business 2010

The Policy for the promotion of agro-processing industries and agri-business, seeks to address the entire value chain in agro-processing and marketing, including development of the supply chain, market development and diversification.

Objectives:

i. To increase the income in the hands of the farmers through more remunerative prices for their produce;
ii. To encourage value addition in agriculture produce and to reduce post harvest losses;
iii. To bring in new technologies and practices to modernize agro-processing and marketing;
iv. To promote export of agri products of the State and to build a strong State brand in the domestic and international market; and
v. To attract private investment in agro-processing and create new employment opportunities on a large scale.

The Policy also seeks to promote and encourage value addition and loss reduction in agriculture, including horticulture; introduce new post harvesting technologies; promote export of agriculture products produced in the State and encourage the development of agro processing infrastructure and human resources.

(d) Major Infrastructure Projects

(i) Khushkhera-Bhiwadi-Neemrana Investment Region

As part of the DMIC project, Khushkhera-Bhiwadi-Neemrana Investment Region, in North-Eastern Rajasthan, would be located within 50 km from the alignment of Dedicated Freight Corridor. This Investment Region is located close to the National Highway No.8 which forms part of the Golden Quadrilateral. Government of Rajasthan has set out ambitious plans for the Investment Region by developing a Global City, to be spread over 40,000 Acres, between Shahjahanpur, Neemrana and Behror and expected to cater to 1 Million Population.

Khushkhera-Bhiwadi-Neemrana Investment Region is located at a distance of 107km from Delhi. Widening of Alwar-Dausa Link (81km) is being carried out by RIDCOR through private sector participation. Availability of huge Land parcels at comparatively lower prices provides an advantage to the industry. Important potential industry sectors in the investment region include automobile, Biotechnology, IT/ITES and Health Sector (refer Map 7.5).

Along with, Export-oriented Industrial Units/SEZ, IT/ITES/Biotech Hub, Integrated Logistics Hub an International Airport Complex, etc. are proposed to be provided with an Airport Complex having an air strip and other integrated facilities that would cater to the needs of business visitors like baggage check-in, registration with the Ministry of External Affairs for overseas visitors etc.

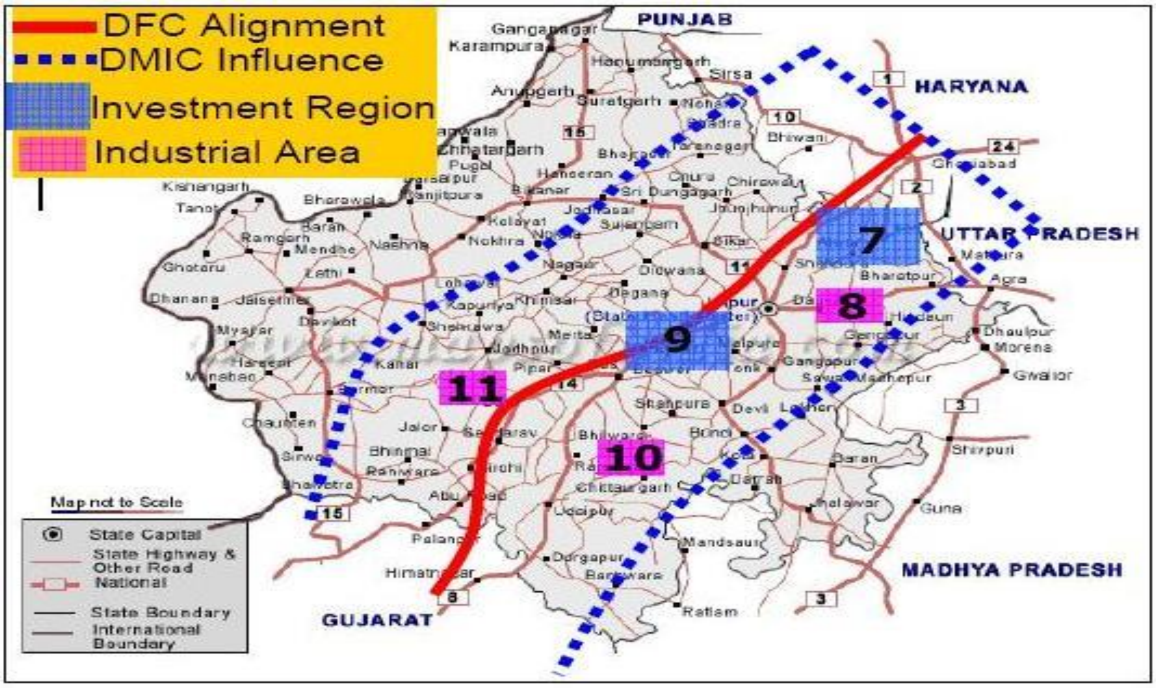
Rail and Road Links:

In case of Feeder road and rail linkages connecting the identified investment region with NHDP, DFC corridors and Hinterland includes following development proposals:

- Connectivity to NH-8, the Golden Quadrilateral Corridor

- Augmentation of Rewari-Alwar- Bharatpur linkages
- Development of requisite grade separators/flyovers/interchanges and underpasses along the National Highways/ State Highways and access roads for uninterrupted freight and passenger movement to the region would also be included in the development of feeder links
- Connectivity to the Western Dedicated Freight Corridor through exclusive siding
- Development of Regional MRTS Linkage between Delhi, Manesar and Neemrana

Map 7.5: Location Map for Proposed Development Nodes in DMIC-Rajasthan



Source: Government of Rajasthan

(v) Inland Container Depots

As per data from Ministry of Commerce & Industries, Govt. of India, there are total two Inland Container Depots (ICDs) (Bhiwadi and Kathuwas & Mandhan, Alwar district), which are under implementation or functional in Rajasthan sub-region.

7.4.5 List of Early Bird Projects with Investments from Japan under DMIC Project

- FTWZ (Free Trade Warehousing Zone) Project in Haryana: MITSUI & CO. LTD
- FTWZ (Free Trade Warehousing Zone) Project in Uttar Pradesh: MITSUI & CO. LTD
- DMIC Human Resources Training Project: Project proposal and Planning: Techno Brain Company (technically supported by Sony Corporation) Implementation Organization: Science and Technology Park, promoted by Government of India's Department of Science and Technology and University of Pune, Maharashtra
- Captive Power Plant at Neemrana Japan Investment Park Hitachi, Neemrana Japanese Participating Companies
- Neemrana Jet Stream Logistics Project NYK Line India & NYK Logistics India
- Waste Textile & Mobile Phone Recycle Project Japan Environment Planning (JEPLAN)

7.5 Foreign Direct Investment in NCR

NCR is able to attract good amount of Foreign Direct Investment (FDI) due to improved infrastructure and have received considerable FDI in the past. During the period from April 2000 to March 2015, NCR attracted approx. $ 49.410 billion (Rs 249,023 Crore) FDI; which is over 20% of India's total FDI during the same period. Maharashtra attracted highest FDI during the same period, close to 29% of India's total FDI, followed by Tamil Nadu with over 7% and Karnataka with over 6% (refer Table 7.3).

Table 7-3: FDI Inflow in NCR from April 2000 to March 2015

Sl. No.	States covered	Cumulative Inflows (April 2000 to March 2015) Rs Crores (US$ millions)	% to total Inflows
1	Maharashtra, Dadra & Nagar Haveli, Daman & Diu	3,53,022 (73,118)	28.62
2	Delhi, Part of UP and Haryana	249023 (49410)	20.19
3	Tamil Nadu, Pondicherry	88,766 (17,014)	7.20
4	Karnataka	82,121 (16,120)	6.66
5	Gujarat	53,797 (11,041)	4.36
6	Andhra Pradesh	49,240 (10,015)	3.99
7	West Bengal, Sikkim, Andaman & Nicobar Islands	14,627 (2,981)	1.19
8	Chandigarh, Punjab, Haryana, Himachal Pradesh	6,360 (1,331)	0.52
9	Rajasthan	6,795 (1,264)	0.55
10	Madhya Pradesh, Chattisgarh	6,096 (1,216)	0.49
11	Kerala, Lakshadweep	6,150 (1,211)	0.50
12	Goa	3,867 (823)	0.31
13	Uttar Pradesh, Uttranchal	2,444 (483)	0.20
14	Orissa	1,961 (3,98)	0.16
15	Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura	381 (84)	0.03
16	Bihar, Jharkhand	267 (50)	0.02
17	Jammu & Kashmir	26 (4)	0.002

Sl. No.	States covered	Cumulative Inflows (April 2000 to March 2015) Rs Crores (US$ millions)	% to total Inflows
18	Region not indicated	3,08,060 (61951)	24.97
Sub Total		12,33,005 (2,48,512)	99.96
19	RBI's NRI Scheme (from 2000-2002)	533 (121)	0.04
Grand Total		**12,33,538** **(2,48,633)**	**100.00**

Source: FDI Statistics, Department for Industrial Policy & Promotion, Ministry of Commerce & Industry. Govt. of India http://dipp.nic.in/English/Publications/FDI_Statistics/2015/india_FDI_March2015.pdf

7.6 Conclusions

The industrial and other investment policies in NCR initially rooted in Industrial Policy resolution of 1956 and subsequent policy statements of 1977 and 1980. Most of these policies put emphasis on the Secondary Sector. The result was that the share of secondary sector in State income went up from 25% in 1982 in NCT Delhi to nearly 80% in 1999-2000. Post 2000, however, the trend reversed, with the share of Secondary Sector declining to 20% and Tertiary Sector taking over, with a share of 80%. This trend mirrored the transition of India to a service-sector dominated economy due to leaps taken in technology sector.

Globalization of economies, preference for outsourcing to low-cost destinations and India's pool of educated and English-speaking workforce led to emergence of India as a major IT, ITES and outsourcing destination. Over a period of time, outsourcing has become a trend not only in software but also in sectors like engineering, design, consulting and financial services. While growth of IT/ITES and financial services sector led the service sector growth in India, NCR service sector continues to be dominated by trade and retail and IT, ITES. Consequently, sub-regions of NCR like Haryana and Uttar Pradesh, taking advantage of proximity to Delhi, have developed into an IT, electronics and engineering hub.

Delhi-Gurgaon metro rail link is a landmark step in the direction of boosting business activity in Gurgaon and thereby making Gurgaon an important growth location in NCR. If the metro line is extended up to Manesar, it will further add impetus to the growth of Manesar. Kundli-Manesar-Palwal expressway is also under construction. After construction of the same, these three locations will be the major growth centers of Haryana sub-region.

Therefore, the earlier investment and industrial policies for NCR has undergone significant change in post 2000 as most of the previous policies were not fully equipped to handle the changing economic scenario, where services and technological advancement have become the cornerstones of economic development. Further, globalization and liberalization have thrown up new challenges and opportunities, which require a more holistic approach towards industrial, investment and infrastructure development, which is reflected in most of the policies.

8. ISSUES AND RECOMMENDATIONS

8.1 Major Issues - Background

NCR is rapidly emerging as a global economic hub and is among the fastest growing economic regions in India with an Average Annual Growth Rate (AAGR) of Gross Domestic Product (GDP) of 11.2% during 2005-06 to 2009-10 at Constant Prices (2004-05), as against the AAGR of 8.7% at national level. The NCR economy is driven by the service sector accounting for 67% of its GDP (2007-08). The main drivers of NCR GDP should come from more joint ventures and collaboration in manufacturing sector to achieve the objective of *Make in India*. It is observed that among the NCR sub-regions, Haryana sub-region is growing at a pace much faster as compared to other sub-regions. There is a marked change in the economic structure of different Sub-regions. NCT of Delhi has become the main center for tertiary sector activities. Uttar Pradesh and Rajasthan sub-regions are still dominated by agricultural activities, while Haryana sub-region is a mix of industrial and service sectors. Gurgaon district in Haryana sub-region has shown phenomenal growth in terms of per capita income, primarily due to fast growth of IT and ITES sector, while Panipat district in Haryana Sub-region is evolving as a major trade centre. Alwar district in Rajasthan sub-region, on the other hand, predominantly remains an agriculture-centered economy.

NCR has undergone different stages of evolution since its inception. Between the 70s to the turn of this millennium, increasing migration into NCT of Delhi was the substantial developmental issue, while post 2000 other parts of the NCR have started developing as strong economic magnets and the critical developmental concern has shifted on how to make other areas of NCR economically strong. An integrated planning process started with the preparation of the Regional Plan-2001 for NCR and subsequently the Regional Plan-2021 for NCR. As indicated, at present the critical development issue is to increase overall competitiveness of the NCR besides ensuring sustainable development. The key challenge lies in the fact that growth in the NCR has been heterogeneous; there are differences of magnitude of the growth and structure of economic activities across the region that need to be overcome.

The analysis of economic activities reveals that the retail trade is not only growing very fast in the NCR but is also a major source of employment after manufacturing. Though manufacturing sector has declined, in terms of growth in NCT-Delhi, it remains one of the major employment generators in the overall NCR economy. Manufacturing has shown a substantial concentration in cities bordering NCT-Delhi, especially Faridabad, NOIDA, etc.

This chapter summarises the issues and for overall development of the NCR and also provides recommendations, besides proposing the projects that may be taken up by the NCR participating State Governments towards overall development of the region.

8.2 Issues

8.2.1 Wide Variation in Level of Economic Growth in NCR

There is a wide variation in GDP growth as well as disparity in per capita income. In 2009-10, NCT-Delhi sub-region has recorded the highest GDP (Rs. 16,98,389.80 Millions) followed by Haryana sub-region (Rs. 8,66,730.30 Millions), Uttar Pradesh sub-region (Rs. 5,06,453.18 Millions) and Rajasthan sub-region (Rs. 1,21,901.00 Millions).

In terms of growth of GDP during 2004-05 to 2009-10, Haryana sub-region had recorded highest growth rate at 11.77% (CAGR), followed by Delhi sub-region at 11.10% (CAGR), Rajasthan sub-region at 9.50% (CAGR), and the Uttar Pradesh sub-region at 8.78% (CAGR), while the CAGR during the same period at NCR level was 10.83%.

In terms of per capita income in 2009-10, NCT-Delhi sub-region has recorded the highest (Re. 98,262), followed by Haryana sub-region (Rs. 74,457), Uttar Pradesh sub-region (Rs. 35,036) and Rajasthan sub-region (Rs. 29,300). However, CAGR of per capita income during 2004-05 has been the highest in Haryana sub-region (10.65%), followed by NCT-Delhi sub-region (9.00%), Rajasthan sub-region (7.17%) and Uattar Pradesh sub-region (6.53%).

The above indicates that while Haryana sub-region has been growing at the fastest rate in NCR, growth rate of Uttar Pradesh sub-region and Rajasthan sub-region is less than that of NCR.

The share of primary and secondary sectors in the NCR economy is decreasing; a strong tertiary sector is emerging as the backbone of the economy of NCT-Delhi. However, in Rajasthan and Uttar Pradesh sub-regions, the primary sector still contributes significantly to the economy [change in LQ of Uttar Pradesh sub-region for primary sector is positive (0.22) and much higher than that of secondary and tertiary sectors during 2000-01 to 2005-06. Similar trend has been observed in case of rajasthan sub-region also). On the other hand, in NCT-Delhi and Haryana sub-regions, the share of primary sector has declined during the same period, which is evident from the decrease in LQ of primary sector in these two sub-regions. This may be attributed to the relatively slower urbanization and industrialization in Uttar Pradesh and Rajasthan sub-regions (refer Table 8.1).

Details of LQ of persons in 2005, disaggregated into rural & urban enterprises as well as LQ of GDP (sector-wise) and growth rates from 2000-01 to 2005-06 are given at Annexure-8.1. LQ of Primary, Secondary and Tetiary Sectors of GDP at Constant Prices (1999-00) are given at Annexure-8.2 to Annexure-8.4 respectively. LQ of Persons by type of enterprises for Rural Areas, Urban Areas and NCR are given at Annexure-8.5 to Annexure-8.7 respectively.

Table 8-1: LQ GDP 2000-01 and 2005-06

District / Region	Primary			Secondary			Tertiary		
	LQ2000-01	LQ2005-06	Change	LQ2000-01	LQ2005-06	Change	LQ2000-01	LQ2005-06	Change
Meerut	2.51	3.31	0.80	1.08	0.88	-0.20	0.68	0.71	0.03
Baghpat	4.22	4.28	0.06	0.44	0.56	0.11	0.63	0.70	0.07
Ghaziabad	1.58	2.09	0.51	1.43	1.28	-0.15	0.71	0.72	0.01
Gautam Buddha Nagar	1.35	1.04	-0.32	1.91	2.13	0.22	0.54	0.51	-0.03
Bulandshahr	3.63	3.86	0.23	0.78	0.82	0.03	0.60	0.65	0.05
U.P. sub-region	**2.39**	**2.61**	**0.22**	**1.23**	**1.25**	**0.02**	**0.64**	**0.65**	**0.01**

Panipat	1.47	1.38	-0.09	0.96	0.84	-0.12	0.93	1.01	0.08
Sonipat	3.12	2.65	-0.47	0.81	1.07	0.26	0.68	0.72	0.04
Rohtak	2.29	2.77	0.48	1.00	0.84	-0.16	0.76	0.80	0.05
Jhajjar	2.17	2.41	0.25	1.42	1.40	-0.02	0.60	0.62	0.02
Rewari	1.63	1.70	0.07	1.47	1.68	0.21	0.68	0.60	-0.08
Gurgaon	0.77	0.31	-0.45	1.56	1.51	-0.05	0.80	0.88	0.08
Faridabad	1.06	0.98	-0.08	1.55	1.34	-0.21	0.75	0.86	0.10
Haryana sub-region	**1.43**	**1.22**	**-0.21**	**1.36**	**1.31**	**-0.05**	**0.77**	**0.83**	**0.07**
NCT-Delhi sub-region	**0.12**	**0.11**	**-0.01**	**0.73**	**0.73**	**0.00**	**1.28**	**1.25**	**-0.03**
Rajasthan sub-region	**2.43**	**3.02**	**0.59**	**1.11**	**1.11**	**0.00**	**0.68**	**0.65**	**-0.03**

Source: Study of Economic Profile of NCR

8.2.2 Workforce

(a) Disguised employment in agriculture sector in all sub-regions except NCT-Delhi

Analysis of distribution of workforce in NCR has indicated that substantial share of workers are engaged in primary sector activities (Rajasthan sub-region has recorded the highest share of 77%, followed by Haryana sub-region with 52%, Uttar Pradesh sub-region with about 48%).

As per 2001 census, NCR has a total of 129.72 Lakhs workers engaged in primary, secondary and tertiary sectors. Of the total working population, largest proportion of the workers (45.02%) are employed in the primary sector, followed by secondary sector (31.60%) and the least (24.86%) in tertiary sector. In Haryana (57.93%), Uttar Pradesh (55.34%) and Rajasthan (79.96%) sub-regions, the majority of workforce is engaged in the primary sector. In case of secondary sector, NCT-Delhi sub-region has recorded the highest share of workers (48.58%), followed by Uttar Pradesh (25.41%), Haryana (25.13%) and Rajasthan (12.07%) sub-regions.

Analysis of data on workers engaged in agricultural activities (cultivators and agricultural labourers) in 2001 and 2011 indicates that in all the sub-regions, proportion of workers engaged in these two categories has decreased (in case of NCT-Delhi sub-region, the proportion has increased negligibly). However, in case of Rajasthan sub-region, significant proportion of workers (65.30% in 2011) is still engaged in these two categories (refer Table 8.2).

Table 8-2: Workers Engaged in Cultivation (Cultivators & Agricultural Labourers)

Sub-Region	Workers engaged in Cultivation			
	2001		2011	
	Number	% to Total Workers	Number	% to Total Workers
NCT-Delhi sub-region	53,204	1.22%	72,873	1.30%
Haryana sub-region	972,007	38.63%	1,250,844	34.09%
Uttar Pradesh sub-region	1,110,693	38.00%	1,526,954	31.81%
Rajasthan sub-region	1,033,649	70.83%	1,115,663	65.30%

Source: Census of India, 2001 & 2011.

In order to increase the share of workers in non-agricultural activities, it is required to create a facilitating business environment in the sub-regions, especially in Rajasthan and Uttar Pradesh, to support the Small Scale Indutries (SSIs), which have huge potential for employment generation. It is evident that only NCT-Delhi sub-region has experienced a mushrooming growth of SSIs, whereas industrial development in other sub-region has been led by large scale industries. There is a need to formulate an effective employment policy in industrial sector for promoting Micro, Small and Medium Enterprises (MSME) units in these sub-regions.

(b) Uneven distribution of main workforce across the NCR

Analysis of distribution of workforce in main and marginal categories indicates that concentration of marginal workers (share of marginal workers in a sub-region to total marginal workers in NCR) is the highest in Uttar Pradesh sub-region (37.91%), followed by Haryana (29.75%), Rajasthan (21.16%) and NCT-Delhi (11.18%) sub-regions. There is a need to provide stable emnployment opportunities through secondary and tertiary sector activities, which helps in generation of employment.

8.2.3 Industrial Development

In accordance with the policies to disperse economic activities in the adjoining towns falling in the Central NCR, the concerned State Governments developed large-scale industrial areas in these towns. Specific areas have been earmarked for the relocation of polluting and hazardous industries shifted outside NCT-Delhi; however, the following shortcomings have been observed:

- Inadequate quality power supply in most industrial areas;
- Lack of infrastructure of effective treatment and disposal of polluting industries;
- Limited availability of skilled manpower in immediate vicinity and a general shortage of manpower;
- Lack of critical support system such as common facilities making it difficult for micro and small enterprises to flourish;
- Issues relating to land acquisition and land availability; and
- SEZ/EPZ unable to develop as per plans.

The overall super structure and business environment required for competitive development of the industrial sector in the NCR needs improvement.

8.2.4 Rural Economy

Trends show a general decrease in the rural population and very slight increase in the rural workforce. Trends also demonstrate a shift from agricultural based employment to Secondary Sector and Tertiary Sector (service oriented employment) becoming the key economic driver. While NCT-Delhi has witnessed a decrease in rural population and agricultural and related establishments in the rural areas, Haryana and Uttar Pradesh sub-regions have witnessed reverse trends. This indicates that while the workforce in NCT-Delhi is moving towards non-agricultural employments, agriculture and allied activities still remain an important source of livelihood in the remaining sub-regions.

(a) Limited non-farm sector employment

Employment options in non-farm activities are limited in the rural areas of NCR. Analysis of number of persons working in agricultural and non-agricultural establishments indicates that most of non-farm sector's employment is concentrated in the Haryana sub-region (3.13 Lakhs in 2005), followed by Uttar Pradesh sub-region (2.42 Lakhs in 2005). This number of workers engaged in non-agricultural establishments in rural areas in 2005 is insignificant, compared to the number of total workers recorded in rural areas of these two sub-regions (number of total workers in rural areas was recorded as 20.95 Lakhs and 25.13 Lakhs in Haryana sub-region and Uttar Pradesh sub-region respectively, as per Census of India 2011 data).

(b) Inadequate Rural Infrastructure

The growth of rural economy depends on the availability of rural infrastructure in the form of Mandi and marketing facilities. Most Mandis in the NCR still follow traditional systems of marketing and have inadequate infrastructure and support systems. An example is common storage and cold storage facilities; which are limited in number and are centralized. Most of these are in the close vicinity of NCT-Delhi. This leads towards distress sale of farm produce by farmers, and therefore, has direct bearing on the low-growth of rural income.

(c) Limited Agro-Processing facilities

Over the last few years, there has been a positive growth in the fruits and vegetables sub-sector of the food processing sector. However, overall agro-based industries are very limited. Presently, traditional agro-industries like rice mills, khandsari and gur (jaggery) making units are prevalent in NCR. For example, Panipat is one of the places in NCR known for its agro-processing industries in pickle making. It is required that technological upgradation of these units are undertaken in order to be competitive. Uttar Pradesh sub-region and the North-Western parts of Haryana sub-region with good irrigation facilities are potential areas for establishment of agro-products and food processing industries.

8.2.5 Informal Sector

There is need to mainstream informal sector employment. Informal sector employment is generally low paid due to poor skills of the workers in this sector. The possible reasons for low skill are lack of opportunity to avail skill-building facilities. Hence, most households engaged in this sector are unable to escape the poverty cycle over generations. The only way to break out of this poverty cycle is by improving existing skills of the workforce in the informal sector.

Tailor-made technical training programs, which suit the requiremens of the existing workforce, are needed There is a need to ensure a mechanism for imparting skill upgradation of the existing informal workers by means of including them in the courses/programmes offered by Industrial Training Institutes (ITIs). It is also imperative to provide short-duration training programs mainly of in-service nature. If the income of the present generation of workers is enhanced in this manner, they may be in a position to support training for their future generations through their own resources.

Training may be imparted in sectors such as cutting, sewing cloth, carpentry, welding, plumbing, etc. Most designs in the garment industry are produced by computer-aided software. Such types of skill formation are also likely to prepare them for alternative employment. The traditional means of providing alternative employment by teaching women to make papads, candles and incense sticks are of very little use, as they do not generate enough incomes for households to climb out of poverty levels sustainably. New programs are required taking into account needs of the industry and willingness of people concerned to learn. There are a number of existing craft clusters in NCR. However, there is inadequate Common Facility Centres (CFCs). Similarly, another important category in which a very large number of informal employments exist is street vending. Street vendors form a major part of informal employment in the major growth centers in the NCR. There is an urgent need to integrate the street vendors as well as their spaces in the formal Urban Planning mechanisms to ensure certainty of their livelihood.

8.2.6 Uniform GDP Data at District Level

Presently, the GDP data is not aggregated at district level rather is obtained by segregating the state level GDP data. Capturing GDP data at district level as per CSO approach could prove more helpful in understanding the status and growth of overall GDP of NCR. Moreover, it is recommended that district level GDP data capturing in NCR should be uniform for better comparability and compatibility.

8.3 Sub-region Wise Issues

8.3.1 NCT-Delhi sub-region

NCT-Delhi sub-region has recorded better GDP, per capita income and distribution of workforce in various categories, compared to other sub-regions of NCR. The growth rate and the sectoral trends are in line with global trends for very large cities. However, there are a few points of concern, which are:

a) Inadequate support provided to Micro, Small and Medium Enterprises (MSMEs);
b) Inadequate level of infrastructure (roads, water, sanitation etc.) in industrial areas; and
c) Lack of a comprehensive policy for strengthening of the craft-based Informal sector that flourishes in urban centers.

8.3.2 Haryana sub-region

Haryana sub-region is on the fast track of industrial development primarily owing to its locational advantage of being adjacent to NCT-Delhi on three sides and infrastructural investment made in the last decade. However, for a more balanced approach the following need to be addressed:

a) Inadequate rural infrastructure to promote agro-based industries;
b) Inadequate level of infrastructure in industrial areas;
c) Inadequate quality of power availability for industries;
d) Increased level of pollution in industrial towns, especially in Bahadurgarh, Faridabad, Panipat etc.;
e) Slow progress on infrastructure projects like KMP Expressway and some SEZs;
f) Inadequate support to MSMEs and absence of structured cluster development programs in major industrial clusters; and
g) Owing to the least level of economic development in Mewat[3], Jhajjar and Rewari districts, there is an urgent need for intervention in secondary and tertiary sector activities, with an objective to ensure large scale employment generation.

8.3.3 Uttar Pradesh sub-region

Low progress is reported in terms of economic development. Some key challenges in the Uttar Pradesh sub-region include:

a) Lack of effective interventions for technological upgradation of existing industrial clusters, such as Meerut, affecting their competitive advantage;
b) Inadequate level of support infrastructure in existing industrial areas, leading to vehicular congestion and pollution in industrial areas, such as Ghaziabad;
c) Lack of a comprehensive policy for Micro, Small and Medium Enterprises (MSMEs);
d) Lack of required level of support to the traditional craft clusters, such as Khurja; and
e) Lack of rural infrastructure for development of non-farm activities.

8.3.4 Rajasthan Sub-Region

Rajasthan sub-region has recorded low growth rate with predominantly agricultural activities. The major challenges for development of this sub-region are:

a) Poor infrastructure (power and water) in the existing industrial areas;
b) Rural infrastructure for non-farm activities is inadequate; and
c) Growth of industrial development limited in comparison with neighboring sub-regions.

8.4 Policy Response

8.4.1 Background

There would be four main drivers for development of NCR in the long-run, namely demography, environment, economy, and technology. The demography is going to be a critical issue in the NCR from the point of view of age, urbanization and changing size of household. This will have a direct impact on the kind and level of manpower and structure of market demand in NCR. Increase in urbanization will also put pressure on vertically linked industries

[3] Study conducted by Sehgal Foundation titled as "Identifying Backwardness of Mewat Region in Haryana: A Block Level Analysis" and sponsored by the Research Division, NITI Aayog, Govt. of India has identified level of backwardness in various aspects/parameters, such as educational infrastructure, health infrastructure, public finance, standard of living, etc. The said Study has also mapped the typology of backwardness across blocks within the district.

to locate near to the mother units. There will be increased demand for housing, energy, food, water and transport in NCR.

8.4.2 Environmental pollution

Rapid urbanization and industrialization will further increase pressure on scarce resources to be used in the most environment friendly manner. Considering this, the NCR participating State Governments are required to come up with concrete Plans for location of industries and other economic activities, with an objective to safeguard the environmentally sensitive areas.

8.4.3 Changing nature of subcontracting and principal relations

There is going to be change in the relations of input suppliers and principal manufacturers. The behavior of industrial sector will be of special nature in the next 25-30 years. The competition among different sizes/strategic nature industries will increase to minimize their risk. The risk will be redistributed from powerful to less powerful and more independent to dependent industries. Especially, MSMEs are likely to be more impacted by economic volatility[4]. The demand for low cost, efficiency and flexibility is likely to increase. It is, therefore, necessary to orient MSME policies in such a way to minimize their strategic dependence on the principals. The infrastructure in the form of common facilities should be made available to MSMEs to help them minimize their cost; improve efficiency and flexibility in production.

8.4.4 NANO Technology

To compete internationally, the technology base of the NCR is going to be completely revamped. The role of Research & Development (R&D) will become more important. Presently, the NCR has a fairly good base for R&D activities. There is need to evolve knowledge centers to provide appropriate R&D for development of industry and other related sectors. Some steps have been taken in this direction. Rai (Sonepat), Rohtak and Greater Noida are coming as good knowledge and innovation centers, but there is a need to establish more such centres.

8.4.5 Public Private Partnership (PPP)

To involve stakeholders in the planning process, there is a need to make PPPs an integral part of the location and industrial policies. The recent issues relating to land acquisition has further highlighted need for PPPs. Gradually, role of the government as the main provider of economic activities in NCR will be that of a facilitator. PPPs will play a crucial role in minimizing the impact of business cycles and decrease the turn-around time.

It is expected that sectors like biotechnology, nano-technology and optical technology will have strong bearing on the economy of NCR. There will be an increased demand for technology and research to have product innovations and deep knowledge base in a very short span of time, since product innovations cycles will further be shorter.

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[4] Less lead time for supplies and production e.g. Maruti Udyog demand projection for its vendors declined from 6 months to few weeks resulting into high production variations during short span of time and higher losses / inventories for small vendors.

The future policy needs to be developed around these priorities for development. The districts of Haryana and Uttar Pradesh sub-regions, which are adjacent to NCT-Delhi, are growing quite fast on the industrial front. There is huge potential for other districts of these two sub-regions, too. The industrial regime of NCT-Delhi after 2000, especially after Honorable Supreme Court’s decision in 1996, is reflected in the structure of NCR’s economy. One of the immediate result is development of industrial clusters outside NCT-Delhi such as Ghaziabad, Noida, Greater Noida, Gurgaon, Panipat, Sonepat, Faridabad, etc.

The existing industrial policies of the NCR constituent State Governments and the Central Government, through the eleventh Five Year Plan, have provisioned for development of PPP models for promoting industrial growth. For example, the Scheme for Integrated Textile Park (SITP) envisages infrastructure for textile industry to be created by Special Purpose Vehicle (SPV) with part support from central government and part by private sector stakeholders. Provision has been made for legal and institutional frameworks to provide the required organizational and individual capacities. Similarly, schemes of the central government in verticals (auto component, food processing, etc.) for common infrastructure development and general cluster development, and the scheme of Ministry of MSME may be used for the development of industrial clusters in NCR.

8.5 Recommendations

8.5.1 Sector-specific recommendations

Based on the analysis of existing economic activities as well as the potentialities of various sub-regions/districts/areas of NCR, the following are recommended:

(a) Agro-based and Food Processing Industry

- Food testing laboratories in Haryana sub-region.
- Fruit and Vegetable Processing Park in the area of Bulandshahr and Jhajjar for horticulture produce.

(b) Electronics and Information & Communication Technology

- Considering the gap between number of approved and operational IT/ITES SEZs in NCR, it is recommended that appropriate policy interventions are made for operationalisation of the approved SEZs to boost export.
- Software Development in NCT-Delhi, Gurgaon and NOIDA (need intensification especially in case of NCT-Delhi).

(c) Automobiles & Automotive Components

- Induced cluster at IMT Manesar and Bawal for automobiles and auto components (need skilled manpower and infrastructure like workers’ hostel etc.)
- Adequate level of support infrastructure, including forward and backward linkages, is to be established for the Auto-Park (e.g. upcoming Auto-Park at Alwar) and Research Institutes (e.g. upcoming National automotive testing, research and development infrastructure project in Haryana).
- Infrastructure support for auto component for Faridabad, Gurgaon, NOIDA, Meerut and Alwar.

(d) Handloom, Hosiery, Textile and Garments Manufacturing

- Apparel park in Gurgaon SEZ and at Barhi (Sonepat) under the Apparel Park for Exports Scheme of Government of India.
- International Trade and Convention Center at Panipat.
- International Trade Center at Gurgaon for promotion of garments.
- Textiles Park in Alwar District.
- Dyeing Houses in Faridabad and Ghaziabad Districts.
- Textile Skill Development Centre at Okhla.

(e) Footwear, leather garments and accessories

- Infrastructure for leather development at Bahadurgarh, Haryana.

(f) General Engineering

- Infrastructure development for general engineering (Faridabad, NOIDA, Gurgaon).

(g) Logistics

- Considering the DFC and the DMIC projects which includes part of Haryana and Uttar Pradesh sub-regions, it is recommended that logistics infrastructure such as Inland Container Depots (ICDs), Container Freight Stations (CFS), Integrated Freight Complexes be set up in these sub-regions at strategic locations.

8.5.2 Cluster Specific Recommendations

(a) Auto-Component (Meerut, Gurgaon, Faridabad and Noida)

There is a strong requirement for technological up-gradation. In most units, simple cutting and drilling machines are being used. Since most units are either micro or small, full automation of the machines has not happened. There is a possibility of introducing advanced equipment, improve shop floor practices, induce quality systems and promote standardization.

(b) Handloom and Powerloom (Panipat and Meerut)

The cluster needs inputs in design, worker’s skill up-gradation and improved dyeing practices. Moreover, there are existing institutional systems to help this cluster and involvement of other development agents may be less efficient to induce use of new technology by leveraging on the Technology Up-gradation Fund (TUF) scheme but the cluster may need support for a very long duration considering that it has practically no direct market linkages and is less productive compared to other similar clusters.

(c) Sports Goods (Meerut)

The cluster has immense scope for technical upgradation within the existing set of manufactured item. Even greater scope lies in diversifying to newer sports segments. Thus, there is a huge scope for promotion of productivity in this cluster. However, several attempts for development have already been done/ are ongoing and there is already a technical institute dedicated for this purpose.

(d) Textiles (Okhla, Gurgaon)

The main focus would be quality improvements, technological up-gradation, skill enhancement and encouraging the entrepreneurs to be a member of global supply chain. The following soft activities are suggested:

- cutting Room Layout and workflow;
- lean manufacturing;
- manpower training;
- quality of management; and
- Production improvement plan (technology adoption).

(e) General Engineering (Faridabad, NOIDA, Gurgaon)

General engineering sector is the backbone of NCR economy and industries are present in major concentration at above mentioned three locations. Most of the units are MSME nature and require support in the areas such as marketing initiatives, technology and availability of raw materials.

8.6 Sub-region Wise Recommendations

8.6.1 Haryana sub-region

The structure of Haryana's economy has undergone significant changes after 2000. The share of primary sector and secondary sector declined and share of tertiary sector has increased from 41% in 1999-2000 to 56% in 2007-08. The service sectors especially IT and ITES has positively impacted the Haryana sub-region. Some districts like Gurgaon and Faridabad played an important role in this shift. However, the secondary sector also has significant share in the economy of the sub-region. It is required that necessary steps be taken by the State Government to provide adequate infrastructure to curb environmental pollution in the Industrial Estates, especially where the polluting industries are located. District-wise recommendations are are under:

(a) Gurgaon

Gurgaon is evolving as the main centre for high-value added services. This is reflected in the analysis that it has the highest per-capita income among all districts of the NCR. Some major areas in Gurgaon which need strengthening are:

- Improved intra-city and inter-city transport system of Gurgaon city. The work to strengthen rail and road infrastructure is in progress. However, better infrastructure is needed for development of Gurgaon as a state of the art centre for financial, insurance, real-estate and business service sector.
- Manufacturing base of Gurgaon, especially in the area of cars, motor-cycles, automobile parts, telecommunication equipments, electrical goods, software development, hardware, sports goods, rubber products, readymade garments has improved in the past; however, the support system in terms of power and critical common facilities for MSMEs are inadequate. It is recommended that cluster based approach be adopted at least in two areas, namely, auto component and readymade garments.

(b) Faridabad

Faridabad is one of the oldest industrial towns of Haryana. It is recommended that infrastructure for wholesale trade in auto parts may be encouraged by providing necessary infrastructure. Owing to its strategic location of close proximity to Delhi as well as Gurgaon and Noida/Gretaer Noida, Faridabad has emerged as a real estate destination as construction activities have grown by 17% from 1999-2000 to 2007-08.

(c) Sonepat

With availability of land and strategic location of Sonepat, a large number of industrial units shifted to Kundli and nearby areas from NCT-Delhi. The district is emerging as a major destination for construction and industrial activities. The district is poised to serve as knowledge centre for the NCR in different cutting edge knowledge areas as the State Government has already set up Rajiv Gandhi Education City in Sonepat. A food processing knowledge centre (NIFTEM by Ministry of Food Processing Industry) has already been set up. It is recommended that Sonepat may be developed as knowledge and food processing hub.

(d) Jhajjar

Jhajjar presently lacks in business or industrial activities. Traditionally it was a trade and commerce centre but could not grow fast due to its inadequate infrastructure base. Recently, setting up of a large power plant in Jhajjar has strengthened the infrastructure. Due to the recent upcoming infrastructure and construction activities, it has become a strategic location for industry, trade and commerce. Considering the significant rural base, it is recommended that rural infrastrcutre as well as supporting infrastructure for MSMEs be developed in the district. An initial infrastructure for entrepreneurship development and other Common Facility Centre (CFC) may create adequate job opportunities in Jhajjar district.

Bahadurgarh, owing to its locational advantage of being in close proximity to NCT-Delhi, has experienced growth in manufacturing sector, which has grown at CAGR of 17% during the period 1999-2000, against the NCR average of 7.5%. Bahadurgarh has good potential for products like ceramics, glass, chemicals, engineering, electrical & and electronics. Government of Haryana aims to promote footwear industries in Bahadurgarh. The KMP Expressway which is very near to Bahadurgarh is expected to provide enhanced connectivity and thereby is expected to change Bahadurgh’s economic structure in big way. It is recommended that good logistic infrastructure between Bahadugarh and Rohtak should be promoted to evolve this area as a major service centre. Trade and commerce centres may slo be promoted, considering this..

(e) Rohtak

Rohtak is strategically located and very well connected by rail and road. It is primarily an agrarian economy with a number of educational institutions, both technical and non-technical. Recently, the government has initiated more technical education facilities in the areas of fashion design and film making and management institute like the Indian Institute of Management (IIM). The Government is also focusing on ‘green-field’ activities in R&D in the automobiles sector. The future of Rohtak is in evolution of the proposed knowledge city. It can also be a very good location for second generation IT and ITES services and can follow the footsteps of Gurgaon to become state of art IT and ITEs location. Development of KMP Expressway would further boost the economy of Rohtak district.

(f) Panipat

Panipat is a historical city and very well connected by rail and road to other towns of the NCR. The city has a number of industries in textiles including handloom and powerloom. Panipat has a significant position in the international market for products like *Darri*, carpet mat, table cover, bed sheet, bed cover, curtain etc. Panipat city is also the biggest centre of Shoddy Yarn in the World. It also has potential for induced chemical park location. However, the district need special attention toward environmental issues as most of the economic development in the district may not be sustainable because of the high potential of the existing industries for industrial pollution. It is recommended that appropriate measures be taken for technological updragation of the existing handloom and powerloom units, in order to make them globally competitive. It is also recommended that appropriate cluster of these units be established by providing Common Facility Centres, besides providing other infrastructures.

(g) Rewari

Rewari is well connected to other cities by rail and road. It is mainly an agrarian town, with very limited but fast upcoming industrial activities in the town. The town serves the hinterland as trade centre and retail market. Two very important industrial growth centres situated in the district are Dharuhera Industrial Complex and Bawal Growth Centre. These two locations have huge employment potential in future industrial development. It is recommended that considering the strategic location of Rewari and close proximity to existing and upcoming Manesar-Bawal Investment Region, heavy industries may be encouraged to come up in Rewari district for the optimum growth of large industries in the NCR.

(h) Mewat

Even though the district is just about 50 KM away from NCT-Delhi, it remained undeveloped. The insustrial estates created by Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) has remained largely underutilized. However, due to substantial real estate activities in adjacent Gurgaon district, the land prices of Mewat district have increased significantly. This has led to accumulation of sudden wealth to a section of the population.

The planned Rewari-Bhiwadi-Palwal railway line will pass through Mewat and near its district head quarter at Nuh. Also, the KMP Expressway is also expected to provide boost to economic activities of Mewat.

It is recommended that interventions be made in development of MSMEs and secondary sector activities, for employment generation, considering the comparatively lesser degree of attainment of socio-economic development as well as lower per capita income in Mewat district. Also, there is potential for meat processing industries in Mewat district.

8.6.2 Uttar Pradesh sub-region

The Government of Uttar Pradesh is promoting the development of several SEZs across the sub-region. Uttar Pradesh has the advantage of having industrial areas in close proximity to

NCT-Delhi including Sahibabad and Surajpur in district Ghaziabad, Khurja, NOIDA and Greater NOIDA. Some of the Industrial Parks and SEZs which have come up in the sub-region include NOIDA Special Economic Zone (SEZ), Software Technology Park, and Export Promotion Industrial Park at Greater NOIDA. As part of the DMIC project, wherein Ghaziabad-NOIDA-Dadri Investment Region is coming up, the sub-region has also huge potential for logistics, freight and associated industries. District-wise recommendations are are under:

(a) Gautambuddha Nagar - NOIDA and Greater NOIDA

NOIDA and Greater NOIDA have emerged as important industrial towns in sectors such as electronics, textiles, engineering, computer software, etc. Due to the support to large number of educational institutions, NOIDA and Greater NOIDA are also known as an Educational Park. The district has all features to become an international city especially with the F1 (Formula One) Track, Yamuna Expressway, etc. Considering the existing knowledge based industries as well as potential of the city, it is recommended that industries in the areas of nano technology, biotechnology and information technology be encouraged by means of investments in R&D. It is also recommended that availability of power and other infrastructure base especially for MSMEs be improved.

(b) Ghaziabad (including Hapur)

Ghaziabad is an old industrial town and one of the most industrialized cities in Uttar Pradesh. Owing to the fact that the industrial units were set up quite some time back, it is recommended that technological upgradation of these industrial units as well as improvement in the infrastructure in the industrial estates/clusters be undertaken to ensure sustained growth.

It is recommended that more growth centers in Ghaziabad district may be developed by providing infrastructure for agro-based industries. One growth centre could be Modinagar, which is also an old industrial town known for its sugar mills. The area has good irrigation facilities and very good fruit and vegetable base. Support to agro-processing sector can help Modinagar area to become more sustainable.

There is immense scope to support informal sector activities in the district by proving skill development facilities and common facilities in handloom and craft sectors. Pilkhua, a small town in Ghaziabad district, is a centre for making traditional textile items and can be further developed as a textile manufacturing centre.

Hapur is a major mandi town in Ghaziabad district. The place is known for its facilities for wheat processing. There is huge potential to It is recommended that processing units of grain & grain based products and potato processing units, considering the huge potential.

(c) Bulandshahr

Bulandshahr district has three important activities i.e. agriculture, milk production and ceramics. It is recommended that suitable policy measures be taken to tap the agro-processing and milk processing potential of the district. The resources should be utilized in the form of modern milk processing plants to make products like cheese, ghee and milk powder etc. It is also recommended that supporting rural infrastructure in the form of cold storage chains, Food Park, etc. be set up to support the district production base.

An important centre located in the district is Khurja, a small town famous for its pottery products. There is need to modernize the units to address the environmental pollution aspect and improve the other infrastructure like water, roads, etc., as well as a need for training institute to cater the demand of skilled manpower in Khurja.

Sikandrabad is another important industrial center in the district. However, the level of infrastructure development is inadequate. It has high potential for processing milk and dairy products.

(d) Meerut

Meerut is famous as an industrial city; one favorable reason for this is its proximity with Delhi. The city is famous for its scissors, handloom cloths, gold jewelry, sports goods (especially cricket goods). It is an important centre of education with number of educational institutions and universities. However, the city lacks infrastructure and competitive environment. It is recommended that modernization and technological upgradation be undertaken in the existing units. It is also recommended that appropriate supporting infrastructure such as Common Facility Centres (CFCs), etc. be set up to support the MSMEs. It is further recommended that Sports Goods Park, Scissor Park, Handloom Park may be developed alongwith providing soft support in the district.

(e) Baghpat

Baghpat has a strong agrarian base and is a major centre of gur (jiggery) making in the region. The industry base of the district is relatively small. The future growth potential areas in the district are grain processing, milk processing and oil mills.

8.6.3 NCT-Delhi sub-region

The economic structure of NCT-Delhi has been undergoing change after 2000's. Due to rapid urbanization, the agrarian base of NCT-Delhi is declining. The important manufacturing industries in the NCT-Delhi include readymade garments, publishing, printing & reproduction of recorded media, electrical machinery and apparatus, rubber and plastic products, basic metals and fabricated metal products and machinery and equipments. Most of these units are MSMEs in nature. The existing support system for MSME and informal sector is inadequate. There is an urgent need for implementation of cluster development programs for MSMEs to handhold them in areas of technology and productivity as per the new Industrial Policy of Delhi. A number of craft clusters need CFCs and other soft support for their competitiveness. As NCT-Delhi has maximum non-farm employment of informal sector there is need to formulate a suitable informal sector policy for the NCT-Delhi.

8.6.4 Rajasthan sub-region

(a) Alwar

The main challenge in Alwar district is its heavy dependence on agriculture sector. There is need to support manufacturing activities in the district in a big way. The DMIC and the Sub-Regional Plan prepared for Rajasthan sub-region of NCR by Government of Rajasthan is likely to significantly impact on the economic activities of Alwar. The three important areas in Alwar identified for future intensive development are (i) Bhiwadi-Tapookara-Khushkhera Complex, (ii) Alwar and (iii) Shahjahanpur-Neemrana-Behror Complex. These three areas are likely to attract significant industrial investment in the next two decades. There is need to support local resource based activities in the region like food processing, heavy industries. It is also recommended that investment in greenfield auto and textile sector may also be encouraged in Alwar. It is further recommended that induced cluster based approach with strong support infrastructure and other support services may be adopted for development of the manufacturing sector in the district.

8.7 Locations of Heavy, Medium and Small Scale Industries, BPOs, IT Sector, Commerce in NCR

NCR being an inter-state region and there are wide variation existing in the statutory tax rates, as well as tax concessions given to manufacturers on purchase of raw materials and machinery, levy of tariff on various services like power, water and transport etc. This plays an important role on the location of heavy and small scale industries and diversion of manufacturing activities from one state to another state.

Due to restriction on setting up of large and medium scale industries as well as polluting industries, coupled with rapid urbanization has led to growth of service sector base in NCT-Delhi. Both centrifugal forces/push factor (shifting of polluting industries towards the periphery, etc.) and centripetal forces/pull factor (new trends in business and investment opportunities represented by the IT/ITES sectors) led the the growth of the ‘cleaner’ service sector in NCT-Delhi. Therefore, it is recommended that hi-tech industries, with special emphasis on high value added products/services SSI, BPOs and IT/ITES be established in NCT-Delhi.

Haryana sub-region has emerged as a major manufacturing base in different manufacturing sectors and service sector like automobile sector, garments, engineering, financial services, BPOs and Real Estate. The existing locations of most of manufacturing sectors like Faridabad, Gurgaon and Panipat are facing challenges due to fast increase in the real estate prices, transportation, energy and other infrastructure related issues. The upcoming projects such as KMP Expressway, DMIC and proposed Model Industrial Towns/Industrial Estates/SEZs will provide sufficient support for the growth of industries in the Haryana sub-region. It is, therefore, recommended that most of manufacturing activities may be gradually moved to areas such as Rewari, Jhajjar, Rohtak, Palwal and Mewat especially medium and heavy industries. The districts adjacent to NCT-Delhi be gradually developed with high-tech industries including BPOs, IT/ITES, Knowledgfe-based industries and MSMEs.

As result of industrial policy changes in NCT-Delhi, a number of industries have been developed in areas such as Sahibabad and Surajpur. However, other locations like NOIDA and

Greater NOIDA with better infrastructure facilities are good location for medium and large industries. So far, IT/ITES and BPOs of many large software and BPO companies are already operational, such as Adobe Systems, TCS, Interra, AgreeYa Solutions, GlobalLogic CSC, HCL, EXL etc. Many other companies have their Indian branch offices in NOIDA, because of the Special Economic Zone, the better sub-urban atmosphere in NOIDA and its closeness to Delhi. It is therefore recommended that NOIDA and Greater NOIDA may be developed as environment friendly industrial belt with IT/ITES, BPOs and R&D, Biotechnology, etc.

Rajasthan sub-region has also huge potential for development of Medium and Large industries, especially considering the close proximity to the DMIC project.

Details of Important Economic Centres are given at Table 8.5 and Map 8.3.

Map 8.1: District wise Economic Centers

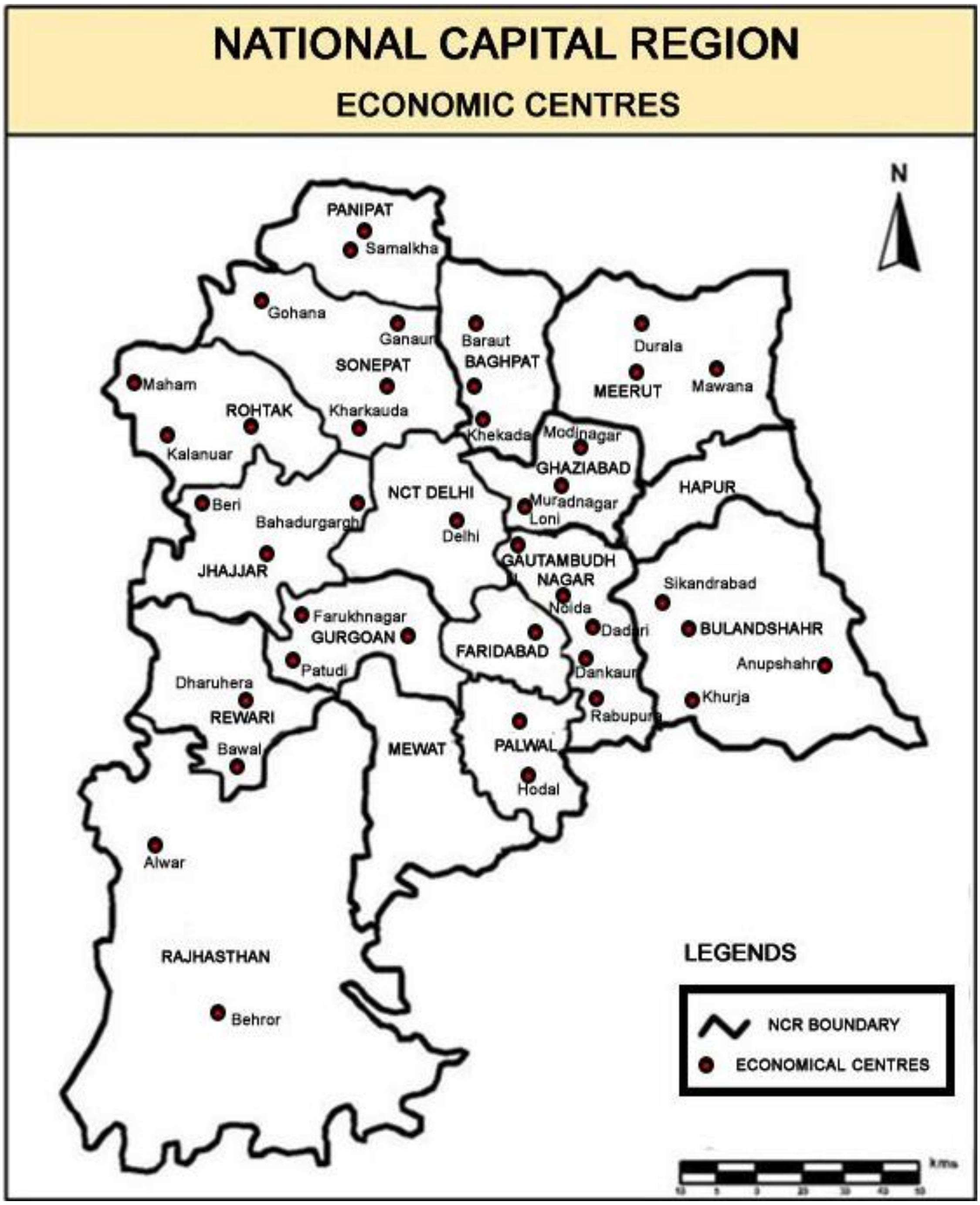

Table 8-3: Important Existing and Proposed Economic Centres

Locations	Employment		Income		Policy/ schemes		Special projects (DMIC/ SEZ)	Clusters		Economy		Economic centers
	Existing	Proposed	Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed	
Meerut	High	Medium	Low	Medium	Not effective	MSME ministry schemes of clusters to be used	Yes	9 cluster	Modernization	Local non farm	Regional	Daurala, Mawana, Meerut
Baghpat	High	Medium	Low	Medium	Not effective	Food park scheme	-	-	-	Local farm	Regional	Baraut, Khekada, Baghpat
Ghaziabad	Low	Medium	Medium	Medium	Not effective	Schemes of clusters and craft	-	2 clusters	Relocation	Regional	National	Modinagar, Loni, Muradnagar, Hapur, Philkhowa
Guatambuddhanagar	Low	Medium	Medium	Medium	Effective	Schemes of clusters and craft	Dadri – Noida - Ghaziabad investment region in	5 clusters	Modernization	National	International	Noida, Dadri, Dankaur, Rabupura, Dewar
Bulandshahr	High	Medium	Low	Medium		Dc handicraft scheme, food park scheme	-	One cluster	Common facilities	Local	Regional	Sikandrabad, Anupshahr, Bulandshahr, khurja
Panipat	High	High	High	High	Not effective	Textiles park, cluster development scheme	-	3 clusters	Modernization and relocation	National	International	Panipat, Samalkha
Sonipat	Low	Medium	Medium	Medium	Food park - Barahi	-	-	-	-	Local	National	Gohana, Ganaur, Sonipat, Kharkauda
Rohtak	High	Medium	Medium	Medium	Investment in R &D skill	Knowledge city and it park	-	-	-	Regional	National	Maham, Kalanuar, Rohtak

Locations	Employment		Income		Policy/ schemes		Special projects (DMIC/ SEZ)	Clusters		Economy		Economic centers
					and management institutions							
Jhajjar	Low	Medium	Medium	Medium	Leather park in Bahadurgarh	CFC and other soft inputs for existing industries required	SEZ proposed	-	-	Local	National	Bari, Bahadurgargh, Jhajjar
Rewari	High	High	Medium	Medium	Very effective industrial policy	Logistic hub and business development services	Manesar – Bawal auto component/ automobile investment region	-	-	Regional	Regional	Rewari, Dharuhera, Bawal
Gurgaon	Medium		High	High	Very effective industrial policy	Focus more on high value added and service industries including R&D centers for auto, textiles, product display centers	-	4 clusters	Modernization and relocation	International	International	Farukhnagar, Patudi, Gurgaon
Faridabad	High	High	Low	Medium	Over flow of industrial activities. Need right policy	Infrastructure development policies of the central and state government	-	4 clusters	Modernization and relocation	National	International	Faridabad, Palwal, Hodal

Locations	**Employment**		**Income**		**Policy/ schemes**		**Special projects (DMIC/ SEZ)**	**Clusters**		**Economy**		**Economic centers**
Delhi NCT	Medium	Low	Medium	High	Service and industry base	Soft and hard inputs from existing policies	-	12 clusters	Modernization and relocation	International	International	Delhi
Rajasthan	High	High	Low	Medium	Policies mainly worked in industrial sector	Existing policies for skill upgradation and soft infrastructure for nonfarm activities to be evolved	Khushkhera – Bhiwadi – Neemrana investment general manufacturing / automobile/ auto component investment region	-		Local	Regional	Behror, Alwar

Source: Study of Economic Profile of NCR

8.8 Location of Wholesale Trade

NCT-Delhi, the core of the NCR, is major part of trading activities in NCR traditionally has always been known for a variety of commodities. Distributive trade is one of the basic activities in NCT-Delhi. The functional specialization of NCT-Delhi, being the centre of political and administrative power, has also resulted in the concentration of banking activities, warehouses, transport and communication facilities etc. Wholesale trading in plastic and PVC goods, chemicals, timber, food grains, flowers, fruits, vegetables, spices, iron and steel and building materials cater to the whole of NCR and in the entire Northern India.

The major parts of the commodities, which are brought to Delhi, are re-distributed outside Delhi. The major items exported out of Delhi are Vegetable and fruits, fuel oil, food grains, iron and steel.

The wholesale trade already started declining in NCT-Delhi whereas services such as financial services, retail trade is growing at faster pace. In the other parts of NCR, commercial activities are fairly developed. Some of the important towns are Meerut, Ghaziabad, Hapur, Khurja and Bulandshahar in Uttar Pradesh sub-region, Faridabad, Panipat, Rewari, Gurgaon, Sonepat and Rohtak in Haryana sub-region and Alwar in Rajasthan sub-region; however, increasing of scale of operation of trade in NCT-Delhi, it has become imperative to decongest Delhi in the above mentioned centers. As different Master Plans of Delhi has recommended decentralization on the wholesale trade, especially for space extensive materials to be located in the central NCR towns of Ghaziabad, Faridabad, Gurgaon, Kundli and Loni. Some of the important proposed locations for decentralization are as under:

Table 8-4: Proposed Locations for Wholesale Trade

Trade materials	Locations
Food grains	Panipat, Hapur and Kundli
Fruit and Vegetables	Panipat (for apples and vegetables); Hapur (for potato and onion); Kundli (mango and vegetables)
Textiles and Readymade Garments	Meerut and Rohtak
Iron and Steel Auto Parts	Ghaziabad, Gurgaon, Faridabad
Fuel Oils	Rewari
Hardware and Building Materials	For hardware – Ghaziabad, For Building Material-Alwar, Dharuhera or Bhiwadi

8.9 Suggested Projects

Keeping in view the various problems, issues and potentials in various sub region, Functional plan has identified 61 industrial and infrastructural development projects for NCR (refer Table 8.5), which includes quality testing and R&D centers, entrepreneurship skill development and training institutes, designing centers, IPR institute, common effluent treatment plants etc. All these suggested projects are in line with the Make in India perspective of zero defect zero effect and meeting the campaign objectives by inducing private investment, new entrants, job creation, innovations in sectors like food processing, auto components, leather, textile, IT/ITES, handloom and handicraft, gems & jewellery etc. and transforming NCR as a environment friendly and competitive industrial zone in the country overtime.

As *Make in India* and *Skilled India* are complementary to each other, skill development centers are also proposed as part of the proposed projects with the objective of inducing entrepreneurship and generating employment in different sectors and locations. Through the proposed projects it is expected to generate employment across the region, limiting migration from rural to urban and increasing workforce participation in the rural side. It is estimated that a total employment of 36,600 and 424,800 can be generated directly and indirectly, respectively. In this way, a significant shortage of skilled workforce in the region can be met from within the region.

Table 8-5: Proposed Industrial and Infrastructure Projects in NCR

Sl. No.	Location	Project Area	Project Title	Indicative Investment (Million Rs)	Tentative Employment (direct)	Tentative Employment (indirect)
Industrial and Infrastructure Projects in Haryana Sub-Region						
1	Rai	Food Processing	Agriculture and Food testing Research Centre	500	50	1,000
2	Barhi	Environment	Modernization of Dyeing Units	200	50	500
3	Barhi	Textile Infrastructure	Training and Development Centre for Textiles	50	50	4,000
4	Kundli	Infrastructure	Gas Supply for Units	2,000	1,000	5,000
5	Panipat	Environment	Modernization of Dyeing Houses	1,000	100	15,000
6	Panipat	Trade and Commerce	Modern Domestic and International Trade centre for Textiles	1,500	1000	20,000
7	Samalkha	Foundry Infrastructure	Modern Common Facility Centre for Foundries	200	50	100
8	Rohtak	Knowledge City	Modernization of all existing Facilities in Educational and Technical Support Institutions for Industry Linkages	1,000	100	1,000
9	Rohtak	Footwear	Footwear Design and Development Institute	500	50	1,000
10	Rohtak	Footwear	Exhibition-cum-Display Centre	500	100	1,000
11	Rohtak	Infrastructure upgrading	Modernization of all Trading Activities viz. Textiles Trade etc.	1,000	100	1,000
12	Jhajjar	Common facility Centre	Industry cum Service Centre	500	100	1,000
13	Faridabad	General engineering	Quality and Testing Centre	750	100	15,000
14	Faridabad	General engineering	Reverse Engineering and CAD and CAM Centre	1,000	100	10,000
15	Faridabad	Textiles	Process House Modernization	750	50	100

Sl. No.	Location	Project Area	Project Title	Indicative Investment (Million Rs)	Tentative Employment (direct)	Tentative Employment (indirect)
16	Rai	Food Processing	Agriculture and Food Testing Research Centre	1,000	50	500
17	Rai	Food Processing	Food Processing Infrastructure (Milk and Mango)	5,000	100	10,000
18	Gohana	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10,000
19	Mewat	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10,000
Informal Sector Projects in Haryana sub-region of NCR						
20	Kharkhoda	Informal Sector	Developing Tourism Infrastructure	100	100	10,000
21	Panipat	Rugs Infrastructure	Rugs Training and Technology Centre	100	100	20,000
22	Jhajjar	Informal Sector	Entrepreneurship Development Centre	500	50	1,000
23	Jhajjar	Service sector	Service Sector Skill Development Centre - BPO and Retailing	500	50	1,000
24	Mewat	Informal sector	Entrepreneurship development Centre in Non industrial Activities	500	50	1,000
25	Jhajjar	Craft	Basketry Craft Training and Resource centre	50	25	5,000
Industrial and Infrastructure Projects in Uttar Pradesh Sub-Region of NCR						
26	Meerut	Sport Goods	Cricket Bat innovation and Research centre, Meerut	100	100	6,000
27	Meerut	Auto component	Modern Common Facility point for Auto Component	500	100	5,000
28	Meerut	Transformers and Voltage Regulators	Research Designs and Standards Centre	500	50	1,000
29	Ghaziabad	Chemical and Rubber	Research and Development Centre	1,000	100	1000
30	Greater Noida	Biotech	Research and Development and Skill Upgrade Centre	1,000	50	500
31	Greater Noida	IPR	National Institute of Intellectual Property	500	50	100
32	Bulandshah er	Food Processing	Dairy Development Research Institute (On the pattern of Karnal and Anand)	1,000	200	5,000
33	Bulandshah r	Food Processing	Food Processing Park (Milk and Mango)	5,000	5000	40,000
34	Hapur	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10,000
Informal Sector Projects in Uttar Pradesh sub-region of NCR						
35	Meerut	Glass and Wooden beads	Training and Marketing Centre for Glass and Wooden Beads.	20	50	1000

Sl. No.	Location	Project Area	Project Title	Indicative Investment (Million Rs)	Tentative Employment (direct)	Tentative Employment (indirect)
36	Meerut	Handloom	Handloom Design and Technology centre.	300	50	5000
37	Khurja	Pottery	Infrastructure up gradation project.	500	100	5000
38	Ghaziabad	Rugs	Design and Resource centre for Rugs	500	100	10,000
39	Bulandshaher	Embroidery	Design and Resource centre for Embroidery	500	100	5,000
40	Philkuwa	Printing	Textiles Printing Training and resource centre	500	100	10,000
Industrial and Infrastructure Projects in NCT-Delhi sub-region of NCR						
41	NCT-Delhi	Textiles	Industry E-readiness Centre	500	20	500
42	NCT-Delhi	Textiles	Textile Common Facility Centre including Training and Skill Development for in Service Workers	1,000	100	1,000
43	NCT-Delhi	Textiles and Hard goods	Design City Centre	1,000	300	1,500
44	NCT-Delhi	Gems and Jewelry	Upgrade of existing Gems and Jewelry Centre	500	100	5,000
45	NCT-Delhi	Infrastructure	Upgrade of existing Infrastructure in Okhla Industrial Areas Phase-I and II	1,000	5000	50,000
46	NCT-Delhi	Environment	Common Effluent Treatment Plants in Industrial Areas	1,000	100	1,000
47	NCT-Delhi	Infrastructure	Improved Logistic facilities in Okhla	1,000	25	1,000
48	NCT-Delhi	Infrastructure	Improved Parking Infrastructure in Industrial Areas	1,000	100	1,000
49	NCT-Delhi	Infrastructure	Improved Logistic Infrastructure for Electronic Industry in Okhla and Nairana	1,000	2,000	5,000
Informal Sector Projects in NCT-Delhi sub-region of NCR						
51	NCT-Delhi	Training	Entrepreneurship Development centre in West Rural Delhi	1,000	1,000	5,000
52	NCT-Delhi	Training	Craft Development Centre in East Delhi	1,000	1,000	5,000
53	NCT-Delhi	Training	Skill Development Centre in Non industrial Trades like Mobile Repairing, Auto Mechanic etc.	500	1,000	5,000
54	NCT-Delhi	Training	Centre for Ethnic Food Quality and Standards	500	100	5,000
55	NCT-Delhi	Training	10 Modern Garment Stitching Centers in Rural and Resettlement Colonies	500	5,000	50,000
Industrial and Infrastructure Projects in Rajasthan sub-region of NCR						

Sl. No.	Location	Project Area	Project Title	Indicative Investment (Million Rs)	Tentative Employment (direct)	Tentative Employment (indirect)
56	Alwar	Auto Component	Tooling and Die Common Facility Centre	1,000	500	5,000
56	Alwar	Auto component	Technology and CAD, CAM Training Centre	1,000	200	1,000
57	Alwar	Textiles	Readymade Garment Park	1,000	10,000	3,0000
Industrial and Infrastructure Projects in Rajasthan Sub-Region of NCR						
58	Alwar	Rugs	Training and Design Center for Rugs	100	20	1,000
59	Bassod Alwar	Footwear leather	Resource and Training Centre for Leather Footwear	100	20	1,000
60	Golaka bas, Alwar	Idol making	Design and Training Centre for Idol Making	100	20	1,000
61	Ramgarh, Alwar	Pottery and Terra Cotta	Modern Common Facility Centre for Terracotta	100	20	1,000
	TOTAL			**46,320**	**36,600**	**4,24,800**

ANNEXURES

Annexure 1. 1: Economic & Development Indicators and Tools & Methods used for GDP Projections.

A. Economic & Development Indicators

Economic indicators are vital statistics used by economists and policy makers to understand the direction of growth of economy of the country or the region. It helps in estimating new requirements and actions to be taken for improvement. The key indicators like **GDP, PCI, WPR, industrial development** etc. have been used to understand and compare the present economic conditions of the regions and districts.

(i) **Gross Domestic Product** (GDP) is one of the commonly used indicators that measure the output generated by the economy over a period that judge the overall economic health of the country/ region. Whereas, **Per Capita Income** (PCI) is the measure of the average earning of a person of the country/ region, i.e. used to evaluate the living conditions/standards and quality of life of people of different areas within the same region or country or other countries. In chapter 2, we have compared the GDP and PCI have been captured for all the four sub regions of NCR namely; NCT of Delhi, Haryana Sub-Region, Uttar Pradesh Sub-Region and Rajasthan Sub-Region and their respective districts to assess the economic pulse of the region. It is not necessary that GDP of a specific sub region reflects an exact picture as in the case of NCT of Delhi that has the maximum GDP among all the sub regions of NCR but remain behind Gurgaon and Faridabad, who have higher PCI than that of NCT. **Sectoral composition** of the GDP is taken to measure the contribution of each sector, primary, secondary and tertiary sector, towards the GDP of the region. It helps in understanding which sector contributes the maximum and it's significance which is provided in section 2.3 of Chapter 2.

(ii) **Workforce** is the quantum of the working population of the country or the region that engage in economic activities, whose value is derived as GDP. Chapter 3 outlines the workforce and its composition across sectors and regions in the NCR. **Workforce Participation Rate** (WPR) is the percentage of working population to total population of the region or country, it indirectly reflects about the level of employment of that region. It has been realized that the total workforce and WPR do not go hand in hand as Rajasthan Sub-Region has recorded the minimum total workforce but invariably has the maximum WPR among all the sub-regions. Further, a disaggregation of the workforce in **nine categories belonging to three sectors namely; primary, secondary and tertiary**; of all the sub-regions till 2001 is given under sections of respective sub-regions. This would help to understand the employment generated in the respective category/ sector in the sub-regions. However, data on workforce on these categories are not available for 2011; instead data is available on four major categories, namely; **Cultivators, Agriculture labors, HH industry workers and other workers**; that gives a close idea of the workforce under these broader heads.

(iii) Another indictor used is **industrial development** in NCR, which is Chapter 4, which outlays the number of industries and its components like employment and investment sub-region wise and district wise in NCR. This would help in understand the industrial health of the region till 2010-11, as comparable data is available till then. The classification of the industries into Micro **Small and medium enterprises** (MSMEs) and **Large** enterprises is necessary to understand the composition of industries at district and regional level and their contributions towards the industrial sector. **Industrial clusters** is a measure of the geographical concentration of specific set of industries in a region, thus helps in understanding the number of units, workers and the output generation in such concentrations.The presence of more clusters in a region shows higher competitveness of the economy. The NCR has a total of 53 such industrial clusters, of which maximum number are in the Rubber & Chemicals (11) industry, while Auto Component clusters have maximum number of units (25,900) but maximum workers are employed in Textile clusters (494116).

(iv) The potential of the rural economy, of the region is other important aspect, which is detailed in Chapter 5, this gives a brief description of the present condition and scope for development in terms of new rural industries, employment generation, marketing infrastructure development etc. **Location Quetient** (LQ) calculated for showed concentration of particular economic activity in the region; which is a good starting point for understanding the regional economy and providing information to support regional planning efforts. Similarly, **informal sector** composition of the region follows the next chapter. This sector consist of those activities, units and workers engaged in activities which are not formally registered with government, but they contribute significantly towards the country's GDP as well as employment generation. The informal sector in Delhi NCT & NCR is provided in section 6.4 & 6.5 of Chapter 6, respectively.

B. Tools

There is a variety of tools available to measure the importance of economic activities from simple computation of specialization (location quotients) to input-output based techniques. The micro-level cluster applications are typically driven by particular regional interests or policy concerns. A very common means of outlining regional industry clusters are the "Location Quotient" (LQ). The Location Quotient is a ratio of the shares: regional industry, i.e. share of total regional employment 'over' national industry, i.e. share of total national employment. To be specific, Location Quotient (LQ) is a measure of quantifying the concentrations a particular industry, cluster, occupation, or industry employment in a location as compared to the regional economy. Thus, it reveals the "unique" characteristics of a local, as compared to the regional average.

An LQ of 1.0 demonstrates that the regional economy has the same portion of employment in industry as the nation as a whole. If the Location Quotient exceeds 1.25, it is usually taken as an initial evidence of a regional specialization in a given sector.

The LQ is mainly used to ascertain the significance of the activity and how this significance changed. The tool is primarily used to understand the changing nature of economic activities at regional and district level.

C. Projection of GDP and Employment for 2030-31

The GDP projections for 2030-31 are carried out primarily based on the nine category wise compound annual growth of GDP from 1999-2000 to 2007-08 (1999-2000 prices) at district level. Similarly, employment projections are based on the population growth at two levels. Level one is based on the worker's participation rate of 2001 and level two is based on the adjusted participation rates due likely structural changes in the economy based on the future growth rates.

GDP PROJECTIONS

Measurement and forecasting of GDP are an imperative part of economic analysis of a country or a region. GDP helps in understanding economic progress of the region, its per capita income, and it also ascertain comparative position of the economy. Growth of GDP is a major economic indicator utilized in the economic policy making.

Geometric Growth Rate Method, where Compound Annual Growth Rate (CAGR) in percentage term has been calculated from the available data (2004-05 to 2009-10) and the same have is used for GDP projections.

As per World Bank, three principal methods are used to calculate growth rates:

- Least Squares Method,
- Exponential Growth Rate Method, and
- Geometric Growth Rate Method.

In these methods, rates of change from one period to the next are computed as proportional changes from the earlier period.

Least Squares Method: Least-squares method for growth rates calculation employed wherever data is available for a sufficiently long time series. (Long time series data is not available in our case and this method has not been applied).

Exponential Growth Rate Method: This method is utilized for calculating growth rate between two points in time for certain demographic indicators, notably labor force and population, etc. (This method is best suited for demographic indicators and hence not used)

Geometric Growth Rate Method: The geometric growth rate method is applicable to compound growth over discrete periods. This method is used primarily for economic phenomena (in our case GDP) where growth rate is measured only at intervals. For making projections for intervals like year 2011, 2021& 2031. The Compound Annual Growth Rate (CAGR)[5] based method is most appropriate and has been used for projections. CAGR removes volatility in the behavior and provides us a simple number for making projections especially for the long term.

While making projections, instead of taking CAGR of GDP of a particular district and then extrapolating, the GDP of corresponding activities in 9 categories for a particular district have been extrapolated and summed them up to reach the total GDP of the district.

[5] **CAGR** is an annualized rate of growth during a particular period. It is a geometric average of annual growth rates. CAGR is widely used to measure those parameters that change in a non-linear way like the GDP.

Subsequently, GDP of different constituent of NCR in a given data has been added as to arrive at total GDP of NCR in that year. The extrapolation of GDP based on nine categories of the activities automatically takes into consideration of the weight of a particular type of activity. Therefore, is realistic in nature.

The GDP projections have been made with the hands-off scenario at constant prices of 2004-05. There are few important factors like growth in the physical capital stock, growth in the labor force, human capital development and technological progress, which have had a severe impact on the factors deciding the future GDP.[6]

PRINCIPAL SOURCES OF INFORMATIONS

Fourth and Fifth Economic Census published by CSO: used for gathering information on number of entrepreneurial units within agriculture (excluding crop production and plantation) and non-agriculture, numerical indicators of economic growth, details of entrepreneurial activities viz. registration particulars, location, nature of the operation, of finance, number of establishments and number of workers in these establishments. The study has used 1998 and 2005 for the assessment of the informal sector in nonagricultural activities in NCR.

NSS Reports published by CSO: used for gathering information on operational and economic features of the unorganized service sector enterprises (other than trade) with particular reference to its number, employment, value added and other essential features of this sector. The data available from the report is very useful in chapters related to the informal sector, employment, and manpower.

State-level economic surveys: published by the Economic and Statistical Departments of the respective states, the reports were used for gathering information on GDP and industrial development.

District Statistical Handbooks: used for collecting districts level data (except NCT of Delhi where information at the State-level is primarily employed for the analysis).

[6] *<http://data.worldbank.org/about/data-overview/methodologies>

Annexure 2. 1: GDP of India, States and NCR in 2013-14

GDP at Current price for year 20013-14			GDP at Constant (2004-05) prices for year 2013-14		
Rank	**Country/ State**	**GDP (in Rs. Crores)**	**Rank**	**Country/ State**	**GDP (in Rs. Crores)**
	India	**1,04,72,807**		**India**	**57,41,791**
1	Maharashtra	14,76,233	1	Maharashtra	8,97,786
2	Uttar Pradesh	8,90,265	2	Uttar Pradesh	4,65,969
3	Andhra Pradesh	8,54,822	3	Andhra Pradesh	4,57,351
4	Tamil Nadu	8,54,238	4	Tamil Nadu	4,80,618
5	West Bengal	7,00,117	5	West Bengal	3,74,899
6	Karnataka	5,82,754	6	Karnataka	3,14,356
7	Rajasthan	5,13,688	7	Rajasthan	2,44,997
8	Madhya Pradesh	4,50,900	8	Madhya Pradesh	2,38,526
9	Delhi	4,04,576	9	Delhi	2,36,156
10	Haryana	3,83,911	10	Haryana	1,98,858
11	Bihar	3,43,054	11	Bihar	1,74,734
12	Punjab	3,17,054	12	Punjab	1,73,221
13	Orissa	2,88,414	13	Orissa	1,48,226
14	Chhattisgarh	1,85,060	14	Chhattisgarh	94,560
15	Jharkhand	1,72,773	15	Jharkhand	1,09,408
16	Assam	1,62,652	16	Assam	88,537
17	Uttara-khand	1,22,433	17	Uttara-khand	67,927
18	Jammu & Kashmir	87,319	18	Jammu & Kashmir	45,399
19	Himachal Pradesh	82,585	19	Himachal Pradesh	47,255
20	Chandigarh	29,076	20	Chandigarh	15,688
21	Puducherry	21,061	21	Puducherry	13,813
22	Meghalaya	21,045	22	Meghalaya	13,465
23	Nagaland	17,749	23	Nagaland	11,367
24	Arunachal Pradesh	13,491	24	Arunachal Pradesh	6,141
25	Sikkim	12,377	25	Sikkim	6,152
26	Andaman & Nicobar Islands	6,150	26	Andaman & Nicobar Islands	4,220
NA	Goa	NA	NA	Goa	NA
NA	Gujarat	NA	NA	Gujarat	NA
NA	Kerala	NA	NA	Kerala	NA
NA	Manipur	NA	NA	Manipur	NA
NA	Mizoram	NA	NA	Mizoram	NA
NA	NCR	NA	NA	**NCR (2009-10)**	**3,19,347.43**
NA	Tripura	NA	NA	Tripura	NA

Annexure 2. 2: Per Capita income of Indian States in 2013-14

PCI at Current price for year 2013-14			**PCI at Constant price for year 2004-05**		
Rank	**Country/ State**	**Per Capita Income (Rs.)**	**Rank**	**Country/ State**	**Per Capita Income (Rs.)**
	India	**74,380**		**India**	**39,904**
1	Delhi	2,19,979	1	Delhi	1,27,667
2	Sikkim	1,76,491	2	Puducherry	96,222
3	Chandigarh	1,56,951	3	Sikkim	83,527
4	Puducherry	1,48,784	4	Chandigarh	82,798
5	Haryana	1,32,089	5	Andaman & Nicobar Islands	72,716
6	Maharashtra	1,14,392	6	Maharashtra	69,584
7	Tamil Nadu	1,12,664	7	Haryana	67,317
8	Andaman & Nicobar Islands	1,07,418	8	Tamil Nadu	62,361
9	Uttara-khand	1,03,349	9	Uttara-khand	56,822
10	Punjab	92,638	10	Himachal Pradesh	54,494
11	Himachal Pradesh	92,300	11	Nagaland	49,963
12	Andhra Pradesh	88,876	12	Punjab	49,411
13	Arunachal Pradesh	84,869	13	Andhra Pradesh	46,788
14	Karnataka	84,709	14	Karnataka	45,024
15	Nagaland	77,529	15	Arunachal Pradesh	37,767
16	West Bengal	69,413	16	Meghalaya	37,439
17	Rajasthan	65,098	17	West Bengal	36,527
18	Jammu & Kashmir	58,593	18	Jammu & Kashmir	31,054
19	Meghalaya	58,522	19	Rajasthan	30,120
20	Chhattis-garh	58,297	20	Jharkhand	28,882
21	Orissa	54,241	21	Chhattis-garh	28,113
22	Madhya Pradesh	54,030	22	Madhya Pradesh	27,917
23	Assam	46,354	23	Orissa	25,891
24	Jharkhand	46,131	24	Assam	24,533
25	Uttar Pradesh	37,630	25	Uttar Pradesh	19,234
26	Bihar	31,229	26	Bihar	15,650
NA	Goa	NA	NA	Goa	NA
NA	Gujarat	NA	NA	Gujarat	NA
NA	Kerala	NA	NA	Kerala	NA
NA	Manipur	NA	NA	Manipur	NA
NA	Mizoram	NA	NA	Mizoram	NA
NA	Tripura	NA	NA	Tripura	NA
	NCR			NCR (2009-10)	59,264

Annexure 2. 3: Calculation of CAGR of GDP from 2004-05 to 2009-10 and projection of GDP for 2011, 2016, 2021, 2026, 2031

	Actual GDP at Constant (2004-05) prices							**Projected GDP at Constant (2004-05) Prices**				
Regions	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**CAGR**	**2011**	**2016**	**2021**	**2026**	**2031**
	GDP (In Rs Millions)	**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In RS Millions)**	**GDP (In Rs Millions)**		**GDP in Millions)**	**GDP (In Millions)**	**GDP (In Millions)**	**GDP (In Millions)**	**GDP (In Millions)**
Meerut	71,760.6	81,598.94	85,739.16	91,741.39	93,859.36	1,01,254.56	7.13	1,08,473	1,53,055	2,15,962	3,04,723	4,29,966
Bagpat	29,072.7	28,550.69	30,675.61	32,878.24	34,721.48	38,426.16	5.74	40,631	53,703	70,980	93,817	1,24,000
Gaziabad+Hapur	89,271.38	97,684.35	1,16,072.75	1,24,785.67	1,31,283.88	1,36,475.9	8.86	1,48,568	2,27,127	3,47,226	53,0830	8,11,521
Gautambudh nagar	73,533.04	75,276.19	1,17,301.88	1,26,289.94	1,31,113.97	1,41,557.06	14.00	1,61,369	3,10,649	5,98,025	11,51,247	22,16,243
Bulandshahr	68,799.56	66,288.34	74,341.09	78,724.65	83,337.35	88,739.5	5.22	93,373	1,20,436	1,55,341	2,00,363	2,58,433
Uttar Pradesh Sub-Region	**3,32,437.28**	**3,49,398.51**	**4,24,130.49**	**4,54,419.89**	**4,74,316.04**	**5,06,453.18**	**8.78**	**5,50,941**	**8,39,334**	**12,78,687**	**19,48,022**	**29,67,724**
Delhi	10,03,245.2	11,04,060.7	12,40,795.8	13,79,608.6	15,57,910.9	16,98,389.8	11.10	18,86,963	31,94,432	54,07,842	91,54,914	1,54,98,318
NCT of Delhi Sub-Region	**10,03,245.2**	**11,04,060.7**	**12,40,795.8**	**13,79,608.6**	**15,57,910.9**	**16,98,389.8**	**11.10**	**18,86,963**	**31,94,432**	**54,07,842**	**91,54,914**	**1,54,98,318**
Alwar	77,420.3	77,425.7	90,451.3	93,576.1	1,10,109.8	1,21,901	9.50	1,33,487	2,10,179	3,30,935	5,21,069	8,20,441
Rajasthan Sub-Region	77,420.3	77,425.7	90,451.3	93,576.1	1,10,109.8	1,21,901	9.50	1,33,487	2,10,179	3,30,935	5,21,069	8,20,441
Faridabad	1,11,351.3	1,21,775.9	1,36,362.8	1,51,289.1	1,62,483.8	1,90,014.6	11.28	2,11,449	3,60,825	6,15,728	10,50,704	17,92,966
Gurgaon	1,66,984.4	1,80,864	2,02,167	2,27,493.5	2,42,417.8	2,69,905.5	10.08	2,97,111	4,80,236	7,76,230	12,54,661	20,27,973
Jhajjar	28,356.3	30,757.1	34,252.7	36,861.3	40,157	44,947.9	9.65	49,286	78,123	1,23,834	1,96,291	3,11,144
Panipat	65,641	72,170.5	79,052.8	88,334.2	1,00,821.3	99,297.5	8.63	1,07,868	1,63,175	2,46,841	3,73,405	5,64,863
Rewari	43,623.8	47,154.9	51,646.3	56,206.5	60,465.4	65,930.6	8.61	71,608	1,08,224	1,63,564	2,47,201	3,73,606
Rohtak	32,447.2	34,565.7	37,592.9	40,120.7	41,930.8	47,052.3	7.72	50,683	73,496	1,06,578	1,54,551	2,24,118
Sonipat	48,414.2	52,734.5	58,439.5	62,897.9	68,729.4	77,067.6	9.74	84,577	1,34,633	2,14,314	3,41,153	5,43,060
Mewat	NA	20,637.4	21,933.9	23,362.9	27,919.4	29,967.8	9.77	32,897	52,439	83,590	1,33,246	2,12,400
Palwal						42,546.5	NA	NA	NA	NA	NA	NA
Haryana Sub-region	**4,96,818.2**	**5,60,660**	**6,21,447.9**	**6,86,566.1**	**7,44,924.9**	**8,66,730.3**	**11.77**	**9,68,771**	**16,90,082**	**29,48,453**	**51,43,760**	**89,73,610**
NCR	**19,09,920.98**	**20,91,544.91**	**23,76,825.49**	**26,14,170.69**	**28,87,261.64**	**31,93,474.28**	**10.83**	**35,39,265**	**59,17,810**	**98,94,847**	**1,65,44,631**	**2,76,63,372**

Source: Planning Commision, updes.nic.in, Dept. of Economics and Statistics of Haryana & Delhi ; and ACDS estimates.

Annexure 2. 4: Sector Wise Contribution of GDP at Constant Prices (Rs. in Millions)

Sectors	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Primary	7,633	7,827	7,673	7,549	7,676	7,675	7,406	7,409	7,134
Secondary	1,00,817	1,11,293	1,07,871	1,24,232	1,24,448	1,50,117	1,67,832	1,79,558	1,87,879
Tertiary	4,43,751	4,56,926	4,82,769	5,11,748	5,47,950	6,02,028	6,68,532	7,83,890	8,96,995
GDP-NCT of Delhi	**5,52,201**	**5,76,046**	**5,98,313**	**6,43,529**	**6,80,074**	**7,59,820**	**8,43,770**	**9,70,857**	**10,92,008**
Primary	14,896	14,535	15,804	12,066	20,237	17,939	16,865	20,815	20,984
Secondary	16,781	15,802	14,001	16,195	17,638	19,320	20,109	21,920	31,140
Tertiary	21,604	21,683	21,407	22,108	24,261	26,161	27,295	31,540	41,451
GDP-Rajasthan Sub-Region	**53,281**	**52,020**	**51,212**	**50,369**	**62,136**	**63,420**	**64,269**	**74,275**	**93,575****
Primary*	43,255	45,323	46,756	44,270	46,508	51,154	54,872	57,096	59,410
Secondary*	91,077	97,664	1,06,578	1,13,300	1,25,539	1,40,025	1,56,879	1,71,792	1,88,123
Tertiary*	93,986	1,28,788	1,46,565	1,63,675	1,79,952	2,01,663	2,35,574	2,74,645	3,20,195
GDP-Haryana Sub-region	**2,28,318**	**2,71,775**	**2,99,899**	**3,21,245**	**3,51,999**	**3,92,842**	**4,47,325**	**5,03,532**	**5,67,728**
Primary	59,312	63,851	61,988	64,404	66,114	70,179	70,268	75,013	75,704
Secondary	79,195	74,492	74,721	75,287	79,039	90,215	96,886	1,09,306	1,22,705
Tertiary	80,017	90,562	93,284	96,885	1,02,323	1,10,678	1,18,032	1,25,823	1,35,858
GDP- UP Sub-region	**2,18,524**	**2,28,905**	**2,29,993**	**2,36,576**	**2,47,476**	**2,71,072**	**2,85,186**	**3,10,142**	**3,34,266**
Primary	1,25,096	1,31,536	1,32,221	1,28,289	1,40,536	1,46,947	1,49,410	1,60,333	1,63,231
Secondary	2,87,870	2,99,251	3,03,171	3,29,014	3,46,619	3,99,446	4,43,059	4,82,576	5,29,846
Tertiary	6,39,358	6,97,959	7,44,025	7,94,416	8,54,454	9,40,358	10,50,078	12,15,897	13,94,499
TOTAL GDP at Constant Prices of NCR	**10,52,324**	**11,28,746**	**11,79,417**	**12,51,719**	**13,41,609**	**14,86,751**	**16,42,547**	**18,58,806**	**20,87,577**
* indicates that in Haryana 2006 and 2007 data has been extrapolated on CAGR of previous years									
** indicates that in Rajasthan 2007 data has been at base price of 2004-05									

Source: www.planningcommission.nic.in and http://updes.up.nic.in

Annexure 2. 5: GDP of NCR in 1999- 2000 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	7,124	6,583	4,697	5,193	3,871	4,838	9,527	41,833	14,697	14,697	1,4623	8514	10,568	6,116	18,535	58,356	7,620	1,22,506
	2	Mining and Quarrying	1,211	135	2	11	3	1	53	1,416	199	199	192	209	293	163	95	952	20	2,587
Secondary Sector	3	Manufacturing, Processing	19,455	33,919	3,212	3,849	5,786	2,553	3,929	72,703	1,1613	11,613	11,768	1221	18,660	24,023	6,069	61,741	63,000	2,09,057
	4	Electricity, Gas and Water Supply	839	468	148	1,251	139	337	492	3,674	21,172	21,172	1,400	569	2,252	851	1,637	6,709	6,730	38,285
	5	Construction	3,595	1,428	1,558	1,745	1,138	1,514	1,917	12,895	3,050	3,050	3,450	606	3,827	748	2,106	10,737	31,080	57,762
Tertiary Sector	6	Trade and Commerce	13,902	15,173	905	9,767	3,179	1,374	2,635	46,935	10,542	10,542	6,266	2762	5,739	6,891	6,003	27,661	1,17,490	2,02,628
	7	Transport, Storage and Communications	3,559.8	3,288	1,366	1,390	1,186	1,759	1,997	14,545.8	1,893	1,893	2,876	906	4,420	1,358	2,352	11,912	58,480	86,831
	8	Financing, Insurance, Real-Estate & Business Services	6,389	10,123	1,484	2,050	1,424	2,187	2,350	26,007	3,645	3,645	4,696	1544	6,347	2,474	3,384	18,445	1,78,080	2,26,177
	9	Community, Social & Personal Services	5,124	4,233	2,462	2,061	2,395	3,245	3,042	22,562	5,524	5,524	6,392	1999	6,731	2,455	4,403	21,980	89,720	1,39,786
	1 to 9	Total GDP	61,199	75,350	15,834	27,317	19,121	17,808	25,942	2,42,571	72,335	72,335	51,663	18330	58,837	45,079	44,584	2,18,493	5,52,220	10,85,619

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

Annexure 2. 6: GDP of NCR in 2000-01 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	7,634	7,227	4,463	5,208	3,943	5,353	9,865	43,693	14,378	14,378	15,337	9,366	11,452	7,008	19,489	62,652	7,620	1,28,343
	2	Mining and Quarrying	1,335	205	2	12	3	1	60	1,618	155	155	244	290	306	187	162	1,189	20	2,982
Secondary Sector	3	Manufacturing, Processing	24,852	30,531	5,115	4,645	6,751	3,394	3,483	78,771	10,864	10,864	10,370	1,114	18,264	21,486	5,964	57,198	63,000	20,9,833
	4	Electricity, Gas and Water Supply	903	484	153	1,322	142	349	513	3,866	21,198	21,198	1,478	597	2,371	892	1,727	7,065	6,730	38,859
	5	Construction	3,983	3,348	1,364	1,743	1,177	1,551	1,857	15,022	2,119	2,119	3,409	599	3,588	720	1,910	10,226	31,080	58,447
Tertiary Sector	6	Trade and Commerce	16,808	18,345	1,095	11,809	3,844	1,662	3,186	56,749	10,104	10,104	6,842	2,842	7,924	7,629	6,771	32,007	1,17,490	2,16,349
	7	Transport, Storage and Communications	4,205	3,809	1,576	1,613	1,362	1,997	2,331	16,893	2,085	2,085	3,416	1,121	5,321	1,701	2,900	14,457	58,480	91,914
	8	Financing, Insurance, Real-Estate & Business Services	7,633	14,899	1,592	2,123	1,516	2,365	2,528	32,656	3,792	3,792	5,274	1,728	7,260	2,819	3,669	20,750	1,78,080	2,35,278
	9	Community, Social & Personal Services	5,232	4,134	2,329	1,965	2,032	3,368	3,431	22,490	5,703	5,703	6,855	1,964	7,459	3,250	3,820	23,349	89,720	1,41,262
	1 to 9	Total GDP	72,585	82,982	17,689	30,438	20,770	20,039	27,255	2,71,757	70,397	70,397	53,224	19,620	63,945	45,692	46,412	2,28,893	5,52,220	11,23,267

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 7: GDP of NCR in 2001-02 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	8,124	7,060	4,560	4,877	3,890	5,643	10,559	44,712	15,661	15,661	15,640	8,549	10,925	5,962	20,185	61,261	7,620	1,29,254
	2	Mining and Quarrying	1,701	222	5	26	3	1	87	2,045	143	143	172	163	166	158	69	727	60	2,975
Secondary Sector	3	Manufacturing, Processing	27,671	32,106	4,393	3,860	9,603	3,117	5,157	85,907	8,919	8,919	8,994	1,345	17,369	22,804	6,156	56,669	60,060	2,11,554
	4	Electricity, Gas and Water Supply	1,373	761	441	468	124	231	340	3,738	1,904	1,904	1,498	596	2,393	896	1,735	7,119	7,810	20,570
	5	Construction	4,190	2,825	1,596	2,577	1,306	2,002	2,440	16,934	3,178	3,178	3,951	637	3,490	829	2,027	10,935	40,000	71,046
Tertiary Sector	6	Trade and Commerce	18,836	20,559	1,227	13,234	4,308	1,862	3,571	63,597	9,274	9,274	6,817	2,764	7,822	7,949	7,258	32,610	1,31,480	2,36,960
	7	Transport, Storage and Communications	4,892	4,318	1,891	1,856	1,576	2,305	2,667	19,505	2,333	2,333	3,568	1,173	5,566	1,785	2,985	15,076	66,990	1,03,904
	8	Financing, Insurance, Real-Estate & Business Services	8,912	19,752	1,686	2,270	1,590	2,565	2,704	39,480	4,039	4,039	5,614	1,819	7,773	2,999	3,832	22,036	1,91,780	2,57,335
	9	Community, Social & Personal Services	5,521	4,364	2,564	2,129	2,127	3,602	3,677	23,983	5,761	5,761	6,632	2,191	7,372	3,392	3,974	23,561	92,520	1,45,826
	1 to 9	Total GDP	81,219	91,968	18,362	31,297	24,526	21,327	31,201	2,99,900	51,212	51,212	52,887	19,236	62,876	46,773	48,221	2,29,993	5,98,320	11,79,425

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 8: GDP of NCR in 2002-03 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	7,255	7,001	4,622	5,346	2,990	5,289	10,514	43,017	11,918	11,918	15,854	8,873	11,715	5,601	21,400	63,442	7,490	1,25,867
	2	Mining and Quarrying	509	554	5	23	70	1	91	1,254	149	149	172	222	273	117	178	962	60	2,425
Secondary Sector	3	Manufacturing, Processing	22,983	34,707	3,174	7,343	11,857	4,168	5,659	89,890	10,342	10,342	8,380	1,447	16,568	22,153	8,372	56,918	67,790	2,24,941
	4	Electricity, Gas and Water Supply	1,039	553	173	1,530	163	400	647	4,504	2,418	2,418	1,497	617	2,409	906	1,732	7,161	8,170	22,253
	5	Construction	4,612	3,302	1,998	2,471	1,456	2,222	2,846	18,906	3,434	3,434	3,237	647	4,451	855	2,019	11,208	48,270	81,818
Tertiary Sector	6	Trade and Commerce	4,612	3,302	1,998	2,471	1,456	2,222	2,846	18,906	3,434	3,434	3,237	647	4,451	855	2,019	11,208	48,270	81,818
	7	Transport, Storage and Communications	5,616	4,919	2,158	2,086	1,792	2,636	3,051	22,258	2,567	2,567	3,953	1,234	6,029	1,930	3,245	16,392	73,400	1,14,617
	8	Financing, Insurance, Real-Estate & Business Services	10,819	24,755	1,806	2,478	1,702	2,772	2,957	47,288	4,339	4,339	6,100	1,978	8,456	3,251	4,082	23,868	2,04,850	2,80,345
	9	Community, Social & Personal Services	5,794	4,628	2,622	2,230	2,194	3,763	3,828	25,058	5,750	5,750	6,996	2,422	7,407	3,509	4,101	24,434	94,480	1,49,722
	1 to 9	Total GDP	63,239	83,721	18,554	25,977	23,680	23,471	32,438	2,71,080	44,351	44,351	49,425	18,086	61,758	39,177	47,149	2,15,594	5,52,780	10,83,805

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 9: GDP of NCR in 2003-04 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	7,431	7,316	4,596	5,561	3,242	5,748	11,240	45,134	20,106	20,106	17,486	9,168	12,179	5,809	2,05,39	65,182	7,560	1,37,982
	2	Mining and Quarrying	1,280	1	3	22	11	1	57	1,374	132	132	162	210	283	113	164	933	120	2,559
Secondary Sector	3	Manufacturing, Processing	23,499	45,595	5,503	5,605	10,350	2,596	5,678	98,825	10,688	10,688	9,338	1,629	16,741	24,487	6,305	58,500	63,260	2,31,273
	4	Electricity, Gas and Water Supply	1,142	586	185	1,693	172	425	691	4,895	2,613	2,613	1,617	655	2,679	978	1,872	7,801	8,730	24,039
	5	Construction	5,234	4,063	2,117	3,101	1,708	2,500	3,095	21,818	4,292	4,292	3,910	743	4,728	1,026	2,331	12,738	524,60	91,308
Tertiary Sector	6	Trade and Commerce	21,659	23,640	1,411	15,217	4,953	2,141	4,106	73,126	10,722	10,722	7,248	2,956	7,843	8,167	7,254	33,467	1,45,280	2,62,594
	7	Transport, Storage and Communications	6,616	5,756	2,519	2,428	2,066	3,048	3,567	26,001	2,947	2,947	4,350	1,397	6,688	2,172	3,691	18,297	84,630	1,31,875
	8	Financing, Insurance, Real-Estate & Business Services	11,618	30,370	1,897	2,573	1,762	2,946	3,116	54,284	4,467	4,467	6,253	1,997	8,860	3,407	4,135	24,651	2,20,980	3,04,382
	9	Community, Social & Personal Services	6,206	4,908	2,727	2,397	2,363	3,889	4,052	26,542	6,093	6,093	7,409	2,571	7,798	3,687	4,443	25,908	97,060	1,55,603
	1 to 9	Total GDP	84,686	1,22,235	20,958	38,595	26,627	23,296	35,603	3,51,999	62,059	62,059	57,773	21,326	67,798	49,845	50,734	2,47,476	6,80,080	13,41,615

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 10: GDP of NCR in 2004-05 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	9,131	8,457	5,231	6,361	4,577	5,944	10,082	49,782	16,645	16,645	17,687	9,702	13,234	6,029	22,341	68,993	7,620	1,43,039
	2	Mining and Quarrying	1,189	1	3	69	10	1	100	1,372	219	219	202	262	345	162	217	1,187	60	2,839
Secondary Sector	3	Manufacturing, Processing	25,618	49,839	5,990	6,055	11,291	2,797	6,163	1,07,753	13,349	13,349	8,232	1,643	18,314	32,486	6,660	67,335	70,660	2,59,097
	4	Electricity, Gas and Water Supply	1,210	627	198	1,787	185	456	733	5,196	2,450	2,450	1,664	678	2,737	1,012	1,939	8,030	9,900	25,575
	5	Construction	6,734	4,300	2,433	4,946	1,995	2,983	3,686	27,077	5,663	5,663	4,402	800	6,035	1,110	2,504	14,851	69,560	1,17,151
Tertiary Sector	6	Trade and Commerce	24,398	26,629	1,589	1,7141	5,580	2,412	4,625	82,374	1,2696	12,696	6,988	3,062	8,509	10,394	7,863	36,815	1,53,840	2,85,725
	7	Transport, Storage and Communications	7,497	6,582	2,783	2,734	2,330	3,502	4,077	29,506	3,832	3,832	4,773	1,547	7,353	2,404	4,098	20,175	96,490	1,50,003
	8	Financing, Insurance, Real-Estate & Business Services	12,743	35,789	2,010	2,687	1,859	3,154	3,472	61,715	3,295	3,295	6,664	2,119	9,611	3,701	4,328	26,423	2,41,880	3,33,312
	9	Community, Social & Personal Services	6,538	5,298	2,937	2,527	2,418	4,092	4,259	28,069	6,505	6,505	8,023	2,657	8,080	3,205	5,300	27,265	1,09,810	1,71,649
	1 to 9	Total GDP	95,057	1,37,522	23,173	44,307	30,245	25,340	37,197	3,92,843	64,654	64,654	58,635	22,469	74,217	60,503	55,250	2,71,073	7,59,820	14,88,390

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 11: GDP of NCR in 2005-06 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Mewat	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	6,998	4,266	6,039	6,131	6,928	5,326	6,663	9,931	52,281	17,747	17,747	19,651	8,462	15,536	6,286	18,902	68,837	7,410	1,46,274
	2	Mining and Quarrying	2,309	1	1	110	53	13	1	104	2,591	193	193	245	337	431	173	245	1,431	0	4,215
Secondary Sector	3	Manufacturing, Processing	27,725	53,460	6,551	1,467	6,603	12,363	1,949	6,733	1,16,851	12,069	12,069	8,820	1,734	19,932	36,005	7,018	73,509	77,020	2,79,449
	4	Electricity, Gas and Water Supply	1,586	851	623	650	653	176	316	545	5,399	2,332	2,332	1,688	687	2,713	1,026	1,967	8,080	10,200	26,011
	5	Construction	7,233	4,902	2,917	2,842	4,924	2,690	3,580	4,443	33,531	4,689	4,689	4,821	896	5,676	1,212	2,692	15,297	806	54,323
Tertiary Sector	6	Trade and Commerce	23,930	31,503	2,028	259	25,712	5,488	1,742	5,398	9,6059	12,086	12,086	7,789	2,833	9,602	11,342	7,009	38,575	1,86,870	3,33,590
	7	Transport, Storage and Communications	8,479	5,334	3,213	1,723	3,001	2,572	3,836	4,546	32,702	3,323	3,323	5,207	1,773	8,102	2,681	4,545	22,307	1,02,620	1,60,952
	8	Financing, Insurance, Real-Estate & Business Services	15,429	39,864	2,154	1,738	2,854	1,985	3,412	3,795	71,230	4,612	4,612	7,099	2,249	10,439	4,033	4,530	28,349	2,64,690	3,68,881
	9	Community, Social & Personal Services	6,532	3,762	2,996	2,423	2,769	2,709	3,997	4,569	29,757	5,970	5,970	8,459	2,818	8,578	3,326	5,620	28,801	1,14,350	1,78,878
	1 to 9	Total GDP	1,00,221	1,43,943	26,522	17,344	53,495	33,320	25,495	40,064	4,40,402	63,018	63,018	63,778	21,790	81,010	66,082	52,526	2,85,186	7,63,966	1,55,2572

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 12: GDP of NCR in 2006-07at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	6,977	3,967	6,297	7,270	5,617	7,028	10,000	46,912	20,535	20,535	20,274	10,031	15,673	6,277	21,051	73,306	7,410	1,48,163
	2	Mining and Quarrying	2,572	1	1	68	16	1	116	2,726	280	280	290	383	525	216	293	1,707	0	4,713
Secondary Sector	3	Manufacturing, Processing	29,414	57,680	7,380	7,226	14,034	1,863	7,367	1,24,636	13,475	13,475	10,886	2,393	20,135	35,737	9,213	78,364	82,700	2,99,175
	4	Electricity, Gas and Water Supply	1,763	940	792	586	183	313	555	4,957	2,159	2,159	1,908	778	3,087	1,162	2,213	9,149	10,700	26,965
	5	Construction	8,129	6,023	3,239	5,855	3,105	4,134	5,113	35,471	6,287	6,287	6,763	1,261	8,081	1,736	3,952	21,793	86,160	1,49,711
Tertiary Sector	6	Trade and Commerce	26,202	35,591	2,320	30,223	6,012	1,812	6,085	1,07,923	13,910	13,910	8,444	3,437	9,761	11,314	8,220	41,175	2,10,670	37,36,78
	7	Transport, Storage and Communications	9,801	5,782	3,706	3,412	2,926	4,369	5,215	35,147	5,316	5,316	5,637	1,932	8,958	2,965	4,812	24,305	1,37,200	2,01,968
	8	Financing, Insurance, Real-Estate & Business Services	17,877	50,117	2,292	3,016	2,098	3,674	4,111	81,887	5,555	5,555	7,521	2,394	10,991	4,264	4,830	30,001	3,20,470	4,37,913
	9	Community, Social & Personal Services	6,802	3,689	3,096	2,909	2,765	4,139	4,890	28,225	6,759	6,759	8,607	2,895	9,170	3,684	5,985	30,342	1,15,550	1,80,875
	1 to 9	Total GDP	1,08,826	1,60,374	28,907	59,849	36,558	27,069	43,080	4,64,238	74,276	74,276	70,330	25,504	86,381	67,356	60,571	3,10,142	9,70,860	18,19,516

Source: www.planningcommission.gov.in and www.delhiplanning.nic.in

Annexure 2. 13: GDP of NCR in 2007-08 at Constant Prices (Base Year 1999-2000) in Rs. Millions

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar*	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	6,956	3,690	6,567	7,628	5,924	7,414	10,070	47,688	20,011	20,011	20,015	9,999	16,060	6,602	21,584	74,260	7,130	1,49,089
	2	Mining and Quarrying	2,865	0	1	88	21	1	130	2,993	971	971	254	342	481	183	183	1,443	0	5,408
Secondary Sector	3	Manufacturing, Processing	31,207	62,234	8,312	7,907	15,931	1,781	8,060	13,4630	19,446	19,446	11,563	2,242	21,063	36,595	9,334	80,798	87,960	3,22,834
	4	Electricity, Gas and Water Supply	1,961	1,039	1007	525	190	310	564	5,174	3,566	3,566	2,246	910	3,598	1,357	2,551	10,663	12,440	31,843
	5	Construction	9,136	7,401	3,597	6,963	3,585	4,773	5,883	40,997	8,127	8,127	9,969	1,661	11,656	2,452	5,507	31,244	87,480	1,67,849
Tertiary Sector	6	Trade and Commerce	28,689	40,209	2,655	35,525	6,586	1,885	6,859	1,21,580	18,009	18,009	8,373	3,310	9,891	11,410	8,181	41,164	2,25,290	4,06,043
	7	Transport, Storage and Communications	11,330	6,269	4,275	3,880	3,330	4,976	5,983	39,877	4,590	4,590	6,518	2,232	10,284	3,453	5,639	28,126	1,86,150	2,58,743
	8	Financing, Insurance, Real-Estate & Business Services	20,713	63,008	2,439	3,188	2,218	3,958	4,454	96,494	9,007	9,007	8,991	2,934	13,381	5,198	5,545	36,049	3,65,180	5,06,730
	9	Community, Social & Personal Services	7,084	3,617	3,199	3,056	2,823	4,285	5,234	29,144	9,841	9,841	8,347	2,755	9,650	3,964	5,802	30,518	12,037	81,540
	1 to 9	Total GDP	1,18,169	1,78,681	31,508	66,958	40,111	28,741	46,323	5,09,427	93,568	93,568	76,274	26,387	96,063	71,216	64,326	3,34,266	9,83,667	19,20,928

*Source: www.planningcommission.gov.in and www.delhiplanning.nic.in *Base year 2004-05*

Annexure 3. 1: Distribution and Participation Rate of Total Workforce in NCR in 2001

Category	**1**	**2**	**3**		**4**	**5**			**6**	**7**	**8**	**9**		**1 to 9**		
Sectors	**Agricultural Laborers**	**Cultivator**	**Livestock, Forestry etc.**	**Rural Industries**	**Mining and Quarrying**	**Manufacturing, Processing**			**Construction**	**Trade and Commerce**	**Transport, Storage and Communications**	**Other Services**		**Total Workers**	**Total Population**	**Participation Rate**
Districts						a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power				**Financing, Insurance, Real estate and Business services**	**Community, Social and Personal Services**			
Faridabad	82,175	1,86,403	46,513	39,924	4,476	65,918	52,788	57,172	92,582	38,370	62,321	27,201	29,113	7,85,762	21,94,586	35.80
Gurgaon	57,928	1,95,768	72,640	25,719	10,868	31,668	25,199	44,611	54,460	32,733	47,504	19,397	18,070	6,29,658	16,60,289	37.92
Jhajjar	44,844	1,77,377	15,765	11,027	241	37,547	7,217	15,602	20,293	14,025	22,031	10,505	6,493	3,88,715	8,80,072	44.17
Panipat	55,042	89,493	21,867	72,535	598	22,445	12,926	21,975	39,523	13,266	17,259	98,16	10,394	3,82,801	9,67,449	39.57
Rewari	44,441	1,48,218	21,187	11,481	858	12,622	11,837	15,437	21,410	9,703	17,297	10,018	4,939	3,33,622	7,65,351	43.59
Rohtak	45,462	1,43,314	14,530	13,379	295	21,377	6,158	21,724	34,225	16,835	25,553	16,602	7,981	3,71,073	9,40,128	39.47
Sonipat	87,390	1,89,673	30,471	19,468	689	36,666	12,188	24,694	37,958	20,508	33,983	18,987	8,621	5,23,031	12,79,175	40.89
Haryana Sub-region	4,17,282	11,30,246	2,18,955	1,93,533	18,025	2,28,243	1,28,313	2,01,215	3,00,451	145,440	2,25,948	1,12,526	85,611	34,14,662	86,87,050	39.31
Baghpat	70,220	1,51,325	16,827	21,571	173	15,989	5,975	13,478	28,858	11,145	20,196	11,068	6,110	3,80,310	11,63,991	32.67
Buland Shahar	1,95,852	4,19,885	1,40,583	82,754	417	38,343	22,806	41,351	98,260	32,489	60,295	21,461	19,330	11,73,805	29,13,122	40.29
Gautam Budh Nagar	34,338	93,015	13,884	20,839	850	17,772	16,761	21,637	37,036	16,594	59,172	12,950	16,917	3,63,814	12,02,030	30.27
Ghaziabad	69,775	1,60,566	38,113	89,367	1,638	66,885	46,526	81,035	1,41,734	66,229	1,04,783	35,586	32,203	9,38,251	32,90,586	28.51
Meerut	1,10,440	2,17,120	45,821	80,514	471	50,441	29,050	65,168	1,14,126	46,239	72,331	30,345	24,363	8,95,856	29,97,361	29.89
Uttar Pradesh Sub-region	4,80,625	10,41,911	2,55,228	2,95,045	3,549	1,89,430	1,21,118	2,22,669	4,20,014	1,72,696	3,16,777	1,11,410	98,923	37,52,036	1,15,67,090	32.44
Alwar	1,28,442	9,05,207	82,083	45,703	4,992	43,016	16,809	45,810	70,538	37,133	34,937	29,883	14,778	14,58,686	29,92,592	48.74
Rajasthan Sub-region	1,28,442	9,05,207	82,083	45,703	4,992	43,016	16,809	45,810	70,538	37,133	34,937	29,883	14,778	14,58,686	29,92,592	48.74

NCT Delhi Sub-Region	15,773	37,431	37,353	5,12,571	15,873	4,19,273	2,35,541	3,95,608	10,61,214	4,80,580	7,38,180	2,78,482	3,41,443	43,46,710	1,38,50,507	31.38
NCR	10,42,122	31,14,795	5,93,619	10,46,852	42,439	8,79,962	5,01,781	8,65,302	18,52,217	8,35,849	13,15,842	5,32,301	5,40,755	1,29,72,094	3,70,97,239	34.97

Source: Census India 2001

Annexure 3. 2: Distribution and Participation Rate of Main Workforce in NCR in 2001

	Districts	Agricultural Laborers & Cultivator	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total Main Workers	Non - Workers	Total Population	Participation Rate of Main Workers
Haryana	Faridabad	1,64,734	25,824	33,334	3,891	59,911	49,091	44,210	84,524	35,777	58,619	25,711	24,037	6,09,663	14,08,824	21,94,586	27.78
	Gurgaon	1,54,526	37,961	21,173	8,952	26,230	23,658	33,868	49,280	30,132	45,582	18,298	14,984	4,64,644	10,30,631	16,60,289	27.99
	Jhajjar	1,44,057	9,806	8,114	202	28,547	6,522	11,371	18,234	13,112	21,299	9,889	5,055	2,76,208	4,91,357	8,80,072	31.38
	Panipat	93,658	9,662	60,470	569	13,861	11,383	18,235	35,880	12,472	15,912	9,152	7,759	2,89,013	5,84,648	9,67,449	29.87
	Rewari	96,647	11,504	7,393	758	8,820	11,064	11,027	19,166	9,003	16,304	9,439	3,730	2,04,855	4,31,729	7,65,351	26.77
	Rohtak	1,38,743	8,752	10,607	287	16,052	5,266	16,441	30,822	15,692	23,896	15,920	5,747	2,88,225	5,69,055	9,40,128	30.66
	Sonipat	1,79,642	20,456	16,053	687	24,274	11,276	19,254	34,711	19,327	32,488	18,348	6,933	3,83,449	7,56,144	12,79,175	29.98
	Haryana Sub-region	9,72,007	1,23,965	1,57,144	15,346	1,77,695	1,18,260	1,54,406	2,72,617	1,35,515	2,14,100	1,06,757	68,245	25,16,057	52,72,388	86,87,050	28.96
Uttar Pradesh	Baghpat	1,66,204	11,349	17,275	153	11,131	4,952	10,368	25,523	10,131	17,133	10,494	5,149	2,89,862	7,83,681	11,63,991	24.90
	Buland Shahar	4,07,211	62,779	47,823	380	30,124	17,062	30,616	81,039	29,197	45,536	19,713	15,228	7,86,708	17,39,317	29,13,122	27.01
	Gautam Budh Nagar	1,04,669	10,033	17,665	810	14,035	14,054	17,908	33,954	15,208	53,155	12,410	14,983	3,08,884	8,38,216	12,02,030	25.70
	Ghaziabad	1,78,028	28,895	75,715	1,583	59,724	41,996	63,711	1,29,794	61,939	96,330	33,750	28,419	7,99,884	23,52,335	32,90,586	24.31
	Meerut	2,54,581	33,238	66,004	422	43,550	24,730	50,364	1,05,644	42,454	66,542	28,742	20,895	7,37,166	8,55,494	29,97,361	24.59
	Uttar Pradesh Sub-region	11,10,693	1,46,294	2,24,482	3,348	1,58,564	1,02,794	1,72,967	3,75,954	1,58,929	2,78,696	1,05,109	84,674	29,22,504	65,69,043	1,15,67,090	25.27
Rajasthan	Alwar	6,11,306	35,375	35,632	4,299	36,437	14,843	38,311	63,738	34,581	32,487	28,494	12,084	9,47,587	15,33,906	29,92,592	31.66
	Rajasthan Sub-region	6,11,306	35,375	35,632	4,299	36,437	14,843	38,311	63,738	34,581	32,487	28,494	12,084	9,47,587	15,33,906	29,92,592	31.66
Delhi	Total of Delhi Region	32,430	34,141	4,69,719	15,105	4,00,520	2,24,302	3,42,996	10,21,816	4,65,616	7,23,447	2,67,712	3,19,712	43,17,516	93,05,273	1,38,50,507	31.17
NCR	Total Workers in NCR	27,26,436	3,39,775	8,86,977	38,098	7,73,216	4,60,199	7,08,680	17,34,125	7,94,641	12,48,730	5,08,072	4,84,715	1,07,03,664	2,26,80,610	3,70,97,239	28.85

Source: Census India- 2001

Annexure 3. 3: Distribution and Participation Rate of Marginal Workforce in NCR in 2001

	Sectors	Agricultural Laborers & Cultivator	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total Marginal Workers	Non - Workers	Total Population	Participation Rate
Haryana	Faridabad	1,04,650	20,689	6,590	585	6,007	3,697	12,962	8,058	2,593	3,702	1,490	5,076	1,76,099	14,08,824	21,94,586	8.02
	Gurgaon	92,263	34,679	4,546	1,916	5,438	1,541	10,743	5,180	2,601	1,922	1,099	3,086	1,65,014	10,30,631	16,60,289	9.94
	Jhajjar	83,912	5,959	2,913	39	9,000	695	4,231	2,059	913	732	616	1,438	1,12,507	4,91,357	8,80,072	12.78
	Panipat	46,539	12,205	12,065	29	8,584	1,543	3,740	3,643	794	1,347	664	2,635	93,788	5,84,648	9,67,449	9.69
	Rewari	1,01,902	9,683	2,372	100	3,802	773	4,410	2,244	700	993	579	1,209	1,28,767	4,31,729	7,65,351	16.82
	Rohtak	54,142	5,307	2,772	8	5,325	892	5,283	3,403	1,143	1,657	682	2,234	82,848	5,69,055	9,40,128	8.81
	Sonipat	99,156	10,015	3,415	2	12,392	912	5,440	3,247	1,181	1,495	639	1,688	1,39,582	7,56,144	12,79,175	10.91
	Haryana sub-region	**5,82,564**	**98,537**	**34,673**	**2,679**	**50,548**	**10,053**	**46,809**	**27,834**	**9,925**	**11,848**	**5,769**	**17,366**	**8,98,605**	**52,72,388**	**86,87,050**	**10.34**
Uttar Pradesh	Baghpat	62,716	5,478	4,296	20	4,858	1,023	3,110	3,335	1,014	3,063	574	961	90,448	7,83,681	11,63,991	7.77
	Buland Shahar	2,08,477	77,804	34,931	65	8,219	5,744	10,735	17,221	3,292	14,759	1,748	4,102	3,87,097	17,39,317	29,13,122	13.29
	Gautam Budh Nagar	24,733	3,851	3,174	40	3,737	2,707	3,729	3,082	1,386	6,017	540	1,934	54,930	8,38,216	12,02,030	4.57
	Ghaziabad	56,079	9,218	13,652	100	7,161	4,530	17,324	11,940	4,290	8,453	1,836	3,784	1,38,367	23,52,335	32,90,586	4.20
	Meerut	82,406	12,583	14,510	49	6,891	4,320	14,804	8,482	3,785	5,789	1,603	3,468	1,58,690	8,55,494	29,97,361	5.29
	U.P. sub-region	**4,34,411**	**1,08,934**	**70,563**	**274**	**30,866**	**18,324**	**49,702**	**44,060**	**13,767**	**38,081**	**6,301**	**14,249**	**8,29,532**	**65,69,043**	**1,15,67,090**	**7.17**
Rajasthan	Alwar	4,21,698	46,708	10,071	693	6,579	1,966	7,499	6,800	2,552	2,450	1,389	2,694	5,11,099	15,33,906	29,92,592	17.08
	Rajasthan sub-region	**4,21,698**	**46,708**	**10,071**	**693**	**6,579**	**1,966**	**7,499**	**6,800**	**2,552**	**2,450**	**1,389**	**2,694**	**511099**	**1533906**	**29,92,592**	**17.08**
Delhi	**NCT-Delhi sub-region**	**9,009**	**3,212**	**30,529**	**768**	**18,753**	**11,239**	**52,612**	**39,398**	**14,964**	**14,733**	**10,770**	**21,731**	**2,27,718**	**93,05,273**	**1,38,50,507**	**1.64**
NCR		**14,47,682**	**2,57,391**	**1,45,836**	**4,414**	**1,06,746**	**41,582**	**1,56,622**	**1,18,092**	**41,208**	**67,112**	**24,229**	**56,040**	**24,66,954**	**2,26,80,610**	**3,70,97,239**	**6.65**

Source: Census India- 2001

Annexure 3. 4: Distribution and Participation Rate of Urban Workforce in NCR in 2001

Sub-region	Sectors / Districts	Agricultural Laborers	Cultivator	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Manufacturing, Processing			Construction	Trade and Commerce	Transport, Storage and Communications	Other Services		Total Worker	Urban Population	Urban Participation Rate
							a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power				Financing, Insurance, Real estate and Business services	Community, Social and Personal Services			
Haryana	Faridabad	6,032	6,743	32,672	27,924	2,976	48,748	45,638	39,892	76,062	28,550	48,326	20,186	21,928	3,74,777	12,21,344	30.69
	Gurgaon	3,280	3,724	3,000	8,144	288	7,318	10,374	11,216	27,460	10,248	19,014	9,472	7,220	1,12,326	3,69,004	30.44
	Jhajjar	1,668	4,644	2,500	4,912	116	8,202	4,572	6,532	10,978	5,100	8,116	4,200	2,558	59,070	1,95,097	30.28
	Panipat	1,246	1,463	2,072	53,990	388	6,190	9,246	11,040	27,638	7,446	9,284	5,566	6,094	87,285	3,92,080	22.26
	Rewari	1,329	1,370	752	2,960	48	2,762	3,322	3,762	11,440	3,208	5,202	2,888	1,614	37,649	1,36,174	27.65
	Rohtak	2,246	2,229	2,034	6,604	220	5,782	3,088	12,054	23,380	8,640	14,318	10,702	4,446	88,919	3,29,604	26.98
	Sonipat	4,066	2,945	2,896	6,998	174	5,986	5,768	9,754	22,788	8,698	12,568	9,482	4,266	89,217	3,21,375	27.76
	Haryana sub-region	**19,867**	**23,118**	**45,926**	**1,11,532**	**4,210**	**84,988**	**82,008**	**94,250**	**1,99,746**	**71,890**	**1,16,828**	**62,496**	**48,126**	**8,49,243**	**29,64,678**	**28.65**
Uttar Pradesh	Baghpat	4,516	9,644	1,702	6,286	68	3,744	1,760	4,998	14,428	4,430	6,086	3,668	2,190	57,166	2,29,432	24.92
	Buland Shahar	13,284	12,589	4,488	25,074	250	12,228	7,476	13,476	51,520	15,654	26,510	8,986	6,800	1,73,011	6,74,458	25.65
	Gautam Budh Nagar	2,990	4,491	3,204	11,464	500	7,692	9,436	13,142	25,696	10,924	39,882	7,010	11,002	1,35,469	4,49,415	30.14
	Ghaziabad	7,510	10,014	7,588	56,212	1,348	42,470	32,486	48,040	1,06,694	50,764	77,148	25,746	21,178	4,29,638	18,16,415	23.65
	Meerut	15,275	12,895	7,366	46,704	336	30,286	17,470	39,948	86,596	33,874	57,116	20,660	14,738	3,36,224	14,51,983	23.16
	U.P. sub-region	**43,575**	**49,633**	**24,348**	**1,45,740**	**2,502**	**96,420**	**68,628**	**1,19,604**	**2,84,934**	**1,15,646**	**2,06,742**	**66,070**	**55,908**	**11,31,508**	**46,21,703**	**24.48**
Rajasthan	Alwar	2,133	9,662	5,928	13,088	222	13,016	5,974	12,460	31,378	12,058	16,882	11,528	5,118	1,26,359	4,34,939	29.05
	Rajasthan sub-region	**2,133**	**9,662**	**5,928**	**13,088**	**222**	**13,016**	**5,974**	**12,460**	**31,378**	**12,058**	**16,882**	**11,528**	**5,118**	**1,26,359**	**4,34,939**	**29.05**
Delhi	**NCT-Delhi sub-region**	**7,418**	**10,730**	**25,828**	**4,73,528**	**13,938**	**3,89,888**	**2,21,226**	**3,61,038**	**10,15,604**	**4,49,000**	**6,97,740**	**2,63,092**	**3,24,828**	**37,66,392**	**1,29,05,780**	**29.18**
NCR		**53,126**	**70,025**	**56,104**	**6,32,356**	**16,662**	**4,99,324**	**2,95,828**	**4,93,102**	**13,31,916**	**5,76,704**	**9,21,364**	**3,40,690**	**3,85,854**	**50,24,259**	**1,79,62,422**	**27.97**

Source: Census of India 2001

Annexure 3. 5: Distribution and Participation Rate of Rural Workforce in NCR in nine categories in 2001

	Sectors						Manufacturing, Processing						Other Services		Total Rural Workers		
Sub-region	**Districts**	**Agricultural Laborers**	**Cultivator**	**Livestock, Forestry etc.**	**Rural Industries**	**Mining and Quarrying**	**a) Household Industries**	**b) Other than household Industries**	**C) Electricity, Gas and Power**	**Construction**	**Trade and Commerce**	**Transport, Storage and Communications**	**Financing, Insurance, Real estate and Business services**	**Community, Social and Personal Services**		**Total Rural Population**	**Rural Participation Rate**
Haryana	Faridabad	76,143	179,660	13,841	12,000	1,500	17,170	7,150	17,280	16,520	9,820	13,995	7,015	7,185	3,79,279	9,73,242	38.97
	Gurgaon	54,648	1,92,044	69,640	17,575	10,580	24,350	14,825	33,395	27,000	22,485	28,490	9,925	10,850	5,15,807	12,91,285	39.95
	Jhajjar	43,176	1,72,733	13,265	6,115	125	29,345	2,645	9,070	9,315	8,925	13,915	6,305	3,935	3,18,869	6,84,975	46.55
	Panipat	53,796	88,030	19,795	18,545	210	16,255	3,680	10,935	11,885	5,820	7,975	4,250	4,300	2,45,476	5,75,369	42.66
	Rewari	43,112	1,46,848	20,435	6,805	810	9,860	8,515	11,675	9,970	6,495	12,095	7,130	3,325	2,87,075	6,29,177	45.63
	Rohtak	43,216	1,41,085	12,025	6,775	75	15,595	3,070	9,670	10,845	8,195	11,235	5,900	3,535	2,71,221	6,10,524	44.42
	Sonipat	83,324	1,86,728	27,575	12,479	515	30,680	6,420	14,940	15,170	11,810	21,415	9,505	4,355	4,24,916	9,57,800	44.36
Haryana sub-region		**3,97,415**	**11,07,128**	**1,76,576**	**80,294**	**13,815**	**1,43,255**	**46,305**	**1,06,965**	**1,00,705**	**73,550**	**1,09,120**	**50,030**	**37,485**	**24,42,643**	**57,22,372**	**42.69**
Uttar Pradesh	Baghpat	65,704	1,41,681	15,125	15,282	105	12,245	4,215	8,480	14,430	6,715	14,110	7,400	3,920	3,09,412	9,34,559	33.11
	Buland Shahar	1,82,568	4,07,296	1,36,095	57,680	195	26,115	15,330	27,875	46,740	16,835	33,785	12,475	12,530	9,75,519	22,38,664	43.58
	Gautam Budh Nagar	31,348	88,524	10,680	9,375	350	10,080	7,325	8,495	11,340	5,670	19,290	5,940	5,915	2,14,332	7,52,615	28.48
	Ghaziabad	62,265	1,50,552	30,525	33,155	335	24,415	14,040	32,995	35,040	15,465	27,635	9,840	11,025	44,7287	14,74,171	30.34
	Meerut	95,165	2,04,225	38,455	33,810	135	20,155	11,580	25,220	27,530	12,365	15,215	9,685	9,625	5,03,165	15,45,378	32.56
Uttar Pradesh sub-region		**4,37,050**	**9,92,278**	**2,30,880**	**1,49,302**	**1,120**	**93,010**	**52,490**	**1,03,065**	**1,35,080**	**57,050**	**1,10,035**	**45,340**	**43,015**	**24,49,715**	**69,45,387**	**35.27**
Rajasthan	Alwar	1,26,309	8,95,545	76,155	32,615	4,770	30,000	10,835	33,350	39,160	25,075	18,055	18,355	9,660	13,19,884	25,57,653	51.61
Rajasthan sub-region		**1,26,309**	**8,95,545**	**76,155**	**32,615**	**4,770**	**30,000**	**10,835**	**33,350**	**39,160**	**25,075**	**18,055**	**18,355**	**9,660**	**13,19,884**	**25,57,653**	**51.61**
NCT-Delhi sub-region		8,355	26,701	11,525	29,720	2,025	29,385	14,315	34,570	45,610	31,580	40,440	15,390	16,615	3,06,231	9,44,727	32.41
NCR		**9,69,129**	**30,21,652**	**4,95,136**	**291,931**	**21,730**	**2,95,650**	**1,23,945**	**2,77,950**	**3,20,555**	**1,87,255**	**2,77,650**	**1,29,115**	**1,06,775**	**65,18,473**	**1,61,70,139**	**40.31**

Source: Census of India 2001

Annexure 3. 6: Distribution of Workers as Main and marginal and disaggregated in to rural and urban in 2011

	Main workers					Marginal workers					Combined total (main + Marginal					Total Workers		
District/ sub-region	**Cultivators**	**Agriculture labor**	**HH Industries**	**other workers**	**Total main workers**	**Cultivators**	**Agriculture labor**	**HH Industries**	**other workers**	**Total marginal workers**	**Cultivators**	**Agriculture labor**	**HH Industries**	**other workers**	**Total work force**	**Rural**	**Urban**	**Total work force**
North West	10,127	10,553	33,767	10,80,679	11,35,126	1,306	2,736	2,129	47,248	53,419	11,433	13,289	35,896	11,27,927	11,88,545	67,492	11,21,053	11,88,545
North	1,967	1,493	10,403	2,69,720	2,83,583	220	298	625	11,720	12,863	2,187	1,791	11,028	2,81,440	2,96,446	5,278	2,91,168	2,96,446
North East	1,738	1,893	27,587	5,91,225	6,22,443	497	513	3,151	34,782	38,943	2,235	2,406	30,738	6,26,007	6,61,386	5,988	6,55,398	6,61,386
East	805	2,841	18,432	5,32,948	5,55,026	351	253	1,109	22,953	24,666	1,156	3,094	19,541	5,55,901	5,79,692	1,348	5,78,344	5,79,692
New Delhi	80	223	962	55,206	56,471	41	52	68	2,909	3,070	121	275	1,030	58,115	59,541		59,541	59,541
Central	463	511	10,342	1,84,662	1,95,978	134	90	560	10,612	11,396	597	601	10,902	1,95,274	2,07,374		2,07,374	2,07,374
West	2,433	3,725	27,623	8,05,840	8,39,621	519	633	1,399	32,148	34,699	2,952	4,358	29,022	8,37,988	8,74,320	1,846	8,72,474	8,74,320
South West	7,832	5,277	16,956	7,19,930	7,49,995	1,901	2,476	1,658	39,322	45,357	9,733	7,753	18,614	7,59,252	7,95,352	44,049	7,51,303	7,95,352
South	2,314	4,958	23,054	8,38,760	8,69,086	670	950	2027	51,660	55,307	2,984	5,908	25,081	8,90,420	9,24,393	4,226	9,20,167	9,24,393
NCT of Delhi	**27,759**	**31,474**	**1,69,126**	**50,78,970**	**53,07,329**	**5,639**	**8,001**	**12,726**	**2,53,354**	**2,79,720**	**33,398**	**39,475**	**1,81,852**	**5,332,324**	**55,87,049**	**1,30,227**	**54,56,822**	**55,87,049**
Faridabad	23,654	19,382	27,869	4,24,411	4,95,316	4,051	9,906	4,417	65,539	83,913	27,705	29,288	32,286	4,89,950	5,79,229	1,06,758	4,72,471	5,79,229
Gurgaon	44,429	15,725	16,002	4,11,285	4,87,441	11,617	11,372	2,226	32,060	57,275	56,046	27,097	18,228	4,43,345	5,44,716	1,58,462	3,86,254	5,44,716
Rewari	73,994	10,452	6,249	1,59,524	2,50,219	28,704	17,763	3,533	37,508	87,508	1,02,698	28,215	9,782	1,97,032	3,37,727	2,64,375	73,352	3,37,727
Rohtak	80,456	20,616	6,353	1,81,524	2,88,949	15,276	15,952	2,168	23,622	57,018	95,732	36,568	8,521	2,05,146	3,45,967	2,12,681	1,33,286	3,45,967
Sonipat	1,10,262	54,040	12,405	2,20,056	3,96,763	32,082	47,693	5,779	40,862	1,26,416	1,42,344	1,01,733	18,184	2,60,918	5,23,179	3,76,188	1,46,991	5,23,179
Panipat	61,474	36,191	12,485	2,28,866	3,39,016	10,646	26,167	3,339	33,150	73,302	72,120	62,358	15,824	2,62,016	4,12,318	2,21,931	1,90,387	4,12,318
Jhajjar	86,313	19,433	6,520	1,34,191	2,46,457	26,076	25,412	2,734	25,855	80,077	1,12,389	44,845	9,254	1,60,046	3,26,534	2,53,833	7,2701	3,26,534
Mewat	81,608	25,426	4,034	93,110	2,04,178	22,629	29,852	1,989	31,316	85,786	1,04,237	55,278	6,023	1,24,426	2,89,964	2,58,721	31,243	2,89,964
Palwal	71,540	26,229	5,616	1,13,547	2,16,932	19,966	34,456	2,950	35,259	92,631	91,506	60,685	8,566	1,48,806	3,09,563	2,42,228	67,335	3,09,563
Haryana Sub region	**6,33,730**	**2,27,494**	**97,533**	**19,66,514**	**29,25,271**	**1,71,047**	**2,18,573**	**29,135**	**3,25,171**	**7,43,926**	**8,04,777**	**4,46,067**	**1,26,668**	**2,291,685**	**3,669,197**	**20,95,177**	**15,74,020**	**36,69,197**
Alwar	6,08,718	95,586	21,588	4,53,569	11,79,461	2,90,173	1,21,186	12,974	1,04,748	5,29,081	8,98,891	2,16,772	34,562	5,58,317	1,708,542	14,87,935	2,20,607	17,08,542
Rajasthan sub region	**6,08,718**	**95,586**	**21,588**	**4,53,569**	**11,79,461**	**2,90,173**	**1,21,186**	**12,974**	**1,04,748**	**5,29,081**	**8,98,891**	**2,16,772**	**34,562**	**5,58,317**	**1,708,542**	**14,87,935**	**2,20,607**	**17,08,542**
Baghpat	1,12,453	49,442	13,958	1,58,666	3,34,519	12,265	25,058	6,389	38,464	82,176	1,24,718	74,500	20,347	1,97,130	416,695	3,37,563	79,132	4,16,695
Bulandshahr	2,92,901	13,6780	44,401	4,11,134	8,85,216	39,574	1,04,357	21,536	1,22,577	2,88,044	3,32,475	2,41,137	65,937	5,33,711	1,173,260	9,19,473	2,53,787	11,73,260
Gautam Budh Nagar	60,899	27,618	26,065	3,43,910	4,58,492	11,769	21,227	9,335	68,286	1,10,617	72,668	48,845	35,400	4,12,196	5,69,109	2,16,673	3,52,436	5,69,109
Ghaziabad + Hapur	1,39,829	83,227	63,604	9,66,251	12,52,911	19,039	40,453	20,068	1,88,067	2,67,627	1,58,868	1,23,680	83,672	11,54,318	15,20,538	4,96,077	10,24,461	15,20,538
Meerut	1,75,944	1,12,247	48,232	5,54,387	8,90,810	20,124	41,748	14,864	1,22,993	1,99,729	1,96,068	1,53,995	63,096	6,77,380	10,90,539	5,43,366	5,47,173	10,90,539

Uttar Pradesh Sub region	**7,82,026**	**4,09,314**	**1,96,260**	**24,34,348**	**38,21,948**	**1,02,771**	**2,32,843**	**72,192**	**5,40,387**	**9,48,193**	**8,84,797**	**6,42,157**	**2,68,452**	**29,74,735**	**47,70,141**	**25,13,152**	**22,56,989**	**47,70,141**
NCR	**20,52,233**	**7,63,868**	**4,84,507**	**99,33,401**	**1,32,34,009**	**5,69,630**	**5,80,603**	**1,27,027**	**12,23,660**	**25,00,920**	**26.21,863**	**13,44,471**	**6,11,534**	**1,11,57,061**	**1,57,34,929**	**62,26,491**	**95,08,438**	**1,57,34,929**

Source: Census of India 2011 and The Study of Economic Profile of NCR

Annexure 3. 7: Distribution of total workforce, population and participation into rural and urban in 2011

	Total Workers			Population			WPR		
District wise/ Sub region	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
North West	67,492	11,21,053	1,188,545	2,13,950	34,42,589	36,56,539	31.55	32.56	32.50
North	5,278	2,91,168	2,96,446	17,746	870,232	8,87,978	29.74	33.46	33.38
North East	5,988	6,55,398	6,61,386	21,527	22,20,097	22,41,624	27.82	29.52	29.50
East	1,348	5,78,344	5,79,692	3,530	17,05,816	17,09,346	38.19	33.90	33.91
New Delhi		59,541	59,541	0	1,42,004	1,42,004	0	41.93	41.93
Central		2,07,374	2,07,374	0	5,82,320	5,82,320	0	35.61	35.61
West	1,846	8,72,474	8,74,320	6,420	25,36,823	25,43,243	28.75	34.39	34.38
South West	44,049	7,51,303	7,95,352	1,43,676	21,49,282	22,92,958	30.66	34.96	34.69
South	4,226	9,20,167	9,24,393	12,193	27,19,736	27,31,929	34.66	33.83	33.84
NCT of Delhi	**1,30,227**	**54,56,822**	**55,87,049**	**4,19,042**	**1,63,68,899**	**1,67,87,941**	**31.08**	**33.34**	**33.28**
Faridabad	1,06,758	4,72,471	5,79,229	3,70,878	14,38,855	18,09,733	28.79	32.84	32.01
Gurgaon	1,58,462	3,86,254	5,44,716	4,72,179	10,42,253	15,14,432	33.56	37.06	35.97
Rewari	2,64,375	73,352	3,37,727	6,66,902	2,33,430	9,00,332	39.64	31.42	37.51
Rohtak	2,12,681	1,33,286	3,45,967	6,15,040	4,46,164	10,61,204	34.58	29.87	32.60
Sonipat	3,76,188	1,46,991	5,23,179	9,96,637	4,53,364	14,50,001	37.75	32.42	36.08
Panipat	2,21,931	1,90,387	4,12,318	6,50,352	5,55,085	12,05,437	34.12	34.30	34.20
Jhajjar	2,53,833	72,701	3,26,534	7,15,066	2,43,339	9,58,405	35.50	29.88	34.07
Mewat	2,58,721	31,243	2,89,964	9,65,157	1,24,106	10,89,263	26.81	25.17	26.62
Palwal	2,42,228	67,335	3,09,563	8,06,164	2,36,544	10,42,708	30.05	28.47	29.69
Haryana Sub region	**20,95,177**	**15,74,020**	**36,69,197**	**62,58,375**	**47,73,140**	**1,10,31,515**	**33.48**	**32.98**	**33.26**

	Total Workers			Population			WPR		
District wise/ Sub region	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
Alwar	14,87,935	2,20,607	17,08,542	30,19,728	6,54,451	36,74,179	49.27	33.71	46.50
Rajasthan sub region	**14,87,935**	**2,20,607**	**17,08,542**	**30,19,728**	**6,54,451**	**36,74,179**	**49.27**	**33.71**	**46.50**
Baghpat	3,37,563	79,132	4,16,695	10,28,023	2,75,025	1,30,30,48	32.84	28.77	31.98
Bulandshahr	9,19,473	2,53,787	11,73,260	26,31,742	8,67,429	34,99,171	34.94	29.26	33.53
Gautam Budh Nagar	2,16,673	3,52,436	569,109	6,73,806	9,74,309	16,48,115	32.16	36.17	34.53
Ghaziabad + Hapur	4,96,077	10,24,461	15,20,538	15,19,098	31,62,547	46,81,645	32.66	32.39	32.48
Meerut	5,43,366	5,47,173	10,90,539	16,84,507	17,59,182	34,43,689	32.26	31.10	31.67
Uttar Pradesh Sub region	**25,13,152**	**22,56,989**	**47,70,141**	**75,37,176**	**70,38,492**	**1,45,75,668**	**33.34**	**32.07**	**32.73**
NCR	**62,26,491**	**95,08,438**	**1,57,34,929**	**1,72,34,321**	**2,88,34,982**	**4,60,69,303**	**36.13**	**32.98**	**34.15**

Source: Census of India 2011 and The Study of Economic Profile of NCR

Annexure 3. 8: Projection of Population of NCR (in Lakhs)

	Population						
Districts/Sub-regions	**2011 (actual)**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
Meerut	34.44	37.10	39.92	42.96	46.22	49.74	53.52
Bagpat	13.03	13.80	14.62	15.50	16.42	17.41	18.45
Ghaziabad*	46.82	55.91	67.06	80.43	96.47	115.70	138.78
Gautambuddha Nagar	16.48	19.99	23.87	28.50	34.02	40.62	48.49
Bulandshaher	34.99	38.39	41.13	46.23	50.74	55.68	61.10
U.P.sub-region	**145.76**	**165.19**	**186.60**	**213.62**	**243.87**	**279.15**	**320.34**
NCT-Delhi sub-region	**167.88**	**177.56**	**188.18**	**199.45**	**211.38**	**224.03**	**237.44**
Alwar	36.74	40.51	44.98	49.95	55.46	61.59	68.39
Rajasthan sub-region	**36.74**	**40.51**	**44.98**	**49.95**	**55.46**	**61.59**	**68.39**
Faridabad**	28.53	32.53	37.27	42.70	48.92	56.04	64.20
Gurgaon	15.14	14.57	14.01	13.48	12.97	12.48	12.01
Jhajjar	9.58	9.97	10.39	10.82	11.28	11.75	12.24
Panipat	12.05	13.49	15.12	16.96	19.01	21.32	23.90
Rewari	9.00	9.73	10.56	11.47	12.45	13.52	14.68
Rohtak	10.61	11.26	11.98	12.74	13.55	14.41	15.33
Sonipat	14.50	15.98	17.25	18.63	20.11	21.71	23.45
Mewat	10.89	11.74	12.64	13.62	14.67	15.81	17.03
Haryana sub-region	**110.30**	**119.27**	**129.22**	**140.42**	**152.96**	**167.04**	**182.84**
NCR	**460.68**	**502.53**	**548.98**	**603.44**	**663.67**	**731.81**	**809.01**
* Ghaziabad includes Hapur							
** Faridabad includes Palwal							

Source: Census of India, 2011; The Regional Plan-2021 for NCR; and The Study of Economic Profile of NCR

Annexure 3. 9: Projection of workforce (2021) in NCR based on current Participation Rate (2001)

Category	1	2	3	4	5	6	7	8	9
Sectors	**Agriculture**	**Mining and Quarrying**	**Manufacturing**	**C) Electricity, Gas and Power**	**Construction**	**Trade and Commerce**	**Transport, Storage and Communications**	**Financing, Insurance, Real estate and Business services**	**Community, Social and Personal Services**
Faridabad	6,02,865	7,601	2,01,579	97,086	1,57,217	65,158	1,05,830	46,191	49,438
Gurgaon	5,65,236	17,449	91,302	71,624	87,437	52,554	76,269	31,143	29,012
Jhajjar	2,93,910	284	52,835	18,415	23,952	16,554	26,003	12,399	7,664
Panipat	3,73,479	935	55,288	34,349	61,778	20,736	26,977	15,343	16,247
Rewari	3,10,984	1,184	33,757	21,305	29,549	13,392	23,872	13,826	6,817
Rohtak	2,76,038	376	35,077	27,675	43,600	21,446	32,552	21,150	10,167
Sonipat	4,41,039	929	65,891	33,306	51,195	27,660	45,834	25,608	11,627
Haryana sub-region	**28,63,551**	**28,758**	**5,35,729**	**3,03,760**	**4,54,728**	**2,17,499**	**3,37,338**	**1,65,660**	**1,30,971**
Meerut	6,04,494	627	1,05,865	86,790	1,51,992	61,581	96,330	40,413	32,446
Baghpat	3,26,576	217	27,594	16,933	36,255	14,002	25,373	13,905	7,676
Ghaziabad	7,29,189	3,338	2,31,116	1,65,138	2,88,834	1,34,965	2,13,533	72,519	65,625
Gautam Budh Nagar	3,21,840	1,688	68,573	42,965	73,544	32,951	1,17,500	25,715	33,593
Buland Shahar	12,13,513	603	88,437	59,804	1,42,109	46,987	87,202	31,038	27,956
U.P. sub-region	**31,95,610**	**6,474**	**5,21,586**	**3,71,630**	**6,92,734**	**2,90,487**	**5,39,937**	**1,83,591**	**1,67,297**
Alwar	17,45,670	7,503	89,919	68,854	1,06,021	55,812	52,511	44,915	22,212
Rajasthan sub-region	**17,45,670**	**7,503**	**89,919**	**68,854**	**1,06,021**	**55812**	**52,511**	**44,915**	**22,212**
NCT-Delhi sub-region	**8,02,718**	**21,566**	**8,89,686**	**5,37,507**	**14,41,855**	**6,52,957**	**10,02,954**	**3,78,369**	**4,63,913**
NCR	**86,07,549**	**64,301**	**20,36,919**	**12,81,750**	**26,95,338**	**12,16,754**	**19,32,741**	**7,72,535**	**7,84,393**

Source: Census of India, 2001 and The Study of Economic Profile of NCR

Annexure 3. 10: Projection of workforce (2031) in NCR based on current Participation Rate (2001)

Category	1	2	3	4	5	6	7	8	9
Sectors	**Agriculture**	**Mining and Quarrying**	**Manufacturing**	**Electricity, Gas and Power**	**Construction**	**Trade and Commerce**	**Transport, Storage and Communications**	**Financing, Insurance, Real estate and Business services**	**Community, Social and Personal Services**
Faridabad	7,91,288	9,976	2,64,582	1,27,430	2,06,355	85522	1,38,906	60,628	6,48,90
Gurgaon	5,86,166	18,095	94,683	74,277	90,675	54500	79,093	32,296	30,086
Jhajjar	3,19,050	309	57,354	19,990	26,001	17970	28,227	13,460	8,319
Panipat	4,69,552	1,175	69,510	43,185	77,670	26070	33,917	19,290	20,426
Rewari	3,66,578	1,396	39,792	25,114	34,831	15786	28,140	16,298	8,035
Rohtak	3,12,294	425	39,684	31,309	49,326	24263	36,828	23,927	11,503
Sonipat	5,14,129	1,083	76,811	38,825	59,679	32244	53,430	29,852	13,554
Haryana sub-region	**33,59,057**	**32,460**	**6,42,416**	**3,60,130**	**5,44,537**	**256354**	**3,98,542**	**1,95,751**	**1,56,813**
Meerut	6,99,963	726	1,22,585	1,00,497	1,75,997	71306	1,11,544	46,796	37,571
Baghpat	3,66,771	244	30,990	19,017	40,718	15725	28,496	15,617	8,621
Ghaziabad	10,48,990	4,802	3,32,476	2,37,563	4,15,508	194157	3,07,182	1,04,324	94,406
Gautam Budh Nagar	4,58,711	2,406	97,736	61,237	1,04,820	46965	1,67,470	36,651	47,879
Buland Shahar	1,46,13,86	726	1,06,501	72,020	1,71,136	56585	1,05,014	37,378	33,666
U.P. sub-region	**40,35,821**	**8,904**	**6,90,289**	**4,90,334**	**9,08,179**	**384738**	**7,19,705**	**2,40,766**	**2,22,144**
Alwar	21,52,527	9,252	1,10,876	84,901	1,30,730	68820	64,750	55,383	27,389
Rajasthan sub-region	**21,52,527**	**9,252**	**1,10,876**	**84,901**	**1,30,730**	**68820**	**64,750**	**55,383**	**27,389**
NCT-Delhi sub-region	**9,01,674**	**24,225**	**9,99,363**	**6,03,768**	**16,19,602**	**733451**	**11,26,594**	**4,25,013**	**5,21,103**
NCR	**1,04,490,79**	**74,841**	**24,42,944**	**15,39,133**	**32,03,048**	**1443364**	**23,09,591**	**9,16,913**	**9,27,448**

Source: Census of India, 2001 and The Study of Economic Profile of NCR

Annexure 3. 11: Projection of workforce (2021) in NCR (Adjusted Participation Rate)

Category	1	2	3	4	5	6	7	8	9	
Sectors	**Agriculture**	**Mining and Quarrying**	**Manufacturing**	**Electricity, Gas and Power**	**Construction**	**Trade and Commerce**	**Transport, Storage and Communications**	**Financing, Insurance, Real estate and Business services**	**Community, Social and Personal Services**	**Total Population**
Faridabad	5,59,007	7,601	2,01,579	97,086	1,57,217	74,534	1,11,801	52,174	49,438	37,26,713
Gurgaon	5,33,130	17,449	91,302	71,624	87,437	53,313	79,969	39,985	29,012	26,65,648
Jhajjar	2,80,462	284	77,906	18,415	31,162	16,554	26,003	13,504	7,664	10,38,749
Panipat	3,47,807	935	55,288	34,349	68,049	27,220	30,244	19,659	16,247	15,12,206
Rewari	2,85,200	1,184	52,815	21,305	42,252	13,392	26,407	15,844	6,817	10,56,295
Rohtak	2,51,505	376	59,882	27,675	59,882	21,446	35,929	23,953	10,167	11,97,642
Sonipat	3,96,812	929	86263	33,306	86,263	27,660	47,445	34,505	11,627	17,25,268
Haryana sub-region	**26,53,922**	**28,758**	**6,25,036**	**3,03,760**	**5,32,263**	**2,34,118**	**3,57,800**	**1,99,624**	**1,30,971**	**1,29,22,521**
Meerut	5,98,779	627	1,19,756	86,790	1,59,674	69,858	96,330	59,878	32,446	39,91,860
Baghpat	3,07,096	217	29,247	16,933	43,871	21,935	25,373	21,935	7,676	14,62,364
Ghaziabad	6,70,575	3,338	2,41,407	1,65,138	3,21,876	1,34,965	2,13,533	1,00,586	65,625	67,05,753
Gautam Budh Nagar	2,86,429	1,688	95,476	42,965	95,476	47,738	1,17,500	35,804	33,593	23,86,911
Buland Shahar	11,37,539	603	1,26,393	59,804	1,68,524	84,262	87,202	42,131	27,956	42,13,109
U.P. sub-region	**30,00,419**	**6,474**	**6,12,280**	**371,630**	**7,89,422**	**3,58,759**	**5,39,937**	**2,60,334**	**1,67,297**	**1,87,59,996**
Alwar	15,74,283	7,503	1,12,449	68,854	1,57,428	89,959	52,511	67,469	22,212	44,97,952
Rajasthan sub-region	**15,74,283**	**7,503**	**1,12,449**	**68,854**	**1,57,428**	**89,959**	**52,511**	**67,469**	**22,212**	**44,97,952**
NCT-Delhi sub-region	**6,58,647**	**21,566**	**8,46,831**	**5,37,507**	**14,418,55**	**7,05,693**	**10,02,954**	**4,70,462**	**4,63,913**	**1,88,18,473**
NCR	**78,87,272**	**64,301**	**21,96,595**	**12,81,750**	**29,20,969**	**13,88,529**	**19,53,202**	**9,97,889**	**7,84,393**	**5,49,98,943**

Source: Census of India, 2001 and The Study of Economic Profile of NCR

Annexure 3. 12: Projection of workforce (2031) in NCR (Adjusted Participation Rate)

Category	1	2	3	4	5	6	7	8	9	
Sectors	**Agriculture**	**Mining and Quarrying**	**Manufa cturing**	**Electricity, Gas and Power**	**Construction**	**Trade and Commerce**	**Transport, Storage and Communicatio ns**	**Financing, Insurance, Real estate and Business Services**	**Community, Social and Personal Services**	**Total Population**
Faridabad	7,33,722	9,976	2,64,582	1,27,430	2,06,355	97,830	1,46,744	68,481	64,890	48,91,482
Gurgaon	5,52,871	18,095	94,683	74,277	90,675	55,287	82,931	41,465	30,086	27,64,354
Jhajjar	3,04,452	309	84,570	19,990	33,828	17,970	28,227	14,659	8,319	11,27,600
Panipat	4,37,277	1,175	69,510	43,185	85,554	34,222	38,024	24,716	20,426	19,01,204
Rewari	3,36,184	1,396	62,256	25,114	49,805	15,786	31,128	18,677	8,035	12,45,127
Rohtak	2,84,539	425	67,747	31,309	67,747	24,263	40,648	27,099	11,503	13,54,947
Sonipat	4,62,572	1,083	10,0559	38,825	1,00,559	32,244	55,307	40,224	13,554	20,11,182
Haryana sub-region	**31,11,617**	**32,460**	**7,43,908**	**3,60,130**	**6,34,523**	**2,77,600**	**4,23,011**	**2,35,320**	**1,56,813**	**1,52,95,897**
Meerut	6,93,346	726	1,38,669	1,00,497	1,84,892	80,890	1,11,544	69,335	37,571	46,22,309
Baghpat	3,44,894	244	32,847	19,017	49,271	24,635	28,496	24,635	8,621	16,42,353
Ghaziabad	9,64,670	4,802	3,47,281	2,37,563	4,63,041	1,94,157	3,07,182	144,700	94,406	96,46,698
Gautam Budh Nagar	4,08,241	2,406	136080	61,237	1,36,080	68,040	1,67,470	51,030	47,879	34,02,008
Buland Shahar	1369895	726	152211	72,020	2,02,947	1,01,474	1,05,014	50,737	33,666	50,73,685
U.P. sub-region	**37,81,046**	**8,904**	**8,07,088**	**4,90,334**	**10,36,232**	**4,69,197**	**7,19,705**	**3,40,437**	**222,144**	**2,43,87,052**
Alwar	19,41,195	9,252	1,38,657	84,901	1,94,120	1,10,925	64,750	83,194	27,389	55,46,272
Rajasthan sub-region	**19,41,195**	**9,252**	**1,38,657**	**84,901**	**1,94,120**	**1,10,925**	**64,750**	**83,194**	**27,389**	**55,46,272**
NCT-Delhi sub-Region	**7,39,842**	**24,225**	**9,51,226**	**6,03,768**	**16,19,602**	**7,92,688**	**11,26,594**	**5,28,459**	**5,21,103**	**2,11,38,346**
NCR	**95,73,701**	**74,841**	**26,40,878**	**15,39,133**	**34,84,477**	**16,50,411**	**23,34,060**	**11,87,410**	**9,27,448**	**6,63,67,567**

Source: Census of India, 2001 and The Study of Economic Profile of NCR

Annexure 4. 1: SEZ in NCR where formal approvals granted under the SEZ Act, 2005

Sl. No.	Name of SEZ	Type
1	Delhi Metro Corporation	IT
2	Delhi State Industrial Information Development Corporation Ltd.	IT
3	Delhi State Industrial Information Development Corporation Ltd.	Gems & Jewellery
4	Haryana Technology Park (Selecto Systems Pvt. Ltd.)	IT
5	M/s. Uppal Housing Ltd.	Multi-services
6	M/s. Luxor Cyber City Pvt. Ltd.	IT/ITES
7	Dr. Fresh Healthcare Pvt.Ltd.	IT/ITES
8	Orient Craft Infrastructure Ltd.	Textiles
9	Assotech Realty Pvt. Lt	IT/ ITE
10	Pioneer Urban Land and	IT/ ITE
11	Infrastructure Limited	IT/ ITE
12	DLF Cyber City Developers Limited	IT/ ITE
13	Global Health Private Limited	Biotechnology
14	Suncity Haryana SEZ Developer Pvt. Ltd.	IT
15	Metro Valley Business Park Private Limited	IT
16	M/s. Parsvnath Developers Limited	IT/ITES
17	Ascendant Estates Private Limited	IT/ITES
18	Ansal Properties and Infrastructure Ltd.	IT/ITES
19	Bentex Towers Pvt. Ltd.	Multi-Services
20	Ireo Investment Holding III Ltd.	Electronic Hardware, IT/ITES
21	Reliance Haryana SEZ Limited	Multi services
22	GurgaonInfospace Limited	IT/ITES
23	GP Realtors Pvt. Ltd.	Electronic Hardware, IT/ITES
24	GP Realtors Pvt. Ltd.	Electronic Hardware, IT/ITES
25	Mohan Investments and Properties Private Limited	IT/ITES
26	Mayar India Limited	Biotechnology
27	Raheja Haryana SEZ Developers SEZ Developers	Engineering
28	Private Limited	
29	Canton Buildwell Private Limited	IT/ITES
30	Unitech Realty Projects Limited	IT/ITES
31	DS Realetors Private Limited	IT/ITES
32	SohnaBuildcon Private Limited	Electronic Hardware, IT/ITES
33	MittalInfratech Private Limited	IT/ITES
34	Starex SEZ Developers Pvt. Ltd.	IT/ITES
35	Perpetual Infracon Private Limited	IT/ITES
36	Gracious Buildcon Private Buildcon Private Limited	IT/ITES
37	Goldsouk International Gems & Jwellery SEZ Private Limited	Gems and Jwellery

Sl. No.	Name of SEZ	Type
38	Anant Raj Industries Ltd.	IT/ITE
39	WellgrowBuildcon Private Limited	Electronic Hardware, IT/ITES
40	Sunwise Properties Private Limited	IT/ITES
41	PrimoseBuildworth Pvt. Ltd.	IT/ITES
42	Airmid Developers Limited	IT/ITES
43	Progressive Buildestate Pvt. Ltd.	Electronic Hardware & Software
44	AnsalColours Engineering SEZ Limited	Agro and Food Processing
45	Mikado Realtors Private Limited	Electronic Hardware, IT/ITES
46	Orient Craft Infrastructure Ltd.	IT/ITES
47	Espire Infrastructure Corporation Limited	Agro and Food Processing
48	Best on Health Limited	Biotech
49	Somani Worsted Limited	Electronics Hardware and Software/ ITES
50	Wipro Ltd.	IT/ITE
51	Moser Bear India Ltd.	Non-conventional Energy including solar energy equipments/ cell
52	Ansal IT City and Parks Ltd.	IT/ITES
53	SeaviewDevelpers Ltd.	IT/ITES
54	HCL Technologies	IT/ITES
55	NIIT Technologies Limited SEZ	IT/ITES
56	OSE Infrastructure Limited	IT
57	Pavitradham Constructions	IT/ITES
58	Private Limited	
59	Unitech Infra-con Limited	IT/ITES
60	Uttar Pradesh State Industrial Development Corporation (Uttar Pradesh SIDC)	Textile
61	Uttar Pradesh State Industrial Development Corporation (Uttar Pradesh SIDC)	Leather
62	Uttar Pradesh State Industrial Development Corporation (Uttar Pradesh SIDC)	Engineering Goods
63	Perfect IT SEZ Private Limited	IT/ITES
64	Uppals IT Projects Pvt. Limited	Electronics Hardware and Software/ ITES
65	Aachvis Softech Pvt. Ltd.	IT/ITES
66	Unitech Hi-tech Projects Private Limited	IT/ITES
67	Uppal Housing Limited	Electronics Hardware and Software/ ITES
68	Sarv-Mangal Realtech Pvt. Ltd.	Electronics Hardware and Software/ ITES
69	Gallant Infrastructure Private Limited	IT/ITES
70	Jubilant Infracon Private Limited	IT/ITES
71	Max-DigiInfotech Private Limited	IT/ITES

Sl. No.	Name of SEZ	Type
72	IVR Prime IT SEZ private Limited	IT/ITES
73	DLF Commercial Developers Limited	IT/ITES
74	Diamond IT Infracon Pvt. Limited	IT/ITES
75	CBS International Projects Private Limited	IT/ITES
76	Golden Tower Infratech Pvt. Ltd.	IT/ITES
77	Diamond Software Developers Pvt. Ltd.	IT
78	R.C. Infosystems Pvt. Ltd.	IT/ITES
79	WellgrowInfotech Private	IT/ITES
80	Arshiya Northern FTWZ Limited	FTWZ
81	AnandInfoedge Pvt. Ltd.	IT/ITES
82	ArthaInfratech Private Limited	Electronics Hardware and Software/ ITES

Annexure 4. 2: Industrial Estates in NCR

Sl. No.	Name of the Industrial Area	District/ Zone	Sub-region
1	GT Karnal Road Industrial Area	North	NCT-Delhi
2	Rajasthan Udyog Nagar Industrial Area	North	NCT-Delhi
3	S M A Industrial Area	North	NCT-Delhi
4	S S I Industrial Area	North	NCT-Delhi
5	Wazirpr Industrial Area	North	NCT-Delhi
6	Lawranc Road Industrial Area	North	NCT-Delhi
7	Udygo Nagar Industrial Area	North	NCT-Delhi
8	D.S.I.D.C. - Sheds Nagloi	North	NCT-Delhi
9	Mangol Puri Industrial Area (Both DDA & DSIDC)	North	NCT-Delhi
10	Badli Industrial Area	North	NCT-Delhi
11	Narela Industrial Area	North	NCT-Delhi
12	Bawana Industrial Area	North	NCT-Delhi
13	Okhla Industrial Area, Ph-I	South	NCT-Delhi
14	Okhla Industrial Area, Ph-II	South	NCT-Delhi
15	Okhla Industrial Estate	South	NCT-Delhi
16	Flatted Factory Complex Okhla	South	NCT-Delhi
17	Mohan Cooperative Industrial Estate	South	NCT-Delhi
18	Flatted Factory Complex, Jhandewalan	South	NCT-Delhi
19	Rani Jhansi Road	South	NCT-Delhi
20	Shahzeda Bagh Industrial Area	South	NCT-Delhi
21	Naraina Industrial Area Ph-I	West	NCT-Delhi
22	Naraina Industrial Area Ph-II	West	NCT-Delhi
23	Mayapuri Industrial Area Ph-I	West	NCT-Delhi
24	Mayapuri Industrial Area Ph-II	West	NCT-Delhi
25	Tilak Nagar Industrial Area	West	NCT-Delhi
26	Kirti Nagar Industrial Area	West	NCT-Delhi
27	D. F.L Industrial Area, Moti Nagar	West	NCT-Delhi
28	Najafgarh Road Industrial Area	West	NCT-Delhi
29	Jhilmil Industrial Area	East	NCT-Delhi
30	Friends Colony Industrial Area, Shahdara	East	NCT-Delhi
31	Patpar Ganj Industrial Area	East	NCT-Delhi
32	Shahdara Industrial Area	East	NCT-Delhi
33	Flatted Factory Complex at Jhilmil, Shahdara	East	NCT-Delhi
34	Sector-4 Industrial Areas Huda	Faridabad	Haryana
35	Sector-5 Industrial Areas Huda	Faridabad	Haryana
36	Sector-6 Industrial Areas Huda	Faridabad	Haryana
37	Sector-13 Industrial Areas Huda	Faridabad	Haryana
38	Sector-15A Industrial Areas Huda	Faridabad	Haryana
39	Sector-24 Industrial Areas Huda	Faridabad	Haryana
40	Sector-25 Industrial Areas Huda	Faridabad	Haryana
41	Sector-27 A Industrial Areas Huda	Faridabad	Haryana
42	Sector-27 B Industrial Areas Huda	Faridabad	Haryana
43	Sector-27 C Industrial Areas Huda	Faridabad	Haryana

Sl. No.	Name of the Industrial Area	District/ Zone	Sub-region
44	Sector-27 D Industrial Areas Huda	Faridabad	Haryana
45	Sector-28 Industrial Areas Huda	Faridabad	Haryana
46	Sector-31 Industrial Areas Huda HSIDC	Faridabad	Haryana
47	Sector-58 Ph-1 Industrial Areas Huda HSIDC	Faridabad	Haryana
48	Sector-59 Industrial Areas Huda HSIDC	Faridabad	Haryana
49	Hathin Industrial Areas HGDA	Faridabad	Haryana
50	Rural Industrial Estat/PWL DI Haryana	Faridabad	Haryana
51	Pragati Vihar Industrial Areas MCF	Faridabad	Haryana
52	Sector-58 Ph-II Industrial Areas Palval Huda	Faridabad	Haryana
53	Udyog Vihar Gurgaon Ph I to VI Sector 18 & DIC	Gurgaon	Haryana
54	Sector 34-35	Gurgaon	Haryana
55	IMT Manesar Phase-I	Gurgaon	Haryana
56	IMT Manesar Phase-II	Gurgaon	Haryana
57	IMT Manesar Phase III & IV	Gurgaon	Haryana
58	Govt. Industrial Areas Bahadurgarh	Jhajjar	Haryana
59	MIE Estate - I, MIE Estate -II, Bahadurgarh	Jhajjar	Haryana
60	HSIIDC Sector - 16 Bahadurgarh	Jhajjar	Haryana
61	HSIIDC Sector - 17 Bahadurgarh	Jhajjar	Haryana
62	HSIIDC Sector - 4B Bahadurgarh	Jhajjar	Haryana
63	Roz ka Meo Industrial Areas	Mewat	Haryana
64	Rural Industrial Estate	Palwal	Haryana
65	Hathin Industrial Estate	Palwal	Haryana
66	Industrial Area, Panipat	Panipat	Haryana
67	Sector -25 HUDA, PH-I	Panipat	Haryana
68	Sector -25 HUDA, PH-II	Panipat	Haryana
69	Sector -29 HUDA, PH-I	Panipat	Haryana
70	Sector -29 HUDA, PH-II	Panipat	Haryana
71	HSIDC Samalkha	Panipat	Haryana
72	Dharuhera Industrial Areas	Rewari	Haryana
73	Bawal Industrial Areas	Rewari	Haryana
74	Barhi (Ph-1)	Sonepat	Haryana
75	Barhi (Ph-II)	Sonepat	Haryana
76	IndustrialEstate, Kundli	Sonepat	Haryana
77	DIC	Sonepat	Haryana
78	Rai Industrial Estate (Ph-I,Sector-4)	Sonepat	Haryana
79	Rai Industrial Estate (Ph-II,Sector-4)	Sonepat	Haryana
80	Baghpat Industrial Agrea	Baghpat	Uttar Pradesh
81	UPSIDC I/A Sikandrabad	Bulandshahr	Uttar Pradesh
82	UPSIDC I/A Junction Road Khurja	Bulandshahr	Uttar Pradesh
83	Govt. Industrial Estate Khurja	Bulandshahr	Uttar Pradesh
84	UPSIDC *Industrial Area Chola	Bulandshahr	Uttar Pradesh
85	UPSIDC I/A Khurja	Bulandshahr	Uttar Pradesh
86	Noida Ph-I Sec-1,11,16	Gautam Budh Nagar	Uttar Pradesh
87	Noida, Ph-II 100/export Industrial Estate	Gautam Budh Nagar	Uttar Pradesh
88	Noida-Ph-III, Sec 57-64 Industrial Estate	Gautam Budh Nagar	Uttar Pradesh
89	LONI Estate	Ghaziabad	Uttar Pradesh
90	SITE-1, Bulandshahar Road	Ghaziabad	Uttar Pradesh
91	SITE-2, Loni Road	Ghaziabad	Uttar Pradesh

Sl. No.	Name of the Industrial Area	District/ Zone	Sub-region
92	SITE-3,MeerutRoad	Ghaziabad	Uttar Pradesh
93	SITE-4,Sahibabad	Ghaziabad	Uttar Pradesh
94	South side GT Road Industrial Estate	Ghaziabad	Uttar Pradesh
95	Masoori Gulawati Road Industrial Estate	Ghaziabad	Uttar Pradesh
96	Kavi Nagar, Sector-17, Industrial Estate	Ghaziabad	Uttar Pradesh
97	Sector-22, Meerut Road Industrial Estate	Ghaziabad	Uttar Pradesh
98	Loha Mandi Industrial Estate	Ghaziabad	Uttar Pradesh
99	SITE-2, Loni Road Harsha Industrial Estate	Ghaziabad	Uttar Pradesh
100	Udyog Kunj Industrial Estate	Ghaziabad	Uttar Pradesh
101	Govt. Industrial Estate, Partapur	Meerut	Uttar Pradesh
102	Sports Goods Complex Industrial Estate	Meerut	Uttar Pradesh
103	Partapur Industrial Area	Meerut	Uttar Pradesh
104	Udhyogpuram Industrial Estate	Meerut	Uttar Pradesh
105	M.I.A Alwar	Alwar	Rajasthan
106	M.I.A Ext. Alwar	Alwar	Rajasthan
107	Agro Food Park , M.I.A Ext. Alwar	Alwar	Rajasthan
108	MIA (South & East), Alwar	Alwar	Rajasthan
109	Kherli Industrial Area	Alwar	Rajasthan
110	Rajgarh Industrial Area	Alwar	Rajasthan
111	Khairthal Industrial Area	Alwar	Rajasthan
112	Thanagazi Industrial Area	Alwar	Rajasthan
113	Old Industrial Area, Alwar	Alwar	Rajasthan
114	Behror Industrial Area	Alwar	Rajasthan
115	Sotanala Industrial Area	Alwar	Rajasthan
116	Bhiwadi Phase I to IV	Alwar	Rajasthan
117	Kushakhera Industrial Area	Alwar	Rajasthan
118	IID, Central Khushkhera	Alwar	Rajasthan
119	Patheri Industrial Area	Alwar	Rajasthan
120	Chopanki Industrial Area	Alwar	Rajasthan
121	Tapukara Industrial Area	Alwar	Rajasthan
122	Shanjahanpur Industrial Area	Alwar	Rajasthan
123	EPIP Neemrana	Alwar	Rajasthan
124	Sare Khurd Industrial Area	Alwar	Rajasthan
125	Manjara Path Industrial Area	Alwar	Rajasthan
Source: DC MSME Industrial Profiles; Govt. of Delhi http://www.delhi.gov.in/wps/wcm/connect/doit_industry/Department+of+Industries/Home/FAQ/			

Annexure 4. 3: District wise List of Industrial Clusters in NCR

Location	Product	No of units	Employment (Direct)	Turnover (Crores)
Meerut	Auto components	4,700	26,000	100
	Band Instruments	433	8,500	20
	Glass & Wooden beads	3,000	15,000	0.7
	Mini Gas Cylinders	160	7,500	100
	Power loom/ Embroidery	3,000	30,000	40
	Rubber Products	130	2,500	40
	Scissors	225	5,000	25
	Sport goods	3,500	70,000	200
	Transformers and voltage regulators	100	3,500	400
Ghaziabad	Chemicals	224	1,574	13,5.54
	Engineering Equipments	635	7,400	340
	Pilkhuwa Textile Printing	400	20,000	100
	Plastic Packaging	150	10,000	350
Bulandshahr	Pottery Cluster Khurja	80	2,500	450
	Khurja Ceramics	600	50,000	200
NOIDA	Chemicals	111	2,221	10,9.49
	Auto and engineering item	12,000	2,00000	50,000
	Garments	6,014	94,736	3,200
	Packaging Material	124	1,800	84.15
	Plastic Products	350	6,500	250
Alwar	Auto Components	200	19,500	250
NCT-Delhi	Auto Components	1,500	50,000	297.2
	Chemicals	339	3,562	337.02
	Engineering Equipments	2,691	47,000	2,000.00
	Food Products	432	1,939	594.28
	Textiles including garment	1,901	1,32,000	921.32
	Cosmetic & Packaging	240	7,200	100
	Plastic Products	746	16,478	54.22
	Rubber Products	178	18,684	192.64
	Sanitary Fittings	100	9,00	30
	Printing & Packaging, Naraina	450	5,000	400
Gurgaon	Automobile and engineering	5,000	2,60,000	10,000
	Rubber & Chemicals	472	11,619	907
	Electronic and Electricals	107	3,427	702
	Readymade Garments	1,310	87,380	13,000
	Leather and Leather and Fur Products, Manesar	205	35,000	867
Panipat	Handloom	1,800	23,000	
	Powerloom	720	50,000	600
	Cotton Spinning and Shoddy Yarn	500	50,000	500
	Carpet	400	60,000	150
	Home Furnishing Cluster	85	2,800	465

Location	**Product**	**No of units**	**Employment (Direct)**	**Turnover (Crores)**
	Textile machinery	28	477	32.4
	Samalkha Foundry Cluster	30	1,200	95
Faridabad	Auto components and engineering	2,500	10,000	3,250
	Chemicals	275	1,375	825
	Electrical Engineering Equipments	203	5,000	1,500
	Textiles	320	7,000	3,200.00
Jhajjar	General Engineering	134	1,000	70
	Footwear	125	12,400	1,560
Sonipat	Stainless Steel Cluster- Kundli	72	8,000	800
	Chemicals	120	2,500	100
	General Engineering	150	3,000	100
	Printing and Packaging Cluster, Rai	110	4,400	165
Source: Clusterobservatory, MSME Foundation				

Annexure 6. 1: Number of Enterprises by Type in NCR Urban Areas – 2005

District/ Sub-region	Agricultural			Non-agricultural All			Total		
	OAE	Establishment	Total	OAE	Establishment	Total	OAE	Establishment	Total
Meerut	2,409	749	3,158	42,249	25,836	68,085	44,658	26,585	71,243
Baghpat	640	270	910	11,871	4,664	16,535	12,511	4,934	17,445
Ghaziabad	891	444	1,335	52,186	34,595	86,781	53,077	35,039	88,116
Gautam Buddha Nagar	1,623	184	1,807	18,446	13,689	32,135	20,069	13,873	33,942
Bulandshaher	221	91	312	29,237	8,981	38,218	29,458	9,072	38,530
U.P. sub-region	**5,784**	**1,738**	**7,522**	**1,53,989**	**87,765**	**2,41,754**	**1,59,773**	**89,503**	**2,49,276**
Panipat	127	176	303	12,420	10,495	22,915	12,547	10,671	23,218
Sonepat	185	177	362	11,019	7,356	18,375	11,204	7,533	18,737
Rohtak	406	330	736	15,708	7,548	23,256	16,114	7,878	23,992
Jhajjar	55	42	97	6,587	3,513	10,100	6,642	3,555	10,197
Rewari	80	48	128	4,787	5,630	10,417	4,867	5,678	10,545
Gurgaon	58	43	101	15,147	12,288	27,435	15,205	12,331	27,536
Faridabad	361	666	1,027	24,844	32,374	57,218	25,205	33,040	58,245
Haryana sub-region	**1,272**	**1,482**	**2,754**	**90,512**	**79,204**	**1,69,716**	**91,784**	**80,686**	**1,72,470**
NCT-Delhi sub-region	**841**	**1,872**	**2,713**	**2,97,081**	**4,31,569**	**7,28,650**	**2,97,922**	**4,33,441**	**7,31,363**
Rajasthan sub-region	**473**	**181**	**654**	**13,106**	**11,809**	**24,915**	**13,579**	**11,990**	**25,569**
NCR	**8,370**	**5,273**	**13,643**	**5,54,688**	**6,10,347**	**11,65,035**	**5,63,058**	**6,15,620**	**11,78,678**

SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

Annexure 6. 2: Number of Enterprises by Type of Enterprises in NCR Rural Areas-2005

District/ Sub-region	Agricultural			Non-agricultural			All		
	OAE	Establishment	Total	OAE	Establishment	Total	OAE	Establishment	Total
Meerut	16,671	3,813	20,484	19,922	7,740	27,662	36,593	11,553	48,146
Baghpat	6,895	1,140	8,035	11,877	3,177	15,054	18,772	4,317	23,089
Ghaziabad	1,247	444	1,691	20,633	7,774	28,407	21,880	8,218	30,098
Gautam Buddh Nagar	2,412	83	2,495	9,126	1,901	11,027	11,538	1,984	13,522
Bulandshaher	4,183	1,416	5,599	19,683	6,613	26,296	23,866	8,029	31,895
U.P. sub-region	**31,408**	**6,896**	**38,304**	**81,241**	**27,205**	**1,08,446**	**1,12,649**	**34,101**	**1,46,750**
Panipat	572	202	774	13,973	4,785	18,758	14,545	4,987	19,532
Sonepat	1,126	350	1,476	13,710	4,907	18,617	14,836	5,257	20,093
Rohtak	2,714	239	2,953	10,329	2,661	12,990	13,043	2,900	15,943
Jhajjar	588	146	734	9,932	3,606	13,538	10,520	3,752	14,272
Rewari	1,291	209	1,500	11,596	5,144	16,740	12,887	5,353	18,240
Gurgaon	3,525	554	4,079	20,706	13,791	34,497	24,231	14,345	38,576
Faridabad	1,245	942	2,187	9,668	10,136	19,804	10,913	11,078	21,991
Haryana sub-region	**11,061**	**2,642**	**13,703**	**89,914**	**45,030**	**1,34,944**	**1,00,975**	**47,672**	**1,48,647**
NCT-Delhi sub-region	**346**	**231**	**577**	**15,398**	**10,405**	**25,803**	**15,744**	**10,636**	**26,380**
Rajasthan sub-region	**6,556**	**1,364**	**7,920**	**31,349**	**24,688**	**56,037**	**37,905**	**26,052**	**63,957**
NCR	**49,371**	**11,133**	**60,504**	**2,17,902**	**1,07,328**	**3,25,230**	**2,67,273**	**1,18,461**	**3,85,734**

Source: Economic Census 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

Annexure 6. 3: Number of Persons by Type of Enterprises in NCR Urban Areas -2005

District/ Sub-region	Agricultural			Non-agricultural			All		
	OAE	Establishments	Total	OAE	Establishments	Total	OAE	Establishments	Total
Meerut	3,896	2,550	6,446	50,197	91,095	1,41,292	54,093	93,645	1,47,738
Baghpat	985	554	1,539	14,029	16,200	30,229	15,014	16,754	31,768
Ghaziabad	1,310	1,254	2,564	63,307	1,40,844	2,04,151	64,617	1,42,098	2,06,715
Gautam Buddha Nagar	4,223	771	4,994	21,402	2,25,120	2,46,522	25,625	2,25,891	2,51,516
Bulandshaher	383	260	643	40,622	25,448	66,070	41,005	25,708	66,713
U.P. sub-region	**10,797**	**5,389**	**16,186**	**1,89,557**	**4,98,707**	**6,88,264**	**2,00,354**	**5,04,096**	**7,04,450**
Panipat	196	555	751	14,439	61,823	76,262	14,635	62,378	77,013
Sonepat	337	715	1,052	12,424	36,981	49,405	12,761	37,696	50,457
Rohtak	709	1,072	1,781	18,101	40,490	58,591	18,810	41,562	60,372
Jhajjar	98	146	244	7,714	31,986	39,700	7,812	32,132	39,944
Rewari	96	352	448	5,502	20,957	26,459	5,598	21,309	26,907
Gurgaon	132	463	595	17,365	88,882	1,06,247	17,497	89,345	1,06,842
Faridabad	526	1,757	2,283	27,849	1,87,694	2,15,543	28,375	1,89,451	2,17,826
Haryana sub-region	2,094	5,060	7,154	1,03,394	4,68,813	5,72,207	1,05,488	4,73,873	5,79,361
NCT-Delhi sub-region	1,751	8,872	10,623	3,61,567	31,14,134	34,75,701	3,63,318	31,23,006	34,86,324
Rajasthan sub-region	803	455	1,258	15,850	58,469	74,319	16,653	58,924	75,577
NCR	**15,445**	**19,776**	**35,221**	**6,70,368**	**41,40,123**	**48,10,491**	**6,85,813**	**41,59,899**	**4,84,5712**

Source: Economic Census 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

Annexure 6. 4: Number of Persons by Type of Enterprises in NCR Rural Areas-2005

District/ Sub-region	Agricultural			Non-agricultural			All		
	OAE	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**
Meerut	39,150	11,602	50,752	30,750	28,720	59,470	69,900	40,322	1,10,222
Baghpat	12,901	3,224	16,125	16,997	20,371	37,368	29,898	23,595	53,493
Ghaziabad	1,774	1,177	2,951	24,002	24,433	48,435	25,776	25,610	51,386
Gautam Buddha Nagar	6,735	369	7,104	14,487	33,471	47,958	21,222	33,840	55,062
Bulandshaher	11,061	4,530	15,591	28,885	20,062	48,947	39,946	24,592	64,538
U.P. sub-region	**71,621**	**20,902**	**92,523**	**1,15,121**	**1,27,057**	**2,42,178**	**1,86,742**	**1,47,959**	**3,34,701**
Panipat	931	1,188	2,119	16,368	38,809	55,177	17,299	39,997	57,296
Sonepat	2,094	1,460	3,554	16,373	61,144	77,517	18,467	62,604	81,071
Rohtak	4,255	641	4,896	12,179	15,491	27,670	16,434	16,132	32,566
Jhajjar	1,510	625	2,135	11,473	39,417	50,890	12,983	40,042	53,025
Rewari	2,448	602	3,050	13,351	34,858	48,209	15,799	35,460	51,259
Gurgaon	6,875	1,721	8,596	26,076	1,15,790	1,41,866	32,951	1,17,511	1,50,462
Faridabad	2,678	2,225	4,903	12,368	41,140	53,508	15,046	43,365	58,411
Haryana sub-region	**20,791**	**8,462**	**29,253**	**1,08,188**	**3,46,649**	**4,54,837**	**1,28,979**	**3,55,111**	**4,84,090**
NCT-Delhi sub-region	**800**	**839**	**1,639**	**17,692**	**50,732**	**68,424**	**18,492**	**51,571**	**70,063**
Rajasthan sub-region	**11,489**	**2,812**	**14,301**	**38,998**	**86,979**	**1,25,977**	**50,487**	**89,791**	**1,40,278**
NCR	**1,04,701**	**33,015**	**1,37,716**	**2,79,999**	**6,11,417**	**8,91,416**	**3,84,700**	**6,44,432**	**10,29,132**

Source: Economic Census 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

Annexure 6. 5: Share of Number of Persons by Type of Enterprises in NCR -2005

	Rural									Urban									All								
District/ Sub-region	**No. of persons usually working**									**No. of persons usually working**									**No. of persons usually working**								
	Agricultural			**Non-agricultural**			**All**			**Agricultural**			**Non-agricultural**			**All**			**Agricultural**			**Non-agricultural**			**All**		
	OAE	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**
Meerut	31.2	28.0	30.4	7.9	3.0	4.4	13.6	4.0	7.3	22.2	10.3	15.2	6.5	2.0	2.6	6.8	2.0	2.7	30.1	21.3	27.3	7.0	2.2	3.0	9.5	2.4	3.7
Baghpat	10.3	7.8	9.7	4.4	2.1	2.8	5.8	2.4	3.5	5.6	2.2	3.6	1.8	0.4	0.6	1.9	0.4	0.6	9.7	5.7	8.4	2.7	0.7	1.0	3.4	0.7	1.2
Ghaziabad	1.4	2.8	1.8	6.2	2.6	3.6	5.0	2.6	3.4	7.5	5.0	6.1	8.2	3.1	3.8	8.2	3.1	3.8	2.2	3.7	2.6	7.5	3.0	3.8	6.9	3.0	3.7
Gautam Buddh Naga	5.4	0.9	4.3	3.7	3.5	3.6	4.1	3.4	3.6	24.1	3.1	11.8	2.8	4.9	4.6	3.2	4.9	4.6	7.7	1.7	5.8	3.1	4.6	4.4	3.6	4.6	4.4
Bulandshaher	8.8	10.9	9.3	7.4	2.1	3.6	7.8	2.5	4.3	2.2	1.0	1.5	5.2	0.6	1.2	5.2	0.6	1.2	8.0	7.2	7.8	6.0	0.8	1.7	6.2	0.9	1.9
U.P. sub-region	**57.1**	**50.4**	**55.4**	**29.7**	**13.3**	**18.0**	**36.4**	**14.8**	**22.1**	**61.6**	**21.7**	**38.2**	**24.5**	**10.8**	**12.8**	**25.3**	**10.9**	**13.0**	**57.6**	**39.6**	**51.9**	**26.2**	**11.2**	**13.8**	**29.7**	**11.6**	**15.0**
Panipat	0.7	2.9	1.3	4.2	4.1	4.1	3.4	4.0	3.8	1.1	2.2	1.8	1.9	1.3	1.4	1.8	1.3	1.4	0.8	2.6	1.4	2.7	1.8	2.0	2.4	1.8	1.9
Sonepat	1.7	3.5	2.1	4.2	6.4	5.8	3.6	6.3	5.4	1.9	2.9	2.5	1.6	0.8	0.9	1.6	0.8	0.9	1.7	3.3	2.2	2.5	1.8	1.9	2.4	1.8	1.9
Rohtak	3.4	1.5	2.9	3.1	1.6	2.1	3.2	1.6	2.2	4.0	4.3	4.2	2.3	0.9	1.1	2.4	0.9	1.1	3.5	2.6	3.2	2.6	1.0	1.3	2.7	1.0	1.3
Jhajjar	1.2	1.5	1.3	3.0	4.1	3.8	2.5	4.0	3.5	0.6	0.6	0.6	1.0	0.7	0.7	1.0	0.7	0.7	1.1	1.2	1.1	1.7	1.3	1.3	1.6	1.3	1.3
Rewari	2.0	1.5	1.8	3.4	3.6	3.6	3.1	3.5	3.4	0.5	1.4	1.1	0.7	0.5	0.5	0.7	0.5	0.5	1.8	1.4	1.7	1.6	1.0	1.1	1.6	1.0	1.1
Gurgaon	5.5	4.1	5.1	6.7	12.1	10.5	6.4	11.8	9.9	0.8	1.9	1.4	2.2	1.9	2.0	2.2	1.9	2.0	4.9	3.3	4.4	3.7	3.7	3.7	3.9	3.7	3.7
Faridabad	2.1	5.4	2.9	3.2	4.3	4.0	2.9	4.3	3.9	3.0	7.1	5.4	3.6	4.1	4.0	3.6	4.1	4.0	2.2	6.0	3.4	3.5	4.1	4.0	3.3	4.1	4.0
Haryana sub-region	**16.6**	**20.4**	**17.5**	**27.9**	**36.2**	**33.8**	**25.1**	**35.5**	**32.0**	**11.9**	**20.4**	**16.9**	**13.4**	**10.2**	**10.6**	**13.3**	**10.2**	**10.7**	**16.0**	**20.4**	**17.4**	**18.2**	**14.6**	**15.3**	**18.0**	**14.7**	**15.3**
NCT-Delhi sub-region	**0.6**	**2.0**	**1.0**	**4.6**	**5.3**	**5.1**	**3.6**	**5.2**	**4.6**	**10.0**	**35.7**	**25.1**	**46.7**	**67.6**	**64.6**	**45.9**	**67.4**	**64.3**	**1.8**	**14.6**	**5.9**	**32.6**	**56.9**	**52.7**	**29.3**	**56.4**	**51.3**
Rajasthan sub-region	**9.2**	**6.8**	**8.6**	**10.0**	**9.1**	**9.4**	**9.8**	**9.0**	**9.3**	**4.6**	**1.8**	**3.0**	**2.0**	**1.3**	**1.4**	**2.1**	**1.3**	**1.4**	**8.6**	**4.9**	**7.4**	**4.7**	**2.6**	**3.0**	**5.1**	**2.6**	**3.1**
NCR	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Annexure 8. 1: Location Quotient and Growth Rates 2000-01 to 2005-06

																					Growth rates 2000-01 to 2005-06			
District / Region	LQ of PERSONS -2005						LQ GDP 2000-01 and 2005-06									GDP Share (2005-06)			Share of in 2005		Sctoral GDP			CAGR
	Rural			Urban			Primary			Secondary			Tertiary			Prim	Sec.	Tertiary	Persons in Est. 2005		Primary	Second.	Tertiary	
	OAE	Est.	Total	OAE	Est.	Total	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	GDP (constant prices)			Agri.	Non-agr.				
Meerut	3.66	1.09	1.96	1.84	0.54	0.73	3.31	2.51	0.79	0.88	1.08	-0.20	0.71	0.68	0.03	13.77	3.68	2.94	33.1	3.5	27.68	0.46	27.55	4.32
Baghpat	4.74	1.92	2.87	1.54	0.29	0.48	4.28	4.22	0.06	0.56	0.44	0.11	0.70	0.63	0.07	6.09	0.80	1.00	10.2	1.2	-8.89	43.59	26.38	2.18
Ghaziabad	1.35	0.69	0.91	2.20	0.82	1.02	2.09	1.58	0.51	1.28	1.43	-0.15	0.72	0.71	0.01	11.05	6.79	3.79	3.2	4.4	35.77	16.91	31.32	5.49
Gautam Buddh Nagar	0.93	0.77	0.82	0.73	1.10	1.05	1.04	1.35	-0.32	2.13	1.91	0.22	0.51	0.54	-0.03	4.47	9.17	2.20	11.87.0	5.2	-10.25	65.56	38.84	7.66
Bulandshaher	4.11	1.30	2.25	2.74	0.29	0.65	3.86	3.63	0.23	0.82	0.78	0.03	0.65	0.60	0.05	13.25	2.80	2.24	9.4	2.0	-2.58	21.60	26.48	2.68
U.P. sub-region	**2.43**	**0.99**	**1.47**	**1.69**	**0.73**	**0.87**	**2.61**	**2.39**	**0.22**	**1.25**	**1.23**	**0.02**	**0.65**	**0.64**	**0.01**	**48.62**	**23.24**	**12.17**	**62.9**	**16.3**	**10.05**	**30.06**	**30.33**	**4.78**
Panipat	1.74	2.07	1.95	0.96	0.70	0.73	1.38	1.47	-0.09	0.84	0.96	-0.12	1.01	0.93	0.08	4.83	2.92	3.54	1.7	2.3	33.67	57.96	96.11	12.64
Sonepat	1.90	3.30	2.82	0.85	0.43	0.49	2.65	3.12	-0.47	1.07	0.81	0.26	0.72	0.68	0.04	6.94	2.81	1.89	2.7	2.2	1.10	100.23	59.52	7.94
Rohtak	2.39	1.20	1.60	1.77	0.67	0.83	2.77	2.29	0.48	0.84	1.00	-0.16	0.80	0.76	0.05	4.61	1.40	1.34	3.9	1.5	24.44	10.39	38.28	6.04
Jhajjar	1.89	2.99	2.61	0.74	0.52	0.55	2.41	2.17	0.25	1.40	1.42	-0.02	0.62	0.60	0.02	4.18	2.42	1.07	1.4	1.6	35.20	52.15	57.63	8.65
Rewari	2.73	3.15	3.00	0.63	0.41	0.44	1.70	1.63	0.07	1.68	1.47	0.21	0.60	0.68	-0.08	3.69	3.65	1.32	2.0	1.3	35.19	88.69	45.69	9.76
Gurgaon	1.73	3.17	2.68	0.60	0.52	0.53	0.31	0.77	-0.45	1.51	1.56	-0.05	0.88	0.80	0.08	2.95	14.20	8.30	5.3	4.4	-42.60	72.32	95.36	12.46
Faridabad	0.74	1.09	0.97	0.90	1.03	1.01	0.98	1.06	-0.08	1.34	1.55	-0.21	0.86	0.75	0.10	6.44	8.77	5.61	4.2	4.7	3.75	22.88	60.49	6.83
Haryana sub-region	**1.64**	**2.32**	**2.08**	**0.87**	**0.67**	**0.70**	**1.22**	**1.43**	**-0.21**	**1.31**	**1.36**	**-0.05**	**0.83**	**0.77**	**0.07**	**33.65**	**36.18**	**23.06**	**21.1**	**18.0**	**7.30**	**54.43**	**73.62**	**10.60**
NCT-Delhi sub-region	**0.07**	**0.10**	**0.09**	**0.90**	**1.31**	**1.25**	**0.11**	**0.12**	**-0.01**	**0.73**	**0.73**	**0.00**	**1.25**	**1.28**	**-0.03**	**5.31**	**36.01**	**62.09**	**7.1**	**62.2**	**-1.94**	**34.88**	**31.76**	**7.79**
Rajasthan sub-region	**3.16**	**2.89**	**2.97**	**0.68**	**0.41**	**0.45**	**3.02**	**2.43**	**0.59**	**1.11**	**1.11**	**0.00**	**0.65**	**0.68**	**-0.03**	**12.41**	**4.58**	**2.68**	**9.0**	**3.5**	**23.42**	**26.40**	**19.86**	**4.48**
NCR	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**															**9.87**	**39.65**	**38.93**	**7.83**

Source: Study of Economic Profile of NCR

Annexure 8. 2: LQ of Primary Sector of GDP constant prices (1999-00) in NCR in 2005-06 and Change in LQ from 2000-01 to 2005-06

Sl. No.	Activities of Primary Sector	Agriculture			Forestry & Logging			Fishing			Mining & Quarrying			Total		
	District/ Sub-region	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change
1	**Faridabad**	0.75	0.92	-0.17	0.85	7.92	-7.08	2.00	1.84	0.16	8.48	6.79	1.68	0.98	1.06	-0.08
2	**Gurgaon**	0.32	0.76	-0.43	0.23	1.07	-0.83	0.70	1.49	-0.79	0.00	0.91	-0.91	0.31	0.77	-0.45
3	**Jhajjar**	2.47	2.20	0.27	2.09	0.06	2.03	6.47	3.71	2.76	0.02	0.05	-0.03	2.41	2.17	0.25
4	**Panipat**	1.42	1.50	-0.08	1.15	0.18	0.97	2.12	2.13	-0.01	0.36	0.16	0.21	1.38	1.47	-0.09
5	**Rewari**	1.74	1.65	0.08	1.80	0.08	1.72	2.36	1.91	0.45	0.14	0.07	0.07	1.70	1.63	0.07
6	**Rohtak**	2.84	2.33	0.51	2.64	0.02	2.62	6.20	4.42	1.78	0.01	0.01	0.00	2.77	2.29	0.48
7	**Sonepat**	2.69	3.17	-0.48	2.70	0.95	1.75	5.81	4.62	1.19	0.95	0.81	0.14	2.65	3.12	-0.47
Haryana sub-region		**1.19**	**1.40**	**-0.22**	**1.11**	**2.57**	**-1.46**	**2.50**	**2.36**	**0.13**	**2.16**	**2.20**	**-0.04**	**1.22**	**1.43**	**-0.21**
1	**Alwar**	3.07	2.46	0.60	3.80	1.31	2.50	0.52	0.00	0.51	1.12	1.12	0.00	3.02	2.43	0.59
Rajasthan sub-region		**3.07**	**2.46**	**0.60**	**3.80**	**1.31**	**2.50**	**0.52**	**0.00**	**0.51**	**1.12**	**1.12**	**0.00**	**3.02**	**2.43**	**0.59**
1	**Meerut**	3.37	2.53	0.84	3.42	1.98	1.44	0.51	0.33	0.18	1.42	1.70	-0.28	3.31	2.51	0.79
2	**Bagpat**	4.27	4.24	0.03	3.66	6.37	-2.71	0.41	0.06	0.35	5.69	5.46	0.22	4.28	4.22	0.06
3	**Gaziabad**	2.07	1.55	0.51	3.13	2.06	1.07	2.20	1.51	0.69	1.96	1.77	0.19	2.09	1.58	0.51
4	**Gautam Budh Nagar**	1.03	1.36	-0.32	1.35	1.77	-0.42	0.13	0.04	0.09	0.97	1.52	-0.55	1.04	1.35	-0.32
5	**Bulandshaher**	3.96	3.73	0.23	3.19	1.51	1.68	0.86	0.51	0.35	1.71	1.29	0.42	3.86	3.63	0.23
Uttar Pradesh sub-region		**2.64**	**2.41**	**0.22**	**2.83**	**2.24**	**0.59**	**0.96**	**0.61**	**0.34**	**1.85**	**1.92**	**-0.08**	**2.61**	**2.39**	**0.22**
NCT-Delhi		**0.11**	**0.12**	**-0.01**	**0.02**	**0.07**	**-0.05**	**0.22**	**0.60**	**-0.38**	**0.03**	**0.06**	**-0.03**	**0.11**	**0.12**	**-0.01**

Source: Study on Economic Profile of NCR

Annexure 8. 3: LQ of Secondary Sector of GDP constant prices (1999-00) in NCR in 2005-06 and Change in LQ from 2000-01 to 2005-06

Sl. No.	Activities of Secondary Sector	Manufacturing						Electricity, Gas & Water Supply			Construction			Total		
	District/ Sub-region	Registered			Unregistered									Total		
		LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change
1	Faridabad	0.30	2.41	-2.11	0.75	0.74	0.01	0.97	0.69	0.28	0.92	0.87	0.05	1.34	1.55	-0.21
2	Gurgaon	0.46	2.76	-2.29	0.27	0.46	-0.20	0.36	0.32	0.04	0.43	0.64	-0.21	1.51	1.56	-0.05
3	Jhajjar	0.25	1.86	-1.61	0.99	0.99	0.00	1.43	0.48	0.96	1.40	1.22	0.18	1.40	1.42	-0.02
4	Panipat	0.08	0.60	-0.52	1.12	1.31	-0.19	0.75	2.40	-1.66	1.17	0.91	0.27	0.84	0.96	-0.12
5	Rewari	0.42	2.18	-1.76	0.88	0.94	-0.06	0.32	0.38	-0.06	1.03	0.90	0.13	1.68	1.47	0.21
6	Rohtak	0.01	0.84	-0.83	1.29	1.09	0.20	0.76	0.97	-0.21	1.79	1.23	0.56	0.84	1.00	-0.16
7	Sonepat	0.15	0.56	-0.42	1.00	0.97	0.02	0.83	1.04	-0.21	1.41	1.08	0.33	1.07	0.81	0.26
Haryana sub-region		**0.30**	**1.96**	**-1.66**	**0.71**	**0.80**	**-0.09**	**0.69**	**0.79**	**-0.10**	**0.92**	**0.88**	**0.05**	**1.31**	**1.36**	**-0.05**
1	Alwar	0.21	1.45	-1.25	0.57	0.54	0.03	2.26	2.29	-0.03	0.95	0.65	0.29	1.11	1.11	0.00
Rajasthan sub-region		**0.21**	**1.45**	**-1.25**	**0.57**	**0.54**	**0.03**	**2.26**	**2.29**	**-0.03**	**0.95**	**0.65**	**0.29**	**1.11**	**1.11**	**0.00**
1	Meerut	0.10	1.18	-1.08	1.04	0.82	0.23	1.62	1.54	0.08	0.96	1.01	-0.05	0.88	1.08	-0.20
2	Bagpat	0.04	0.15	-0.11	0.83	0.64	0.20	1.93	1.68	0.24	0.52	0.48	0.04	0.56	0.44	0.11
3	Gaziabad	0.24	1.86	-1.62	1.09	0.93	0.16	2.05	2.05	-0.01	0.89	0.89	0.00	1.28	1.43	-0.15
4	Gautam Budh nagar	0.67	3.54	-2.87	0.48	0.56	-0.07	0.95	1.08	-0.13	0.23	0.25	-0.02	2.13	1.91	0.22
5	Bulandshahr	0.07	0.37	-0.31	1.46	1.37	0.09	2.29	2.06	0.23	0.65	0.65	0.00	0.82	0.78	0.03
U.P. sub-region		**0.26**	**1.59**	**-1.33**	**0.99**	**0.89**	**0.09**	**1.73**	**1.71**	**0.02**	**0.68**	**0.71**	**-0.02**	**1.25**	**1.23**	**0.02**
NCT-Delhi sub-region		**0.03**	**0.27**	**-0.24**	**1.20**	**1.18**	**0.02**	**0.80**	**0.70**	**0.09**	**1.17**	**1.21**	**-0.04**	**0.73**	**0.73**	**0.00**

Source: Study on Economic Profile

Annexure 8. 4: LQ of Tertiary Sector of GDP constant prices (1999-00) in NCR in 2005-06 and Change in LQ from 2000-01 to 2005-06

Sl. No.	District/ Sub-region	Trade, Hotels & Restaurants			Railways			Transport			Storage			Communication			Banking & Insurance			Real, Ownership of Dwel. B.Ser. & Legal			Public Administration			Other Services			TOTAL		
		LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change	LQ2005-06	LQ2000-01	Change
1	Faridabad	1.65	1.18	0.47	0.81	0.83	-0.03	1.16	0.80	0.37	1.27	1.06	0.22	0.49	0.40	0.09	0.33	0.35	-0.02	0.97	0.68	0.29	0.37	0.36	0.00	0.70	0.67	0.02	0.86	0.75	0.10
2	Gurgaon	1.12	1.13	-0.01	0.30	0.39	-0.09	0.48	0.74	-0.26	0.16	0.62	-0.46	0.26	0.20	0.06	0.05	0.31	-0.26	2.18	1.49	0.69	0.20	0.32	-0.11	0.25	0.43	-0.18	0.88	0.80	0.08
3	Jhajjar	0.39	0.32	0.07	1.40	1.58	-0.17	1.86	1.37	0.49	0.34	0.41	-0.07	0.43	0.33	0.10	0.25	0.31	-0.06	0.45	0.57	-0.12	0.81	0.87	-0.05	1.11	1.13	-0.02	0.62	0.60	0.02
4	Panipat	2.45	1.98	0.47	0.98	1.29	-0.31	0.71	0.70	0.01	1.18	2.13	-0.95	0.30	0.27	0.03	0.22	0.30	-0.08	0.25	0.37	-0.12	0.39	0.44	-0.05	0.50	0.55	-0.05	1.01	0.93	0.08
5	Rewari	0.84	0.94	-0.10	2.23	2.67	-0.45	0.80	0.71	0.09	1.23	0.52	0.71	0.47	0.39	0.08	0.21	0.28	-0.07	0.31	0.43	-0.12	0.66	0.76	-0.11	0.76	0.78	-0.02	0.60	0.68	-0.08
6	Rohtak	0.35	0.42	-0.07	3.12	2.97	0.15	1.88	1.28	0.60	1.99	1.15	0.84	0.77	0.51	0.27	0.54	0.53	0.02	0.64	0.61	0.03	1.45	1.29	0.16	1.37	1.35	0.02	0.80	0.76	0.05
7	Sonepat	0.69	0.60	0.09	1.38	1.52	-0.14	1.61	1.25	0.36	1.51	1.30	0.21	0.54	0.41	0.13	0.35	0.35	0.00	0.48	0.55	-0.08	0.87	0.89	-0.02	1.10	1.05	0.05	0.72	0.68	0.04
Haryana sub-region		**1.15**	**1.07**	**0.09**	**1.00**	**1.17**	**-0.17**	**0.98**	**0.88**	**0.09**	**0.89**	**0.99**	**-0.10**	**0.40**	**0.33**	**0.08**	**0.22**	**0.34**	**-0.12**	**1.14**	**0.85**	**0.29**	**0.48**	**0.54**	**-0.06**	**0.63**	**0.71**	**-0.08**	**0.83**	**0.77**	**0.07**
1	Alwar	0.98	1.00	-0.03	1.07	1.02	0.05	0.45	0.42	0.04	1.58	1.32	0.27	0.50	0.40	0.10	0.25	0.20	0.05	0.38	0.53	-0.14	0.82	0.81	0.01	0.86	0.91	-0.06	0.65	0.68	-0.03
Rajasthan sub-region		**0.98**	**1.00**	**-0.03**	**1.07**	**1.02**	**0.05**	**0.45**	**0.42**	**0.04**	**1.58**	**1.32**	**0.27**	**0.50**	**0.40**	**0.10**	**0.25**	**0.20**	**0.05**	**0.38**	**0.53**	**-0.14**	**0.82**	**0.81**	**0.01**	**0.86**	**0.91**	**-0.06**	**0.65**	**0.68**	**-0.03**
1.	Meerut	0.62	0.66	-0.03	0.68	0.67	0.01	1.04	0.92	0.13	1.40	1.07	0.33	0.57	0.44	0.13	0.45	0.34	0.12	0.53	0.63	-0.10	1.19	1.14	0.05	1.18	0.96	0.22	0.71	0.68	0.03
2	Bagpat	0.66	0.74	-0.08	0.82	0.75	0.07	0.92	0.74	0.18	0.90	0.81	0.09	0.69	0.49	0.20	0.55	0.38	0.17	0.39	0.47	-0.09	1.30	0.79	0.51	1.07	0.79	0.28	0.70	0.63	0.07
3	Gaziabad	0.60	0.63	-0.03	2.10	2.19	-0.09	1.12	1.03	0.09	2.40	2.36	0.04	0.65	0.53	0.12	0.41	0.32	0.09	0.71	0.80	-0.09	0.59	0.70	-0.11	1.14	1.04	0.10	0.72	0.71	0.01
4	Gautambudh nagar	0.88	0.85	0.02	0.98	1.17	-0.19	0.40	0.41	-0.01	0.14	0.15	-0.01	0.30	0.28	0.02	0.19	0.17	0.02	0.34	0.44	-0.10	0.27	0.28	-0.01	0.54	0.70	-0.16	0.51	0.54	-0.03
5.	Bulandshaher	0.68	0.74	-0.06	1.04	0.97	0.07	1.13	0.88	0.25	1.43	1.31	0.11	0.52	0.38	0.14	0.31	0.22	0.09	0.44	0.56	-0.12	0.78	0.67	0.11	1.04	0.64	0.41	0.65	0.60	0.05
U.P. sub-region		**0.69**	**0.71**	**-0.02**	**1.23**	**1.26**	**-0.03**	**0.92**	**0.82**	**0.10**	**1.36**	**1.27**	**0.09**	**0.53**	**0.42**	**0.11**	**0.36**	**0.28**	**0.08**	**0.51**	**0.61**	**-0.11**	**0.74**	**0.72**	**0.02**	**0.99**	**0.85**	**0.14**	**0.65**	**0.64**	**0.01**
NCT-Delhi sub-region		**1.03**	**1.08**	**-0.05**	**0.91**	**0.82**	**0.09**	**1.09**	**1.18**	**-0.09**	**0.88**	**0.87**	**0.01**	**1.55**	**1.60**	**-0.05**	**1.74**	**1.67**	**0.07**	**1.16**	**1.27**	**-0.11**	**1.40**	**1.34**	**0.06**	**1.22**	**1.20**	**0.02**	**1.25**	**1.28**	**-0.03**

Source: Study on Economic Profile of NCR

Annexure 8. 5: L. Q. of Persons by Type of Enterprises in NCR Rural Aeas-2005

District/ Sub-region	No. of persons usually working								
	Agricultural			Non-agricultural			All		
	OAE	Establishments	Total	OAE	Establishments	Total	OAE	Establishments	Total
Meerut	8.52	8.00	8.39	2.50	1.07	1.52	4.14	1.42	2.44
Baghpat	8.49	6.73	8.07	4.18	2.30	2.89	5.36	2.52	3.58
Ghaziabad	0.39	0.81	0.49	1.95	0.91	1.24	1.53	0.90	1.14
Gautam Buddh Nagar	1.23	0.21	0.99	0.99	1.05	1.03	1.06	1.01	1.03
Bulandshaher	4.73	6.14	5.07	4.62	1.47	2.46	4.65	1.71	2.81
U.P. sub-region	**3.87**	**3.58**	**3.80**	**2.32**	**1.17**	**1.54**	**2.74**	**1.30**	**1.84**
Panipat	0.39	1.57	0.67	2.56	2.78	2.71	1.97	2.71	2.44
Sonepat	0.89	1.98	1.15	2.61	4.47	3.88	2.14	4.34	3.52
Rohtak	2.57	1.23	2.25	2.75	1.60	1.96	2.70	1.58	2.00
Jhajjar	0.91	1.20	0.98	2.59	4.07	3.61	2.13	3.93	3.26
Rewari	1.76	1.37	1.66	3.58	4.28	4.06	3.09	4.14	3.74
Gurgaon	1.50	1.19	1.43	2.13	4.32	3.63	1.96	4.16	3.34
Faridabad	0.54	1.43	0.76	0.94	1.43	1.28	0.83	1.43	1.21
Haryana sub-region	**1.10**	**1.42**	**1.17**	**2.13**	**3.13**	**2.82**	**1.85**	**3.04**	**2.60**
NCT-Delhi sub-region	**0.01**	**0.04**	**0.02**	**0.10**	**0.14**	**0.13**	**0.08**	**0.13**	**0.11**
Rajasthan sub-region	**2.99**	**2.32**	**2.83**	**3.79**	**3.87**	**3.85**	**3.57**	**3.79**	**3.71**
NCR	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

Source: Study on Economic Profile of NCR

Annexure 8. 6: L. Q. of Persons by Type of Enterprises in NCR Urban Aears -2005

District/ Sub-region	Agricultural			Non-Agricultural			All		
	OAE	Establishments	Total	OAE	Establishments	Total	OAE	Establishments	Total
Meerut	5.74	2.94	4.17	1.71	0.50	0.67	1.80	0.51	0.69
Baghpat	4.39	1.93	3.01	1.44	0.27	0.43	1.51	0.28	0.45
Ghaziabad	1.93	1.44	1.66	2.15	0.77	0.97	2.14	0.78	0.97
Gautam Buddh Naga	5.24	0.75	2.72	0.61	1.04	0.98	0.72	1.04	0.99
Bulandshaher	1.11	0.59	0.82	2.71	0.28	0.61	2.68	0.28	0.62
U.P. sub-region	**3.95**	**1.54**	**2.60**	**1.60**	**0.68**	**0.81**	**1.65**	**0.69**	**0.82**
Panipat	0.56	1.23	0.93	0.94	0.65	0.69	0.93	0.66	0.70
Sonepat	0.97	1.61	1.33	0.83	0.40	0.46	0.83	0.40	0.47
Rohtak	2.90	3.43	3.20	1.71	0.62	0.77	1.73	0.63	0.79
Jhajjar	0.40	0.47	0.44	0.73	0.49	0.52	0.72	0.49	0.52
Rewari	0.47	1.34	0.96	0.62	0.38	0.41	0.61	0.38	0.42
Gurgaon	0.20	0.53	0.39	0.59	0.49	0.50	0.58	0.49	0.50
Faridabad	0.72	1.89	1.38	0.88	0.96	0.95	0.88	0.97	0.96
Haryana sub-region	**0.75**	**1.41**	**1.12**	**0.85**	**0.63**	**0.66**	**0.85**	**0.63**	**0.66**
NCT-Delhi sub-region	**0.19**	**0.74**	**0.50**	**0.89**	**1.24**	**1.19**	**0.88**	**1.24**	**1.19**
Rajasthan sub-region	**1.42**	**0.63**	**0.97**	**0.64**	**0.38**	**0.42**	**0.66**	**0.39**	**0.42**
NCR	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

Source: Study on Economic Profile of NCR

Annexure 8. 7: L. Q. of Persons by Type of Enterprises in NCR-2005

District/ Sub-region	Agricultural			Non-agricultural			All		
	OAE	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**	**OAE**	**Establishments**	**Total**
Meerut	8.16	6.11	7.53	1.94	0.57	0.80	2.64	0.64	1.00
Baghpat	7.96	4.93	7.04	2.25	0.53	0.82	2.89	0.58	1.00
Ghaziabad	0.58	1.05	0.73	2.09	0.79	1.01	1.92	0.79	1.00
Gautam Buddh Nagar	1.75	0.41	1.34	0.72	1.04	0.99	0.84	1.04	1.00
Bulandshaher	4.26	4.06	4.20	3.27	0.43	0.90	3.38	0.47	1.00
U.P. sub-region	**3.88**	**2.82**	**3.55**	**1.81**	**0.74**	**0.92**	**2.04**	**0.77**	**1.00**
Panipat	0.41	1.44	0.73	1.42	0.93	1.01	1.30	0.93	1.00
Sonepat	0.90	1.84	1.19	1.35	0.92	0.99	1.30	0.93	1.00
Rohtak	2.61	2.05	2.44	2.01	0.74	0.96	2.08	0.76	1.00
Jhajjar	0.85	0.92	0.87	1.28	0.95	1.00	1.23	0.95	1.00
Rewari	1.59	1.36	1.52	1.49	0.88	0.98	1.50	0.89	1.00
Gurgaon	1.33	0.94	1.21	1.04	0.98	0.99	1.08	0.98	1.00
Faridabad	0.57	1.60	0.88	0.90	1.02	1.00	0.86	1.03	1.00
Haryana sub-region	**1.05**	**1.42**	**1.16**	**1.23**	**0.95**	**1.00**	**1.21**	**0.95**	**1.00**
NCT-Delhi sub-region	**0.04**	**0.30**	**0.12**	**0.66**	**1.10**	**1.03**	**0.59**	**1.09**	**1.00**
Rajasthan sub-region	**2.78**	**1.68**	**2.45**	**1.57**	**0.83**	**0.96**	**1.71**	**0.84**	**1.00**
NCR	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

Source: Study on Economic Profile of NCR